



## **Fracking: Planning for an energy nirvana?**

### **Introduction**

“Fracking”, or rather hydraulic fracturing is a subject that fosters great passion and concern in many. The word “frak” was recently used as an expletive in a remake of a 1970’s television classic, to replace another well known Anglo-Saxon curse, and in Swedish *fräck* means "audacious", "shameless" or "bold".

### **What is Fracking?**

Hydraulic fracturing is the name which has been coined to describe non-conventional on-shore oil and gas exploration. In its simplest form a mixture of water, sand and chemicals are injected at high pressure down a borehole into below ground strata containing hydrocarbons. That strata is fissured by the high pressure liquid, those fissures are kept open by the sand in the drill fluid and the hydrocarbons contained in the strata are returned to a well-head at ground level through steel casing which have been installed to line the well. Relatively recent developments in drilling and extraction technology have resulted in oil and gas reserves which are contained in strata that were previously considered to have been too impermeable to allow economic extraction now being accessible.

Typically, infrastructure at ground level will include a drilling rig, which can typically be up to 150 feet in height, a hydration unit, vapour control equipment, storage and processing infrastructure, power generators and general access infrastructure. The drilling rig will drill a borehole that is lined with steel casing into the hydrocarbon containing strata and that borehole can be vertical, inclined, horizontal or a combination of all three.



### **Licensing Process**

There are three phases of the hydraulic fracturing process; exploration, testing and appraisal and production and the current licensing process applies to all three stages individually. Exploration involves relatively short term exploratory drilling and seismic surveys (some of which is permitted development under Schedule 2 Part 17 of the Town and Country Planning (General Permitted Development)(England) Order 2015 and therefore does not require a prior application for planning permission).

Testing and appraisal is a medium term operation during which the well operators determine the viability of the below ground resources identified during the exploration phase and the production phase is the final, much longer term phase during which the hydrocarbons will be extracted. The production phase will last until the economic viability of the reserves have been depleted, which could typically be for up to 20 years. The planning and environmental impact of each of the phases arguably increases with the increasing longevity of each phase, though it is likely that the drilling rig utilised in the exploratory and appraisal phases will not normally be required for the entirety of the production phase and so arguably the visual, character and amenity impact of the development associated with the mineral extraction will reduce.

The permission or licensing process currently applicable to hydraulic fracturing has five stages. Once an exploration company has obtained a licence under Stage 1 they must go through each of stages 2 to 5 for each of the three phases of hydraulic fracturing.



- **Stage 1** – A Petroleum Exploration and Development Licence (PEDL) is issued by the Oil and Gas Authority, an executive agency of the Department of Energy and Climate Change (DECC);
- **Stage 2** – Planning Permission is issued by the relevant strategic planning authority;
- **Stage 3** – The exploration company must obtain other relevant licences and permits from other agencies, such as the Environment Agency. This can be done at the same time as awaiting the outcome of the planning application;
- **Stage 4** – Notification is given to all other relevant agencies such as the HSE, British Coal, the British Geological Survey and the Hazardous Substances Authority;
- **Stage 5** – Well consent is issued by DECC.

The PEDL issued under Stage 1 is not a consent to drill and is granted on a discretionary basis by DECC following applications made by exploration companies. That discretion is exercised on the basis of the perceived technical, financial and environmental capabilities of those seeking the PEDLs. December 2015 saw the conclusion of the 14<sup>th</sup> licensing round with 159 PEDLs being available, of which 93 were onshore PEDLs, 75% of which were for hydraulic fracturing. PEDLs are granted for blocks of land which are 10km by 10km in area, the whole of the British Isles and its associated off-shore waters having been divided into such blocks.

Once an exploration company has obtained a PEDL it must then obtain planning permission from the strategic planning authority to install the well and associated infrastructure. Such planning applications are currently to be determined in accordance with the Development Plan unless other material considerations indicate otherwise.



Few if any adopted Development Plans will have specific policies relating to hydraulic fracturing. However, the National Planning Policy Framework (NPPF) and the Planning Practice Guidance (PPG) both contain provisions which address hydraulic fracturing, the NPPF in the context of general mineral exploration and the PPG in the context of specific reference to on-shore oil hydrocarbon extraction. In *Europa Oil and Gas Ltd v Secretary of State for Communities and Local Government [2013] EWHC 2643* the courts held that hydraulic fracturing exploratory drilling falls under the definition of “mineral extraction”, and thus general policies for mineral extraction will apply to hydraulic fracturing.

During the planning application process the exploration company can also be progressing applications for environmental permits and once those permits and planning permission are obtained other relevant agencies are notified. The planning process must assume that the environmental permits required under stage 3 will be issued if the relevant requirements are met. In *R (Frack Free Balcombe Residents' Association) v West Sussex CC [2014] EWHC 4108 (Admin)* Gilbart J rejected an application for judicial review of a decision to grant planning permission. It was alleged by the claimants that the strategic planning authority had materially failed in not taking into account the likelihood of environmental controls being effective. However, as is well known to planning practitioners, planning decision makers are entitled to assume that other statutory regimes, such as environmental controls will operate correctly and be properly applied.

Once planning permission and the necessary environmental permits are obtained and the other relevant authorities are notified the licensee can apply to DECC for a Well Consent. Once received drilling operations can commence.



### **Legislative Framework**

The Petroleum Act 1998 at sections 3, 4A and 4B provide the statutory power for the Secretary of State to issue licences and well consents for hydrocarbon exploration and extraction. Sections 4A and 4B, which were inserted by section 50 of the Infrastructure Act 2015 prevent a licence from being issued in circumstances where hydraulic fracturing would take place at depths of less than 1000m below ground level, or where hydraulic fracturing would take place within “*protected groundwater source areas*” or within “*other protected areas*”, which are to be further defined by way of regulations made by the Secretary of State.

The Onshore Hydraulic Fracturing (Protected Areas) Regulations 2016/384 were announced in July 2015, briefly debated in December 2015, made on 10<sup>th</sup> March 2016 but at the time of writing are not yet in force. They define “*other protected areas*” as being land at a depth of less than 1200m beneath a National Park, the Broads, Areas of Outstanding Natural Beauty and World Heritage Sites. The definition does not include Sites of Special Scientific Interest or other such designations and, contrary to the Government announcement of January 2015 the 2016 Regulations do not amount to “an outright ban” on hydraulic fracturing in National Parks and other protected areas, they merely require it to be carried out at depths of 200m more than all other areas of the country. “*Protected groundwater source areas*” are also defined but, as with “*other protected areas*” there is no outright ban, rather an increase of 200m in the minimal acceptable depth.

In the absence of specific development plan policies for hydraulic fracturing planning decision makers will have to rely upon general minerals polices and upon the minerals policies in the NPPF. The NPPF has now been with us for some time and planners will be generally familiar with its provisions. It intends to set out the Government’s planning policies, the intention being that this would form a compendious statement of



policy. Section 13 is entitled “Facilitating the sustainable use of minerals”. Paragraphs 142 to 149 address minerals generally.

Paragraph 142 NPPF states that minerals “*are essential to support sustainable economic growth and our quality of life*”. It emphasises the need for a “*sufficient supply of material to provide...the energy...the country needs*”. Paragraph 143 informs that local plans should “*identify and include policies for extraction of mineral resource of local and national importance in their area*” and in terms of environmental criteria reminds planning authorities that “*when developing noise limits, recognise that some noisy short-term activities, which may otherwise be regarded as unacceptable, are unavoidable to facilitate minerals extraction*”.

Most importantly, for planning decision making, paragraph 144 states that local authorities should “*give great weight to the benefits of the mineral extraction, including to the economy*”. However, paragraph 115 states that “great weight should be given to conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty with paragraph 116 stating that planning permission for major developments in these designated areas should be refused except in exceptional circumstances. Paragraph 132 requires great weight to be given to the conservation of designated heritage assets.

The NPPF applies a presumption in favour of sustainable development and the starting point must be that hydraulic fracturing which accords with the policies in the NPPF is sustainable development. Planning authorities that fail to address hydraulic fracturing or impose policies that appear to be ones of purely restraint will find themselves in difficulty in resisting planning applications for hydraulic fracturing as by operation of paragraphs 14 and 215 of the NPPF such policies will be treated as being out of date and afforded little weight in the decision making process. At present it would be



realistic to assume that, outside of the general polices in the NPPF there is real potential for a policy vacuum.

### **Where are we now?**

In January 2015 the Government announced an outright ban on hydraulic fracturing in National Parks and SSSIs. By the introduction of the 2016 Regulations that “ban” has been significantly relaxed.

In August 2015 Lancashire County Council refused a number of planning applications made by Cuadrilla for exploratory drilling on two sites. The applications received recommendations for approval by officers but the Planning Committee decided otherwise, refusing planning permission in substance. The refusals were based on familiar concepts; impact on landscape character, visual impact, noise and highways concerns. There was a perceived irritation from central Government and the refusals were followed by a joint Policy Statement from the DECC and the Department for Communities and Local Government emphasising the need for hydraulic fracturing, informing planning authorities that decisions on hydraulic fracturing planning applications should be made in 16 weeks and revising the recovery criteria, paving the way for the Government to decide all such planning applications in the future, rather than those decisions being taken by democratically elected councillors or an appointed planning inspector.

In October 2015, perhaps heightening the Government’s general irritation at the resistance of planning authorities towards hydraulic fracturing Ryedale District Council announced a five year moratorium on the support of hydraulic fracturing applications, contrary to legal advice from its own solicitor. The council felt that there was insufficient scientific evidence to conclude that the processes involved are safe.



The 14<sup>th</sup> licencing round was commenced in 2014 and in August 2015 27 PEDLs were issued, each PEDL relating to a block of land 100 miles square, none of which were south of Leicestershire. 132 blocks were held back pending a habitats assessment and were finally released in December 2015. As mentioned earlier 75% of those PEDLs were for hydraulic fracturing.

February 2016 saw a leaked letter from the Government suggesting that hydraulic fracturing was being considered for inclusion under the Nationally Significant Infrastructure planning regime, taking the responsibility for decision making away from locally elected councillors and, in theory, speeding up the decision making process.

February 2016 also saw the commencement of the public inquiry where the appeals of Cuadrilla against the refusals by Lancashire County Council were heard. The inquiry sat for 6 weeks and the decision is awaited. The Planning Inspector who heard the appeals, the highly experienced Wendy McKay, will only make a recommendation, the final decision being taken by the Secretary of State.

One might reasonably conclude that the Government's direction is clear; they are avidly in favour of hydraulic fracturing and will seek to push planning authorities in that direction. There will naturally be concern where planning authorities do not have specific, up to date policies for dealing with hydraulic fracturing and there is clearly a pressing need for strategic planning authorities to plan positively for hydraulic fracturing or face having the power to decide such applications taken away from them, perpetuating the age old tension between National Government policies and intentions and the local democratic process.





The science and engineering behind hydraulic fracturing is relatively straightforward. However, there remain some doubts, perhaps not without reason, at this stage over the safety of the associated processes. It is arguably not for the planning process to deal with those concerns, such concerns more properly being addressed through the environmental permit process. As well planning authorities bringing statutory challenges to the grant of planning permission for hydraulic fracturing, or local residents challenging such permissions by way of judicial review it may also serve those seeking to oppose hydraulic fracturing to consider carefully the prospect of judicial review of decisions to grant the necessary environmental permits.

The role of third parties and local residents' groups in opposing planning applications for hydraulic fracturing and subjecting environmental licences to careful scrutiny should not be underestimated. The Government seeks to promote localism and the voice of local people should be heard and in making their opinions heard local residents' groups should be well organised, focused and well prepared.

There is still quite some way to go to realise the energy and economic nirvana said to be promised by hydraulic fracturing. Experiences in the USA might suggest that a cautious approach should be adopted but one might be forgiven for concluding that the Government's enthusiasm remains unabated.



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