INFORMATION

RIBBLE VALLEY BOROUGH COUNCIL
REPORT TO HEALTH & HOUSING COMMITTEE

Agenda Item No.

meeting date: THURSDAY, 31 OCTOBER 2013
title: GENERAL REPORT
submitted by: CHIEF EXECUTIVE
principal author: JAMES RUSSELL, HEAD OF ENVIRONMENTAL HEALTH SERVICES

1 PURPOSE

1.1 To inform Committee of relevant issues which have arisen since the last meeting.

1.2 Relevance to the Council's ambitions and priorities:

- Council Ambitions – The following reports generally relate to the Council's ambitions to make people's lives healthier and safer.

2 HANSON CEMENT LIAISON MEETING

2.1 A liaison meeting was held on 26 September 2013. A copy of the minutes is attached as the Appendix A to this report.

3 CLITHEROE CEMETERY EXTENSION UPDATE

3.1 I can report the ongoing satisfactory progress with the Clitheroe Cemetery extension scheme. Since the last meeting of this Committee, detailed discussions have now been undertaken with grounds maintenance and a competitive cost established for inclusion in the revenue budget.

3.2 With regard to establishing a suitable final finish, a specialist contractor has been engaged to till and remove all stones within the existing budget. Grounds Maintenance are to undertake an initial general weed/grass kill and to re-sow with suitable grass seed to be ready for use next spring.

4 ENVIRONMENTAL HEALTH STAFF

4.1 Unfortunately to date, we have been unsuccessful in attracting a full time maternity cover replacement for the Environmental Health Officer (Health & Safety) post.

4.2 It may now be necessary to employ environmental health consultants to meet end of year annual service targets.

5 SHALE GAS FRACKING - UPDATE

5.1 Lancashire County Council arranged an information briefing on the subject of future shale gas extraction or 'Fracking' in Lancashire. The event was held at County Hall on 8th October. The Leader and Chairs of Planning & Development and Community Committees attended the presentations.

5.2 The Office of Unconventional Gas and Oil (OUGO) provided an overview to the current situation, as the new Government office created to promote the safe, responsible, and environmentally sound recovery of the UK's unconventional reserves of gas and oil, including shale gas and oil and other forms such as coal bed methane.

5.3 The OUGO presentation indicated the Governments position in that shale gas is expected to provide;

- a bridge to a low-carbon future and will have a role to 2050 and beyond
- UK shale gas will improve energy security by reducing dependency upon imported energy, support economic growth, job creation and tax revenues
- UK shale gas is subject to robust regulation by DECC, HSE and EA;
- Greenhouse gas emissions from UK shale will be relatively small
- OUGO will co-ordinate work across Government to support exploration – and inform the public
- Industry needs to engage early with local communities

5.4 I attach a County briefing note as Appendix B to this report for your information.

JAMES RUSSELL
HEAD OF ENVIRONMENTAL HEALTH SERVICES

MARSHAL SCOTT
CHIEF EXECUTIVE

For further information please ask for James Russell on 01200 414466.

BACKGROUND PAPERS

None.

JAR/HEALTH & HOUSING/31 October 13

HANSON CEMENT LIAISON COMMITTEE
MEETING DATE – THURSDAY, 26 SEPTEMBER 2013

PRESENT:	G Young	-	Hanson Cement
	J Peate	-	Hanson Cement
	L England	-	Bellman Committee
	S Booth	-	Chatburn PC
	Hazel Best	-	West Bradford PC
	David Sharp	-	West Bradford PC
	J Haine	-	LCC
	Cllr I Brown	-	RVBC
	Cllr P Dowson	-	RVBC
	J Russell	-	RVBC
	O Heap	-	RVBC

GEOLANCASHIRE PRESENTATION

Before the Liaison meeting started, Peter Del Strother on behalf of GeoLancashire gave a brief presentation on the 5 Geotrails along the Ribble Way that had been produced. Particular emphasis focused on the Clitheroe trail which is to include a viewing platform at Hanson Cement. The trails had been written for walkers in general but had more geographical information on their website.

Gary reported that this was the first step in an educational package that would include a graphical timeline and a geology room alongside the work that the Ribble Catchment Trust are doing.

A visit to the viewing platform then took place.

1 APOLOGIES FOR ABSENCE

1.1 Apologies for absence were received from Cllr Richard Sherras, Bill Honeywell (West Bradford) and Mary Gysbers.

2 MINUTES

2.1 The minutes of the meeting held on 21 March 2013 were circulated and approved as a correct record.

2.2 Lynda asked if the analysis of a deposit on one of the gauges had been received (8.1). Gary reported that it had confirmed as bird strike.

2.3 Jonathan corrected the depth of the quarry in point 4.1 to – 31 metres (minus) not 31 metres.

3. OPERATIONAL ISSUES

3.1.1 Gary gave a brief update on operations at Ribblesdale. Nationally the demand was continuing to recover and the outlook for Ribblesdale works was that production should be back to normal by the end of January 2014. As a result they would be looking to recruit more employees.

3.2 Gary reported that noticeable differences would include the increase in trains to 6 per week – 3 to Scotland and 3 to Avondale (Bristol), and the increase in truck movements carrying SRF onto the site.

4 BELLMAN, LANEHEAD AND COPLOW QUARRIES

4.1 Gary reported that development at Bellman had continued although there have been some issues with management of clay deposits. Company extracting in the order of 3.5 million tonnes per annum. De-watering has continued from Bellman into Worston Brook and Lanehead into the Ribble in compliance with EA permit conditions. Extraction and recovery of stone from Tarmac Quarry was ongoing as was the development in the Horrocksford area. The application for the deepening of the operation at Lanehead had been submitted. Intention to deepen from 17 to -31 metres in Horrocksford to access additional high grade limestone. Production requires access to 27,000 tonnes per week of appropriate grade/blend to enable continuous plant operation.

4.2 Gary presented an overview of blasting data for both Bellman and Lanehead along with the outflow data that confirmed excellent compliance with quarry planning conditions. There had been a couple of notifications of 'feeling' the blast (Feb) but these had been well within permitable limits.

4.3 Gary gave details of the outflows at Bellman and Lanehead along with suspended solids/ph graphs. He also showed data for the settlement pond.

4.4 He reported that the discharges to the river were still monitored even though this was no longer required by the Environment Agency. Rather than purely chemical checks the Ribble Catchment Trust were now doing 'health checks' on the river with regard to habitat and species present.

5 QUARRY DEEPENING APPLICATION

5.1 This had been submitted on 17.9.12 for the right hand side of Lanehead quarry. There are current reserves of 7 years that would be extended by a further 13 years. This application, in conjunction with existing Bellman reserves, allows for sufficient reserves to support ongoing investment at the plant. For compositional reasons, it will be necessary that both quarries will operate together up to the end of reserve life; estimates for when this will be relate to production volumes but could potentially provide to 2050.

5.2 Draft conditions relating to a proposed joint hydrological monitoring scheme with Tarmac had been received this week and were being considered.

5.3 Monitoring was also taking place at Chatburn Brook to ascertain the potential loss of water attributable to quarry operations, if any.

6 SUBSTITUTE FUELS / MATERIALS UPDATE

6.1 Gary showed a bar chart of the comparative use of substitute fuels - situation again improving – in that site had achieved 65% in 2013, compared to highest achieved of 70% in 2009.

6.2 SRF had previously been sourced from Scotland. A contract had now been secured with Lancashire Waste, Thornton to provide SRF. Approx 170 tonnes can be used in one day. A significant % of the waste from Lancashire Waste being used by Hanson Cement at Ribblesdale works.

6.3 Application had been made to use MBM to the main burner. Trails were ongoing with SRF to the main burner and calciner. An application for capital for SRF to calciner had been made.

7 COMMUNITY CONCERNS (COMPLAINTS)

7.1 Hanson had received 5 complaints so far in 2013. 3 related to dust and 2 to plume grounding. A question was asked if any complaints were ever received about noise. Gary reported that none had been received so far this year and that these were better dealt with if the complainant rings the site as the noise is happening so that an immediate check can be made. A noise survey using an acoustic camera had been carried out at the Padeswood site where it had shown that the offending noise does not always come from where it was expected.

8 ENVIRONMENTAL PERFORMANCE

8.1 Gary gave an overview of continuing monitoring of dust, by dust gauges on Google Earth that were placed all around the site and had been in operation since 2007 (single kiln operation). The results showed correlation between all the gauges (North, South, East and West) and the general trend of deposits was continuing to decrease. Any gauge linked with a complaint is sent off for independent analysis. This often transpired as bird strike. Covers had been installed at the 'duckpond' gauge.

8.2 Gary reported that the company were to review the number of monitoring stations that would probably result in a rationalisation and reduction in number.

9 ANY OTHER BUSINESS

10.1 Housing development

Gary had made representations on behalf of Hanson Cement at the Planning Inquiry. The outcome had now been received and the appeal had been dismissed with planning permission being given for houses on this site (Old Road, Chatburn).

10.2 Environment Agency

James asked if they were looking for anything new in the future. Gary reported that they have adopted a 'lighter touch' approach to this site although they still visit regularly every couple of months.

10.3 Tarmac

James asked about what happens to the planning permission if Tarmac don't take up quarry work again in the future. Jonathan reported that it would lapse, although the consent was live until 2018 when the agreed restoration works would have to take place if there was no quarrying.

Gary reported that Hanson were accelerating their restoration works in certain parts of their quarries where it was known that there would be no further work. This however would only take place above the 'end' water level. There is currently an approved Restoration Plan.

11 DATE OF NEXT MEETING

11.1 The next meeting of the Hanson Cement Liaison Committee will be held on Thursday 27 March 2014.

Briefing note provided for the shale gas briefing

ONSHORE GAS AND OIL OPERATIONS IN LANCASHIRE

Date: 16th September 2013

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1. BACKGROUND AND GENERAL INFORMATION

Shale gas activity in the UK is still in the exploration stage, where companies are drilling test wells. There is no experience of production operations in UK conditions as yet, although there is a long history of production of oil and gas from 'conventional' onshore fields. Background and general information is provided below in the following paragraphs.

The Department of Energy and Climate Change have recently produced a document that provides a synopsis of common questions put forward in relation to shale gas and fracking. It can be read by following this link:

https://www.gov.uk/government/publications/about-shale-gas-and-hydraulic-fracturing-fracking

Onshore gas and oil

In the UK, as elsewhere, hydrocarbons (gas and oil) are predominantly extracted from permeable rock formations such as sandstones. These "conventional" hydrocarbon reservoirs are predominantly sandstones and other porous rocks. The source of the hydrocarbons trapped in 'unconventional' reservoirs is predominantly shale with significant organic content. Such shales are widely distributed worldwide and are generally much more extensive in geological occurrence than conventional reservoirs. There have been many attempts over the years to develop these kinds of hydrocarbon resources. However, shale has low permeability (i.e., does not allow gas to flow) so gas production in commercial quantities requires the rock structure to be fractured to provide permeability. The process to achieve this is known as 'fracking'. This has enabled the rapid development of technologies to extract unconventional gas, most particularly shale gas in the USA.

Hydraulic fracturing ("fracking") is a generic term for various oilfield operations which aim to improve hydrocarbon flow rates in low permeability oil/gas reservoirs by increasing the natural fracturing in the rocks, or by creating artificial fractures. These operations vary, in choice and volume of fluid injected, pressures and rates, depending on specific reservoir attributes. In the UK, fracking has been used for many years by the industry – in particular to extract hydrocarbons from 'tight' sandstone gas reservoirs offshore, low permeability oil and gas fields onshore and some Coal Bed Methane fields onshore. Hydraulic fracturing, involves fracking fluid being pumped into the shale to enlarge or create fractures. The fluid consists of water, fine sand particles and a combination of chemicals chosen relative to geology type to act as a proponent. Fluids are pumped into the shale under pressure to

fracture the rock. As the pressure is released, the pressurised fluid returns to the surface (flow back water) but leaving some within the shale including the sand which resides within the fractures and creates a migratory path way from which gas can flow to the surface via the borehole. Vertical and horizontal drilling is often used with shale gas wells, with lateral extensions up to 10,000 feet within the shale, to enable the creation of a very large fracture network within the shale. Experience in the USA suggests that successful production techniques have to be specifically 'tuned' for particular rock formations.

Overall around 200 fracking operations have been carried out onshore in the UK, with the earliest carried out in 1958 and latest in 2011. Many more have been conducted in the offshore North Sea in tight gas fields. The type of fracking routinely conducted in the USA for shale gas, is usually significantly different to that so far conducted in the UK in that it involves multiple stages and much larger volumes of fluid. Fracking operations were conducted by Cuadrilla in Lancashire in April and May 2011.

Bowland Shale

A recent report by the British Geological Survey (BGS) has found that reserves of shale gas in the UK are twice as large as previously estimated. The findings from this first independent study says that the potential volume of shale gas in the Bowland Basin covers 11 counties in the North of England. Scientists from the British Geological Survey have estimated on a central scenario that there is likely to be some 40 trillion cubic meters (1,300 trillion cubic feet) of shale gas in the ground in this area. While this does not mean that this amount could be extracted for use, the report gives industry and regulators an indication. The amount that could be extracted could be substantially lower than the total amount of gas in place because of technical and commercial limitations on the level of extraction.

Cuadrilla Resources Ltd has a 100km square licence which covers most of the Fylde, Ribble Estuary and the north part of West Lancashire. Aurora has a similar license for a large part of West Lancashire and Southport. The BGS survey report has prompted press speculation on potential Shale Gas activity in East Lancashire. Petroleum Exploration and Development Licences are issued by the Department for Energy and Climate Change and the next licensing round is expected in 2014.

The Nature of Operations

Site development works and drilling activities are common for exploratory well sites and involve four phases:

- The construction of the drilling platform**:** stripping of top soils, some sub soil levelling and storing, the laying of an impervious and stabilising membrane followed by the construction of a sealed stoned working platform. The removed topsoil and subsoil is stored as bunds along the sides of each of the sites and which assist in providing temporary screening of plant and equipment during the drilling operations. The site preparation works take up to six weeks.

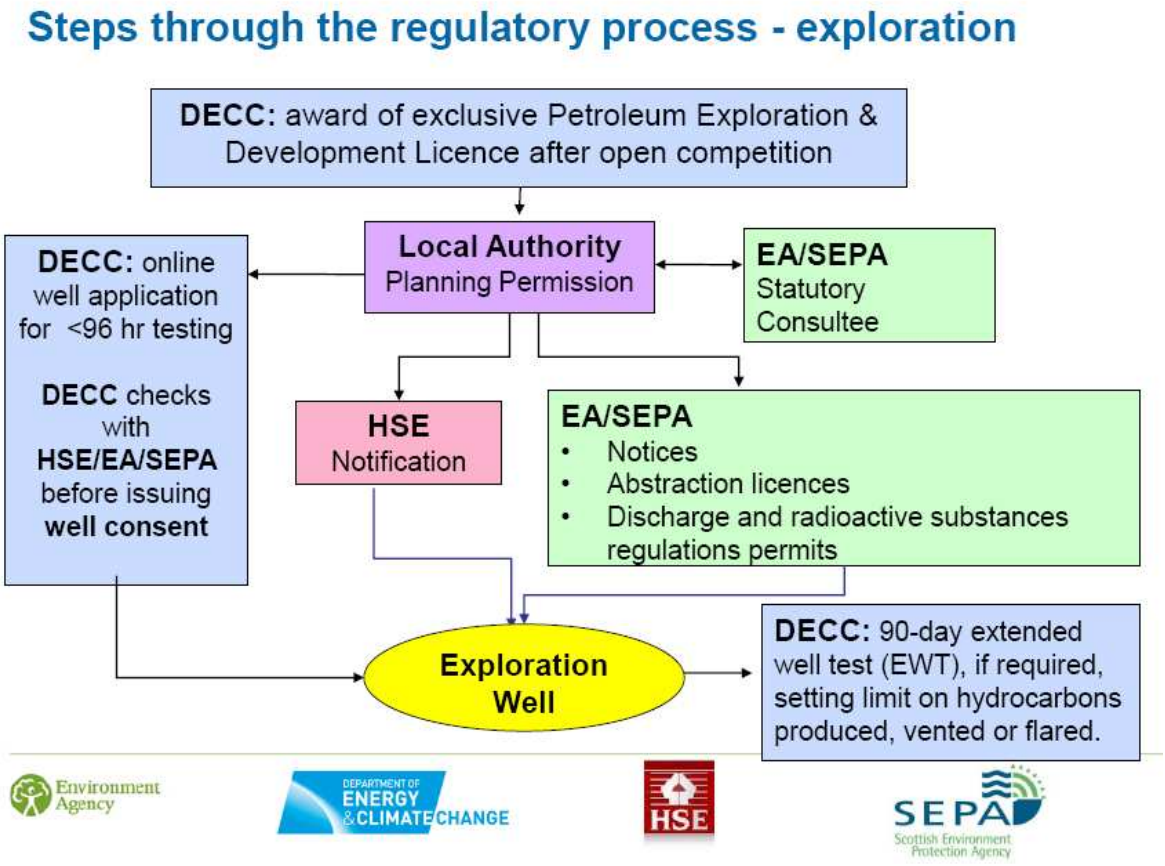
- The drilling operations: a borehole is drilled to the depth of the target rock formation. Of the permissions granted in Lancashire the variation in depth of the shale is between 2470 metres (8100 ft.) and 3505 metres (11500 ft.) below ordnance datum. The drilling operations are undertaken 24 hours per day, 7 days per week over a period of five to six weeks or more. The drilling rig is up to 36m high. The borehole is lined with steel tubing ("casing") to prevent the escape of drilling or fracking fluids and to control the flow of hydrocarbons if encountered.
- Testing for the presence of hydrocarbons: This is undertaken on completion of drilling operations and during normal daytime hours. To allow the gas to flow, the shale is fractured (see above) and which allows gas to flow from the fractured rock up the borehole to the surface where it is sampled, tested and managed by either flaring off or closing the borehole.
- If no gas is detected or not detected in commercially exploitable quantities the borehole will be plugged and the site restored over a period of up to six weeks. If successful, the borehole will be temporarily sealed with a control valve and the rig and other temporary buildings removed. The land would not be restored immediately as further testing or production facilities may be required. However, further planning permission would be required for the retention of the platform and for any further testing or subsequent production facilities.

2. THE ROLES, RESPONSIBILITIES AND RELATIONSHIPS OF THE REGULATORS

There are four regulatory bodies responsible for unconventional gas exploration and exploitation:

- Department of Energy and Climate Change (DECC)
- Lancashire County Council (LCC)
- The Health and Safety Executive (HSE)
- The Environment Agency (EA)

Their respective roles are set out below. It should also be noted that DECC have also established an 'Office for Unconventional Gas and Oil', which will join up responsibilities across Government and provide a single point of contact.



DECC

Companies seeking to explore for or produce oil or gas, must first obtain a petroleum licence from DECC. This conveys no permission for operations on land, but gives exclusivity for exploration operations against other oil and gas exploration companies, within a defined area. DECC which regulates the efficient use of the resource (i.e., the oil or gas in the ground), in particular by scrutiny of the drilling operations and production plans.

Hydraulic fracturing (fracking) operations for shale gas in the UK had been suspended since May 2011, pending the investigation of two seismic tremors experienced near Preese Hall, Lancashire during fracking operations. In the light of the recommendations of a panel of independent experts, of comments received in response to a public consultation, and of the recommendations of an authoritative review of the scientific and engineering evidence on shale gas extraction made by the UK's science and engineering academies, the Royal Society and the Royal Academy of Engineering, the Secretary of State for Energy has announced the introduction of new regulatory requirements to ensure that seismic risks are effectively mitigated.

DECC will impose and regulate the following requirements:

- Operators will first be required to review the available information on faults in the area of the proposed well to minimise the risk of activating any fault by

fracking, and required to monitor background seismicity before operations commence. Real time seismic monitoring will also continue during operations, with these subject to a "traffic-light" regime, so that operations can be quickly paused and data reviewed if unusual levels of seismic activity are observed.

- Operators will have to take a more cautious approach to the duration and volumes of fluid used in the fracking itself. A fracking plan will be required to be submitted to DECC before consent is given to any fracking. Real-time recording of earthquakes during and for 24 hours after each stage of the frack will be analysed to look for abnormal induced events amidst the normal background seismicity.
- Operators will also be required to monitor the growth in height of the frack away from the borehole. This will allow the operator to evaluate the effectiveness of the frack, but also ensure that the actual fracture is conforming to its design, and that it remains contained and far away from any aquifers.
- So far as Cuadrilla's current exploration programme in Lancashire is concerned, the remedial action level for the traffic light system (that is, the "red light") will be set at magnitude 0.5 (far below a perceptible surface event, but larger than the expected level generated by the fracturing of the rock).

Subject to these new requirements, DECC is prepared in principle to consider new applications for consent to such operations, and the suspension is therefore lifted. As before, final consent to any well or well operations is dependent on confirmation that all other necessary permits and consents have been obtained.

The full Government response to the recommendations made on the scientific and engineering evidence by the Royal Society and the Royal Academy of Engineering can be accessed via the following link:

Government response to Royal Academy of Engineering and Royal Society report on "Shale Gas Extraction in the UK: a review of hydraulic fracturing" [PDF, 78.8KB, 13 pages]

Further information from DECC can be accessed via the following link
https://www.gov.uk/oil-and-gas-onshore-exploration-and-production

LCC

The County Council is the strategic planning authority for mineral and waste developments in the county. This involves managing the planning process according to planning rules set out by the government to assess applications for mineral developments, including mineral exploration. The county council must determine applications in accordance with planning law. A planning application can only be refused if it is contrary to the policies of the development plan and there are sustainable reasons to do so. If planning permission is granted, we monitor and inspect the operations to ensure they comply with any conditions imposed. We have to be fair and neutral in the way we approach considering planning applications within the limitations of planning law.

The County Council does not work in isolation when determining planning applications and works closely with other regulators, agencies and bodies in

determining applications. For example, safety and environment are important factors and the advice provided by other agencies is carefully considered before decisions are taken. The County Council maintains close working relationships with other regulatory bodies and local authorities associated with or affected by shale gas operations including officers of the respective district councils through teleconferences and meetings.

If the County Council requires advice of a specialised nature and it is unavailable in-house, then the planning authority can appointment specialised consultants and for which there is a prescribed procurement process which must be followed.

HSE

The HSE is responsible for:

- Regulating the health and safety aspects of shale gas exploration in particular considering well integrity and construction. The integrity of the well construction is important in terms of environmental protection, and most particularly in this instance, minimising the risk of contamination of the aquifer.
- Requiring operators to produce a Health and Safety document for the site.
- Requiring operators to notify HSE on well design. The HSE do not give consent, but will scrutinise the design and can undertake a range of further interventions (up to issuing prohibition notices) if they have concerns about the proposed design.
- Requiring operators to provide HSE with a weekly report of drilling activity. HSE will scrutinise these reports, and this can trigger further interventions, including site visits
- Requiring the well operator to have a well examination scheme, delivered by an independent well examiner who (as part of that scheme) will review the well design and monitor the construction phase of the well and its subsequent maintenance.
- Transport of gas products and injection into the grid.

EA

The EA are a statutory consultee in the planning process and will discuss proposals and provide advice to planning authorities. The EA provide advice as part of pre-application enquiries, for scoping of any Environmental Impact Assessment and on the planning application itself. Where risks to the environment are significant, for example where development is proposed contrary to groundwater protection policy and practice, the EA will object to the planning application

The Environment Agency's key role in on-shore drilling, which includes shale gas exploration, is to protect ground water including aquifers, and surface water including rivers and water courses from pollution and to ensure that any hydraulic fracturing flowback water is managed and disposed of responsibly. The EA have announced that they have reappraised the legal framework for unconventional oil and gas and concluded that all activities involving drilling and well stimulation will require environmental permits.

Drilling a borehole requires a mining waste permit for the management of waste including drill cuttings, spent mud and fluid, waste gases and waste left underground. Well stimulation is likely to need permits for radioactive substances. Depending on the hydrology, operators may also need to consider applying for a groundwater permit.

Operators are required to notify the EA of their plans under the Water Resources Act 1991 (WRA 1991) and they expect that shale gas developments that include hydraulic fracturing will need environmental permits under the Environmental Permitting (England and Wales) Regulations 2010 (EPR) before fracturing operations commence. The EA determine these applications undertaking environmental risk assessment. Were there is significant public interest in an application, the EA will provide an opportunity for public scrutiny. However, the EA are only able to consult on the issuing of environmental permits, and not wider issues relating to the shale industry.

Under the Water Resources Act 1991 (WRA 1991) the EA must be notified when a company wishes to sink a borehole so that it can ensure the borehole design will properly protect of any groundwater present. If hydraulic fracturing takes place in a borehole that passes through groundwater, the EA would regard the fracturing as a 'groundwater activity'. .

Only substances that have been assessed as being non-hazardous pollutants under the Groundwater Daughter Directive may be used in hydraulic fracturing fluids. Information on the chemicals used by an operator in hydraulic fracturing can be made available to the public. The EA's Chemicals Assessment Unit reviewed the chemicals used in fracking fluid to ensure they were classed as non-hazardous under the Groundwater Directive 2006. The Unit's decisions are further peer-reviewed by the Joint Agencies Groundwater Directive Advisory Group.

The EA regulate water abstraction linked to any extraction process if the operator wishes to take water directly from a river or from groundwater. If operators want to abstract water directly from surface water or groundwater for operational purposes, and this exceeds 20 cubic metres a day, they will need a Water Abstraction Licence. Applications for licences are assessed like any other licence and will be granted if the quantities proposed for abstraction can be taken in a way that doesn't harm the environment or other users.

The EA regulate discharges of flow-back fluids under EPR as Mining waste operations and radioactive substances. As a 'Mining waste operation' an operator will need a permit under EPR for managing the flow-back from hydraulic fracturing, The flow-back fluid is considered mining wastes and the operator must provide a waste management plan with their permit application that will set out how they mange this waste. Naturally occurring radioactive materials (NORM) are also present in many geological formations, including oil and gas bearing strata such as shale formations. The flow-back fluid that returns to the surface following hydraulic fracturing are likely to contain sufficient NORM that they will be classed as radioactive waste. As such the operator must have an environmental permit for their temporary storage and subsequent treatment and disposal. Treatment and disposal

may take place on-site or be carried out at remote sites such as sewage treatment works or effluent treatment facilities.

Operators must demonstrate to the EA that their proposed activities are not harmful to people or the environment. The EA use a variety of methods such as audits, site inspections, check monitoring and / or sampling, and reviewing operator records and procedures. They may ask to monitor the effects their activities have on the environment and report these for inclusion on EA public registers through the permits issued. The EA have the power to serve notice on an operator to stop an activity; and where an offence is committed, the Environment Agency can prosecute.

The EA and the HSE have released a *'Working together agreement'* that explains the joint approach to the regulation of unconventional oil and gas developments:

http://www.hse.gov.uk/aboutus/howwework/framework/aa/hse-ea-oil-gas-nov12.pdf .

Further information with regards to regulations can been found at the regulators websites at the following links:

- Environment Agency' guidance note on exploratory shale gas operations and
- http://www.hse.gov.uk/offshore/unconventional-gas.htm

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3. CURRENT ACTIVITY IN LANCASHIRE.
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A number of planning permissions for exploratory (test) shale gas drilling operations where granted in 2009/10.

- Land at Annas Road, Westby, Blackpool – granted 19/11/10 (Ref. 05/10/0634).
- Banks Enclosed Marsh, Bonny Barn Road, Hundred End, Becconsall – granted20/10/10 (Ref.08/10/0973).
- Land at HM Kirkham Prison, Freckleton Road, Kirkham – granted 15/06/10 (Ref.05/10/0184).
- Land South of Grange Road, Singleton – granted 214/10 (Ref. 8/10/0973).
- Land 450m North of Hale Hall Farm, Inskip Road, Wharles – granted 3/03/10 (Ref 05/09/0813).
- Preese Hall Farm, Weeton, Kirkham, Preston – granted 30/10/09 (Ref 05/09/0572).

The following planning permission was also granted for hydrocarbon investigations to a company called Aurora:

- Norris Farm, Down Holland, Moss Lane, Formby – planning permission granted on 17th May for temporary change of use from agriculture to site for drilling and testing for hydro carbons including four shallow exploratory boreholes and associated site compound (Ref 08/11/0210).

The first planning permission was granted at **Preese Hall, Weeton** in accordance with the Scheme of Delegation in October 2009. The site has been constructed, the borehole drilled and two fracking tests carried out. Further testing was suspended in view of seismic movement having been recorded at the time.. An application to restore the site was granted by the development control committee in January 2013.

The site at **Grange Road, Singleton** was granted planning permission by the Development Control Committee in April 2010 in view of three objections having been received. The site compound has been constructed and the borehole drilled. No fracking activities have been carried out to date. The County Council is in receipt of an application for a time extension of the parent planning permission and which includes fracking the vertical borehole that has been drilled. Cuadrilla has been informed by the County Council that this application constitutes EIA development. At Grange Road, Cuadrilla have said that they will submit a further application to covering drilling, hydraulic fracturing and a flow testing programme and submit it later in the year.

An application at **Becconsall, Banks** was granted planning permission, again in accordance with the Scheme of Delegation in October 2010. Again, the site compound has been constructed and the borehole drilled. No fracking activities have been carried out to date. A time extension application at Becconsall has been submitted by Cuadrilla and the proposed activity is reduced to diagnostic testing and excludes fracking.

The Development Control Committee granted planning permission for a site of **Annas Road at Westby** in November 2010 in view of two objections having been received. The site was drilled by Cuadrilla, though not 'fracked'. The 'parent' planning permission expired on 19 January 2013. There are currently two planning applications relating to the site; one for a time extension of planning permission for the vertical well and one to horizontally drill off the vertical borehole. Both applications exclude fracking and remain to be determined. Cuadrilla had said that a decision on drilling and testing at the existing Anna's Road site will be deferred but just recently Cuadrilla announced that they will be with drawing from the site and restoring it.

And finally planning permission was granted for a borehole at **Kirkham Prison** in June 2010 and planning permission was granted at **Hale Hall Farm** in March 2010. Both permissions have expired.

Cuadrilla operates an **existing gas extraction well at Elswick.** The site was first granted planning permission (Ref 5/94/130) in May 1994 for the temporary extraction of hydrocarbons and generation of electricity. Subsequent planning permissions have been granted to extend the life of the site. The current planning permission for this development was granted in February 2009 (ref 05/08/1027) and was subject to a time limit requiring the gas extraction and electricity generation operations to cease not later than ten years from the date of the permission (by no later than 23rd February 2019) and to be restored within a further 12 months (by no later than 23rd February 2020).

Notwithstanding current planning applications before the County Council awaiting determination, Cuadrilla released a press statement on 5 July 2013 that contained some detail of how they plan to go forward with their developments in Lancashire. In summary the press release stated:

- They intend to complete a full Environmental Impact Assessment (EIA) for each exploration well site where they seek planning consent for drilling, hydraulic fracturing and flow testing.
- At Grange Road, they will submit applications covering drilling, hydraulic fracturing and a flow testing programme and submit it later in the year. Subject to all necessary approvals, they intend returning to the sites and completing work in 2014.
- A decision on drilling and testing at the existing Anna's Road site will be deferred until later in the exploration programme
- Cuadrilla proposes to strengthen its exploration programme by adding more additional temporary exploration sites during 2014 to assess gas flow rates. Cuadrilla has not yet disclosed the location of the additional temporary sites.
- Cuadrilla will also apply for planning consent to drill up to three further vertical exploration wells. These wells will not be hydraulically fractured. They will allow additional rock samples to be taken, and further improve knowledge of the subsurface geology; their locations will be discussed with the community before they are finalised. These operations will be discrete from the proposed exploratory works detailed above
- Cuadrilla has appointed Arup, the engineering and environmental consultancy, to undertake Environmental Impact Assessments for each application to drill, fracture and flow-test.
- Cuadrilla press releases can be accessed via the following link:

  http://www.cuadrillaresources.com/

All current planning applications can be viewed on the Development Management planning register at:

http://planningregister.lancashire.gov.uk.

USEFULL LINKS

LCC Development Management:

http://www3.lancashire.gov.uk/corporate/atoz/a_to_z/service.asp?u_id=537&tab=1

LCC Planning register: planningregister.lancashire.gov.uk/planapplist.aspx

Department of Energy and Climate Change: http://www.decc.gov.uk/

Health and Safety Executive: http://www.hse.gov.uk/

Environment Agency: www.environment-agency.gov.uk/

West Lancashire Borough Council: http://www.westlancs.gov.uk/default.aspx

Fylde Borough Council: http://www.fylde.gov.uk/

The Royal Society: royalsociety.org/