

**OVERVIEW AND SCRUTINY COMMITTEE  
(REGENERATION & ENVIRONMENTAL SERVICES)**

**SHALE GAS (FRACKING) WORKING GROUP  
FINAL REPORT  
OCTOBER 2015**



# Overview & Scrutiny

**'Valuing  
Improvement'**

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## LEAD MEMBER'S INTRODUCTION

It gives me great pleasure to submit to you the findings of the investigation in relation to Shale Gas.

The investigation was undertaken as a result of a Notice of Motion to the Council in July 2014 and the Working Group was established by the former Overview and Scrutiny Committee (Regeneration and Environmental Services) in September 2014.

During the course of the study, Members gained a significant knowledge of the Fracking process.

It is highly likely that the Government will continue to support the development of Shale Gas.

The Working Group agreed a number of recommendations which, if agreed by the Cabinet, we believe will go a long way in getting the best deal for the Communities of Sefton.

On behalf of the Working Group I would like to take this opportunity to thank all the agencies, outside bodies and organisations that took part in this review and all Members and Officers from Sefton M.B.C. that were involved in completing the report.



**Councillor Fred Weavers**  
**Lead Member of the Shale Gas (Fracking) Working Group**



## 1.0 BACKGROUND

- 1.1 At its meeting on 24 July 2014, the Council considered a motion (follow the link below to access details of the motion) and resolved that:-

“an all-party Working Group be appointed to consider the implications set out in the Motion and Amendment in more detail and submit their findings to Cabinet for consideration in due course and that the membership and terms of reference of the Working Group be determined in the near future.”

Link to the motion submitted to the Council:

<http://modgov.sefton.gov.uk/moderngov/ecCatDisplay.aspx?sch=doc&cat=13602&path=0>

- 1.2 At its meeting held on 16 September 2014, the Overview and Scrutiny Committee (Regeneration and Environmental Services) resolved that:

Councillors Lappin, McGuire and Weavers be nominated to serve on the Shale Gas (Fracking) Working Group and that any other Members of the Committee wishing to serve on the Working Group be requested to contact the Director of Corporate Services.

- 1.3 At its meeting on 20 January 2015, the Overview and Scrutiny Committee (Regeneration and Environmental Services) resolved that:-

Councillors Hartill and Maguire be included as Members of the Shale Gas (Fracking) Working Group.

- 1.4 At its meeting on 17 March 2015, the Overview and Scrutiny Committee (Regeneration and Environmental Services) resolved that Councillor O'Brien be appointed to serve on the Shale Gas (Fracking) Working Group.

- 1.5 The work of the Working Group spanned two Municipal Years and so consequently there had been a change in Membership. At its meeting on 28 July 2015 the Overview and Scrutiny Committee (Regeneration and Skills) resolved that:-

“the membership of the Shale Gas (Fracking) Working Group be re-affirmed as Councillors O'Brien and Weavers and Councillors Hartill and McGuire be invited to comment on the Final Report as former Members of the Committee who served on the Working Group.”



1.6 Details of Working Group meetings are as follows:-

<b>Date</b>	<b>Activity</b>
6.11.14	Presentation in relation to Local Authority Powers relating to Shale Gas, Background Information and Scope Review
1.12.14	Agree Scoping Document; and Interview Key Witness – Mr. Peter Cowley, Principal Lawyer, Planning, Environment and Property Services Team, Sefton M.B.C.
15.1.15	Interview Key Witness – Dr. Emer Coffey, Associate Director of Public Health, Health Protection, Liverpool City Council and Consultant in Public Health, Sefton M.B.C.
12.2.15	Interview Key Witnesses: Mr. Gordon Whitaker, Environment Agency; and Mr. Stephen Birch, Team Leader, Strategic Transportation Planning Unit, Investment Programmes and Infrastructure, Sefton M.B.C.
26.3.15	Interview Key Witnesses: Mr. Tony Almond, representative from the Health and Safety Executive; and Mr. Derek McKenzie, Interim Head of Planning, Sefton M.B.C.
9.7.15	Interview Key Witness – Mr. Mark Long, Head of Inward Investment and Employment, Sefton M.B.C.

1.7 Members of the Group drafted and agreed the following terms of reference and objectives of the review:-

## **2.0 SHALE GAS**

### 2.1 Terms of Reference

2.1.1 Clarify the licensing and regulatory framework for Shale Gas development.

2.1.2 Clarify the extent of control that Sefton Council has over shale gas extraction within its boundaries.

2.1.3 Identify the issues that should be addressed through the planning process, including assessments and information requirements, to enable Sefton Council to determine applications for Shale Gas development.

2.1.4 Compile an evidence base of licensed areas and proposed / consented sites within Sefton and the stage of development.

2.1.5 Clarify the position and law of “Trespass” in terms of land under home owners and businesses where fracking could be undertaken.

2.1.6 Review the studies or policy position of other Authorities within the Liverpool City Region, the Combined Authority and the LEP.





- 2.1.7 Identify potential community impacts, benefits and opportunities for Carbon off-set.
- 2.1.8 Report to Cabinet on its findings.
- 2.2 Objectives
  - 2.2.1 To enable Sefton Council, as local planning and minerals planning authority to develop a robust response to planning applications for shale gas.
  - 2.2.2 For the Working Group to only address those matters for which Sefton has a regulatory role and statutory responsibility, principally through Local Plan policy and regulatory compliance including the National Planning Framework and Habitats Regulations.
  - 2.2.3 To review the Regulatory Framework for shale gas and identify any improvements to local co-ordination of regulatory response and oversight and, where applicable, reference to Government.

### **3.0 METHODS OF ENQUIRY**

- 3.1 Background reading.
- 3.2 Presentation:- Member shale gas presentation.
- 3.3 Topic based discussion:- thematic meetings, drawing on key witnesses, primarily from regulatory organisations such as the Environment Agency.

### **4.0 KEY WITNESSES – SUMMARY OF FINDINGS**

- 4.0.1 Members of the Working Group gathered evidence through various methods, including presentations and briefings and receiving reports. Evidence was also obtained when Members had the opportunity to interview key witnesses, various Officers and Partners.
- 4.0.2 Paragraphs 4.1 – 4.7 provide a summary of the points raised in presentations/discussions held with key witnesses who had been invited to attend Working Group meetings.

#### **4.1 THE POSITION AND LAW OF “TRESPASS”**

- 4.1.1 The Working Group received a verbal presentation from the Principal Lawyer, Planning, Environment and Property Services, Mr. Peter Cowley in relation to the legal position of landowners in terms of extraction of minerals under their land. Mr. Cowley presented the following facts:-



## Legal position:

- A landowner owns all the substrata which lie beneath their land up to an undefined depth where the notion of ownership becomes absurd. However there may be occasions where large landowners could sell the land and retain the mineral rights.
- Permission to drill under the land or property of a landowner is required from the landowner and if it is not obtained then it is deemed to be trespass.
- Where permission has not been granted, there is a statutory procedure under which a court may grant a right to extract minerals under the Mines (Working Facilities and Support) Act 1966, subject to the following limitations.
  - Limitation on grant of rights:-
    - (1) No right shall be granted under section 1 of the Act unless the court is satisfied that the grant is expedient in the national interest.
    - (2) No right shall be granted under section 1 of the Act unless it is shown that it is not reasonably practicable to obtain the right by private arrangement for any of the following reasons:-
      - (a) That the persons with power to grant the right are numerous or have conflicting interests;
      - (b) That the persons with power to grant the right, or any of them, cannot be ascertained or cannot be found;
      - (c) That the persons from whom the right must be obtained, or any of them, have not necessary powers of disposition, whether by reason or defect in title, legal disability or otherwise;
      - (d) That the person with power to grant the right unreasonably refuses to grant it or demands terms which, having regard to the circumstances, are unreasonable.
  - Application for rights
    - (1) An application for the grant under section 1 of this Act shall be sent to the Minister, and the applicant for an ancillary right for the purpose of or in connection with working any minerals may be a person either having or applying for the right to work those minerals.
    - (2) The application shall set out the circumstances alleged to justify the grant of the right, and shall be in such form and accompanied by such information verified in such manner as the Minister may direct.
    - (3) The Minister shall consider the application, and shall, unless after communication with such other parties interested (if any) as he may think fit, he is of opinion that a *prima facie* is not made out, refer the matter to court.
  - Reference of application to court
    - (1) Where a matter is referred to the court under the last foregoing section, the court, if satisfied that the requirements of this Act are complied with in the case of the applicant, may, by order, grant the right on such terms and subject to such conditions, and for such period, as the court may think fit, and upon such an order being made, the right specified in the

order shall, subject to the following provisions of this Act, vest in the applicant.

(2) Where a right is granted, such compensation or consideration as in default of agreement may be determined by the court shall be paid or given by the applicant in respect of the acquisition of the right to such persons as the court may determine to be entitled thereto.

- That the current above procedure was a long one and could take up to 2 years.

- Case law “Bocado SA v Star Energy Onshore UK Ltd” – An energy company had carried out activities relating to the extraction of oil beneath a property without the title owner’s permission. The issue raised was whether this constituted a trespass, and to what extent does the owner of the surface land also own the substrata which lie beneath. Star Energy had a statutory licence to perform acts necessary for the extraction of oil, and the works underneath the landowner’s property were performed from adjoining land and did not cause any damage to the land. Nevertheless, the landowner asserted that he was entitled to a “share of the spoils” from any extraction.

The Court held that a landowner owns all substrata which lie beneath his property up to an undefined depth where the notion of ownership becomes absurd. The works involved in this case would not be so deep to render the notion of ownership absurd, and hence a trespass had occurred. However, the Court held that the correct measure of damages was not a “fair share of spoils”, but rather adequate compensation for the act of performing the operation (in this case installing pipes). This compensation was measured at £1,000.

- Government realised that the procedure under the 1966 Act was a long and expensive one and in May 2014 launched a 12 week consultation on the following proposals to reform the procedure for securing underground access to oil or gas deposits and geothermal energy:-

- An underground right of access below 300m (nearly 1000ft);
- A voluntary community payment from industry of £20,000 per lateral well; and
- A voluntary public notification for access, in the form of public announcements to the local community.

Government state that this solution would significantly simplify the existing procedure. The shale and geothermal industries will be able to proceed with developing their potential, and local communities will be appropriately informed and compensated for this right of access.

- The consultation closed on 15 August 2014 and Government responded to the Consultation and published their response in a document which can be accessed on the following link:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/358521/Government\\_Response\\_FINAL.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/358521/Government_Response_FINAL.pdf)

The Government’s response to the consultation concluded with the following points:-



- We acknowledge the large number of responses against the proposal and the fact that the proposal has provided an opportunity for the public to voice their concerns and raise issues. However, the role of the consultation was to seek arguments and evidence to consider in developing the proposed policy. Whilst a wide range of arguments were raised and points covered, we did not identify any issues that persuaded us to change the basic form of the proposals.
- Having carefully considered the consultation responses, we believe that the proposed policy remains the right approach to underground access and that no issues have been identified that would mean that our overall policy approach is not the best solution.
- We will therefore put before Parliament primary legislation to implement the policy proposals set out in the consultation paper. Parliament's scrutiny of the provisions will provide further opportunities for public engagement on the issues.

Arising from the presentation, Members then raised the following issues:-

- That the voluntary Community payment proposal seemed rather vague. Would it be paid at a community level or to the Local Authority? A payment made at a Community level would need to be paid to a body that was constituted and how would the area of the Community be determined or defined? Response: Nothing has been defined in detail, but it's interesting to note that a Community should benefit when it could be one landowner who has been affected. The proposal is to submit primary legislation to Parliament.
- There are various policies included within Sefton's draft Local Plan, one of which is the Minerals Policy. Until the draft Local Plan is adopted, the Minerals Policy has limited material weight and so in terms of Shale Gas and any other mineral issue, Sefton Council would be guided by the Unitary Development Plan until such time as the Local Plan is adopted. Members welcomed that as a result of the Working Group's first meeting, the following additional provision had been included within the Policy:-  
 ".....The Council would find it helpful to receive through pre-application discussions and/or in support of an application, information that addresses the following matters:
  - Impacts to health, wellbeing and equality;
  - Community impacts, including any funds and/or works accruing from the proposals for community benefit, predicted new employment for local people and benefits for local businesses."
 Members agreed that the provision would clearly set out Sefton Council's expectations at pre-application stage. The Working Group was updated by Alan Jemmett on the draft Local Plan policy on minerals. It was confirmed that energy minerals including shale gas were covered within the policy and its explanatory text.

The approach adopted was designed to be compliant with national policy and reflect the local circumstances in the borough.

It was also intended to provide clarity to industry and local communities regarding Mineral Planning Authority controls and expectations of prospective developers. It was agreed that the draft policy might provide a useful source of information for the Working Group.

It was also agreed that Alan Jemmett would make contact with the Environment Agency as Members also wished to receive expert evidence from them.

- What is the position if a company goes off shore and drills? Response: There is a licensing round for off shore drilling and a company could have a land based site and drill out. A marine based structure would be expensive.

## 4.2 HEALTH IMPACTS IN RELATION TO SHALE GAS

The Working Group received a verbal presentation, with supporting documents from Dr. Emer Coffey, Associate Director of Public Health – Health Protection, Liverpool City Council and Consultant in Public Health, Sefton Council.

Dr Coffey referred to the following documents:-

Potential Health Impacts of the Proposed Shale Gas Exploration Sites in Lancashire – Link to the document below:-

<http://modgov.sefton.gov.uk/moderngov/ecCatDisplay.aspx?sch=doc&cat=13602&path=0>

Public Health England – Review of the Potential Public Health Impacts of Exposures to Chemical and Radioactive Pollutants as a Result of the Shale Gas Extraction Process – Link to the document below:-

<http://sb1msgov1/ecSDDisplay.aspx?NAME=SD1866&ID=1866&RPID=10070777&sch=doc&cat=13602&path=13602>

Dr. Coffey presented the following facts in relation to the Public Health England – Review of the Potential Public Health Impacts of Exposures to Chemical and Radioactive Pollutants as a Result of the Shale Gas Extraction Process document:-

- That there was a lot of current evidence based on the USA and that the UK should not compare itself with the USA as they are both different in the way they are regulated, the geography and communities and so to compare with the American experience wouldn't be a fair comparison.
- That Public Health England had reviewed the literature on the potential public health impacts of exposures to chemical and radioactive pollutants as a result of shale gas extraction. It concluded that the currently available evidence



indicated that the potential risks to public health in the vicinity of shale gas extraction sites would be low if shale gas extraction was properly run and regulated.

Where potential risks had been identified in the literature, the reported problems were typically a result of operational failure and a poor regulatory environment. Therefore good on-site management and appropriate regulation of all aspects from exploratory drilling, gas capture, use and storage of fracking liquid, and post operations decommissioning were essential to minimise the risk to the environment and public health.

- Public Health England (PHE) also stated that “In order to provide assurance of low risk to the public’s health from the shale gas extraction process, PHE’s view is that robust environmental regulation is essential. This includes the need to consider local factors, particularly in relation to aspects of the process that involve new technologies such as hydraulic fracturing. PHE is in regular dialogue with the Environment Agency to ensure that the protection of the public’s health is appropriately reflected in all aspects of the regulatory process. We will work with regulators to ensure that effective environmental monitoring is undertaken, including base-line monitoring, before any drilling or extraction is commenced”.
- PHE’s report focuses on potential risks to people in the vicinity of shale gas extraction sites as a result of releases of chemical and radioactive pollutants during extraction. It does not consider wider public health and socioeconomic impacts such as increased traffic, impacts on local infrastructure and worker migration. The report refers to the importance of considering such broader issues in local planning applications to determine overall impact on the health and wellbeing of local communities. Such considerations will, for example, weigh the beneficial effects of employment and local economic development, against potential harms from increased traffic density and air pollution, and impact on the natural environment.
- PHE have undertaken to provide specialist scientific support to local authorities when considering the evidence provided by applicants. They are in discussion with the Local Government Association and Directors of Public Health about an appropriate framework for providing that support.

Dr. Coffey highlighted the various recommendations contained within the Potential Health Impacts of the proposed Shale Gas Exploration Sites in Lancashire document. Recommendations had been made by Lancashire County Council in relation to the following headlines:-

Recommendations:-

- To address community understanding of risks associated with shale gas exploration.
- To address air quality.
- To minimise greenhouse gas emissions.
- For emergency preparedness.



- To address health impacts of noise.
- To address issues related to induced seismicity.
- To address issues related to waste.
- To address issues related to light.
- To address issues related to transport.
- To address occupational health risks.
- To establish baseline and monitoring of environmental conditions.
- For local policy and practice.
- For national policy and guidance development.
- For research.

Arising from the verbal presentation, Members raised the following issues:-

- Members agreed that the document was a useful case study and that the Working Group could use the document as a basis in formulating its findings in preparation for producing its final report.
- Were Health Impact Assessments (HIA) a statutory requirement of the developer? Response: Government has set thresholds, for example a HIA would not be required for a test drill; however, if the developer receives consent to move onto full extraction then a H.I.A. could be triggered.
- As a Minerals Authority, at the planning stage of the application, could the Council recommend that a developer be requested to undertake a H.I.A.? Response: It is difficult to stipulate that the developer must undertake a H.I.A. Any request should be fair and appropriate for the level and size of the development site. As stated at previous meetings a Council document could be developed setting out the expectations of the Council in relation to Shale Gas extraction.
- A test drill could have a huge impact on the health and wellbeing of some individuals within our communities. The site at Banks caused many residents to suffer anxiety and had an impact on their mental health and it can be very difficult for some individuals to understand the implications. Response: A test drill would usually be referred to as low risk in terms of health. Meaningful engagement with the local communities is essential, ensuring the community has an opportunity to learn and understand the procedure and process. In that respect the Council could act as facilitator of community information evenings that the developer hosts in a transparent and meaningful manner. Representatives from key regulatory agencies could be invited to give an objective balance to the debate, thereby ensuring genuine challenge occurs. Community engagement could be included within the “Shale Gas Extraction – The Councils Expectations” document, if drafted and agreed.

#### 4.3 REGULATORY POWERS AND APPLYING THEM IN PRACTICE

The following headlines were presented:-

- The Environment Agency and their role.



- The possible risks to the environment from Hydraulic Fracturing, Air, land and water.
- The current regulation and if permits are required.
- The importance of the location, geological setting and well construction in protecting groundwater.

The presentation also outlined the schematic geology of natural gas resources, the process involved in exploratory shale gas operations and the environmental risks from shale gas extraction.

It was highlighted that open and transparent regulation was essential and this would be managed by the following conditions:-

- The requirement of Environmental permits before drilling.
- Risk based and site specific – one size does not fit all.
- Permits are consulted upon – public interest.
- Pre-operational and post decommissioning monitoring required.
- Inspection and check monitoring in line with national standards and open to scrutiny.

Mr. Whitaker explained the ways in which the regulation would be applied as follows:-

- Approval of components of fracturing fluids.
- Permit requirements where a groundwater resource was at risk.
- Management of drilling waste, flow back water and flared gases require an agreed waste management plan.
- Management plans required where dissolved naturally occurring radioactive material in flow back.
- Flaring standards and methods set out under the Industrial Emissions Directive.
- Site conditioning and permit surrender.
- Use of water: abstraction licence required, if take in excess of 20m square per day.
- Planning advice and flood risk assessment.

Permit compliance and inspection was reported as being very important and would be carried out by:-

- On-site inspection throughout operations focusing on:-
  - site set up
  - drilling and well construction
  - mini frack
  - fracking
  - flow back



- Joint inspection carried out with the Health and Safety Executive.
- Compliance records open to the public.
- Powers to prosecute and enforce suspension of operations.

Mr. Whitaker concluded by setting out the position of the Environment Agency as follows:-

- Shale gas in the UK is at the early stage of development.
- The environmental risks are taken seriously and they can be managed effectively.
- All Shale gas operations will require environmental permits.
- The Environment Agency has all the necessary regulatory controls in place at exploration stage with a robust inspection regime.
- The Environment Agency continues to work closely with the Government, other regulators and the new Office of Unconventional Gas and Oil (OUGO).
- Examining best practice in environmental regulation in Europe (via EU technical working group).

Arising from the verbal presentation, Members raised the following issues and observations:-

- There are various ongoing issues being debated at the House of Commons in relation to Shale Gas. The production of Shale Gas is in its infancy and so the industry is evolving; with this in mind will all the amendments be reflected in the Working Group's Final Report? Response: The Final Report should be set in the context of a rapidly emerging industry and as such should be highlighted in the Final Report.
- Could a Company use sea water in the fracturing process? Response: A Company would need to demonstrate it was safe to do so.
- Is there a charge to use sea water? Response: There is a charge and that payment would go to the Environment Agency to offset against the Environmental risk assessments that they would be required to undertake.
- Does the Environment Agency have the capacity to monitor the environmental risks associated with Shale Gas and is the monitoring mechanism in place adequate? Response: The Environment Agency does have the capacity and the monitoring mechanism is more than adequate.
- In relation to hazardous waste, when vibration is introduced into sand the sand becomes a fluid: this could have an effect on buildings? Response: A Company would be required to carry out a test drill before fracturing can proceed and then the Company would be required to ensure that there was a mechanism in place to alert Officers of any leakage. They would also be required to illustrate to the Health and Safety Executive in relation to how the well integrity would be maintained.

The evidence so far indicates that in terms of the geology, there is no real risk that fracturing from a measured distance shouldn't propagate through to cause a risk. The Environment Agency would know the underground geology and adopt a risk based approach. Integrity of the well from design through



installation and into operation is the key to minimisation of any potential emissions and is the responsibility of the operator and closely inspected and regulated by the authorities.

- Can you give an undertaking that the inspectors are qualified in the area of Shale Gas? Response: The Environment Agency would ensure that the right inspectors were in place to ensure a Company was complying within the terms of the permit.
- If a Company was not complying within the terms of the permit can the Environment Agency close the site? Response: Both the Environment Agency and the Health and Safety Executive can issue a “Suspension Notice”. Both Organisations work closely together and the one with greater powers would instigate and take the issue forward.

#### 4.4 TRANSPORT IMPACT ASSESSMENT

Mr. Birch reported that from a Highways perspective, the approach in terms of a Shale Gas development would be the same approach for other developments in that a transport assessment would be undertaken.

The transport assessment would be site specific and would consider the number and nature of trips to the site and the routes being used. He explained that should a journey travel into another Local Authority, then consultation with that Authority would be required.

Members raised the following questions regarding Highways issues in relation to a Shale Gas development:-

- With reference to a Shale Gas Exploration site in Banks, West Lancashire, the traffic was directed through Southport. If that site had been developed into a full Shale Gas Extraction operation and the transport assessment had identified Southport as the preferred route, would Sefton Council have a bigger say? Response: Sefton Council could comment on the application through the consultation process. If those comments were not taken into account, then Sefton could object through the planning application process.
- When Shale Gas Exploration took place in Banks was Sefton Council consulted? Response: From recollection I think Sefton were consulted. However, I can't be sure and so that could be a question when Working Group Members interview a representative from Sefton's Planning Services.

## 4.5 MANAGING THE ENVIRONMENTAL RISKS

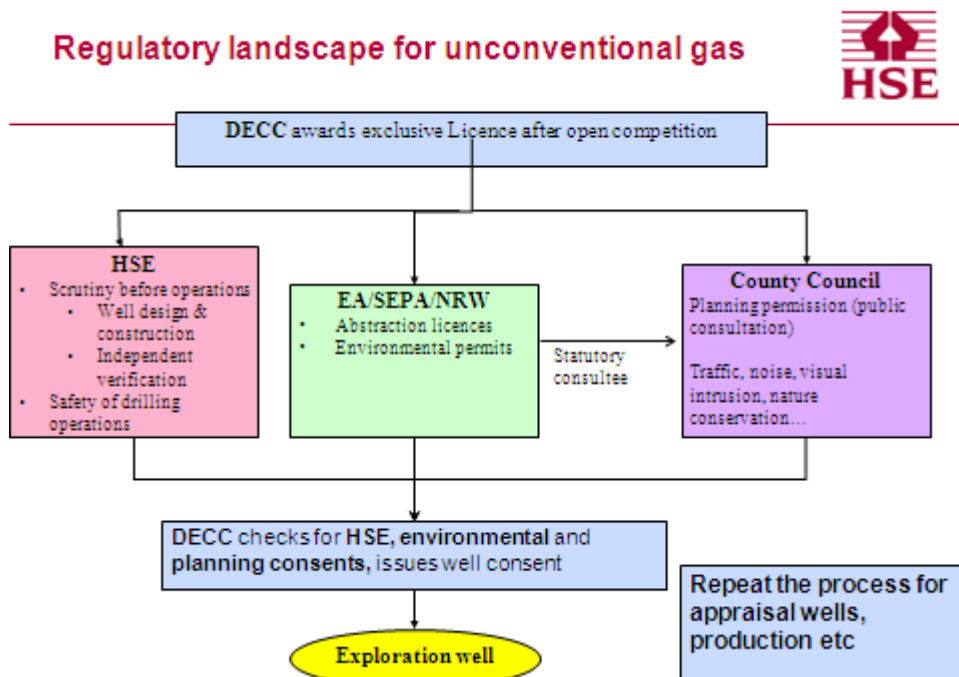
Mr. Almond stated that the Health and Safety Executive is an independent regulator who do not promote or speak in opposition of Shale Gas.

Mr. Almond presented the following headlines:-

- The Health and Safety Regime.
- How the Health and Safety Executive Regulates.
- How the Health and Safety Executive and other regulators work together.
- Independent Well Examiner.

The presentation highlighted the following key issues:-

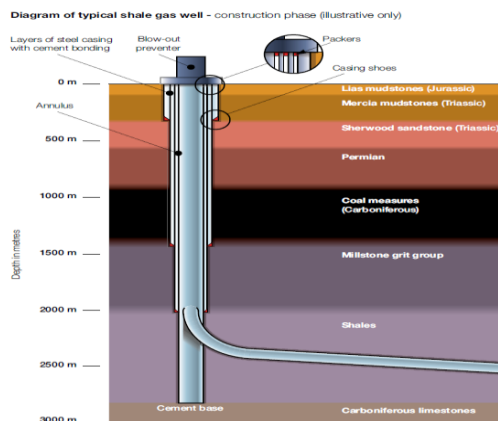
- The Regulatory landscape for unconventional gas as follows



- The main hazard in relation to Shale Gas Exploration being:-
  - Unplanned release of fluids which can result in a “blow out” and could lead to ignition causing fire/explosion. This is the reason why well integrity is very important.
- The Health and Safety Regulatory Regime and the following set of requirements for onshore Regulations:-
  - Well integrity to ensure no fluids escape.
  - Notification sent to HSE before the well can be drilled.

- The operator must complete a health and safety document setting out that the risks will be managed on site.
  - Operators to report into the Health and Safety Executive weekly while drilling is taking place.
  - Operator to appoint an independent Quality Control Officer.
- Designing the well – notification
    - 21 days prior to drilling commencing, the operator is required to provide information in relation to the design of the well, the equipment to be used, the assessment of risk and the geology below the surface.

## Designing the well - notification



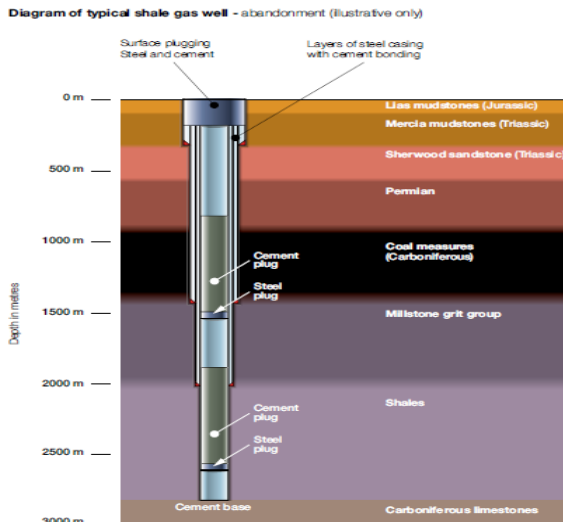
- Constructing the well – weekly report to the Health and Safety Executive includes details of:-
  - activity since the work started or since the last report;
  - the diameter and depth of the borehole;
  - the diameter and depth of the casing; and
  - drill fluid density.

The purpose of the weekly report is to check against the information in the notification and that the pressure in the well and the well's stability is as expected.

- Decommissioning / Abandonment – in the event of a well being decommissioned/abandoned, there is a stringent process in place. The operator is required to cement the well and also place at least two plugs with cement over each at the appropriate levels within the well.



## Decommissioning/ Abandonment



- The Independent Well Examiner's Role
  - Important quality control for the industry;
  - Independent competent person;
  - Assesses well design, construction and maintenance;
  - Reviews the proposed and actual well operations to confirm they meet the operator's policies and procedures, comply with HSE's Regulations and follow good industry practice.
  - HSE checks that the operator has these arrangements in place for the complete lifecycle of the well from design through to final plugging and decommissioning.

Arising from the presentation, Members raised the following issues and observations:-

- Shale Gas (Fracking) is a new process so how can we be sure that it is safe?  
Response: Shale Gas (Fracking) is not a new process: the Health and Safety Executive has been involved in the process since the 1990's. Whereas fracturing is not a new process, high volume fracturing is. There are potential hazards to a Shale Gas operation, but the regulatory regime in terms of well integrity is robust and the well operator must manage the risks in such a way that they are as low as reasonably practicable.
- If the potential hazards occur, who is responsible?  
Response: The well operator is responsible and they should ensure well integrity. A good health and safety operation is required. Before any oil or gas well can be drilled, a safety document must be produced by the operator.



The document sets out how the risks will be managed, the expected behaviours of contractors on site and the fact that an emergency plan needs to be in place highlighting how the site will be evacuated.

- If an emergency happened on site how would the community be protected?  
Response: The emergency plan would set out the evacuation procedures. The operator should work to keep hazards within the site in order that the hazards cannot have an effect beyond the site boundary. The operators should work with Emergency Services and they will need to ensure that there is provision for fast and effective firefighting.
- What would happen if there was an unplanned release of fluids (blow out)?  
Response: In the event of a “blow out” then the operator could seal the well off and is required to notify the Health and Safety Executive if there is an unplanned release of fluids or blow out prevention equipment is used. This could lead to the decommissioning of the well. Operators must design the well with decommissioning in mind.
- Who does the Independent Well Examiner report to?  
Response: The Independent Well Examiner keeps an audit of records and makes recommendations to the operator. The Health and Safety Executive must be informed of the location of those records.
- Would you say that wells are safe?  
Response: The risks of drilling are managed and regulated well. Of the 350 wells onshore the industry has a good safety record, well regulated and is a mature industry. For example, Wytch Farm in Dorset has a number of wells in operation, including deep wells and wells drilled horizontally. The longest lateral (horizontal) well in the world at over 11km is at Wytch Farm.
- Lancashire has formed a Cross-Regulator Group - do you think that adds value?  
Response: Lancashire has formed a “Shale Gas Forum”. The Forum has representatives from the Environment Agency, Public Health England, the Health and Safety Executive, Police and the County Council. The Forum is building knowledge and intelligence in relation to sites. The Forum has been in operation for 2 years and meets quarterly.
- The Environment Agency produces disclosure in relation to what constitutes fracking fluid. Is disclosure helpful?  
Response: The Environment Agency disclose information very well - a lot of information goes on its web site. This type of disclosure is a way of mitigating risk perception and helps to support and assure the public by sharing information.

#### 4.6 PLANNING PROCESS/PLANNING APPLICATIONS

Mr. McKenzie explained that he had focused his presentation on the elements of the Terms of Reference, in relation to Planning as set out in the Scoping Document:

- *“Clarify the extent of control that Sefton Council has over shale gas extraction within its boundaries; and*



- *Identify the issues that should be addressed through the Planning process”.*

The following headlines were presented:-

- The Regulatory Framework
- Sefton’s role as Minerals Planning Authority
- Sefton’s role as Competent Authority
- Summary of Seismic Survey activity in Sefton.

The Regulatory Framework:

The presentation highlighted the following details in relation to the “National Planning Policy Framework” (NPPF):-

- Paragraph 147 “Hydrocarbon development”
- Distinguish between three phases of development:
  - Exploration
  - Appraisal (testing)
  - Production
- Address constraints on production and processing within licensed area.
- Encourage underground gas and carbon storage and associated infrastructure if feasible.

The presentation also highlighted the following details in relation to the Planning Practice Guidance (PPG):-

- Provides detail in relation to conventional and non-conventional hydrocarbon extraction.
- Explains phases of hydrocarbon extraction.
- Clarifies the regulatory procedure.

The presentation featured details in relation to the General Permitted Development Order (GPDO):-

- Some exploratory phases do not require planning permission (permitted development).
- Includes seismic survey work to investigate geologic conditions.
- Must notify the Minerals Planning Authority setting out how they comply with the applicable conditions.

The following examples of permitted development were presented:-

- Drilling bore holes (not for petroleum).
- Seismic surveys (not more than 1kg of explosive charges)
- Other excavations (not larger than 12sqm or deeper than 10m)
- Includes multiples with buffers.
- Any structure required for the above purposes (not more than 12m in height).



The following details in relation to the conditions to permitted development were presented:-

- Not within 50m of an occupied residential building, hospital or school.
- Not within a National Park, Area of Outstanding National Beauty, Site of Specific Scientific Interest or site of Archaeological Interest.
- Not outside the hours of 7am to 6pm.
- Reinstatement and making good the land.

The following regulatory process was highlighted:-

## The Regulatory Process

<b>Department for Energy &amp; Climate Change</b> Issues licenses *Gives consent to drill Monitors seismic activity Grant consent for flaring/venting	<b>Minerals Planning Authority SEFTON COUNCIL</b> Grant permission for wells/well-pads Impose conditions Ensure impact is acceptable
<b>Environment Agency</b> Protect water resources Treatment/disposal of waste Control emissions to air	<b>Health &amp; Safety Executive</b> Regulate all safety aspects of extraction Design & construction of wells

The presentation highlighted Sefton Council’s Role as a Minerals Planning Authority as:-

- Provide an appropriate Policy Framework.
- Determine any development proposal.

The presentation referred to the existing Unitary Development Plan:

- Adopted in 2006;
- Policy EMW5 (Chapter 9, Energy, Minerals and Waste): Onshore Oil and Gas;
- “Conventional” hydrocarbons;
- Not equipped to deal with shale gas fracking.

The presentation also referred to the publication of the draft Local Plan in relation to Shale Gas and Sefton Council’s Role as Minerals Planning Authority:

- Natural and Heritage Assets Chapter;
- Policy NH8 (Sections 3 and 4)
  - Section 3: provides broad overriding context.





- Section 4: lists the planning and environmental criteria that will be taken into account when determining an application.
- Supporting Text refers to possible need for Environmental Impact Assessment.

Sefton Council's Role as Minerals Planning Authority in Assessing Issues was presented as:-

Planning and environmental criteria:

- Amenity;
- Air quality;
- Lighting;
- Visual intrusion;
- Landscape character;
- Traffic impact;
- Contamination;
- Impact on land;
- Flood risk and drainage;
- Land stability;
- Ecology;
- Heritage.

Sefton Council's Role as "Competent Authority" was presented as:-

- Permitted development or development proposal must comply with European Habitats Directive.
- The Minerals Planning Authority has a duty to ensure compliance with the Directive and meets relevant tests – Appropriate Assessment.
- Regulations 60-63 of the Conservation (Natural Habitats) Regulations 1994 (1999/2716) (General Development Orders) and regulations 73-75 of the EU Conservation of Habitats and Species Regulations 2010 (2010/490)

The following application to conduct a seismic survey in Sefton has been received:

- Aurora Energy Resources.
- Mixed source 3D seismic survey notification.
- Submitted in February 2014 and April 2014.
- Within DECC licensed area PEDL164.
- Part 22, Class B of General Permitted Development Order 1995 (as amended).
- LPA Ref: DC/2014/00368

The proposal:

- The submission had an accompanying methodology:
  - Limits on timescale due to ecological matters (Overwintering birds)

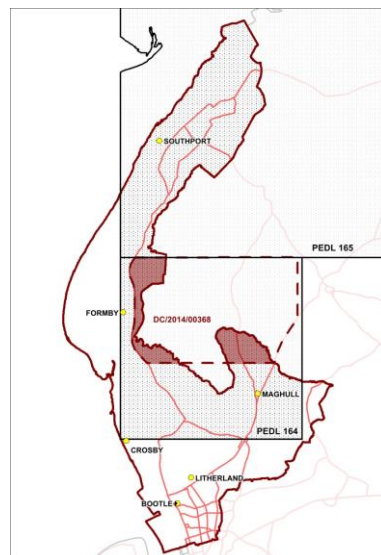


- Limits on extent of survey area due to archaeological sites (44 sites and 1 Listed Building)
- Process of burying “shots” and “nodes” into the ground on spikes.
- Shots detonated and nodes record impact.

The outcome:

- After careful assessment, the development works were deemed to be permitted.
- The applicant was duly notified in writing.
- The Minerals Planning Authority released a statement to confirm that the works were permitted development but the survey was never carried out in Sefton.

## License and Application Area



Arising from the presentation, Members raised the following issues and observations:-

- What is the position in terms of National Parks? Response: National Parks fall under a different raft of Regulation. Amendments to the “Infrastructure Bill” allow Shale Gas Companies to drill horizontally under National Parks and other protected areas provided the well is located outside the boundary.
- Who is responsible for any adverse effects? Response: The Department for Energy and Climate Change are responsible for monitoring seismic activity, which includes if a Company drills horizontally and enters into another boundary.
- Does Sefton M.B.C. work on behalf of the developer/applicant or the community? Response: Sefton M.B.C. work collaboratively to come to an acceptable solution. As a Planning Authority we are required to take a



balanced approach based on a careful assessment of all the facts and evidence presented by all parties. If the developer/applicant cannot demonstrate that all the serious risks cannot be satisfactorily mitigated, then as a “Competent Authority” Sefton would be within its rights to reject the application.

- If a Shale Gas operator was to submit an application to Sefton, the Council should be in a confident position and convey the expectations, by way of a “Shale Gas Extraction – The Council’s Expectations” document. Response: Any requirements have to be reasonable and proportionate to the size of the development and the requirements have to be clear and precise. If we, as the Planning Authority, cannot demonstrate how it quantified and assessed the impacts then the Authority could face legal challenge, so all the requirements have to be accurate. As Planning Authority, we should be impartial in the process to avoid the possibility of exposing the Authority to risks.

#### 4.7 ECONOMIC BENEFITS

Mr. Mark Long, Head of Inward Investment and Employment, Sefton M.B.C. provided the following evidence:-

##### Introduction

Most data on fracking is from the United States, but the situation in the UK is very different:

- US shale beds are much larger and therefore attract more supply chain providers
- US shale beds are located in rural areas, so more basic infrastructure has to be installed to access them
- European gas markets are highly commodified and gas is sold between countries leading to a large internal market. The relatively small amount of shale gas available from the UK in the next 5-10 years will therefore have less impact on European prices, compared to the US where it is generated in volume and has substituted for imports
- Fracking is a more highly regulated activity in the UK.

Most of the information in this presentation is taken from recently published reports by Ernst & Young (“Getting Ready for UK Shale Gas”, 2014), Amion (“Potential Economic Impacts of Shale Gas in the Ocean Gateway”, 2014), and the LCR Local Enterprise Partnership (“Shale Gas and Liverpool City Region”, 2015), all of which address the UK situation.

##### Evidence on the economic impact of shale gas extraction

There are several stages of development: site preparation, exploratory drilling, exploratory fracking, preparing for production, operation and maintenance, and decommissioning. Of these stages, the most significant in terms of new jobs are the test and production stages.



Ernst & Young have completed a national forecast of employment requirements for the fracking industry in the UK:

- 102 direct jobs per pad per year
- Of which: 62 jobs per year in direct drilling/operations on-site
- Of which: most posts are specialised and employed in mobile gangs by the operator/contractors, and local recruitment only of apprentices and labourers.

Looking at the UK supply chain, Ernst & Young forecast:

- In the drilling stage, 28% of spend on steel casings, 27% of rig hire, 14% of drill rigs and 8% of directional drilling equipment will be sourced from the UK, the rest from overseas suppliers
- In the hydraulic fracturing stage, 83% of pipes, pumps and valves will be imported.

Ernst & Young predict that there will be high leakage of UK spend abroad in the early stages of the industry, but that this presents opportunities for import substitution as the UK industry develops to serve local markets.

Amion have provided job assumptions for the impact of fracking on the Ocean Gateway area (Liverpool/Manchester corridor). They forecast 3,500 jobs in the first 10 years, of which 1,482 will be direct jobs, the rest in the supply chain.

Regeneris have analysed three test wells in Lancashire operated by Cuadrilla. They estimate

- 250 jobs per year created in the UK
- Of which: 43 jobs per year in Lancashire
- Of which: 17 jobs per year in Cuadrilla/1<sup>st</sup> tier contractors, the rest in the wider supply chain
- Therefore 7% of employment impact is retained in the locality.

Cuadrilla themselves estimate 30-40 total Full Time Equivalent jobs per pad in Lancashire.

In addition to the job and supply chain impacts, the LCR could also receive benefits from downstream use of shale gas as a feedstock in the chemicals industry. The LEP report by Sir John Bibby points out that local firms Ineos and Growhow are eager to access a more plentiful and cheaper alternative gas supply. Shale gas could therefore safeguard UK capacity against US competition in the chemicals industry which is starting to benefit the US chemicals industry. Bibby argues the LCR has about 4,000 jobs at risk because of competitive pressures from the US.

The Peel Group is proposing that the Port of Liverpool (operated by Peel Ports) is a natural choice for an LCR “shale gas hub” as the first port of call for North Atlantic shipping, with spare capacity at Stanlow, existing connections to the UK national gas grid, and capacity to import field supplies including drilling rigs for modification in the UK. Peel has its own Land & Property Company to secure sites and promote port-related development; and it recently established Peel Oil & Gas, with this remit:

*Peel Gas & Oil is a strategic development partner working alongside current and prospective onshore shale gas licence holders. As part of the privately owned Peel Group, Peel Gas & Oil works to fund and deliver early stage well pad development drawing on the Group's skills and assets in land, infrastructure, utilities, transport and planning.*

*This service allows shale gas operators to focus on their core skills in exploration, with the aim of speeding up delivery and de-risking site development for both licence operators and their investors. This pace is vital to enable the industry to move quickly through the licensing and consenting process.*

## Evaluation

It seems clear that the employment claims for fracking will only be delivered if a successful UK shale gas supply chain is created and can substitute for imports.

The Bibby report admits that development of UK skills and services is “the most important factor” when quantifying economic benefit (p46), because the UK fracking industry “will require imported workers initially” for drilling and completions (p56).

Merseyside Environmental Advisory Service argued in an independent report revised in 2014 that direct local benefits from fracking are negligible because

- Employment is in semi-skilled occupations
- The job yield is transient
- Jobs are concentrated in 6-8 years of exploration and preparing for production, and very few people are needed once the pad is producing.

The immediate employment creation of an individual pad is modest and equivalent to a new Aldi store, for example. Local recruitment will be for short-term, roustabout jobs. More valuable positions will be created higher up the supply chain, but for that reason will be employed centrally and deployed across a large number of sites. Again, LCR has no specific advantage for training and developing higher-level occupations in this new industry.

There is no particular LCR dimension to this supply chain because LCR does not have a significant engineering sector. In fact, the Port of Liverpool may have a direct interest in promoting US-led shale gas extraction because it will benefit from US imports into the proposed “shale gas hub”.

The benefits of a secure energy supply are real, but the question is whether opening up shale gas best achieves energy security, or whether we continue government policy to develop the renewable sector and/or nuclear.

Members will have to weigh the positive gain from a new UK fracking industry against other factors, such as alternative uses of the same public money, or the benefits of leaving fossil fuels in the ground.



In the event of an operator securing all necessary consents for test drilling, and then fracking, in locations within Sefton, members could ask for the operator to

- Prepare an Economic Impact Assessment in advance of drilling (in addition to standard Environmental Impact Assessments), where costs, opportunity costs, benefits and incentives could be set out transparently, and
- sign a voluntary Employment, Skills & Supply Agreement that would maximise the local benefits of any investment for apprenticeships, young people, the unemployed, local suppliers and the wider community.

A fully consented shale gas field in the LCR would probably have the support and sponsorship of the Local Enterprise Partnership, which would take lead responsibility for promoting investment and supplier development, with the Local Authorities in a supporting role.

## 5.0 EVALUATION OF FINDINGS

5.0.1 After receiving all the evidence, Members of the Working Group made the following evaluation of findings:-

- (i) Sefton's geology is underlain with shale rock that is potentially gas and liquid hydrocarbon (oil) bearing – mineral resources can only be extracted where they occur;
- (ii) Two companies currently hold Petroleum Exploration and Development licences (Aurora Exploration (UK) Ltd. PEDL 164 and Cuadrilla Bowland Ltd. PEDL 164), that cover a large part of the northern half of the Borough;
- (iii) Shale development drilling and high volume, high pressure fracturing could take place beneath Sefton but from adjacent administration areas;
- (iv) Sefton Council is one of the key regulators for the industry; and
- (v) Development may have impacts, both positive and negative, on the Borough and the communities that live in Sefton.

Members were also motivated by the desire to be better informed about the issue, particularly as it is attracting a lot of public and media interest.

## 5.1 CONTEXT

The Working Group identified early on that the principal mechanism for regulatory control for proposed shale gas and oil development for Sefton Council is through the land use planning system. As a unitary authority, Sefton Council is Local Planning Authority, Minerals Planning Authority, Waste Planning Authority and Competent Authority (under Habitats Regulations). The primary local policy for Sefton is the emerging Local Plan and implementation of those policies through its development control function. The Local Plan is due to be submitted to the Secretary of State for examination during 2015.



Sefton's Local Plan addresses a range of regulatory, statutory duties and legal responsibilities of the Council through an integrated approach – the Plan needs to be read as a whole. It is therefore crucial that the suite of policies within the Local Plan are used in an integrated way to ensure that environmental health and protection, public health and wellbeing, Habitats Regulations, economic and transport environment matters amongst others are adequately addressed when considering proposals for shale gas development.

Planning consent is required at each of the principal stages of shale gas and oil development: exploration, testing and well appraisal and production. Consent may also be required for decommissioning of the well, although there is normally a restoration and aftercare plan agreed at earlier planning stages.

The position in Sefton is similar to many other areas locally, regionally and nationally. National planning policy sets the framework for regulating the shale gas industry. Local planning policy and decisions on planning applications need to conform to national guidance such as the National Planning Policy Framework and the more detailed on-line guidance. Quite a number of the activities associated with shale gas and oil may fall under permitted development, and/or be in conformity with the Town and Country Planning (General Permitted Development) (England) Order 2015 (Statutory Instrument No.596).

In addition, Sefton's regulatory processes need to work effectively in tandem with, but not duplicate, the responsibilities of other regulatory regimes and organisations including DECC, HSE, PHE and Environment Agency. Sefton has to proceed from a starting point of presuming that these organisations regulate the shale gas and oil activities effectively. The Working Group identified that there is a need to ensure that the existing regulatory processes do indeed work in tandem to deliver effective regulation of what is perceived as a "new" activity in Sefton.

However, from a planning perspective, shale gas development is very similar to many other types of mineral and energy mineral extraction activities that have taken place on shore, including parts of Sefton, for many years. Many of the regulatory considerations and industrial processes are therefore not unique to shale gas.

It should be noted that:

- The activity is a permanent activity, not temporary, because 50-75% of produced water is locked permanently within geological structures and can be considered a permanent waste disposal operation.
- Following restoration and aftercare of the well there is the potential for an area of land to remain permanently changed, though this does depend on the detail of the decommissioning and restoration plan.



- Technological advances in horizontal directional drilling activity means that theoretically, a surface based installation can extend underground for many Kilometres to access shale bearing rock – so potentially and with technological innovation, a single well pad installation could extend 10 kilometres radius (over 300km<sup>2</sup>). For example, Wytch Farm, Dorset, extends 11km from the well and technical drilling barriers are unlikely to be insurmountable for greater distances. So, potentially above ground development outside of Sefton, for example in West Lancashire, could access gas and oil from deep geology under the borough.
- Extraction efficiencies can be low with 5 – 10% exploitation on the potential gas resource in rock being fairly typical in the USA.

In undertaking this work, Sefton has also drawn on experience and emerging practice from the industry, particularly UK Onshore Oil and Gas, the Local Enterprise Partnership and Public Health professionals including Public Health England and Lancashire County Council. An interest has also been maintained on development proposals in Lancashire in the light of the refusal of recent applications.

## 5.2 CURRENT STATE OF MATURITY OF THE SHALE GAS INDUSTRY IN THE UK

A key constraint that the Working Group has had to contend with is the immaturity of shale gas and oil development in the UK. Access to industry, regulatory and community experience of all three principal stages of shale gas development in England has therefore been very limited. Some Members have visited exploration wells in Lancashire to view for themselves the activity and have attended numerous meetings, conferences and events.

Currently there are no examples of shale gas development that have progressed to testing and appraisal stage, let alone progressed to production.

Evidence and experience has therefore been drawn from:

- Very recent experiences in Lancashire and the large body of literature that has been prepared by and for the County Council to inform spatial and land use planning considerations;
- Similar mining, minerals and industrial processes that are being regulated effectively, particularly in the mineral and energy mineral sectors; and
- Examples overseas such as the USA, where there are valid comparisons to be made as follows:

Whilst there is now a considerable body of evidence from practices in the United States, caution has been exercised in drawing too many comparisons with what is likely in Sefton and the Liverpool City Region. There are simply too many





differences in geology, environmental regulation, industry practice and the structure of the energy supply and consumption market to draw valid comparisons. What the US experience does show us however, are some of the risks when some parts of an industry operate and are regulated in a sub-optimal way.

Whilst Sefton has potentially significant reserves of shale gas in deep geology it is still too early to ascertain whether it will be technically feasible or commercially viable to exploit. The first step, therefore, will be to ascertain if the shale underlying Sefton, and other parts of the Liverpool City Region, is gas bearing and can be “stimulated” to produce a commercially viable flow of gas and other commercially useful products.

The Working Group has proceeded on the basis that, whilst the outcome of the recent DECC licensing round is not known, all areas of Sefton and areas adjacent to the borough will have a Petroleum Exploration and Development Licence granted. In other words, the conditions are in place to enable the shale gas and oil industry to embark on the development process should they choose to do so.

### 5.3 A RAPIDLY CHANGING PICTURE

The Working Group has been operating at a time of great public and media interest, evolution of the emerging shale gas industry in England and change in the range of technologies and practices associated with the type of activity. Many notable recent reports have been accessed during the Group’s inquiry including the Environment Audit Committee Inquiry into Fracking, the Government’s response, amendments to the Infrastructure Bill and various health reviews and reports. As already indicated, the large body of information based on the Lancashire experience, including the two well appraisal applications currently being considered, have also been accessed. It is not the role of the Working Group to review what is developing into an immense literature on the subject. This would not be efficient given the lack of practical examples of delivered projects within the English or UK context. Members have therefore targeted their enquiries.

Government has signalled its continued desire for shale gas development to move forward as part of the country’s response to energy strategy and security. The outcome of the 2014 DECC onshore and “watery” area licensing rounds has not yet been published, so it remains uncertain which blocks have been licensed and to whom.

## 5.4 LANCASHIRE

The most advanced work on shale gas in England has taken place in Lancashire notably in the Fylde area and near Blackpool. The very recent applications to drill, fracture (high volume, high pressure hydraulic fracturing) and flow test up to four wells at both Roseacre Wood and Preston New Road have been refused by Lancashire County Council on amenity, transport, landscape and noise grounds. Monitoring arrays were also applied for.

It remains too early to say what will be the final outcome of the proposals in Lancashire. Although Cuadrilla is currently considering its options, the applicant has appealed the refusal for determination and ultimately the final decision will be made by the Secretary of State.

## 5.5 A WIDER VIEW

Several conferences have reported on the shale gas industry's desire to adopt a far more proactive and open approach to planning their developments. The Government in pre-election pledges and the Chancellor's statement provided clear signals to the industry that the Conservative Government is supportive of shale gas development.

This is largely in response to a well organised "anti" lobby and high levels of public anxiety about possible risks and implications of the proposed activity. The development of a more transparent and two-way approach that welcomes scrutiny and disclosure is to be encouraged from a regulatory perspective, because it helps to weigh the different issues objectively.

What is clear is that the Liverpool City Region is likely to be an area of significant interest for the following reasons:

- Geology and thickness of potentially shale gas and shale oil bearing deposits;
- Proximity to Lancashire;
- Existing commercial interest from a range of organisations including Aurora Resources, Cuadrilla, I-Gas, Ineos Chlor and Peel Energy;
- Potential synergies with existing industry and supply chain; and
- Proximity to potential customers.

## 5.6 TIMESCALE FOR SHALE GAS DEVELOPMENT

It seems unlikely that development proposals involving high volume, high pressure hydraulic fracturing of shale will be received in Sefton in the short term. This is a factor of the lead-in time for applications and also because of the uncertainty created by:



- Lancashire refusals and the outcome of any appeal; and
- Not knowing the outcome of the 2014 PEDL licensing round.

However, it seems more likely that Sefton (and other LCR Districts) will receive applications for seismic survey, monitoring arrays and exploratory drilling within the next 48 months. The rate of development of the shale gas industry thereafter will be determined by multiple factors outside the control or influence of Sefton or the scope of the Working Group.

## 5.7 IS IT COMMERCIALY VIABLE?

It has yet to be proven by the industry that shale gas development is commercially viable within the context of English regulation, the energy market and the costs and benefits of extraction. What is clear however, is the continuing Government support and industry appetite to answer the commercial viability questions. The only objective way to answer this question is for some applications to progress to testing and appraisal.

The Liverpool City Region Local Enterprise Partnership set up a Steering Group under the chairmanship of Sir Michael Bibby to explore the economic implications of shale gas. With a strong focus on supply chain opportunity and the reliance on gas both as a source of energy and raw material to industrial processes, the Working Group is due to present its final report over the coming months.

Ultimately a lot of interest therefore remains focussed on the ultimate fate of the applications in Lancashire.

## 5.8 A PROACTIVE APPROACH IN SEFTON

It is for these reasons that Sefton Council should be well prepared to respond proactively to the shale gas (and oil) industry. This has provided much of the focus for the Working Group.

Any decisions taken by the Council will need to be justified, effective and compliant with national policy unless special circumstances can be proven. The recommendations of this report are intended as a thoughtful and proportionate response to the issues on the basis of the evidence gathered. It provides a clear statement of what is expected of the industry, how this can be required through the planning process, and how the communities and place that is Sefton can be safeguarded for future generations.

## 6.0 CONCLUSIONS

- 6.1 The Working Group concluded that little new could be gained from a root and branch review of all literature, claims and counter claims relating to the issues



around shale gas development. Much of the uncertainty will only be resolved with shale gas projects advancing to appraisal and testing stages.

- 6.2 The Working Group concluded that its primary focus should be on the regulatory controls that are within the remit of Sefton Council. The role of other regulators is of interest to ensure that regulatory processes operate effectively in tandem.
- 6.3 The Working Group concluded that the integrated suite of policies within Sefton's emerging Local Plan provide an appropriate and adequate means of regulatory control for those issues within the Council's remit. Substantive change to the publication draft policy wording is not justified. However amendments to the explanatory text, local planning application validation checklist and Sefton's Statement of Community Involvement would be most helpful to reflect the recommendations of the Working Group, subject to Cabinet approval.
- 6.4 There is no technical or planning policy justification for Sefton to adopt an approach or policy that differs significantly to the national picture. The Council will consider all applications for shale development as they affect the borough on the basis of the planning merits of the project / scheme.
- 6.5 There is no technical justification why Sefton should pursue a shale gas (and oil) development policy. Nor is there any logical case to single out shale gas (and oil) development as a specific subject for a Supplementary Planning Document.
- 6.6 Members considered and then rejected a spatial approach for shale gas either identifying constrained areas or preferred locations. Instead, an integrated approach of planning, supported by discretionary guidance to the industry on what is expected in Sefton, as set out in the recommendations in the Report, is considered to be a more efficient and proportionate approach. For many of the shale issues, a range of technical solutions are potentially feasible e.g. horizontal drilling distances and uncertainty over transmission infrastructure requirements, which could limit the benefit or value added by a spatial approach.
- 6.7 The economic impact of prospective shale development remains uncertain for Sefton, although there could be future benefit for supply chain, contribution as a hub and to increase security of existing employers in the borough and wider City Region. The Working Group considered that economic benefit should be retained as far as possible within the Borough, including local supply chain and local workforce where these are available.



6.8 At the time of drafting the Final Report announcements regarding award of the 14<sup>th</sup> Licence Round blocks including those blocks that are subject to consultation on the Habitats Regulations Assessment, had been published. 27 licences have been awarded immediately with 132 more to be awarded subject to appropriate assessment about which a consultation has been launched. Among the 132 licence blocks there are 2, 3 or 4 that impinge directly on the Liverpool City Region, together with blocks in Cheshire, Greater Manchester and Lancashire. To access a map of the blocks please follow the link below:-

<http://modgov.sefton.gov.uk/moderngov/ecCatDisplay.aspx?sch=doc&cat=13602&path=0>

6.9 Consultation to seek comments on the oil and gas Authority's Strategic Plan – Level Habitats Regulations Assessment (HRA) of blocks taken forward for consideration of award in the 14<sup>th</sup> onshore oil and gas licensing round closed on 29 September 2015. The Government response to the consultation process has yet to be published,

6.10 Another recent development at the time of drafting the Final Report is in relation to Ministers taking away the power from Local Authorities that do not make decisions on developments within 16 weeks of receiving a Fracking Application.



## 7. RECOMMENDATIONS AND ACTION

The Working Group identified 6 recommendations which could be reported to Cabinet for approval and brought to the attention of regulators and the shale gas industry and their advisors in the form of a Good Practice and Expectations Document.

In this way Sefton Council can make its expectations clear in an open and transparent way, not just to the shale oil and gas industry and their advisors, but to the communities of Sefton and adjacent areas.

### Recommendation 1 – Joined Up Regulation

It is crucial that the regulatory processes work in tandem and in a joined up way to inform decision taking, regulation and on-going development and monitoring of shale gas. Regulators should share advice, evidence, technical assessments and responses at an operational level to facilitate effective regulation.

The Working Group recommends that for all shale oil and gas development proposals at all stages (exploration, appraisal and testing, production and decommissioning) that a cross-regulator working group be set up to:

- Inform pre-application discussions;
- Avoid duplication;
- Ensure that the evidence base and regulatory assessments to be completed are timely, robust and of sufficient scope;
- Provide a means of open scrutiny and discussion of issues at project design and early development stage.

For Sefton Council, the following technical representatives should be included in any Cross-Regulator Group and co-opted as and when they are needed:

- Elected Member Representation;
- Planning;
- Environmental Health / Protection;
- Public Health;
- Transportation;
- Merseyside Environmental Advisory Service;
- Legal;
- Estates;
- Investment.



Other suggested organisations are as follows:

- Public Health England;
- Environment Agency;
- Health and Safety Executive;
- Local Enterprise Partnership;
- Adjacent Local Authorities for cross-boundary projects.

### Recommendation 2 – Good Practice and Expectations Document

That Sefton Council prepares a Good Practice and Expectations Document ('the Document') targeted at the shale gas (and oil) industry to provide a clear statement of what Sefton Council and the communities and businesses of Sefton expect in terms of the activities of the shale gas and oil industry in the Borough.

The Document will cover such matters as public consultation and engagement, expected level of information to be provided with any planning application including evidence base and technical appraisals; infrastructure statements; transport assessment/statement (depending upon development); cumulative impact assessments; economic impact assessment; health impact assessment; mitigation measures; as well as disclosure of materials to be used. The Document will encourage applicants to enter into early discussions with the Council, other Regulators and the wider community.

The Document will help inform discussions and decision making and will be supported by updates and revisions to the Council's Statement of Community Involvement (setting out the expectation for pre-application consultation and engagement) and the local validation checklist for planning applications (specifying information required to make any planning application valid) thereby, providing weight to the aims and objectives within it.

### Recommendation 3 – Environmental Impact Assessment (EIA)

For development falling within the specified thresholds within Schedule 1 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 ('the EIA Regulations'), an Environmental Statement (ES) must be submitted. The Council must be consulted on the scope of the ES.

For development that falls within Schedule 2 of the EIA Regulations, a screening opinion must be submitted to the Council to determine if the proposal constitutes EIA development. For those applications which are not EIA development, a comprehensive suite of documentation, evidence and technical assessments will be agreed as an outcome of pre-application discussion.



#### Recommendation 4 - Environmental Monitoring Plans (EMPs)

EMPs should be agreed for each principal stage of the shale gas (and oil) development cycle. This is particularly important in relation to infrastructure, emissions and public health given the immaturity of the industry.

#### Recommendation 5 – Habitats Regulations Assessment (HabsRA)

The applicant must engage in early pre-application discussion to ensure that the scope of baseline information provided enables Sefton Council to complete the assessment of likely significant effects of proposed shale gas (and oil) projects. Given the large number of internationally important nature conservation sites within and adjacent to Sefton and the large areas of functionally linked habitat, particular attention needs to be given to avoiding areas of sensitivity at the site selection stage.

In undertaking the HabsRA, Sefton Council will need to use the baseline data commissioned and provided by the applicant. The duration, method and scope of survey will need to be agreed, but a requirement of at least 12 months survey and/or monitoring is not uncommon.

#### Recommendation 6 – Resourcing Regulatory and Monitoring requirements

Experience in Lancashire has shown that applications from the shale industry are very resource intensive. The cost of effectively administering and informing the planning and regulatory process is substantially greater than any fees charged. Planning fees therefore fall a long way short of the cost of joined up Local Authority regulation of this activity and there is a need to explore mechanisms to build capacity.

Whilst Sefton has experienced technical professional staff with minerals and energy mineral experience including shale gas (and oil), significant development of the shale gas (and oil) industry in Sefton (and the other LCR authorities for that matter) will, in all likelihood, place additional strain on the regulatory framework which is already working over capacity.

Whilst planning performance agreements may provide some resource security, it is important that the Council and other Regulators remain and are seen to remain independent and objective. It is therefore recommended that Sefton Council completes a regulatory capacity assessment of low, medium and high development scenarios to:

- Inform resource planning and budget allocation;
- Inform liaison and negotiation with applicants, including planning performance agreements or other such similar mechanisms.





Given that the primary responsibility for regulatory control is the planning process, eight actions are proposed to implement Recommendations 1 – 6. These are listed below:

- (i) That the Head of Regeneration and Housing be requested to establish a Cross-Regulator Working Group, to include Elected Member representation, for all shale gas (and oil) development proposals at all stages;
- (ii) That the Head of Regeneration and Housing be requested to prepare a “Good Practice and Expectations Document” to provide transparency to the industry and the public and that it is appropriately referred to in the explanatory text to Mineral Policy NH8 within Sefton’s Local Plan;
- (iii) That the Head of Regeneration and Housing be requested to ensure that the local validation checklist is updated as appropriate to take account of the issues identified in this Report;
- (iv) That the Head of Regeneration and Housing be requested to ensure that Sefton Council’s Statement of Community Involvement is updated as appropriate to take account of the issues identified in this Report with respect to matters of community engagement in relation to shale gas (and oil) development;
- (v) That the Head of Regeneration and Housing be requested to ensure an Environmental Statement accompanies development that requires it when assessed against the EIA Regulations;
- (vi) That the Head of Regeneration and Housing be requested to ensure that Environmental Monitoring Plans are agreed at each stage of the shale gas (and oil) development cycle;
- (vii) That the Head of Regeneration and Housing be requested to ensure that in respect of the Habitat Regulations any applicant should be advised to engage in early pre-application discussion to ensure that the baseline information provided enables Sefton Council to complete the assessment of likely significant effects of proposed projects; and
- (viii) That the Head of Regeneration and Housing in consultation with the Chief Finance Officer be requested to complete a regulatory capacity assessment of low, medium and high development scenarios in order to inform resource planning and budget allocation and inform liaison and negotiation with applicants include planning performance agreements of other such similar mechanisms.



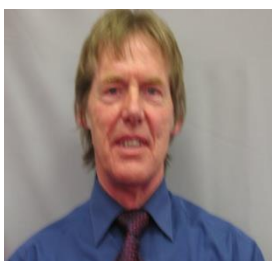


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- Officers, Partners and former Members of the Working Group

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***Councillor Fred Weavers  
(Lead Member)***



***Councillor Ted Hartill***



***Councillor Sue McGuire***



***Councillor Michael O'Brien***

**Overview  
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