

RESPONSE TO THE GOVERNMENT CONSULTATIONS ON PERMITTED DEVELOPMENT FOR SHALE GAS EXPLORATION AND INCLUSION OF SHALE GAS PRODUCTION PROJECTS IN THE NATIONALLY SIGNIFICANT INFRASTRUCTURE PROJECT (NSIP) REGIME.

To: **Economy and Environment Committee**

Meeting Date: **11 October 2018**

From: **Graham Hughes - Executive Director, Place and Economy**

Electoral division(s): **All**

Forward Plan ref: *Key decision:* **No**

Purpose: **To consider the response to the Government's Consultation Papers on:**
1. Permitted Development for Shale Gas Exploration, and;
2. Inclusion of shale gas production projects in the Nationally Significant Infrastructure Project (NSIP) regime

Recommendation: **To agree the proposed responses to the above consultations, as set out paragraph 4.1a and 4.1b (respectively) of the report.**

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1. BACKGROUND

- 1.1 The Government believes that domestic onshore gas production, including shale gas has the potential to play a major role in further securing our energy supplies and that substantial benefits can be delivered through safe and sustainable exploration; potentially creating economic benefits locally and nationally, including new jobs.
- 1.2 The County Council has the opportunity to respond to the Government on two consultation papers in respect of proposals for non-hydraulic fracturing shale gas exploration and production. The first paper seeks views on the principle of granting planning permission for non-hydraulic shale gas exploration development through a permitted development right; and the second on the proposed inclusion of major shale gas production proposals under the Nationally Significant Infrastructure Project (NSIP) regime, and any related criteria which may apply.
- 1.3 The exploratory phase of oil and gas extraction seeks to acquire geological data to establish whether hydrocarbons are present, which in the case of shale gas may involve drilling an exploration well, and conducting seismic surveys. This is then followed by a (testing) appraisal stage, and then a production stage.
- 1.4 Members have asked for information in respect of shale gas exploration and production (often termed fracking), and have previously been briefed on this matter. For convenience this information is attached as Appendix 1.

2.0 PERMITTED DEVELOPMENT FOR SHALE GAS EXPLORATION

- 2.1 The Government considers that the recent determination of planning applications for shale gas exploration have been disappointingly slow; and has found that it has taken Mineral Planning Authorities up to 83 weeks to determine such planning applications, instead of the 16 weeks allowed for planning applications which require Environmental Impact Assessment.
- 2.2 It is proposed under the first consultation paper to include a permitted development right for shale gas exploration. A permitted development right is in effect the approval of development which is given at the national level. Criteria may apply, and part of the consultation paper is seeking views on the circumstances in which it would be appropriate to give a permitted development right for shale gas exploration, and restrictions which may apply under this right.
- 2.3 Permitted development rights remove the need for a planning application unless the development falls under the Environmental Impact Assessment Regulations 2017, and in the Government's view would provide a simpler, more certain route to encourage development. It would also speed up the planning system, and reduce the burden on

developers and local planning authorities by removing the need for them to determine planning applications for shale gas exploration.

- 2.4 However, it is important to note that any permitted development right would not apply to the appraisal and production operations of shale gas extraction. Also, that any permitted development right would only cover the planning aspects of the development. It would not remove requirements under other regimes. Any developments that would be permitted through a permitted development right, would still be required to receive the appropriate consents from three regulators (the Environment Agency, the Health and Safety Executive and the Oil and Gas Authority) before development can proceed.
- 2.5 The Government is proposing that any permitted development right would be for exploratory shale drilling and would only apply to shale gas exploration, and for non-hydraulic fracturing operations to take core samples for testing purposes. It would not allow for the injection of any fluids for the purposes of hydraulic fracturing, and the right would not apply to all onshore oil and gas exploration and / or extraction operations.
- 2.6 The definition proposed is:
'Boring for natural gas in shale or other strata encased in shale for the purposes of searching for natural gas and associated liquids, with a testing period not exceeding 96 hours per section test'
Where a developer intends to use hydraulic fracturing as part of the operation, or as would be necessary at the appraisal stage, they would be required to obtain planning permission from the relevant mineral planning authority.
- 2.7 The formulation of any permitted development right would have regard to environmental and site protection laws such as those for Areas of Outstanding Natural Beauty, Scheduled Monuments, Sites of Special Scientific Interest etc. Development which would be likely to have significant effects on the environment requiring an Environmental Impact Assessment would not be permitted development as noted in paragraph 2.3 above; and if it fell under Schedule 2 of the Environmental Impact Assessment Regulations, it would only be permitted where a screening opinion or direction had been issued to the effect that the development is exempt from the Environmental Impact Assessment Regulations.
- 2.8 Some existing permitted development rights for the use of land in respect to mineral exploration carry conditions and restrictions to ensure the impact of the development is mitigated, including:
- Agreement with the relevant mineral planning authority on the restoration of the conditions of the land before the development took place;
 - Limits on the height of any structure assembled or provided;

- Limits on the height of any substructures and ancillary drilling compounds;
- Time-limits on both the operation and duration of works;
- Restrictions on any operations carried out within a certain distance of sensitive site uses;
- Restrictions on the number of wells within a certain area;
- Restrictions on development near an aerodrome or airport;
- No removal of trees from the land.

The Government are seeking views on what restriction may be appropriate to any permitted development right for shale gas exploration as conditions and restrictions attached would be outlined in the legislation, which would create the national permission for the development.

- 2.9 A condition of any permitted development right can also be a requirement that the developer has to seek 'prior approval' from the local planning authority. Prior approval means that a developer has to seek approval from the local planning authority that specified elements of the development as listed in the legislation are acceptable before work can proceed. A local planning authority cannot consider any other matters when determining a prior approval application.
- 2.10 The Government is suggesting that for shale gas exploration, local consideration of particular elements of the development may potentially be required to be approved by the relevant mineral planning authority through a prior approval process. By way of example, the prior approval considerations might include transport and highways impact, contamination issues, air quality and noise impacts, visual impacts, proximity of occupied areas, setting in the landscape, and could include an element of public consultation.
- 2.11 Views are also being sought on whether the permitted development right for shale gas exploration should be time limited (2 years is suggested), or be permanent.

3.0 INCLUSION OF SHALE GAS PRODUCTION PROJECTS IN THE NATIONALLY SIGNIFICANT INFRASTRUCTURE PROJECT (NSIP) REGIME

- 3.1 Currently, any organisation wishing to undertake a shale gas development must submit its planning application to the local Mineral Planning Authority. However, the Planning Act 2008 created a planning process for Nationally Significant Infrastructure Projects (NSIP) in fields of development including energy, water, waste water, road and rail transport and hazardous waste disposal. For projects falling within scope of what is defined in this Act as a NSIP, this becomes the only route for obtaining planning consent. The final decision for granting development consent rests with the relevant Secretary of State depending on the type of infrastructure project. However, local

authorities would be included in the decision making process as a consultee. The Government is proposing to include major shale gas production projects as a Nationally Significant Infrastructure Project, and thus any future shale gas production project that met the defined thresholds would have to apply for development consent within this regime.

- 3.2 An operator wishing to construct a Nationally Significant Infrastructure Project must submit a development consent application to the Secretary of State. As part of this process, the operator will need to have assessed any likely significant impacts of the proposed project. For such projects, where an application is accepted, the Secretary of State will appoint an 'Examining Authority' to examine the application in accordance with any relevant National Policy Statement. The Examining Authority will be arranged by the Planning Inspectorate and will be either a single Inspector or a panel of between two and five Inspectors. The examination will take into account any information and have regard to any local impact report submitted by the local authority as well as representations from statutory bodies, non-governmental organisations and other interested parties including the local community. Once the examination has been concluded, the Examining Authority will reach its conclusions and make a recommendation to the Secretary of State, who will make the decision on whether to grant or to refuse consent.
- 3.3 The consultation outlines some potential criteria which could determine if a shale gas production project is considered nationally significant. A summary of these criteria is below:
- Number of Wells: Since shale gas is within very low permeability rock the gas does not easily flow. To access and produce commercial amounts of natural gas multiple horizontal wells are drilled and hydraulically fractured. The number of horizontal wells will vary depending on the geology and gas properties of each site.
 - Recoverable Gas: the extent of underground gas storage (the exploration and appraisal work will give an estimate of what can be produced/recovered from the development site)
 - Gas Production: the level of production over a given time period (e.g. per day, month, year or well lifetime)
 - Local or National Grid Connection: A production site may require a direct connection to the local gas distribution network or national transmission system.
 - Associated Equipment: These could include water treatment facilities, micro-generation plants and other gas processing facilities which when combined could result in an expansive development project.
 - Shared Infrastructure: Where there is more than one well-site some operators may develop shared infrastructure to connect operations.

4.0 RESPONDING TO THE CONSULTATION PAPERS

4.1 Responses to the two consultation papers are required by 25 October 2018. The papers each set out a number of questions upon which views are sought. These are set out in Appendix 2. Whilst the Government would ideally like replies to be focussed on the questions asked, these are sometime 'closed' questions or technical questions; and so not to be limited to the questions set, officers have put the proposed responses to each of each consultation papers below for member approval.

a. Proposed response to the Consultation Paper: Permitted Development for Shale Gas Exploration:

Whilst noting that the geology in Cambridgeshire means that it is unlikely that shale gas exploration and production will take place in this County, there are nonetheless a number of concerns that Cambridgeshire County Council has to raise. These are set out below:

- The principle of making the decision on proposals for shale gas exploration a permitted development right instead of by a planning application would be a concern if the conditions set are not suitably restrictive. There is considerable concern about proposals for shale gas exploration, particularly in the local communities which may be affected. Although the permitted development right will only apply to those projects which will not give rise to significant environmental impacts (under the Environmental Impact Assessment (EIA) Regulations), such proposals should still be determined at the local level as planning applications, so that public consultation on the full proposal can take place, (rather than just on the 'prior approval' details). Such a regime is also likely to be confusing and frustrating for local communities which would expect full community involvement in such a proposal.
- The consultation paper lists potential 'prior approval' considerations such as traffic and highways, contamination issues, air quality, noise, visual impact, proximity to occupied areas, setting in the landscape. These are significant issues, which add to the conclusion that any proposal for shale exploration should not be consented under permitted development rights, but subject to the planning application procedures.
- The proposed permitted development regime for shale exploration will still involve the Mineral Planning Authority undertaking tasks such as registration, EIA screening, and potentially public consultation on the detail of the proposals if the scheme were 'permitted' under the proposed regime. It is assumed that this work would attract a prior approval fee, which is likely to be a minimal amount compared to the amount of work and challenge that may come as a result of it e.g. challenge to a screening opinion etc. Any fee (which as yet has not been proposed) should fully reflect the amount of officer time likely to

be involved, especially as the response from any public consultation (even under the prior approval) is likely to be significant. The extent of public consultation required also needs to be defined.

- If the proposed permitted development right goes ahead, the work associated with dealing with such requests would have to be done in a prescribed timescale. This timescale should be realistic given the high level of community interest that is likely to arise from any proposed scheme.
- If the permitted development right is take forward, then the proposal to exclude applications for exploration which would be likely to give rise to significant effects (under the EIA Regulations), and from other sensitive locations such as those listed under Questions 3 is supported.

Answer to the Consultation Questions:

Question 2: Should non-hydraulic fracturing shale gas exploration be granted planning permission through a permitted development right?

Yes / No

Answer: No (see above)

Question 3 a) Do you agree that a permitted development right for non-hydraulic fracturing shale gas exploration development would not apply to the following? (see full list of sensitive area in Appendix 2) Yes/No

Answer: Yes

Question 5 Do you have comments on the potential considerations that a developer should apply to the local planning authority for a determination, before beginning the development?

Answer: If the regime is carried forward then duration of the operation, hours of working, and height and locations of any built structures, number and location of cores to be drilled should also be a prior approval matters.

Question 6: Should a permitted development right for non-hydraulic fracturing shale gas exploration development only apply for 2 years, or be made permanent?

Answer: Any permitted development right should be time limited, as circumstances which prevailed the time of any 'consent' may change over time and could, for example, give rise to significant environmental impacts which would not have been there previously. In which case the proposal would need to be considered taking into account current circumstances.

(Questions 1, 4, and 7 – no reply).

b. Proposed Response to Inclusion of Shale Gas Production Projects in the Nationally Significant Infrastructure Project (NSIP) Regime

Whilst noting that the geology in Cambridgeshire means that it is unlikely that shale gas production will take place in this County, the principle of moving decision making on proposals for shale gas production from local to central Government needs further clarification, and at this stage it cannot be supported.

There is considerable concern about proposals for shale gas production, particularly in the local communities which may be affected. Although the NSIP regime is proposed to only apply to those larger projects that will result in a number of gas wells and production rates on a large scale basis (subject to the final criteria to be considered); unless such proposals are determined at the local level as planning applications, a decision based on local knowledge and full community involvement will be lost. The retention of a local decision would allow further information to be sought, specialist advice to be taken, and further rounds of public consultation (as necessary) to take place.

Whilst it is acknowledged that many of the planning applications determined to date have taken longer than the statutory 16-week period for EIA development, it is considered that there is likely to be a genuine reason for this. To suggest that decisions should be escalated to a NSIP owing to past determination timescales is not the best way forward, especially as the NSIP process itself automatically includes an Examination in Public which can be time consuming in itself.

In addition there is concern that some local communities may find the NSIP process more difficult or more daunting to engage with than the planning application process; and that they may perceive central Government taking the decision as a 'done deal' when projects come forward under the NSIP regime.

If the proposal goes ahead the Government must consult further on the draft thresholds for the inclusion of projects in the NSIP regime. Current criteria that have been suggested range from the number of wells; the level of gas production, associated and shared infrastructure. However, the thresholds in respect of each criteria (or new criteria which may come out of the consultation) have not yet been defined.

(No reply is proposed to the individual questions set out in the consultation paper).

5. ALIGNMENT WITH CORPORATE PRIORITIES

5.1 Developing the local economy for the benefit of all

There are no direct implications arising.

5.2 Helping people live healthy and independent lives
No implications.

5.3 Supporting and protecting vulnerable people
No implications.

6. SIGNIFICANT IMPLICATIONS

6.1 Resource Implications
There are no financial implications arising at the present time.
However, see paragraph 4.1 a bullet point number 3 of the main report.

6.2 Procurement/Contractual/Council Contract Procedure Rules Implications
No Implications.

6.3 Statutory, Legal and Risk Implications
No Implications.

6.4 Equality and Diversity Implications
No Implications.

6.5 Engagement and Communications Implications
No Implications.

6.6 Localism and Local Member Involvement
No Implications.

6.7 Public Health Implications
There are no direct Public Health Implications in relation to the consultation response. However, the FAQ section summarises the public health impacts of shale gas extraction.

Implications	Officer Clearance
Have the resource implications been cleared by Finance?	Yes Sarah Heywood
Have the procurement/contractual/Council Contract Procedure Rules implications been cleared by the LGSS Head of Procurement?	Yes Paul White
Has the impact on statutory, legal and risk implications been cleared by LGSS Law?	Yes Debbie Carter-Hughes
Have the equality and diversity	Yes

implications been cleared by your Service Contact?	Tamar Oviatt-Ham
Have any engagement and communication implications been cleared by Communications?	Yes Joanna Shilton
Have any localism and Local Member involvement issues been cleared by your Service Contact?	Yes Tamar Oviatt-Ham
Have any Public Health implications been cleared by Public Health	Yes Stuart Keeble

SOURCE DOCUMENTS GUIDANCE

Source Documents	Location
Permitted Development for Shale Gas Exploration, Ministry of Housing, Communities and Local Government (19 July 2018)	https://www.gov.uk/government/consultations/permitted-development-for-shale-gas-exploration
Inclusion of Shale Gas Production Projects in the National Significant infrastructure Project (NSIP) Regime, Department for business, energy and Industrial Strategy (19 July 2018)	https://www.gov.uk/government/consultations/inclusion-of-shale-gas-production-projects-in-the-nationally-significant-infrastructure-project-nsip-regime

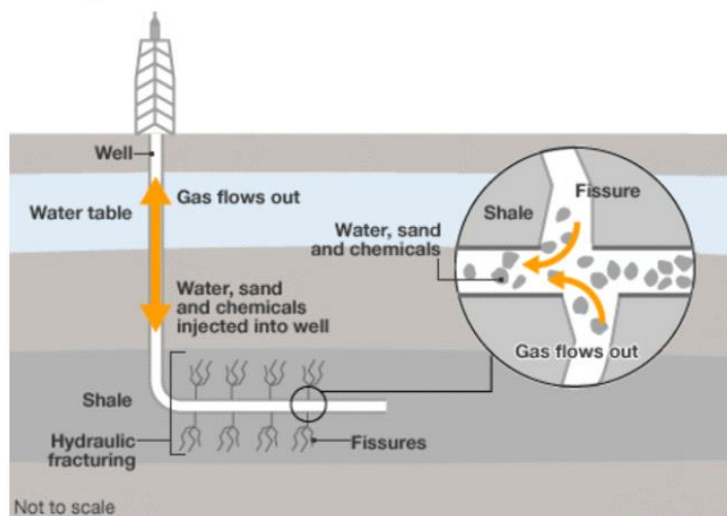
Hydraulic fracturing for shale gas fact sheet

Briefing note requested by E&E Committee at May 2016 meeting, provided to Spokes circa September 2016

Q: What is hydraulic fracturing and how is it done?

A: Hydraulic fracturing or fracking is a method used to extract natural gas from shale rock formations. Engineers drill a hole deep into the rock (up to 3 km) and inject a mixture of sand, water and chemicals at high pressure. The rock splits, releasing the gas. Shale gas is mostly composed of methane (CH₄) otherwise known as natural gas and can be recovered from shale using hydraulic fracturing i.e. fracking.

Shale gas extraction



Q: What are the benefits?

A: Producing gas could help improve the security of the UK's energy supplies. Supporters say it could also lead to cheaper energy bills and create thousands of jobs.

Q: And the problems?

A: Opponents claim fracking could contaminate water supplies with chemicals, cause earthquakes, and disruption from noise and traffic. There are two potential impacts on groundwater. The first is associated with the supply and consumption of water for fracking. According to a report available on www.gov.uk on water use each fracking operation requires between 10,000 and 30,000 m³ of water. The volume will depend on the site, but estimates suggest that the amount needed to operate a fracked well for a decade may be equivalent to the amount needed to water a golf course for a month, or the amount needed to run a 1,000 MW coal-fired power plant for 12 hours. The second concern is contamination of groundwater via the fracking chemicals. The East of England is one of the driest regions in the UK and careful management of water resources is necessary.

Q: What chemicals are used to frack?



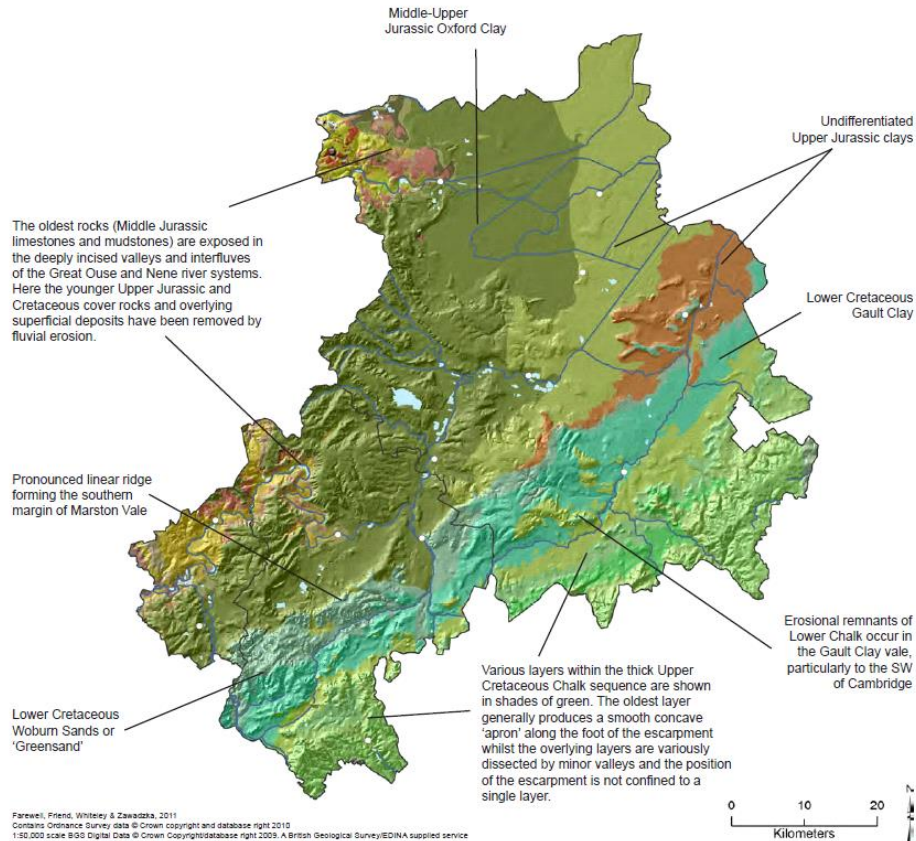
A: Any chemicals used must be approved by the Environment Agency prior to use. Cuadrilla has reported using polyacrylamide (to reduce friction) and sodium salt (for tracing fracturing fluid). While they have approval to use hydrochloric acid, they have not used it to date.

Q: Where is it approved or viable in the UK?

A: Hydraulic fracturing has taken place for decades in the UK, with the first treatment thought to have taken place in the mid-1970s. Official studies suggest Britain could have vast resources of shale gas trapped in rocks deep beneath the ground that could help meet the country's gas needs for decades to come. Until fracking takes place, it is not known how easily shale gas can be extracted. Fracking is most prevalent in Central England. There are several different rock formations in the UK that have the potential to produce shale gas. The map at right shows areas where licenses have been granted for onshore oil and gas activity.

Q: Is any fracking happening in Cambridgeshire?

A: Not at present. The British Geological Survey have completed shale resource estimates for several areas in the UK (Scotland, Wales, Weald Basin (south of London and Bowland Shale in central Britain), however these have not covered Cambridgeshire.



The geology of the majority of the county is predominately clay, which swells in contact with water and complicates the fracturing process. There are some chalky soils in the south of the county, operators in Texas have had success in drilling in chalky soils, however this requires horizontal drilling to access the shale gas.

Q: What is the process to develop a well?

A: The drilling of such wells and the establishment of any gas/oil production facility will require planning permission from the Mineral Planning Authority and the normal community consultation arrangements for planning applications will apply to any proposals received. The government has published a planning guidance note on onshore oil and gas for Mineral Planning Authorities.

Any planning applications received will be considered within the context of the policies of the National Planning Policy Framework and the council's adopted minerals plan where safeguarding policies are set out in respect of visual amenity and highways impacts, protection of ground and surface waters, sustainable management of wastes, air quality and noise and disturbance. In certain circumstances the proposals may be subject to the process of

Environmental Impact Assessment involving detailed consultation with the other regulatory bodies involved.

Q: What restrictions on fracking are in place?

A: New rules introduced in late 2015 allowed fracking 1,200 metres below national parks, areas of outstanding natural beauty or sites of special scientific interest as long as drilling takes place from outside protected areas. Companies will still be allowed to drill down on the edge of such protected areas, then drill horizontally underneath the park. The [Scottish](#) and Welsh governments have both introduced a moratorium on fracking.

Sources:

British Geological Survey website on shale exploration, accessed 31 August 2016

Cuadrilla corporate website, accessed 1 September 2016

<https://decc->

[edu.maps.arcgis.com/apps/webappviewer/index.html?id=29c31fa4b00248418e545d222e57ddaa](https://decc-edu.maps.arcgis.com/apps/webappviewer/index.html?id=29c31fa4b00248418e545d222e57ddaa)

Note to Councillors on Fracking Campaign, David Atkinson, Business Manager County Planning, Minerals and Waste, Cambridgeshire County Council, July 2013

www.gov.uk, Current fields and licences wall map, accessed 31 August 2016.

www.gov.uk, Fracking UK shale: water, accessed 1 September 2016.

www.gov.uk, Guidance on fracking: developing shale oil and gas in the UK, accessed 31 August 2016

Supplemental FAQ (September 2018):

Question. What are the health impact of shale gas extraction?

Answer

A 2014 review^[1] of the public health impacts of shale gas extraction by Public Health England (PHE) found that the risk to public health was low, provided operations were properly regulated. The review addressed 3 areas of potential concern in relation to public health:

1. **Air quality** - Gaseous emissions (e.g. Nitrogen dioxide, particulates etc) occur from the extraction process itself, but also from associated activities such as storage tanks and vehicles. Emissions from small-scale operations are unlikely to have significant impact of local air quality, however, increased monitoring around sites is advised, particularly in larger-scale operations.
2. **Radiological Pollution** - There has been concern about the potential release of radioactive materials, however the review found that this is unlikely to be in quantities which have the potential to affect public health.
3. **Water & Hydraulic Fluid** - Most evidence suggests that contamination of groundwater as a result of borehole leakage through poor well design, construction and integrity is an area of concern, but that contamination of groundwater from the underground hydraulic fracturing process itself is unlikely. Proper design and construction of

the well is imperative to minimise the risk of leakage. There is also a need to adequately manage the chemicals used in hydraulic fracturing.

The review also highlights a key difference in risk between small-scale exploratory drilling and the larger-scale extraction operations that may follow a successful exploration drill. The risk of small scale exploratory drilling to public health is likely to be very small.

^[1]

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/332837/PHE-CRCE-009_3-7-14.pdf

Consultation Questions: Permitted Development for Shale Gas Exploration

Question 1

- a) Do you agree with this definition to limit a permitted development right to nonhydraulic fracturing shale gas exploration? Yes/No
b) If No, what definition would be appropriate?

Question 2 Should non-hydraulic fracturing shale gas exploration development be granted planning permission through a permitted development right? Yes/No

Question 3

a) Do you agree that a permitted development right for non-hydraulic fracturing shale gas exploration development would not apply to the following? Yes/No

- Areas of Outstanding Natural Beauty
- National Parks
- The Broads
- World Heritage Sites
- Sites of Special Scientific Interest
- Scheduled Monuments
- Conservation areas
- Sites of archaeological interest
- Safety hazard areas
- Military explosive areas
- Land safeguarded for aviation or defence purposes
- Protected groundwater source areas

b) If No, please indicate why.

c) Are there any other types of land where a permitted development right for non-hydraulic fracturing shale gas exploration development should not apply?

Question 4 What conditions and restrictions would be appropriate for a permitted development right for non-hydraulic shale gas exploration development?

Question 5 Do you have comments on the potential considerations that a developer should apply to the local planning authority for a determination, before beginning the development?

Question 6 Should a permitted development right for non-hydraulic fracturing shale gas exploration development only apply for 2 years, or be made permanent?

Question 7 Do you have any views the potential impact of the matters raised in this consultation on people with protected characteristics as defined in section 149 of the Equalities Act 2010?

Consultation Questions: Inclusion of shale gas production projects in the Nationally Significant Infrastructure Project (NSIP) regime

1. Do you agree with the proposal to include major shale gas production projects in the Nationally Significant Infrastructure Project regime?

2. Please provide any relevant evidence to support your response to Question 1.

3. If you consider that major shale gas production projects should be brought into the Nationally Significant Infrastructure Project regime, which criteria should be used to indicate a nationally significant project with regards to shale gas production? Please select from the list below:
- a. The number of individual wells per well-site (or 'pad')
 - b. The total number of well-sites within the development
 - c. The estimated volume of recoverable gas from the site(s)
 - d. The estimated production rate from the site(s), and how frequently (e.g. daily, monthly, annually or well lifetime)
 - e. Whether the well-site has/will require a connection to the local and/or national gas distribution grid
 - f. Requirement for associated equipment on-site, such as (but not limited to) water treatment facilities and micro-generation plants
 - g. Whether multiple well-sites will be linked via shared infrastructure, such as gas pipelines, water pipelines, transport links, communications, etc
 - h. A combination of the above criteria – if so please specify which
 - i. Other – if so please specify
4. Please provide any relevant evidence to support your response(s) to Question 3.
5. At what stage should this change be introduced? (For example, as soon as possible, ahead of the first anticipated production site, or when a critical mass of shale gas exploration and appraisal sites has been reached).
6. Please provide any relevant evidence to support your response to Question 5.