

## **Frack Free Notts Questions/Information from meeting of 10 March 2014**

Thank you for meeting with Mark Haslam and Andrew Barker of the Environment Agency on 10 March 2014, as a result of the meeting and the issues raised we hope you find the following information useful and that it provides further information to help future discussions.

I have also emailed a copy of the mining waste permit and it's associated decision document. Please feel free to circulate this information to the group.

### **What is Dart Energy doing at Sutton Cum Lound?**

Dart Energy is planning to drill an exploratory borehole to explore the potential for gas production from Coal Bed Methane. The drilling process is expected to last for at least 28 days. The purpose of the borehole is to extract a core of coal to surface for analysis.

Thereafter, depending on the findings from the exploration, Dart Energy may carry out production tests to determine the viability of full scale methane gas production.

### **How deep will the borehole go?**

The borehole will have a depth of up to 920 metres. The geological target formation for the drilling is the Pennine Middle Coal Measures.

### **How many wells will Dart Energy be allowed to drill?**

Dart Energy has applied to drill a single exploratory well at Sutton Cum Lound. However, the petroleum exploration development licence (PEDL) that it has from DECC means that Dart Energy could apply to drill other wells within the area defined by that licence. These other wells would be subject to Dart Energy obtaining planning and other permissions/permits.

### **Where can you find more information on the drilling of this borehole?**

We would encourage you to look here for information about Dart Energy's progress and intentions. [http://www.dartgas.com/page/Europe/United\\_Kingdom/](http://www.dartgas.com/page/Europe/United_Kingdom/)

### **What is the role of the Environment Agency?**

We are the environmental regulator for oil and gas exploration in England. Through effective regulation we will help ensure that any oil or gas operations are conducted in a way that protects people and the environment.

Dart Energy has been granted a mining waste operation permit for the management of non-hazardous extractive waste that is produced from the exploratory drilling and completion process. The activity in question involves the management of waste drilling muds and cuttings from the drilling operation.

At Sutton Cum Lound we will be:

- Protecting water resources, including groundwater (aquifers) by scrutinising Dart Energy's proposed methods
- Ensuring that there is appropriate management, treatment and disposal of mining waste produced during the borehole drilling by monitoring compliance with our mining waste permit. The mining waste permit controls the management of waste on site whilst the transport and disposal of waste off site is controlled by the Duty of Care regulations.

## **What happens if the operator breaches the permit?**

If for example we find the operator is breaching its permit condition, we can carry out enforcement action which could include stopping work and serving a notice. We would require the operator to undertake improvement work and we could potentially prosecute the operator depending on the severity, cause and impact of the permit breach.

In an emergency situation the company, other authorities and ourselves will implement incident response plans. There are management procedures in place to reduce the risk of something going wrong.

## **Groundwater**

All operators must notify us of their intention to drill a borehole under section 199 Water Resources Act 1991. Operators must provide details to the Environment Agency of how they intend to protect water resources, including groundwater, in the construction and use of boreholes. We issued a notice to Dart Energy that covers the above points in July 2012.

## **Radioactive Substances Regulations**

Dart Energy does not require a radioactive substances activity permit to drill the borehole. A Radioactive Substances Regulation permit would be required for the management of any radioactive wastes from any well production testing phase. This is because the produced water and other wastes generated may contain sufficient naturally occurring radioactive materials (NORM) to qualify as radioactive waste. Any application for such a permit will also be subject to public consultation.

## **Is the Environment Agency required to consult during permit applications?**

When we receive an application for a bespoke permit we have a duty to consult with a number of statutory consultees as well as the general public.

Our approach to engagement around permitting is described in our "Working together: your role in our environmental permitting" document which is available at:

[http://www.environment-agency.gov.uk/static/documents/Business/Working\\_together\\_PPS\\_v2.0.pdf](http://www.environment-agency.gov.uk/static/documents/Business/Working_together_PPS_v2.0.pdf)

In this case we had a four week consultation period.

We note your disappointment that the consultation was not wider or undertaken for a longer period of time. As such for future applications for this type of activity we will circulate a link to make you aware of similar proposals in Nottinghamshire in order that you may view the application.

## **Will records of the public consultation be made available?**

Information on our consideration of the comments we receive during the consultation is produced in the decision document. The records of the consultation will be kept on the public register so that members of the public can request to see them. Guidance on how to do this can be found at <http://www.environment-agency.gov.uk/research/library/publicregisters/default.aspx.#>

To avoid having to request a copy I have attached a copy of the decision document to this email.

## **Possible Changes to the Permitting Process**

We have opened public consultation on proposed standard rules permits covering a number of activities involved in onshore oil and gas exploration. If adopted, these standard rules will simplify and speed up the permitting process for some basic exploratory activities, while safeguarding environmental standards. The standard rules would in particular cover:

- Safe management, accumulation and disposal of extractive wastes from drilling minerals boreholes using water based drilling mud;
- Groundwater protection and the safe management, accumulation and disposal of extractive wastes from drilling minerals boreholes using water- and oil-based drilling mud;
- Safe management, accumulation and disposal of wastes containing naturally occurring radioactive materials (NORM) resulting from oil and gas exploration; and
- Flaring of waste gas over 10 tonnes per day (which is otherwise covered under the mining waste rules).

The standard rules for exploratory drilling do not cover hydraulic fracturing nor do they cover production facilities. A second set of standard rules permits covering well stimulation (fracking) at the exploration stage and crude oil storage at the production phase is currently being developed. We expect to consult on these in the summer.

We are proactively contacting our key stakeholders and those who have previously commented on similar consultations to ensure we have a full range of views before we make our decision. You can access the consultation here

<https://consult.environment-agency.gov.uk/portal/>

The consultation is open until 12<sup>th</sup> May 2014.

## **Water Quality**

You raised specific concerns regarding the baseline level of pollution of water in streams and groundwater.

The quality of water in streams, rivers and the ground is monitored by the Environment Agency and we sample water quality to check that in terms of its chemical and biological content to ensure that environmental quality standards are being maintained.

## **What should you do if you witness a pollution incident?**

Any suspected breaches of an environmental permit or pollution incidents should be reported to our 24 hour hotline: 0800 807060.

To conclude I hope this information helps to provide some clarity about the remit and jurisdiction regarding the organisations that are involved in the regulation of oil and gas exploration and

## **Roles and responsibilities of other Organisations**

### **What safety checks will be carried out on site?**

The Health and Safety Executive lead on matters related to safety at the site.

### **Well Failure Rate**

Questions were raised regarding the failure rate of shale gas production wells. We will need to examine this issue further but the Environment Agency is committed to the protection of groundwater and will be examining any proposals for either exploration or production boreholes in detail. The construction and regulation of production wells is overseen by the Health and Safety Executive. The following link provides information regarding their duties and the legislation they are governed by in this area of work. <http://www.hse.gov.uk/shale-gas/assets/docs/shale-gas.pdf>

### **What regulations are there for traffic, noise and light pollution?**

Traffic, noise and light controls are included in the planning permission. Enforcement of the planning permission is a matter for Nottinghamshire County Council. The mining waste permit would also include a standard noise condition. Within the Waste Management Plan there is a section on noise and vibration monitoring. This includes details of complaints and remedial action which need to be discussed with the Environment Agency.

### **Health Issues**

Your local G.P. and Public Health England will be able to advise on health issues.

Public Health England is an independent UK organisation that was set up by to protect the public from threats to their health from infectious diseases and environmental hazards. It does this by providing advice and information to the general public, to health professionals such as doctors and nurses, and to national and local government. Information about Public Health England can be found at their website

<https://www.gov.uk/government/organisations/public-health-england>

### **Closed Coal Mines/Mine Waters/Methane Emissions from Mines**

The Coal Authority is the lead organisation for dealing with discharges from old coal mines, they also have records and maps which relate to old mine workings and offer a search service regarding the location of these workings and the potential effects on properties.

We work closely with the Coal Authority to identify the most significant discharges from abandoned coal mines, and those areas of the country where mine waters are still rising in underground workings.

Nationally we keep a priority list of existing discharges based on environmental impact. This list is agreed with the Coal Authority and defines their work program. We also agree where rising mine waters pose a future threat to rivers or aquifers. When a treatment plant for a discharge from an abandoned mine is built, the operator usually needs environmental permits from us to abstract the groundwater and to make a discharge.

The role of the Environment Agency is to regulate and monitor any discharges of mine water to surface water. Discharges of effluent to surface water such as this are controlled by a discharge consent which sets limits on the effluent content to prevent pollution.

Mine waters in the Nottinghamshire coalfield are managed by the Coal Authority. Details regarding the frequency of any mine gas monitoring checks and the detailed information

regarding the times and duration of mine water pumping activities are not held by the Environment Agency but would be held by the Coal Authority.

Information about the Coal Authority can be found at their website <http://coal.decc.gov.uk/>

### **Subsidence/Seismic Activity**

Issues relating to subsidence and seismic activity relating to fracking are dealt with by the Department of Energy and Climate Change-(DECC) the link below will connect to the DECC document that provides some information about the approach that DECC have adopted.

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/283837/Seismic\\_v3.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/283837/Seismic_v3.pdf)

To ensure that the right team is assigned to any future query you have regarding the work of the Environment Agency as a first point of contact please email any enquiry to our customer services team at [Midlandscustomerserv@environment-agency.gov.uk](mailto:Midlandscustomerserv@environment-agency.gov.uk)