

# The Environment Agency and the Health and Safety Executive

November 2012

## Working together to regulate unconventional oil and gas developments

### Emerging unconventional oil and gas developments

The oil and gas industry is well established in the UK, having focused on exploiting 'conventional' oil and gas fields, both onshore and offshore. The industry is now beginning to explore for 'unconventional' oil and gas as a result of recent technological developments. These include using hydraulic fracturing for the exploration of oil and gas shales as well as coal bed methane extraction. The shale gas industry in particular has come under a great deal of scrutiny and is the primary focus of this statement.

### Coordinated regulation

Shale gas operations are likely to require environmental permits from the Environment Agency under the Environmental Permitting Regulations 2010 (EPR). Shale gas wells must be designed, built and operated to standards set in the regulations governed by the Health and Safety Executive (HSE). Together we must be satisfied that wells are designed, constructed and operated to standards that protect people and the environment. The Environment Agency's overall approach to regulating shale gas exploratory activities is set out in a guidance note available on the Environment Agency website. The Environment Agency and the HSE have developed a joint approach to inspecting new exploratory shale gas operations, to make sure that they are effectively regulated to protect people and the environment. This joint approach supports and supplements our existing inspection and consultation arrangements for sites regulated under (EPR) and our Memorandum of Understanding for the co-ordination of the regulation of plant, processes and substances which are subject to regulation by the Agency and HSE.

### Future unconventional oil and gas exploration and appraisal wells

The Environment Agency will adopt a compliance assessment plan for each site that sets out how they will measure the operator's compliance and ensure that environmental risks are properly managed. This may include a variety of methods such as audit, site inspections, check monitoring, sampling, and reviewing operator records and procedures. HSE will assess the well design prior to construction, and monitor well operations during construction, based on weekly operations reports submitted to HSE by the well operator, to ensure the construction phase matches the design intent. Ongoing meetings with the well operator prior to, and during, the operational phase will include site inspections to assess well integrity during the operational phase. We have agreed jointly to inspect the next series of hydraulic fracturing operations in England and Wales.

For new and first time shale gas operators we will:

- meet and advise them of their duties under the relevant legislation
- conduct a joint inspection of the key operations, including:
  - cementing and verification of cement

- mini hydraulic fracture ○ bleed back
- main hydraulic fracture

These meetings and visits may include other licensing or statutory bodies as appropriate. Any change to the process, such as hydraulic fracturing at shallow depth or change of fracturing media may result in reviewing this inspection schedule and may require permit modifications.

## Collaborative working

Over the past 16 years the Environment Agency and HSE have worked together in the mutual delivery of major packages of regulation in England and Wales. The Environment Agency works in partnership to assess environmental hazards and risks from the manufacture, use and disposal of industrial and consumer chemicals, and waste materials. The HSE is the UK competent authority and the Environment Agency the enforcing authority for REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) Regulations. This includes those chemicals used in the process of hydraulic fracturing.

## Roles and responsibilities

The Environment Agency and HSE have a Memorandum of Understanding in place that sets out the day to day arrangements for managing the broad range of operations that fall under their regulatory control. The Environment Agency is responsible for protecting and improving the environment of England and Wales. Under the Environmental Permitting Regulations 2010, the Environment Agency also has responsibility for:

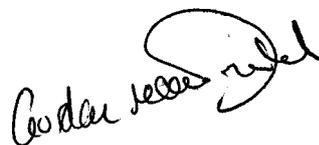
- managing water resources
- protecting communities from the risk of flooding
- issuing permits for certain industrial, farming, waste management, surface water and groundwater discharge activities
- issuing permits for radioactive substances and mining waste activities

The HSE, under the Health and Safety at Work Act, has the primary expertise on health and safety issues. They are responsible for the inspection and regulation of duty holders to ensure the health and safety of the workforce and others affected by work activities, such as those under the Environmental Permitting Regulations.

## Signed November 2012



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## Review

We propose to review this joint arrangement and make any adjustments identified by operating experiences after the first six months and every 12 months thereafter.