

Environment Agency Onshore Oil and Gas Sector Guidance

Background to CIWEM

CIWEM is the leading independent Chartered professional body for water and environmental professionals, promoting excellence within the sector. The Institution provides independent comment on a wide range of issues related to water and environmental management, environmental resilience and sustainable development.

CIWEM welcomes the opportunity to respond to the Environment Agency's *Onshore oil and gas sector guidance*. CIWEM has specifically focused on the aspects of the consultation as they relate to shale gas. CIWEM has recently completed a further review on shale gas entitled *Shale Gas and Water 2016: An independent review of shale gas extraction in the UK and the implications for the water environment*. This is available from www.ciwem.org/shalegas. We were also pleased to attend a workshop on the onshore oil and gas sector guidance which was informative.

Summary

1. The purpose of this guidance is to signpost the reader to the appropriate regulatory regimes for onshore oil and gas exploration and extraction. Do you feel the document fulfils this purpose?

Yes. This will be made easier when the document is uploaded to the .gov website with weblinks to the appropriate regulatory regimes.

2. Does the guidance clearly outline the Environment Agency permits that are needed for onshore oil and gas? Please explain your answer

Yes, this information is clearly explained.

3. Does the guidance clearly outline the other Environment Agency permissions that are needed for onshore oil and gas?

Yes

4. Is there anything missing that you feel should be included in the guidance?

Further work on Best Available Techniques needs to be completed. For example on flaring and the treatment of flowback.

Reuse of flowback and produced water arguably represents the most sustainable process with regards to water resources and reuse onsite will also reduce the risks associated with

transporting waste. We therefore support the proposal for reuse in certain circumstances (to facilitate production of hydrocarbons).

Whilst not related specifically to the guidance we are concerned about the ability to treat flowback fluid at the present time. Advanced treatment technologies may not be able to treat the levels of dissolved solids in produced water which would limit the ability to treat produced water on site. Dilution at a treatment works may be able to reduce the salinity, however it may not be appropriate to dilute to the level required to dilute the radionuclides present to regulatory levels. It is certain that water treatment capacity will be an issue if the industry grows, and wastewater volumes increase.

Where reinjection for disposal is allowed the environment must be protected first and foremost from any risk of contamination or seismicity issues. Reinjection for disposal must be carefully considered. We welcome the requirement of an accompanying groundwater activity permit. As flowback and produced water are treated distinctly by the regulatory regime there should be guidance as to where the difference lies in practice between flowback and produced water.

5. [Please tell us if you have any other views or comments on the guidance that have not been covered by previous questions.](#)

CIWEM is pleased to see the continuation of a commitment to a robust regulatory regime. We are particularly pleased to see the addition of the guidance on hydrogeological risk assessment as part of planning and permitting applications. We also welcome that this is to be carried out by a specialist and consider that they should be Chartered by an appropriate professional body.

We fully support the requirements for a site condition report, hydrogeological assessments, sub-surface information plans, monitoring and the disclosure of chemicals information, which will help improve the transparency of the industry and provide us with baseline information on which to assess any impacts.

We would like clarification on how further revisions to the guidance would be made. As it is likely to be hosted on the .gov website as a series of pages, would a public consultation be required?