



Standard Rules for the Environmental
Permitting Regulations – Consultation
No.10

Summary of consultation responses

December 2014

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1 Introduction

The Environmental Permitting (England and Wales) Regulations 2010 (“EP Regulations”) allow us to offer standard permits, to reduce the administrative burden on business while maintaining environmental standards. They are based on sets of standard rules that we can apply widely in England and Wales. The rules are developed using assessments of the environmental risk posed by the activity.

Through the tenth consultation, live from 17 February to 12 May 2014, we proposed some new standard rules and risk assessments in relation to onshore oil and gas activities. For each new standard rule set we also, in accordance with Section 4.4 of our charging scheme, indicated the proposed applicable charge band from the default standard facility table.

The consultation invited views on whether we have correctly identified the risks associated with each activity and whether the new sets of rules are appropriate to manage the environmental risks.

2 How we ran the consultation

The Standard Rules Consultation No 10 was live from 17 February to 12 May 2014. We solicited the views of operators, trade associations and businesses, other regulators, the public, community groups and non-governmental organisations with an interest in environmental issues.

We invited comments on new sets of standard rules for the following activities:

- The management of waste, not including a waste facility, generated from onshore oil and gas prospecting activities not including well stimulation (using water based drilling mud). SR2014 No.1.
- The management of waste, not including a waste facility, generated from onshore oil and gas prospecting activities not including well stimulation (using oil and water based drilling mud). SR2014 No.2.
- Gas flaring at onshore oil and gas exploration and appraisal sites SR2014 No 3, and;
- The accumulation and disposal of radioactive waste from oil and gas exploration. SR2014 No.4.

The process was mainly an e-consultation although hard copies were made available to those who requested.

We received and considered a total of 14 responses. Out of the 14 responses; five were from industry, two were from government organisations, two from non-government organisations, one from a consultancy, one from a trade body, one individual and two anonymous responses.

3 Summary of key findings and the actions we will take

The majority of respondents agreed with our approach to use standard rules for onshore oil and gas activities, subject to certain amendments.

Some respondents mistakenly provided comments in relation to hydraulic fracturing. The mining waste standard rules only cover drill and core operations and do not allow any form of well stimulation, including hydraulic fracturing. We therefore have not attempted to deal with specific consultation comments related to well stimulation (including hydraulic fracturing) in this consultation response document.

Since the development of the standard rules for gas flaring (SR2014 No.3) we have had further discussions with industry considering its scope. It has become clear that in many cases operators require waste gas flares that have been of a far greater size than was envisaged under the standard rules risk assessment. In some instances the quantity of gas to be destroyed could fuel a 50MWth large combustion plant. The environmental risks associated with emissions from the larger plants can be higher and therefore require a more detailed assessment and consideration within a bespoke permit application where we can consider the site specific aspects associated with the plant. In addition, the envelope of operating parameters for these flare systems, such as gas pressure, flare temperature and continuity of operation, can be very wide. Due to the diverse range of applications and technologies currently employed for waste gas flaring at onshore oil and gas facilities we have concluded that further work is needed to determine the Best Available Techniques for thermal destruction of waste gases from onshore oil and gas facilities. At this stage therefore we have decided not to proceed with this standard rule set. For this reason, we do not address comments made on this rule set as part of this document.

It has also not been possible to take forward permitting of the groundwater activity under the proposed drill and core rule set using oil and water based drilling mud (SR2014 No2). This is due to a requirement under the Environmental Permitting Regulations that requires a hydrogeological assessment of the area concerned which means standard rules are not appropriate. As we have removed the groundwater activity from the drill and core rules (SR2014 No.2) we have decided to combine the two drill and core rule sets (SR2014 No.1 and SR2014 No.2) as the permit conditions are very similar. We have retained two separate mining waste plans (for water or oil and/or water based drilling mud). Operators who use these standard rules will need to separately determine if they require a bespoke groundwater permit before applying for the standard rules.

A number of changes have been made to the rules, risk assessments and mining waste plans to provide further clarity and in response to the detailed comments received.

Please find below our responses to the questions and main comments raised by our respondents to the Standard Rule Consultation No 10.

4 Responses to questions

Question one: Do you agree with our approach to use standard rules for oil and gas exploration activities?

Out of 14 responses received 6 answered this question and 3 respondents were in favour of our approach, 3 objected and one "didn't know". Another 8 respondents provided specific comments on the detail of the rules but did not answer the specific question.

Regarding concern over breaches of Environment Agency duties and Directive requirements:

One respondent had concerns over whether the appropriate duties and Directives will be met. We are satisfied that the use of standard rules is appropriate and that requirements for public participation and consultation are satisfied.

Question two: Do you agree with the proposed new rules that we have set out in section 4 of this consultation?

Out of 14 responses 4 did not agree with the proposed new rules, two agreed but the majority had comments to make to suggest revisions to the rules.

Regarding uncertainty of the risks of subsurface engineering:

One respondent stated that the risks from sub-surface engineering for shale gas meant that standard rules were not appropriate. As was stated previously the rules are for lower risk activities and do not involve hydraulic fracturing. The drill and core standard rules allow for the drilling of boreholes, which is an established technology.

Regarding the need for good on-site management for exploration activities:

One respondent stressed the need for good on-site management for the drilling and associated activities. The standard rules set out operational requirements within the mining waste plan and there is also a requirement for the operator to maintain a management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints.

Regarding amending the rules to include formation testing:

A respondent wanted the rules for SR2014 No.1 to be revised to include activities such as acid washing and acid squeezing. We are considering these activities for possible future standard rule sets, and any proposals will be subject to further public consultation.

Regarding provision of further referencing and definitions of standard rules:

A number of respondents wanted to see further clarification of terms within SR2014 No.1 and No.2 drill and core rule sets. We have amended the text in relation to definitions of 'extraction' and 'pre-production extraction'.

Regarding coding for naturally occurring gas:

A comment was received regarding the designation of naturally occurring gas as European Waste Catalogue code (EWC) 16 05 04* gases in pressure containers (including halons) containing dangerous substances. The response was also that gases themselves do not form any part of the EWC as gaseous emissions are clearly excluded from the Waste Framework Directive obligations.

The management of gases is required under the Extractive Waste Directive 2006/21/EC not the Waste Framework Directive. The reference to hazardous waste can be found in our guidance Hazardous waste: interpretation of the definition and classification of hazardous waste (WM2).

This definition is the closest fit under these codes and is also consistent with the codes used in a number of oil and gas permit applications that we have already received. As the code is starred * the hazardous nature will need to be assessed.

Regarding providing secondary containment for all storage areas for SR2014 No 1 & 2:

Responses included the comment that the requirement to have both bunded storage areas and a membrane is not practicable for a temporary drilling site for all equipment and would further restrict the operators' ability to have standard rules. This is a point of clarification regarding our requirements. In the rules we have clarified that the requirement for primary containment measures do extend across the entire site of operations and that secondary containment measures as set out in CIRIA C736 will be required for those areas where extractive wastes are accumulated and stored pending removal from site.

Regarding concern over storage period for extractive waste:

One respondent was concerned over the length of time allowed for storage of extractive waste of up to 12 months due to the fact that drilling normally takes a lot less time to carry out. We have set out in the waste management plans that any extractive waste must be removed from site as soon as reasonably practicable and would expect this to be within 7 days. We would agree that the drill and core activities permitted under these standard rules would be completed well within 12 months and have changed this storage period to 3 months.

Regarding requirement for cement bond logs for cementing of the well casing:

One respondent stated that cement bond logs are not undertaken on all sections of the casing string and the operator exercises discretion depending on the geological section of the well bore and various tests carried out during and after the cementing process. Our response is that well integrity is a critical component to ensuring environmental protection and cement bond logging (CBL) can be a useful means of verifying integrity where there is a single casing. Where monitoring of the process indicates that the height of cement may be insufficient, then a cement bond log should be run to verify that there is sufficient cement behind the casing. Determining where the top of cement is in the casing, that the cement is as designed for the specific location and that it is of the appropriate quality will be key to demonstrating a well's integrity.

Regarding the scope of standard rule for the accumulation and disposal of radioactive waste:

There was a query over whether SR2014 No4 should cover exploration stage and not production. We can confirm that the permitted activity under Environmental Permitting Regulations is 'production of oil and gas'.

Regarding the permitted level of radioactivity under standard rule for the accumulation and disposal of radioactive waste:

A higher figure was proposed than that allowed in the draft rules. We have increased the accumulation limit to 30MBq accepting that the 10MBq originally proposed may unnecessarily restrict the use of the standard rule. This increase to 30MBq from 10MBq is based on available data and allows flexibility for operators within the rule. This equates to an insignificant change of the assessed dose from 0.14 uSv/yr at 10MBq to 0.47 uSv/yr at 30 MBq assuming continuous 365 day storage. The change does not affect the disposal limits or the environmental impact of those disposals. The primary control on accumulation is condition 2.3.1 which requires the operator to minimise the amount of radioactive waste produced and the time kept on site.

Question three: Have we correctly identified all risks for each activity described in the generic risk assessments associated with this consultation?

Out of 14 responses 4 did not agree with the proposed new rules, two agreed but the majority had comments to make to suggest revisions to the rules. There were also a number of minor amendments and number references in the risk assessments, which we have also addressed but are not listed here.

Regarding clarification of exclusion of hazardous substances in SR2014 No1

One respondent sought further clarification regarding whether the exclusion meant all hazardous substances that may be used in drilling operations or only for the hazardous substances used in the production of oil based drilling mud. We can confirm that the only materials being assessed are those which are extractive waste and not the components prior to formulation and use of the drill fluids. We have addressed this in the risk assessment.

Regarding prohibition of activities within groundwater protection zones

Some respondents questioned the prohibition of activities in Source Protection Zone 2 and the 250 metres distance from any well, spring or borehole used for the supply of water for human consumption.

The outer edge of protection zone 2 is defined by a distance equivalent to a 400-day travel time within the water table, to any well, spring or borehole used for the supply of water for human consumption. The distance is a minimum of 250 metres. The distance and the travel time combined are designed to allow for the detection of pollutants in monitoring boreholes situated adjacent to the oil or gas borehole, and for restoration of groundwater quality before there is any impact on the feature that is being protected.

Regarding prohibition of activities from other receptors

We have distance criteria in the rules so that we can make a more detailed site specific assessment of the risks for those sites that are close to receptors and fall within those distances. It does not mean that the activities cannot be carried out at all. We also have a duty to comply with conservation legislation to protect rare species, habitats and protected sites. Our Fisheries, Biodiversity and Geomorphology (FBG) team have already defined distances for every combination of the 127 features and around 60 different permit types and this now includes these rules. Many of those distances relate to those agreed in 2002 with Natural England, for the Habitats Directive Review of Consents. We use the most up to date information from local record centres, our own monitoring and the National Biodiversity Network (NBN) Gateway to maintain location maps for species and habitats. Our screening distances are based on an assessment

of the distance at which the predicted ambient concentration of foreseen emissions from an activity, are below a level at which they could have a significant impact on species, habitats or receptors.

Regarding having a number of standard rules in close proximity

Concern from one respondent was expressed for situations where there might be a number of standard rules in a particular location and what the cumulative effect might be on the environment. It is unlikely that an operator will bring forward proposals for sites in close spatial proximity at the exploration stage, as they are often exploring different areas and geologies within their license area. If they did so, these standard rules only allow limited activities, such as drilling and sampling of the borehole, and we consider that the risks from combined or cumulative effects of emissions from a number of sites permitted under these standard rules as insignificant. If an operator wanted to further develop their operations into more complex activities, such as hydraulic fracturing, they would need to vary their permit to a bespoke permit, which would also be subject to further assessment and public consultation.

Regarding removal of littering from the risk assessment

We have removed littering as a specific item from the generic risk assessment as generation of litter is not associated with the drill and core activity that is covered by the standard rule.

Question four: Are there any barriers to complying with the standard rules?

In their responses many consultees reiterated the points made in Q1 and 2 as barriers to use of the rules.

Regarding the terms principal and secondary aquifers

A respondent requested that the term 'principal and secondary aquifers' in SR2014 No 2 be edited to read 'principal and secondary aquifers of resource value' to distinguish between useful groundwater and unusable formation water found at depth. However legislation requires that we afford protection to all groundwater, so this change has not been made.

Question five: Do you think that the introduction of standard rules for onshore oil and gas exploration will have a significant financial impact overall on your businesses. If you agree or disagree, please explain why, and provide evidence to support your view of the likely impacts.

If the Environment Agency is considering a change in policy, process or practice which has a significant financial impact on business, the government's [Accountability for Regulatory Impact](http://www.gov.uk/government/publications/regulator-impact-accountability-guidance) (ARI) process (www.gov.uk/government/publications/regulator-impact-accountability-guidance) requires it to develop a formal Business Engagement Assessment and consult affected business sectors to seek a common view on the size of the impact.

Some consultees responded that there would be reductions for their operations in terms of application fees and also in the amount of time in making permit applications.

No responses suggested that these reduced costs were significant, so the Environment Agency will not be proceeding with a formal Business Engagement Assessment for the proposed changes.

Question six: Are there any other activities that you think would benefit from the standard permitting approach or future revisions?

Regarding proposed new standard rules for onshore oil and gas activities:

The following activities were suggested as potential standard rules for the future:

- the management of extractive waste and well testing;
- flaring of sour gas; and
- production phase.

We will consider if these activities are appropriate for future consultation on standard rules.

Question seven: Please tell us if you have any other views or comments on these proposed rules that have not been covered by previous questions?

The following additional views were expressed;

Regarding references to the permeability of bunds in standard rules SR2014 No 1 & 2:

The reference to banded areas in the rules should be in accordance with the CIRIA 164 report and will be amended accordingly.

5 Next Steps

Responses from this consultation will be used to inform the new standard rules and the generic risk assessments.

The proposed new standard rules will be published on the .gov.uk website in December 2014.

Individuals who wish to follow up their responses, or points made within this document, in more detail are welcome to contact us:

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email: enquiries@environment-agency.gov.uk

Appendix A

List of respondents:

Anonymous respondents (x 2)

Cuadrilla

Envireau Water

Friends of the Earth

IGas

Individual respondent

Natural England

Network Rail

Public Health England

PSSL

Sefton Green Party

UKOOG

United Utilities

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