

# Standard rules SR2015 No1

The Environmental Permitting (England & Wales) Regulations 2016

The management of extractive waste not including a waste facility, generated from onshore oil and gas prospecting activities including drilling, coring, leak off testing (LOT), acid wash and decommissioning but excluding any well stimulation or hydraulic fracturing, for the production of oil or gas, (using oil and water based drilling mud)

# Introductory note

This introductory note does not form a part of these standard rules.

When referred to in an environmental permit these rules will allow the operator to carry out activities involved in oil and gas exploratory drilling operations at a specified location, provided that the permitted activities meet the following location criteria:

Category	Relevant criteria (or N/A)
Sensitive receptor (conservation and heritage)	Not within 200m of a European Site or Site of Special Scientific Interest.
Sensitive receptor (people)	Not within 200 metres of the nearest sensitive receptor.
Emissions to water	Not within a groundwater source protection zone 1 or 2, or where a source protection zone has not been defined then not within 250 metres of any well, spring or borehole used for the supply of water for human consumption. This must include private water supplies.
Emissions to air	Not within a specified Air Quality Management Area
Other	Not within flood zone 1 Not within 10m of any watercourse

These rules will permit:

Category	Relevant criteria (or N/A)	
Activity and scale	A mining waste operation for the management of extractive waste generated from prospecting, including the use of acid washes, leak off testing, well drilling, suspension and decommissioning, not including a waste facility.	
	<ul> <li>The management of extractive waste will be limited to non-hazardous waste with the exception of any hydrocarbons present in rock and which either contaminate drill cuttings or may be returned to the surface as free hydrocarbons during the drilling operation which would be hazardous waste and will not involve a waste facility; and</li> <li>Includes oil based drilling mud and cuttings which may be contaminated with oil based drilling mud.</li> </ul>	
Treatment methods	No treatment of extractive waste is permitted.	
Main waste streams	Extractive waste includes: Spent drilling mud, drill cuttings, hydrocarbons, spent spacer fluid, spent suspension fluid, waste fluid from LOT, acid wash flush fluids, produced and /or formation waters.	
Emissions	These rules do not allow any point source emission into surface waters or groundwater. No groundwater activity is permitted.	
Key restrictions	These rules do not apply to the management of waste generated by well stimulation of any type, including hydraulic fracturing and / or hydrocarbon extraction and / or appraisal, extended well testing or production.	
	These rules do not apply to a regulated facility with more than one operator.	

# End of introductory note

# Record of changes (see separate note)

Version	Date	Change
1.0	April 2008	Published for launch of EPR 2008
2.0	April 2009	Minor administrative changes



# Rules

# 1 Management

### 1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
  - (a) in accordance with a written management system that identifies and minimises risks of pollution, so far as is reasonably practicable, including those risks arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
  - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with rule 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in these standard rules shall have convenient access to a copy of the permit.

# 1.2 Avoidance, recovery and disposal of wastes produced by the activities

- 1.2.1 The operator shall take appropriate measures to ensure that:
  - (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
  - (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
  - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.
- 1.2.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

# 2 **Operations**

# 2.1 Permitted activities

2.1.1 The only activities authorised by the permit are the activities specified in table 2.1 below.

Table 2.1 activities	
Description of activities	Limits of activities
The management of extractive waste not involving a waste facility, arising from prospecting for oil and gas without well stimulation of any type.	The activities shall be limited to and conform to those described in Waste Management Plan 3 (WMP3). The management of extractive waste will be limited to the wastes described in WMP3. The storage of extractive waste is limited to temporary storage in secure containment as part of the collection and transportation of waste from the site. The storage of waste shall not exceed a period of 3 months.

#### 2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan attached to the permit.
- 2.2.2 The activities shall not be carried out within:
  - (a) 10 metres of any watercourse;
  - (b) a groundwater source protection zone 1 or 2, or where a source protection zone has not been defined then within 250 metres of any well, spring or borehole used for the supply of water for human consumption. This must include private water supplies;
  - (c) a specified Air Quality Management Area (AQMA);
  - (d) 200 metres of a European Site or a Site of Special Scientific Interest;
  - (e) 200 metres of the nearest sensitive receptor;
  - (f) a flood zone 1.

# 2.3 Operating techniques

- 2.3.1 The activities shall, subject to the rules of this permit, be operated in accordance with the Waste Management Plan reference WMP3 unless otherwise agreed in writing by the Environment Agency.
- 2.3.2 The activities shall be operated using the techniques and in the manner described in Table 2.3 below.

#### **Table 2.3 Operating techniques**

- 1. The management of extractive wastes shall be undertaken using the techniques described in WMP3.
- 2. All solids, liquids and sludges shall be stored using containment systems constructed in accordance with CIRIA C736 to prevent pollutants entering the environment, unless otherwise agreed in writing by the Environment Agency.
- 3. All extractive waste storage tanks shall be located on an impermeable surface (a permeability of less than 1x10<sup>-9</sup> m/s) with sealed construction joints within a bunded area. The bunded area shall have a capacity of at least 110% of the largest vessel, or 25% of the total tankage

#### Table 2.3 Operating techniques

volume, whichever is greater. Bunds shall be inspected daily during operational periods to ensure that this capacity is maintained, such as, but not limited to the removal of rainwater.

4. If a well is to be suspended or decommissioned it will be sealed or otherwise made safe, including any associated surface works in accordance with established procedures and the following regulatory provisions: The Borehole Sites and Operations Regulations 1995 and The Offshore Installations and Wells (Design & Construction etc.) Regulations 1996.

# 3 Emissions and monitoring

# 3.1 Emissions to air, land and water

3.1.1 There shall be no point source emissions to water, air or land.

# 3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in WMP3 and in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
  - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

# 3.3 Odour

- 3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in WMP3, to prevent or where that is not practicable to minimise the odour.
- 3.3.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
  - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

# 3.4 Noise and vibration

3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the

operator has used appropriate measures, including, but not limited to, those specified in WMP3 to prevent or where that is not practicable to minimise the noise and vibration.

- 3.4.2 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
  - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

# 3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in WMP3.
- 3.5.2 If required by the Environment Agency, the operator shall
  - (a) take such samples and conduct such measurements, tests, surveys, analyses and calculations, including environmental measurements and assessments, at such times and using such methods and equipment as the Environment Agency may specify and
  - (b) keep samples, provide samples or dispatch samples for tests at a laboratory, as the Environment Agency specifies, and ensure that the samples or residues thereof are collected from the laboratory within three months of receiving written notification that testing and repackaging in accordance with the relevant legislation are complete.
- 3.5.3 The operator shall maintain records of all monitoring required by these rules including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.4 The operator shall carry out:
  - (a) regular calibration, at an appropriate frequency, of systems and equipment provided for carrying out any monitoring and measurements necessary to determine compliance with these rules; and
  - (b) regular checking, at an appropriate frequency, that such systems and equipment are serviceable and correctly used.

# 4 Information

#### 4.1 Records

- 4.1.1 All records required to be made by these standard rules shall:
  - (a) be legible;
  - (b) be made as soon as reasonably practicable;
  - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
  - (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:
    - (i) off-site environmental effects; and
    - (ii) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall maintain convenient access, in either electronic or hard copy, to the records, plans and management system required to be maintained by this permit.

# 4.2 Reporting

- 4.2.1 The operator shall send all reports and notifications required by these standard rules to the Environment Agency using the contact details supplied in writing by the Environment Agency.
- 4.2.2 Within one month of the end of each month, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste removed from it during the previous month.

# 4.3 Notifications

- 4.3.1 The Environment Agency shall be notified without delay following the detection of:
  - (a) any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution;
  - (b) the breach of a limit specified in these standard rules; or
  - (c) any significant adverse environmental effects.
- 4.3.2 Written confirmation of actual or potential pollution incidents and breaches of emissions shall be submitted within 24 hours.
- 4.3.3 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (c) any change in the operator's name or address; and
- (d) any steps taken with a view to the dissolution of the operator.

In any other case:

- (e) the death of any of the named operators (where the operator consists of more than one named individual);
- (f) any change in the operator's name(s) or address(es); and
- (g) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

#### 4.4 Interpretation

4.4.1 In these standard rules the expressions listed below shall have the meaning given in the table.

4.4.2 In these standard rules references to reports and notifications mean written reports and notifications, except where reference is made to notification being made as soon as possible in which case it may be provided by telephone.

Term	Interpretation
"accident"	An accident that may result in pollution
"acid wash"	A wellbore acid treatment designed to remove scale or similar deposits from perforations and well-completion components. Acid wash treatments do not include injection of treatment fluid into the reservoir formation.
"authorised officer"	Any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.
"emissions of substances not controlled by emission limits"	Emissions of substances to air, water or land from the activities, either from the emission points specified in these standard rules or from other localised or diffuse sources, which are not controlled by an emission limit.
"emissions to land"	Includes emissions to groundwater.
"environment"	All or any of the media of air, water (including sewers and drains) and land.
"EP Regulations"	The Environmental Permitting (England and Wales) Regulations 2016 no 1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.
"European site"	Special Area of Conservation of candidate Special Area of Conservation or Special Protection Area or proposed Special Protection Area in England and Wales, within the meaning of Council Directives 79/409/EEC on the conservation of wild birds and 92/43/EEC on the conservation of natural habitats and of wild flora and fauna and the Conservation of Habitats and Species Regulations 2010. Internationally designated Ramsar sites are dealt with in the same way as European sites as a matter of government policy and for the purpose of these rules will be considered as European sites.
"Extractive waste"	Waste which directly results from the prospecting, extraction, treatment and storage of mineral resources and the working of queries
"groundwater"	All water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.
"groundwater source protection zone"	Has the meaning given in the document titled "Groundwater protection: Principles and practice" published by the Environment Agency in 2012.
"impermeable surface"	A surface or pavement constructed and maintained to a standard sufficient to prevent the transmission of liquids beyond the pavement surface, and should be read in conjunction with the term "sealed drainage system".

"leak off test LOT" or Diagnostic Fracture Injection Test (DFIT)	Also referred to as a Mini fall-off, data frack or Mini frack; used to establish the pressure at which fluids are forced into the formation or the point at which the formation begins to fracture.
"nearest sensitive receptor"	The nearest place to the permitted activities where people are likely to be for prolonged periods. This term would therefore apply to dwellings (including any associated gardens) and to many types of workplaces. We would not normally regard a place where people are likely to be present for less than 6 hours at one time as being a sensitive receptor. The term does not apply to the operators of the permitted facility, their staff when they are at work or to visitors to the facility, as their health is covered by Health and Safety at Work legislation. N.B. the term would apply to dwellings occupied by an operator's family.
"pollution"	Emissions as a result of human activity which may –
	(a) be harmful to human health or the quality of the environment
	(b) cause offence to a human sense
	(c) result in damage to material property, or
	<ul> <li>(d) impair or interfere with amenities and other legitimate uses of the environment.</li> </ul>
"prospecting"	The search for mineral deposits of economic value, including sampling, drilling and trenching but excluding works required for the development of such deposits, and any activities directly associated with an existing extraction operation.
"quarter"	A calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.
"samples"	Samples that have been prepared or treated to enable measurements of activity to be made
"sealed drainage system" in relation to	A drainage system with impermeable components which does not leak and which will ensure that:
an impermeable surface	<ul><li>a) no liquid will run off the surface otherwise than via the system;</li><li>b) except where they may lawfully be discharged to foul sewer, all liquids entering the system are collected in a sealed sump.</li></ul>
"secure storage"	Storage where waste cannot escape and is not accessible to the public
"site"	The location where the activities can take place
"specified AQMA"	An air quality management area within the meaning of the Environment Act 1995 which has been designated due to concerns about certain pollutants
"SSSI"	Site of Special Scientific Interest within the meaning of the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000).
"techniques"	Both the technology used and the way in which the regulated facility is designed, built, maintained, operated and decommissioned

"waste facility"	An area designated for the accumulation or deposit of extractive waste, whether in solid or liquid state or in a solution or suspension, for the following time periods:	
	<ul> <li>no time period for Category A facilities or hazardous waste facilities;</li> <li>6 months for hazardous extractive waste generated unexpectedly;</li> <li>1 year for non-hazardous non-inert extractive waste;</li> </ul>	
	3 years for inert extractive waste and non-hazardous waste from prospecting for oil, and evaporates other than gypsum and anhydrite.	
"well stimulation"	Excluded for the purposes of this permit – includes the injection of acid or alkali to either open or increase the porosity of the target strata and thereby increase the production of oil or gas and the flow of hydrocarbons to the well.	
"year"	Calendar year ending 31 December.	

End of standard rules