



# Consultation on the applicability of integrated pollution prevention and control to onshore oil exploration activities

April 2014

1. Part 2 of Schedule 1 to the Environmental Permitting (England and Wales) Regulations 2010 (“the EPR”) lists a wide range of industrial activities which are subject to, amongst others, the requirements of Schedule 7A of the EPR. Those in Part A(1) of Part 2 of Schedule 1 are regulated by the Environment Agency or by Natural Resources Wales.
2. Most of the “Part A(1)” activities are also to be found in Annex I to the industrial emissions Directive (2010/75/EU). As such, their conduct is subject to the system of integrated pollution prevention and control (IPPC) which is now set out in Chapter II of the Directive, although it has its origins at EU level in the eponymous 1996 Directive (96/61/EC).
3. A few Part A(1) activities are not to be found in the industrial emissions Directive. These originate from the introduction under the Environmental Protection Act 1990 of the system of integrated pollution control and were retained when the IPPC Directive was first transposed in 2000. These “legacy” activities are subject to IPPC in the same way as the Directive activities.
4. The “legacy” activities were reviewed in the course of transposing the industrial emissions Directive. Whilst the consultation paper issued in March 2012<sup>1</sup> proposed the removal of 42 on grounds of their being in practice moribund or superfluous, 13 were proposed for retention because there were considered to be sound environmental protection reasons for doing so. This proposal attracted support from 12 of the 14 respondents who addressed it and so was embodied in the Environmental Permitting (England and Wales) (Amendment) Regulations 2013.

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<sup>1</sup> At <https://www.gov.uk/government/consultations/transposition-of-the-industrial-emissions-directive-in-england-and-wales>

5. Amongst the legacy activities retained is that set out in paragraph (h) of Part A(1) of Section 1.2 of Part 2 of Schedule 1 to the EPR. This activity is referred to simply as “paragraph (h)” in the remainder of this paper. It is:

‘The loading, unloading, handling or storage of, or physical, chemical or thermal treatment of –

(i) Crude oil;

(ii) Stabilised crude petroleum’

6. This activity has the potential environmental impacts set out in Appendix 1 of this paper. However, for many years the Environment Agency has held a regulatory position that paragraph (h) does not incorporate the loading, unloading, handling or storage of crude oil which may be encountered during oil or gas exploration activities. This position was taken on the basis that exploratory activities are of limited duration and the volume of oil extracted is low relative to that extracted during the production life of the well and so the regulatory burden associated with obtaining a Part A(1) permit under the EPR is disproportionate to the environmental risk. Moreover, there are other regulatory controls on oil exploration which provide protection for the environment: these are set out in Appendix 2 of this paper.

7. As it confirmed by the retention of paragraph (h) whilst removing other legacy activities in the 2013 amendments to the EPR, Government is satisfied that IPPC remains appropriate for oil production activities. However, paragraph (h) can be read as covering the handling etc. of crude oil in any situation and irrespective of the amounts involved.

8. Under the Petroleum Act 1998, all on-shore oil exploration, appraisal and exploitation activities need a petroleum exploration and development licence from the Secretary of State for Energy and Climate Change before those activities can commence. “Petroleum” is defined in the legislation as including ‘any mineral oil or relative hydrocarbon and natural gas, existing in its natural condition in strata’. However, DECC is not an environmental regulator for onshore operations.

9. Subject to respondents’ views,, Government therefore proposes to add the following paragraph to the *Interpretation and application of Part A(1)* of Section 1.2 of Part 2 of EPR Schedule 1:

“4. Part A(1)(h) does not apply to activities for which a petroleum exploration and development licence has been issued by the Minister pursuant to the Petroleum Act 1998 and the capacity of crude oil storage does not exceed 200 tonnes and the duration of oil storage does not exceed 6 months; .”

10. Do you agree with the proposed amendment? Can you suggest any other options for providing clarification in the EPR that paragraph (h) does not apply to oil exploration ?

## **APPENDIX 1: Emissions and environmental impact of oil storage associated with oil and gas exploration**

Emissions to air: The oil storage tank itself will need to be vented, the vent will normally discharge directly to air. Crude oil is made up of a range of hydrocarbons and the lighter fractions can be quite volatile leading to emissions of volatile organic compounds (VOCs). UK oil fields are sour, therefore the crude oil will also contain some hydrogen sulphide, which can cause odour issues.

Degassing: Crude oil requires degassing. The gas produced is predominantly methane and at an exploratory site will either be flared, generating the combustion gases carbon dioxide, nitrogen oxides and (depending on the sulphide content) sulphur dioxide, or vented directly to atmosphere as a mixture of methane, water and low levels of hydrogen sulphide.

Emissions to water: There is the potential for emissions to water from the oil storage, as a result of leaks and spills of crude oil, this is most likely during transfer operations. During flow testing the crude oil storage tank may require emptying daily.

Waste: Crude oil normally contains water, a layer of which can build up in the crude oil storage tank, which periodically requires draining off. This waste water is a hazardous waste and requires containment and appropriate disposal.

## **APPENDIX 2: Other Regulatory Controls in Place**

Control of Major Accident Hazard (COMAH) Regulations 1999 apply to storage of more than 200 tonnes of crude oil where the crude oil is classified as R51/53 "Toxic to aquatic organisms may cause long term adverse effects in the aquatic environment". The Regulations require the production of a major accident prevention policy and onsite emergency plan. The Regulations are enforced by the Environment Agency, the devolved administrations and the Health and Safety Executive, as a joint competent authority.

The Control of Pollution (Oil Storage)(England) Regulations 2001 apply, in England only, to oil storage containers of more than 200 litres' capacity. Enforced by the Environment Agency, the Regulations require that the storage tank is constructed of a corrosion resistant material and according to prescribed standards for secondary containment.

Sections 161A-D Water Resources Act 1991 allow the Environment Agency and Natural Resources Wales to serve notices to prevent or remedy pollution of controlled waters. Such notices can be used both to control risks from the storage of oil and also to bring about clean-up of pollution caused by leaks from oil storage.

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