

Submission in response to public consultation for document: **Designated Petroleum Activities Regulations**

It is nonsensical to propose to use the same safety regulations to cover both offshore and onshore, conventional and unconventional, petroleum activities. The safety issues are entirely different depending on the type of activity proposed. My specific concern is that the regulations being developed with offshore petroleum rigs in mind are entirely unsuited to unconventional shale gas extraction, in which well pads are constructed in populated areas, and in which gas wells pass under people's homes and drinking water supplies.

The proposed CER safety framework, in attempting to cover a wide range of diverse activities under a single system (in which the petroleum undertakings are invited to define and control the risks posed by their activities), risks failing to control any of the activities in an appropriate manner.

As a minimum, there should be separate sets of documents outlining the systems and regulations that will apply to offshore and onshore drilling respectively. As the documentation stands, it is impossible to know what content was developed for offshore drilling and what was intended to cover onshore drilling. The impression one gets is that the safety framework documents in general have been created to cover offshore drilling, while the fact that the framework will also legally apply to onshore drilling is hardly mentioned.

But, clearly, safety is more of an issue when well pads are constructed in populated areas than when they are offshore.

The risks of this type of gas extraction are outlined in this European Parliament report *"Impacts of Shale Gas and Shale Oil Extraction on the Environment and on Human Health"*

<http://www.europarl.europa.eu/document/activities/cont/201107/20110715ATT24183/20110715ATT24183EN.pdf>

I call on the CER to design a system of control specifically to cover the many and various health and safety risks posed by unconventional shale gas extraction. If the CER has been given a regulatory role for this activity, it should regulate it seriously, and not just mention it as an afterthought in a safety system designed for a different activity.

It is my view that unconventional shale gas extraction is an activity that is inherently so dangerous and polluting that it can never be considered safe in proximity to human habitation. The Irish government has not (yet) banned unconventional shale gas extraction in this country, so it is possible that the CER may one day soon be called on to regulate this activity. While the CER does not have the power to ban unconventional shale gas extraction, it does (if I am not mistaken) have the authority to refuse to issue a safety permit for this activity. The safety regulations developed by the CER should therefore contain at least the minimal prescriptive safety precautions to allow the CER to exercise its authority to protect the health and safety of the populations in the affected areas by refusing to grant safety permits.

Specifically, Item 4 of the *Draft of Designated Petroleum Activities Regulations, "Designation of certain classes of petroleum activity"*, should be split into two sections, one for onshore petroleum activity and the other for offshore petroleum activity.

The classes of petroleum activity under the section "Onshore Petroleum Activity" should be a clear list of all the processes associated with onshore petroleum extraction, with the processes involved in hydraulic fracturing as an explicit subsection. The proposed wording of the designated activities (incredibly) makes no mention of hydraulic fracturing, although the explanatory text states that this will be covered. If it is to be included in the regulatory scope, surely the law should make mention of it. Processes that should be explicitly designated include site preparation, well pad construction, transport, storage, management, and disposal of materials (including but not restricted to chemicals, water, and silica), wastewater disposal and treatment, and pipeline construction and management. In short, the designation should clearly describe the actual processes used in unconventional petroleum extraction and should state how they are or are not covered by the regulations. This seems to be the minimum that we should be able to expect from the regulations.

Item 4 (2)(a) specifically states that production "shall not be construed as extending to the construction or commissioning of any petroleum infrastructure prior to the introduction of any hydrocarbon to that infrastructure". The preceding section make no

mention of hydraulic fracturing and the introduction of chemicals and silica into the ground for this purpose. However, the explanatory document states that “well work includes hydraulic fracturing operations”. The problem is that the proposed wording for the regulations does not include the “well work” as a designated activity. If the activity of hydraulic fracturing is included under item 4 (1)(a), the regulations should make this explicitly clear.

Also, where is the construction of onshore wellpads covered? And the construction of pipelines? Compressor stations? Wastewater storage facilities? If the regulations are being designed to cover onshore petroleum activities, they must specifically and explicitly state which of the related are or are not regulated. The proposed *designation of certain classes of petroleum activity* does not make this clear. At all.

Item 2.2(d) of the *Designated Petroleum Activity Regulations* states:

“decommissioning: this includes from making the petroleum infrastructure hydrocarbon free to site abandonment”.

The *Draft of Designated Petroleum Activities* does not include any more information with regard to decommissioning.

Given that much of the enormous quantity of toxic chemicals used in hydraulic fracking remains underground and can continue to migrate through the rock even after a the “petroleum infrastucture” has been decommissioned and abandoned, the regulations should provide for longterm monitoring of ground and surface water. Methane migration is another possibility that is a significant safety risk, as it can cause water well explosions, and this risk remains even after the decommissioning of a petroleum infrastructure.

In general, the *Draft of Designated Petroleum Activities Regulations* gives the impression that unconventional onshore gas extraction has not been given serious consideration, and therefore gives the (distinct and troubling) impression that it will not be seriously regulated. The words “hydraulic fracturing and all other forms of onshore unconventional petroleum extraction” should at least be mentioned in the regulations that are meant to cover these activities.