



Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

## **Petroleum Incident Regulations Consultation Paper**

### **Part of the Petroleum Safety Framework**

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# 1 Introduction

## 1.1 Background

### 1.1.1 The Petroleum Safety Framework

The *Electricity Regulation Act 1999*, as amended *inter alia* by the *Petroleum (Exploration and Extraction) Safety Act 2010* (the Act) gives the CER responsibility for the safety regulation of petroleum exploration and extraction activities in Ireland, including specifically a requirement for the CER to “establish and implement a risk-based petroleum safety framework” (referred to in this document as the Framework). The Framework is the overall system that the CER uses to regulate the safety of petroleum activities, and in particular designated petroleum activities<sup>1</sup>, carried out by petroleum undertakings<sup>2</sup>. The Framework required by the Act is permissioning and risk-based, recognising that hazards may be presented by the activities to be regulated. It requires petroleum undertakings to obtain permission from the regulator to undertake their operations by submission and approval of a safety case that describes how the risk has been reduced to a level that is as low as is reasonably practicable (ALARP).

The CER *Decision Paper on the High Level Design of the Petroleum Safety Framework* (the ‘High Level Design’<sup>3</sup>) sets out how the Framework operates.

## 1.2 Purpose / Effect of the Regulations

### 1.2.1 Overview

In accordance with section 13S of the Act, petroleum undertakings are required to notify the CER of petroleum incidents.

Section 13A(1) of the Act defines petroleum incidents as an event or occurrence, in at or in the precincts of petroleum infrastructure which:

- a) Results in the loss of human life;
- b) Results in personal injury being suffered by a person;
- c) Results in damage to the structural integrity of petroleum infrastructure;
- d) Results in the structural integrity of petroleum infrastructure being compromised;
- e) Results in the failure or malfunction of plant and equipment used as part of or in a manner closely associated with petroleum infrastructure; or
- f) Is an event or occurrence of a class prescribed by regulations made by the Commission under section 13V of the Act.

In accordance with section 13V of the Act, the CER may, for the purposes of enabling Part IIA of the Act to have full effect, make regulations (hereafter referred to as the or the ‘Regulations’) to prescribe a class of event or occurrence for the purposes of the definition of a petroleum incident<sup>4</sup>, which in the opinion of the CER may materially increase the risk of the following events or occurrences<sup>5</sup> from occurring:

<sup>1</sup> *SI 89 of 2013 – Petroleum Safety (Designation of Certain Classes of Petroleum Activity) Regulations 2013.*

<sup>2</sup> As defined in Section 13A(1) of the Act.

<sup>3</sup> See *Decision Paper on the High Level of the Petroleum Safety Framework* (CER/12062)

<sup>4</sup> Section 13A(1) of the Act.

<sup>5</sup> As set out in section 13U(1)(a) to (c) of the Act.

- a) Loss of human life;
- b) Personal injury being suffered by a person; or
- c) Damage to property, the ownership of which is held by a person other than the petroleum undertaking concerned.

The Regulations may also prescribe a form to be used by petroleum undertakings in notifying the CER of a petroleum incident, and the classes of information to be included in such a form.<sup>6</sup>

### 1.2.2 Statutory Offence

Section 13S(3) of the Act states that non-compliance with section 13S(1) (notification of a petroleum incident) and (2) (furnishing the CER with requested information related to the incident within a specified timeline) is an offence. Section 13S(3) of the Act provides that:

*A petroleum undertaking which does not comply with this section commits an offence and is liable –*

- (a) on summary conviction to a fine not exceeding €5,000 or*
- (b) on conviction on indictment to a fine not exceeding €1,000,000.*

## 1.3 Consultation on the Petroleum Incident Regulations

### 1.3.1 Overview

In accordance with section 13V of the Act, the CER may prescribe by regulation, a class of event or occurrence for the purposes of the definition of petroleum incident. The CER may also prescribe a form to be used by the petroleum undertaking in notifying the CER of a petroleum incident and the classes of information to be included in such a form. Having had regard to the matters set out in Section 13A(1) of the Act (definition of 'petroleum incident') and being of the opinion that the events or occurrences listed in these Regulations may materially increase the risk of an event or occurrence referred to in section 13U(1)(a) to (c) of the Act, the CER now publishes its draft Regulations for consultation. The draft Regulations are set out in section 4 of this document.

### 1.3.2 Structure of Document

**Section 2** summarises the development process for the proposed draft Regulations. It also proposes classes of events/occurrences which in the opinion of the CER may materially increase the risk of an event or occurrence referred to in section 13U(1)(a) to (c) of the Act occurring for the purposes of the definition of a petroleum incident.

**Section 3** outlines the high level actions the CER may take following the notification of a petroleum incident by a petroleum undertaking.

**Section 4** sets out the proposed text of the Regulations. The Schedule to the draft Regulations sets out the form to be used by petroleum undertakings in notifying the CER of a petroleum incident.

**Section 5** presents the key areas for consultation to which responses are requested.

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<sup>6</sup> Section 13V(b) of the Act.

## 1.4 **Next Steps**

Interested parties are invited to provide written responses to the proposed text of the Regulations. Comments should be sent by September 26<sup>th</sup> 2013, preferably in electronic format to:

Róisín Cullinan  
 Commission for Energy Regulation  
 The Exchange  
 Belgard Square North  
 Tallaght  
 Dublin 24  
 rcullinan@cer.ie

The CER intends to publish all comments received on the CER website. Respondents wishing for their submission, or sections therein, to be treated as confidential should note this in their submission. Should a respondent wish to meet with the CER to discuss its submission, the CER will make itself available for such meetings in the week commencing September 30<sup>th</sup> 2013. Respondents wishing to meet with the CER to discuss their submissions should contact Róisín Cullinan ([rcullinan@cer.ie](mailto:rcullinan@cer.ie)) at the CER no later than close of business September 26<sup>th</sup> 2013.

**Following the consultation process, it is proposed that the Petroleum Incident Regulations will come into effect from November 30<sup>th</sup> 2013.**

## 1.5 **Potential Clarifications to High Level Design**

If the proposals set out in this consultation paper are accepted it would necessitate replacement of the bulleted items in section 8.1 of the High Level Design as follows (clarification in bold)

*Reportable petroleum incidents will include events or occurrences in, at or in the precincts of a petroleum infrastructure which:*

- a) Results in the loss of human life,*
- b) Results in personal injury being suffered by a person;*
- c) Results in damage to the structural integrity of petroleum infrastructure;*
- d) Results in the structural integrity of petroleum infrastructure being compromised;*
- e) Results in the failure or malfunction of plant and equipment used as part of or in a manner closely associated with petroleum infrastructure; or*  
*Are a class of event or occurrence prescribed under the Petroleum Incident Regulations as follows:*
- f) well control event; or**
- g) prescribed occurrence.**

Some other minor clarifications to section 8 of the High Level Design will also be required to refer to the final published Regulations. These will include some of the elements set out in section 3.1 of this paper. Any clarifications to the High Level Design that are required following the publication of the final Regulations post consultation process, will be incorporated into an updated version of the High Level Design once all the regulations, written regulatory documents and procedures which comprise the Framework have been completed. This is expected to occur in November 2013.

## 2 Petroleum Incidents

### 2.1 Development Process for the Petroleum Incident Regulations

Section 13A(1) of the Act defines a petroleum incident as an event or occurrence, in at or in the precincts of petroleum infrastructure which:

- a) results in the loss of human life;
- b) results in personal injury being suffered by a person;
- c) results in damage to the structural integrity of petroleum infrastructure;
- d) results in the structural integrity of petroleum infrastructure being compromised;
- e) results in the failure or malfunction of plant and equipment used as part of or in a manner closely associated with petroleum infrastructure; or
- f) is an event or occurrence of a class prescribed by regulations made by the Commission under section 13V of the Act.

As set out in section 1.2 and in accordance with section 13V of the Act, the CER may make regulations prescribing a class of event or occurrence for the purposes of the definition of petroleum incidents, which in the opinion of the CER may materially increase the risk of the following:

- a) Loss of human life;
- b) Personal injury being suffered by a person; or
- c) Damage to property, the ownership of which is held by a person other than the petroleum undertaking concerned.

To inform the development of the Regulations in accordance with section 13V of the Act, the CER carried out a review of the requirements for reporting petroleum incidents in Ireland and internationally (the 'Review'). The Review enabled the CER to identify international best practice with regard to petroleum incident reporting so as to enable the CER to identify any additional classes of petroleum events or occurrences which, in the opinion of the CER, may materially increase the risk of an event or occurrence referred to in section 13U(1)(a) to (c) of the Act, and so which should be reportable to the CER. The petroleum incident reporting requirements of the following countries and authorities were reviewed:

- A. Ireland – Health and Safety Authority (HSA)<sup>7</sup>
- B. UK – Health and Safety Executive – Offshore Safety Division (OSD)<sup>8</sup>
- C. Nova Scotia – Canada Nova Scotia Offshore Petroleum Board (CNSOPB)<sup>9</sup>
- D. Denmark – Danish Energy Agency (DEA)<sup>10</sup>
- E. Australia – National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA)<sup>11</sup>

<sup>7</sup> Information and links on accident reporting to the HSA can be found at [www.hsa.ie](http://www.hsa.ie) and [http://www.hsa.ie/eng/Topics/Accident\\_and\\_Dangerous\\_Occurrence\\_Reporting/#reportableaccidents](http://www.hsa.ie/eng/Topics/Accident_and_Dangerous_Occurrence_Reporting/#reportableaccidents)

<sup>8</sup> Information and links on accident reporting to the HSE can be found at <http://www.hse.gov.uk/riddor/index.htm>

<sup>9</sup> Information and links for incident reporting to the CNSOPB can be found at [http://www.cnsopb.ns.ca/sites/default/files/pdfs/c-nlop\\_b\\_cnsopb\\_incident\\_reporting\\_and\\_investigation\\_guidelines\\_november\\_30\\_2012.pdf](http://www.cnsopb.ns.ca/sites/default/files/pdfs/c-nlop_b_cnsopb_incident_reporting_and_investigation_guidelines_november_30_2012.pdf)

<sup>10</sup> Information and links for incident reporting to the Danish Energy Agency can be found at <http://www.ens.dk/undergrund-forsyning/olie-gas>

<sup>11</sup> Information and links on accident reporting to NOPSEMA can be found at <http://www.nopsema.gov.au/safety/reporting-accidents-and-dangerous-occurrences/>

The 'Country Performance Measures' of the International Regulators Forum were also reviewed<sup>12</sup>.

### 2.1.1 Additional Classes under Section 13V of the Act

The Review identified common petroleum incident reporting trends across countries and regulators, which informed the CER process of identifying additional classes of petroleum events which may materially increase the risk of an event or occurrence referred to in section 13U(1)(a) to (c) of the Act and so should be prescribed for the purposes of defining petroleum incidents.

Draft regulations are set out in section 4 of this document. Within the draft regulations, the CER proposes to prescribe the following additional classes under section 13V of the Act:

- a) well control event; or
- b) prescribed occurrence.

Given the importance of well control with respect to petroleum safety, the CER is of the opinion that a well control event may materially increase the risk of an event or occurrence referred to in section 13U(1)(a) to (c) of the Act and so considers it appropriate to explicitly prescribe well control events as a distinct class of event or occurrence for the purposes of the definition of 'petroleum incident'.

The results of the review show that incident reporting requirements typically include a prescribed list of or events or occurrences, or impacts arising from events or occurrences. The class of petroleum incidents which are 'prescribed occurrences' under the draft Regulation may overlap with those events or occurrence, in at or in the precincts of petroleum infrastructure defined under the Act that result in:

- a) damage to the structural integrity of petroleum infrastructure;
- b) the compromise of structural integrity of petroleum infrastructure; and
- c) failure or malfunction of plant and equipment used as part of or in a manner closely associated with petroleum infrastructure.

While this will result in a degree of overlap between these classes of petroleum incidents and the new class of 'prescribed occurrence', it provides additional certainty for specific events and occurrences which, in the opinion of the CER, may materially increase the risk of an event or occurrence referred to in section 13U(1)(a) to (c) of the Act and so must be reported to the CER by petroleum undertakings.

The terms 'well control event', 'third party property' and 'prescribed occurrence' are defined in the draft Regulations and the CER is of the opinion that each of the additional classes are events or occurrences that could materially increase the risk of:

- a) Loss of human life;
- b) Personal injury being suffered by a person; or
- c) Damage to property, the ownership of which is held by a person other than the petroleum undertaking concerned.

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<sup>12</sup> International Regulator's Forum website link to Country Performance Measures:  
<http://www.iroffshoresafety.com/country/performance/>

## 3 Post Notification of a Petroleum Incident

### 3.1 CER consideration of a reported petroleum incidents

The Act imposes an obligation upon petroleum undertakings to notify the CER of a petroleum incident. Petroleum undertakings are defined as “*any person to whom a petroleum authorisation has been given or granted*”, and so the Act imposes a notification obligation on each ‘person’ named on the authorisation. As such, each person who is named in the petroleum authorisation is a duty holder under the Act.

The CER notes that for ease and efficiency of administration, all persons named on an authorisation may seek to appoint one of their number to be responsible for discharging their obligations arising under the Framework and that one of the named persons would be responsible, as between the persons named on an authorisation, for notifying the CER of the petroleum incident on behalf of all such persons. However this contractual arrangement is not reflected in the Act and the persons in respect of whom the notification is made must be clearly identified on the face of the notification. A petroleum undertaking will not have discharged its obligation to notify a petroleum incident if it does not make the notification or someone does not expressly make the notification on its behalf. Where the notifying party is not the petroleum undertaking, the name of the party giving the notice should be given, together with the name of the petroleum undertaking. The CER shall be entitled to rely on any notification purported to be made on behalf of a petroleum undertaking.

On receipt of such a notification of a petroleum incident, the CER shall consider the notification and assess whether further action is required by it or the petroleum undertaking. Where the CER considers that no further action is necessary, it may inform the petroleum undertaking that it does not intend to instigate action with respect to that specific petroleum incident.

Where the CER considers further action is necessary, it may request a report, within a specified timeline, from the petroleum undertaking concerned.<sup>13</sup> The report will give additional details of the incident and the circumstances associated with it so that the CER may give further consideration to the petroleum incident and determine whether further action, including enforcement action, is required.<sup>14</sup>

The CER also has the option to appoint a petroleum safety officer to investigate the petroleum incident in accordance with section 13T of the Act. The powers of a petroleum safety officer are set out in section 13W of the Act.

The CER will require the petroleum undertaking to notify it where other agencies have been notified of the petroleum incident. This will facilitate discussions between the CER and the other notified agencies with respect to subsequent requests for reports from the petroleum undertaking and/or investigations into the petroleum incident with a view to avoid duplication of regulatory efforts where possible.

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<sup>13</sup> Section 13S(2) of the Act

<sup>14</sup> Section 13T(2) of the Act

### **3.2 CER Reporting of Petroleum Incidents**

Under section 13U of the Act, the CER is required to prepare and send to the Minister for Communications, Energy and Natural Resources, a report in respect of incidents which result in:

- a) The loss of human life;
- b) Personal injury being suffered by a person; or
- c) Damage to property, the ownership of which is held by a person other than the petroleum undertaking concerned.

The CER may also send a report to the Minister in respect of any other petroleum incident where the CER deems it appropriate by reason of the seriousness of the petroleum incident concerned.

## 4 Draft of Petroleum Incident Regulations

S.I. No. [X] of 2013

### PETROLEUM SAFETY (PETROLEUM INCIDENT) REGULATIONS 2013

*Notice of the making of this Statutory Instrument was published in*

*“Iris Oifigiúil” of [ ]*

The Commission for Energy Regulation in exercise of the powers conferred on it by Section 13V of the Electricity Regulation Act 1999 (as inserted by Section 3(c) of the Petroleum (Exploration and Extraction) Safety Act 2010) (No. 4 of 2010), hereby makes the following regulations:

#### *Citation*

1. These Regulations may be cited as the Petroleum Safety (Petroleum Incident) Regulations 2013.

#### *Commencement*

2. These Regulations shall come into operation on 30 November 2013.

#### *Interpretation*

3. (1) In these Regulations, unless the context otherwise requires—

“Act of 1999” means the Electricity Regulation Act 1999 (No. 23 of 1999), as amended;

“Prescribed occurrence” means:

- i. Uncontrolled fire or explosion;
- ii. Uncontrolled release of hydrocarbon vapour exceeding 1 kilogram;
- iii. Uncontrolled release of hydrocarbon liquids exceeding 100 litres;
- iv. Uncontrolled release of non-hydrocarbon hazardous substances;

- v. Loss of mooring, stability or buoyancy of a vessel, or loss of position of a dynamically positioned vessel;
- vi. Subsidence, or collapse of the seabed, likely to affect the foundation of an installation or pipeline;
- vii. Any collapse of any petroleum infrastructure or any part thereof;
- viii. A collision by a vessel, vehicle, crane, helicopter or aircraft with any petroleum infrastructure;
- ix. Inability of the stand-by vessel to remain on location;
- x. Failure of any load-bearing parts and safety critical components of cranes or lifting devices;
- xi. Any instance of a person falling into water; or
- xii. An event or occurrence which results in mustering on an onshore or offshore site, other than when resulting from planned drills.

“Hazardous substance” means any substance or mixture classified as corrosive, harmful, irritant or toxic in accordance with the European Regulation (EC) No 1272/2008, the ‘CLP Regulations’.

‘Third party property’ means property other than property in the ownership of the petroleum undertaking(s) concerned, or of contractors or subcontractors to that petroleum undertaking that are carrying out work in connection with a designated petroleum activity.

“Well control event” means

- i. Any uncontrolled release from a well;
- ii. Any event associated with a well that results in activation of the blow-out prevention or diversion system;
- iii. Any event associated with a well that results in a positive flow indication as a result of a fluid influx;
- iv. The detection of hydrogen sulphide in the course of operations at a well or in samples of well-fluids from a well where the presence of hydrogen sulphide in the reservoir being drawn on by the well was not anticipated;
- v. Failure to maintain a planned minimum separation distance between wells
- vi. The mechanical failure of any safety critical element of a well whose failure would cause or contribute to, or whose purpose is to prevent or limit the effect of the unintentional release of fluids from the associated well or reservoir.

(2) In these Regulations —

(a) a word or expression that is used in these Regulations and is also used in the Act of 1999 has, unless the contrary intention appears, the same meaning in these Regulations as it has in the Act of 1999.

(b) where a word or expression is given a meaning in the Act of 1999 or in these Regulations then, except where the context otherwise requires, any cognate word or expression used in these Regulations shall be construed accordingly.

(c) a reference to an article or schedule is to an Article of, or Schedule to, these Regulations, unless it is indicated that reference to some other provision is intended, and

(d) a reference to a paragraph is a reference to a paragraph of the provision in which the reference occurs, unless it is indicated that reference to some other provision is intended.

*Prescription of Classes of Event or Occurrence*

4. Any event or occurrence which falls within the following classes of event or occurrence is prescribed as an event or occurrence for the purposes of paragraph (f) of the definition of petroleum incident contained in section 13A(1) of the Act of 1999:

(a) prescribed occurrence;

(b) well control event;

*Form of Notification of Petroleum Incidents*

5. A petroleum undertaking(s) shall notify the Commission of a petroleum incident in writing, and such notification shall be in the form and contain the particulars outlined in the First Schedule.

6. In addition to complying with Regulation 5, in the case of a petroleum incident resulting in the loss of a human life, or as a result of which persons are missing, the petroleum undertaking(s) shall supply the Commission by the quickest practicable means with the name of the deceased or missing person(s), brief particulars and the location of the petroleum incident.

Sealed with the common seal of the Commission for Energy Regulation on the [ ] 2013.

Dermot Nolan

Chairperson of the Commission

## Schedule

**Petroleum Incident Notification Form**

<b>Petroleum Undertaking</b>	
<b>Petroleum Authorisation Number</b>	<b>Location</b>
<b>Date of incident</b>	<b>Time of incident (24hr)</b>
<b>Person making Notification</b>	
<b>Point of Contact (name and position)</b>	
<b>Email</b>	<b>Phone Number</b>
<b>Installation Type</b>	<b>Installation Name</b>

OTHER AGENCIES NOTIFIED		
<input type="checkbox"/> HSA <b>Contact:</b>	<input type="checkbox"/> AAIU <b>Contact:</b>	<input type="checkbox"/> MCIB <b>Contact:</b>
<input type="checkbox"/> IRCG <b>Contact:</b>	<input type="checkbox"/> An Garda Síochána <b>Contact:</b>	<input type="checkbox"/> Other (Please Specify): <b>Contact:</b>

INCIDENT CLASSIFICATION	
Definitions as per Part IIA of the Electricity Regulation Act 1999 (as amended) and the <b>Petroleum Safety (Petroleum Incident) Regulations 2013</b>	
Ref.	Class of event or occurrence that is or resulted in: Please tick box as appropriate
<b>A</b>	<input type="checkbox"/> <b>Loss of human life or missing persons</b> Loss of human life: Y/N Missing person(s): Y/N
<b>B(1)</b>	<input type="checkbox"/> <b>Personal Injury</b> <b>Worker</b> – Injury that resulted in the injured person not being able to perform all of their normal work activities for more than 3 consecutive days after the incident
<b>B(2)</b>	<input type="checkbox"/> <b>Non worker</b> – Injury that required treatment by a medical practitioner or hospitalisation
<b>B(3)</b>	<input type="checkbox"/> <b>Worker</b> – Absence from work not exceeding 3 days excluding the day of the injury Please specify incident and injury:

C	<input type="checkbox"/>	Damage to the structural integrity of petroleum infrastructure
D	<input type="checkbox"/>	Compromise of structural integrity of petroleum infrastructure
E	<input type="checkbox"/>	Failure or malfunction of plant and equipment
F(1)	<input type="checkbox"/>	Well control event Please specify:
F(2)	<input type="checkbox"/>	Prescribed Occurrence Please specify:

Did the petroleum incident result in damage to third party property? YES/NO

Did the petroleum incident occur due to a dropped object? YES/NO

#### BRIEF DESCRIPTION OIF INCIDENT AND IMPACT

--

#### EMERGENCY RESPONSE ACTIONS (IF ANY)

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Completed by \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_

Petroleum incident notifications must be sent to [petroleumincident@cer.ie](mailto:petroleumincident@cer.ie) at the CER as soon as is practicable after the incident.

## **5 Consultation on the Petroleum Incidents Regulation**

The CER invites respondent comments on the following:

1. The additional classes of events and occurrences proposed to be prescribed by the CER under section 13V, in particular the definition of:
  - a. A prescribed occurrence; and
  - b. A well control event.
2. The specific text of the Regulations; and
3. The form to be used by petroleum undertakings to notify the CER of a petroleum incidents and the information to be included therewith.