

Petroleum Safety Permits

Atlantic Ireland 2018 Conference

Róisín Cullinan

31st October 2018

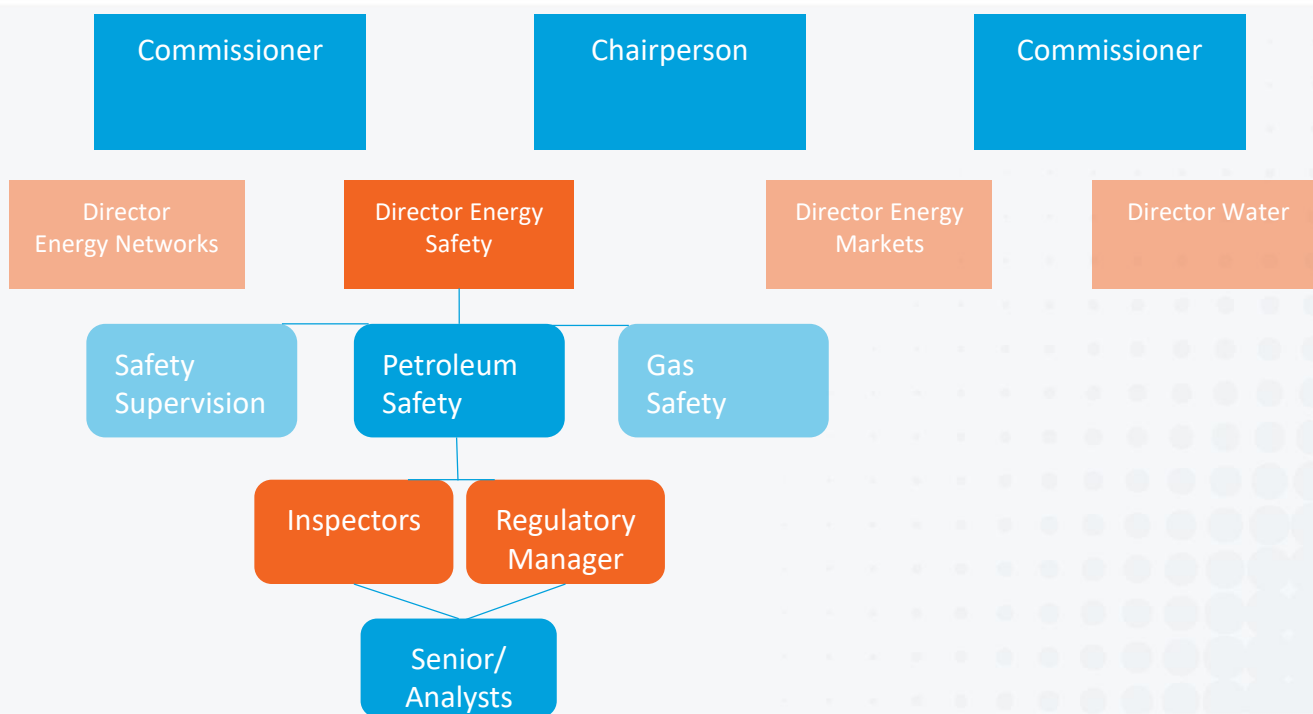
Petroleum Safety Permits

CRU 'Energy Safety' Division – Who we are

- CRU established 1999 as an Economic regulator
- Energy Safety Division established in 2006
- Safety Regulatory functions split across 3 teams:
 1. Safety Supervision: gas installers, electrical contractors
 2. Gas Safety (downstream): Transmission and distribution pipelines/Gas Networks Ireland/LPG undertakings
 3. Petroleum Safety (upstream): Petroleum Exploration and Extraction

Petroleum Safety Permits

CRU Organisational Structure



Petroleum Safety Permits

Petroleum Safety – what we do

Petroleum Safety regulatory focus

1. Major accident
 - a. Occupational health and safety is the responsibility of the Health and Safety Authority
2. Designated Petroleum Activities (DPAs)
 - a. A designated petroleum activity cannot be carried out without a safety permit
 - b. Designated petroleum activities include: exploration/production/decommissioning

Main functions

1. Assess safety cases (and notifications) for the purpose of issuing safety permit
2. Carry out audits and inspections
3. Investigate petroleum incidents
4. Undertake enforcement action

Petroleum Safety Permits

Petroleum Safety – who we regulate

Operators:

- ▶ primary responsibility for control and reduction of risk
- ▶ Responsible for submitting the well work/production/decommissioning safety cases

Owner:

- ▶ Responsible for submitting the non production safety case

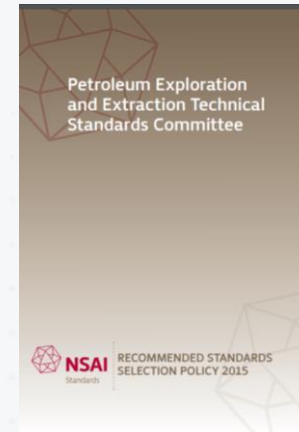
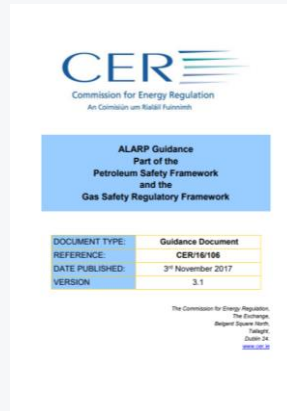
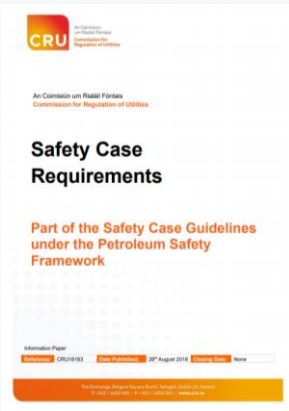
Petroleum undertaking(s)

- ▶ Responsible for submitting the safety permit application

Petroleum Safety Permits

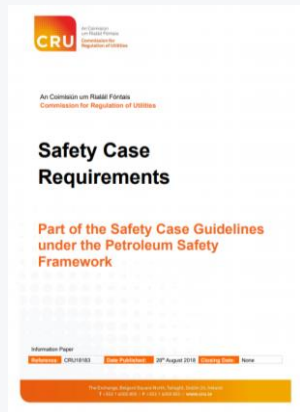
Petroleum Safety –Safety Cases

- ▶ A safety case must be prepared in accordance with the Safety Case Guidelines
- ▶ The CRU Safety Case Guidelines are a suite of documents:



Petroleum Safety Permits

Petroleum Safety – Safety Case Requirements



2 Prescriptive Requirements	5
2.1 Prevention	5
2.2 Control and Detection	5
2.3 Emergency Response	6
2.4 Standards	6
2.5 Safety and Environmental Critical Elements	7
4 Well Work Safety Case Requirements	16
4.1 Envelope of Operations	16
4.2 Context and Structure	17
4.2.1 Petroleum Authorisation and Operator	17
4.2.2 Designated Petroleum Activity	17
4.2.3 Roles and Identities of Third Party Organisations	17
4.2.4 Associated Safety Cases	18
4.2.5 Safety Case Structure Alignment with Requirements	18
4.3 Installation Suitability	18
4.3.1 Non- production Installation Suitability for the Well Operations	18
4.3.2 Additional Equipment	18
4.3.3 Non-well Operations	19
4.4 Description of Well Operations	19
4.4.1 Well Work Activity	19
4.4.2 Reservoir and Well Description	20
4.4.2.1 For New Wells	20
4.4.2.2 For Existing Wells	21
4.4.3 Suspension and Abandonment	22
4.5 ALARP Demonstration	22
4.6 Safety (and Environmental) Critical Elements, Performance Standards, Assurance and Verification	23
4.7 Safety (and Environmental) Management System	23
4.8 Emergency Response (Safety)	23
4.9 Emergency Response (Offshore Environment)	23

5 Non-Production Safety Case Requirements	24
5.1 Context and Structure	24
5.1.1 Non-production Installation Owner	24
5.1.2 Safety Case Structure Alignment with Requirements	24
5.2 Non-production Installation	24
5.2.1 Installation Description	24
5.2.2 Hazardous Substances	24
5.2.3 Well Operations	25
5.2.4 Non-well Operations	25
5.2.5 Persons Affected	25
5.3 ALARP Demonstration	25
5.4 Safety (and Environmental) Critical Elements, Performance Standards, Assurance and Verification	26
5.5 Safety (and Environmental) Management System	26
5.6 Emergency Response (Safety)	26
5.7 Emergency Response (Offshore Environment)	26
5.8 Combined Operations	26
5.8.1 Arrangements for Combined Operations	27
5.8.2 ALARP Demonstration for Combined Operations	27
5.8.3 Safety (and Environmental) Critical Elements, Performance Standards, Assurance and Verification for Combined Operations	27
5.8.4 Management System Interfacing	27
5.9 Workforce Consultation	28

Petroleum Safety Permits

Petroleum Safety – Submitting a Safety Case (1)

- ▶ CRU facilitates pre submissions meetings to assist applicants in understanding our requirements
- ▶ It is recommended that an initial pre submission meeting is requested prior to, or early on in the development of the safety case for Irish submission
- ▶ A further meeting can be requested to check that progress on the safety case development continues to meet CRU requirements

Petroleum Safety Permits

Petroleum Safety – Submitting a Safety Case (2)

- ▶ On submission of a safety case alongside a CRU Safety Case application form, the CRU assessment process includes:
 1. Admin
 - a) Check that all required documents have been submitted
 - b) Legal check
 2. Completeness Check
 - a) Does the submitted safety case contain all sections as required by the Safety Case Requirements
 3. Main Assessment
 4. Safety Permit decision
 - a) May include Special Conditions

Petroleum Safety Permits

Petroleum Safety – Safety Case Assessment timeline

- ▶ The timeline for a CRU safety case assessment under legislation is 6 months with the potential to restart the clock where additional information is required
- ▶ CRU aim to assess a **well work safety case** in **3 months**
- ▶ CRU aim to assess a **non production safety case** in **3 months** (assessment timelines are concurrent where submitted with a well work safety case)
- ▶ CRU aims to assess a **production safety case** in **6 months**
- ▶ It is not CRU practice to restart the clock where additional information is required. CRU may however pause the clock whilst awaiting the further information The applicant will be provided with an updated assessment completion date where this occurs

Petroleum Safety Permits

Petroleum Safety – Safety Case Requirements: Notifications

Design

- ▶ *“The operator must submit a Design Notification for a planned new Production Installation ... An operator may be required to submit a Design Notification for a material change to an existing Production Installation with an accepted safety case prior to implementing the material change.”*
- ▶ Doesn't require acceptance but a rejection would likely result in a rejection of the subsequent operational safety case e.g. production safety case

Combined Operations

- ▶ *[The Safety Case Requirements paper] provide[s] the structure and requirements for a Combined Operations Notification, which is complementary to the safety cases for the installations involved in the Combined Operations, and as such is not a standalone document. The standalone operations of the installations will be described in their respective safety cases and are not required to be repeated in the Combined Operations Notifications to cover aspects that are relevant to the material change.”*
- ▶ Requires acceptance for permitting the activity

Petroleum Safety Permits

Petroleum Safety – Acknowledgement of Compliance

- ▶ CRU will assess a non production safety case in accordance with the Safety Case Requirements outside of a safety permit application for the purposes of issuing an Acknowledgement of Compliance
- ▶ An AoC does not permit the carrying on of a designated petroleum activity and is not acceptance of a safety case, but acts as an early assessment of the safety case to indicate that it satisfies the requirements of the Act and the CRU Petroleum Safety Framework
- ▶ AoC's are published to the CRU website

Petroleum Safety Permits

Petroleum Safety – Other key CRU documents



Requirements of the Petroleum Safety Framework

DOCUMENT TYPE:	Decision
REFERENCE:	CER/16/023
DATE PUBLISHED:	3 rd November 2017
VERSION:	3.1

The Commission for Energy Regulation,
The Exchange,
Belgard Square North,
Tallaght,
Dublin 24,
www.cer.ie



CER Audit and Inspection System part of the Petroleum Safety Framework

DOCUMENT TYPE:	Decision
REFERENCE:	CER/16/015
DATE PUBLISHED:	29 th February 2015
VERSION:	1.0

The Commission for Energy Regulation,
The Exchange,
Belgard Square North,
Tallaght,
Dublin 24,
<http://www.cer.ie>



Safety Case Fees Structure and Methodology Part of the Petroleum Safety Framework

DOCUMENT TYPE:	Decision Paper
REFERENCE:	CER 16/032
DATE PUBLISHED:	29 th February 2016
VERSION:	2.0

The Commission for Energy Regulation,
The Exchange,
Belgard Square North,
Tallaght,
Dublin 24,
www.cer.ie



STATUTORY INSTRUMENTS

S.I. No. 166 of 2016

PETROLEUM SAFETY (PETROLEUM INCIDENT) REGULATIONS
2016



Guidance for Notification of Incidents Part of the Petroleum Safety Framework

DOCUMENT TYPE:	Decision
REFERENCE:	CER/16/037
DATE PUBLISHED:	3 rd November 2017
VERSION:	2.1

Petroleum Safety Permits

Petroleum Safety – European and international interactions

European Offshore Authorities Group

- ▶ Formal interaction under the Offshore safety [Directive 2013/30/EU](#)

North Seas Offshore Authorities Forum

- ▶ Member of numerous working groups
- ▶ NSOAF publications on Petroleum Safety section of the CRU website

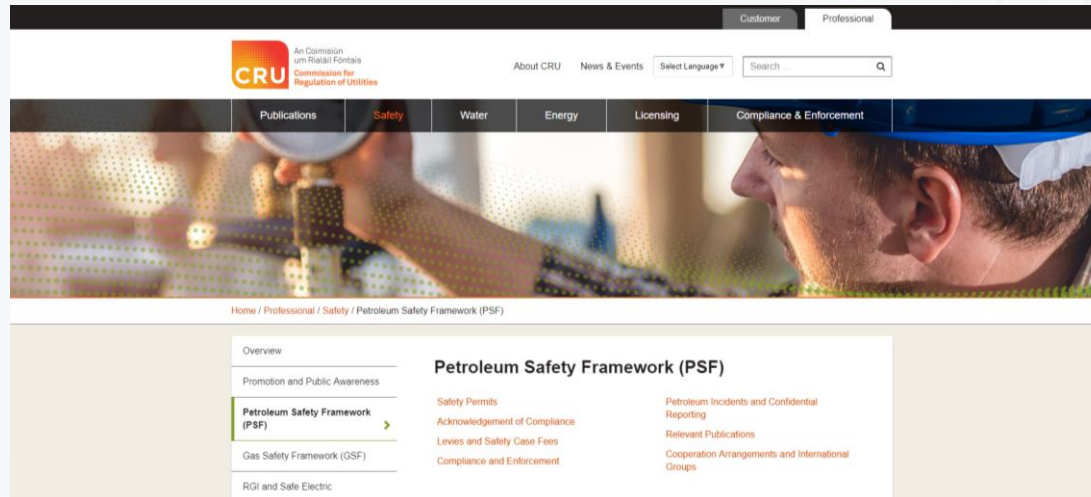
International Regulator Forum

- ▶ In process of joining

Petroleum Safety Permits

Petroleum Safety - Contact

- ▶ All enquiries/submissions to petroleumsafety@cru.ie
- ▶ All publications and guidance available for download at www.cru.ie



Petroleum Safety Permits

Petroleum Safety - Contact

Thank You for Listening
petroleumsafety@cru.ie