



Department
of Energy &
Climate Change

Safety and Environmentally Critical Elements



Background

SCR2015 Reg. 2

“major accident” means—

- (a) an event involving a fire, explosion, loss of well control or the release of a dangerous substance causing, or with a significant potential to cause, death or serious personal injury to persons on the installation or engaged in an activity on or in connection with it;
- (b) an event involving major damage to the structure of the installation or plant affixed to it or any loss in the stability of the installation causing, or with a significant potential to cause, death or serious personal injury to persons on the installation or engaged in an activity on or in connection with it;
- (c) the failure of life support systems for diving operations in connection with the installation, the detachment of a diving bell used for such operations or the trapping of a diver in a diving bell or other subsea chamber used for such operations;
- (d) any other event arising from a work activity involving death or serious personal injury to five or more persons on the installation or engaged in an activity on or in connection with it; or
- (e) any major environmental incident resulting from any event referred to in paragraph (a), (b) or (d)



Background

SCR2015 Reg. 2

“major environmental incident” means

an incident which results, or is likely to result, in significant adverse effects on the environment in accordance with Directive 2004/35/EC of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage.

Major Environmental Incident (MEI) **must** have another safety related major accident as a precursor.



Background

SCR2015 Reg. 2

“safety and environmental-critical elements” means such parts of an installation and such of its plant (including computer programmes), or any part of those—

- (a) the failure of which could cause or contribute substantially to a major accident; or
- (b) a purpose of which is to prevent, or limit the effect of, a major accident;

All SECE are SCE renamed. No new ECE identified which would become an SECE under OSD definitions.



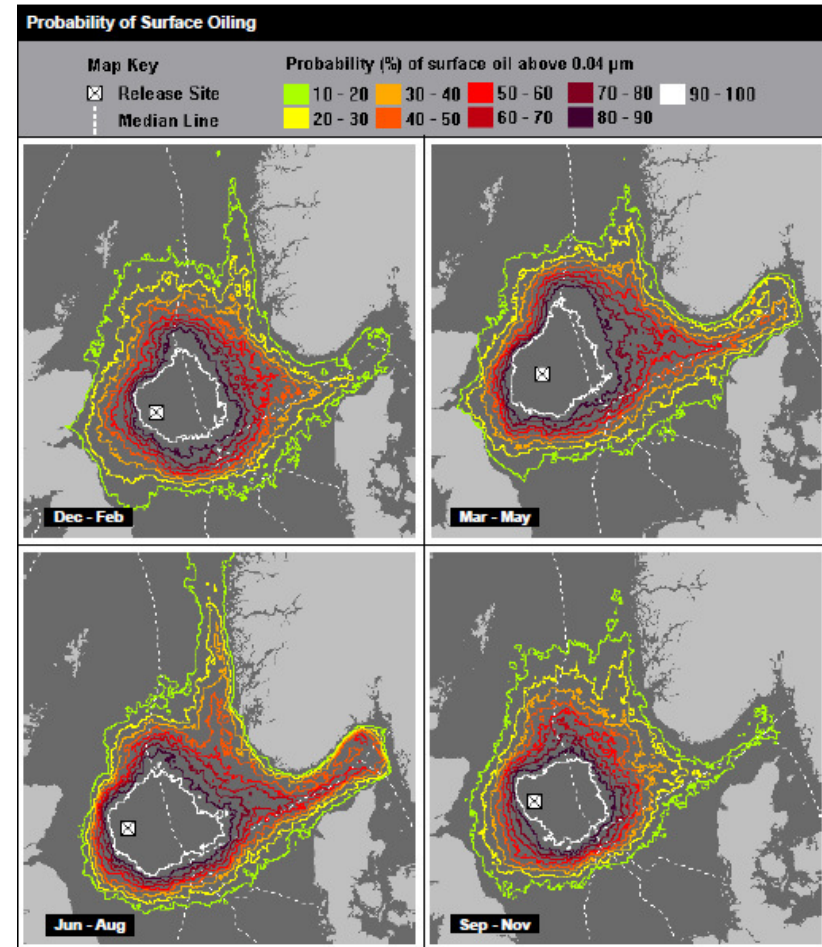
Major Accident Risk Assessment

- Dutyholders / Well Operators must undertake MAHRA for their installations / proposed operations
- MAHRA identifies potential for environmental consequences associated with MA
- MAHRA identifies if potential environmental consequence could result in significant pollution / MEI
- MAHRA needs to consider location as it affects the potential for environmental consequence
- ES, EIA, OPEP provide information on worst case scenarios and potential for environmental impact
- If no environmental MA identified then the SC explains the process used to conclude this.



Oil Pollution Emergency Plans (OPEPs)

- Must facilitate the implementation of a robust and effective response to an oil pollution event and minimise impact on marine environment
- Responsible persons must demonstrate the ability to respond effectively to the worst case release
- Modelling within OPEP demonstrates potential impact of worst case
- Best OPEPs are succinct and guide the responder through the response process and decision making effectively
- OPEPs must be site and operation specific and response measures based around variables such as oil type and location





Suitability of SECE

- The Safety Case should confirm SECE are suitable measures to prevent / mitigate MA, including potential for significant pollution / MEI
- DH should describe / demonstrate in SC the process undertaken to review MAHRA to consider potential environmental damage and ensure SECE are still suitable
- For NPI the DH would need to describe / demonstrate in the SC the process undertaken to review MAHRA due to change of location to ensure continued suitability of the SECE.
- Alternatively describe that this will be undertaken in Well Notification in collaboration with well operator.
- Well notification may include the details of any such review, changes to MAHRA, details of new SECE and their performance standards.



Possible SECE reviews

- Well blow outs – HP/HT, Deepwater, High flow rates, crude characteristics
- FPSO structural damage with loss of significant crude inventory
- Operations close to shore / sensitive locations where large inventories could cause damage.
- Consideration to improving functionality of SECE to ensure it operates as designed and to survivability to allow time for pollution response not just evacuation.
- ALARP applies