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)
“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