

# Learnings from OPRED evaluated Oil Spill Response Exercises in the UK

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## Introduction

The UK environmental regulatory regime for offshore oil and gas operations is administered by the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED). OPRED is part of the Department of Business, Energy and Industrial Strategy (BEIS) and is responsible for the development, implementation, application and enforcement of environmental legislation such that UK oil and gas activity can proceed cost effectively and in an environmentally sound manner.

The Merchant Shipping (Oil Pollution Preparedness, Response and Co-operation Convention) Regulations 1998 implement, in part, the International Convention on Oil Pollution Preparedness, Response and Co-operation 1990. They require operators of offshore installations, where there is a risk of an oil pollution incident, to have an oil pollution emergency plan (OPEP). The OPEP sets out arrangements for pollution prevention, detection and emergency response in the event of an actual or potential offshore oil pollution incident. The OPEP must also integrate with the UK National Contingency Plan (NCP).

The Offshore Safety Directive 2013 (OSD) also requires that certain information regarding emergency response measures is included in the Internal Emergency Response Plan which forms part of the Installation Safety Case and for oil spill response this includes the OPEP. In the UK the implementation of the OSD amended the OPRC Regulations by extending the requirement for an OPEP to Responsible Persons, i.e. installation operators, well operators, owners of non-production installations and operators of oil handling facilities (pipelines).

The OPEP review and approval process is carried out by the OPRED's Offshore Environmental Inspectorate which has published Guidance Notes<sup>1</sup> for preparing OPEPs which include the requirements for oil spill response training and exercises.

The Offshore Installations (Emergency Pollution Control) Regulations 2002 details the powers conferred to prevent and reduce pollution and the risk of pollution following an accident involving an Offshore Installation. These powers are exercisable by the Secretary of State and in the UK the Secretary of State's Representative (SOSREP) has been authorised to exercise these powers on behalf of the Secretary of State. The SOSREP role was created to enable one person to exercise "ultimate control" during an oil pollution incident whilst acting in the overriding public interest<sup>2</sup>.

During an incident an Operational Control Unit (OCU) may be established by the SOSREP, its function being to monitor plans for control and prevention of pollution and to provide a forum for discussion of these plans, environmental impacts and the interests of other parties. Normally the OCU will act to monitor and, where appropriate, advise the operator's incident response team but the SOSREP will always have responsibility for all decisions taken. To facilitate this, the OPEP must clearly demonstrate how the OCU interfaces with the established emergency response processes and procedures of the Responsible Person.

Relevant operational staff must receive certain training and exercise experience and the Department requires installation operators to conduct an exercise scenario such that it will require the establishment of the OCU and interaction with the SOSREP and OCU. These exercises, required every three years, are referred to as ‘SOSREP Exercises’. The location, timing and scope of such exercises must be discussed and agreed with the Department and the SOSREP in advance. There are typically 5-10 such exercises each year.

SOSREP exercises require an oil spill scenario which results in an incident which is both significant and ongoing, this being the trigger for the SOSREP to require the setting up of the OCU. All aspects that are required to be tested can generally be completed during an exercise lasting one day.

Key elements to be tested in a SOSREP exercise include:

- Notification of the incident to the relevant authorities;
- Implementation of the OPEP;
- Suitability of facilities and resources;
- Provision of requested information; and
- Interface with SOSREP, OCU members and other relevant parties.

All SOSREP Exercises are evaluated by the Department to ensure the requirements of the OPRC Regulations and Guidance are demonstrated. At the end of the exercise a hot wash is used to give immediate feedback to the operator and to conclude whether the requirements of the Department have been met. This is followed up by written confirmation of the Departments conclusion and details of any significant learning which the Department would like the operator to take note of. The Department also reviews its own performance for opportunities for improvement.

Over the years useful feedback and numerous learnings have been generated from the evaluation of SOSREP exercises which are then used to improve operators oil spill emergency response arrangements. Although these are captured by the individual operators, up to now there has been no review of learnings across the industry with a view to sharing learnings and identifying common areas for improvement. The Department has reviewed and anonymised learnings from recent SOSREP exercises with the intention of sharing with operators via Oil and Gas UK (OGUK), the leading representative body for the UK offshore oil and gas industry.

## **Main Results**

A review of learnings from OPRED evaluation of the SOSREP exercises identified 8 topics which were observed on two or more occasions. These are summarised below:

1. Details contained in the initial notification of the incident to OPRED were not accurate or relevant aspects were not conveyed sufficiently clearly to the inspector;
2. There were inaccuracies in the OPEP or the OPEP was not followed;
3. Actions generated by the OCU were not closed out or there was an unnecessary delay in closing out;
4. Dimension and/or appearance of the spill rather than quantity of oil spilled was used to estimate and track the incident;
5. Not updating release rates over the exercise even when more information became available;
6. Oil type used in modelling was not representative of oil being spilled during the scenario;

7. Dispersant stocks were not compatible between Emergency Response and Rescue Vessel and shore based stocks held by industry response providers, which causes delays in agreeing dispersant use; and
8. Poor information flow between OCU and operator Emergency Response Centre and vice versa, which can lead to confusion.



Fig. 1 - Example of an OCU set up during a SOSREP exercise during 2017.

## Conclusion

Following the review, a number of examples of common learnings from OPRED evaluated SOSREP exercises were noted. Learnings have been anonymised by the Department and will be shared with industry, allowing operators to review their OPEPs and associated procedures in advance of an exercise and more importantly of a real incident. Although learnings could simply be shared by anonymising and publishing findings, it is considered more helpful to share these in an interactive environment where operators can discuss these with OPRED evaluation staff, for example during OGUK Oil Spill Response Fora. Once shared, OPRED evaluators can “look out” for common learning issues during exercises to assess whether sharing learnings does result in improvements and future exercise scenarios can be tailored to test plans more effectively.

OPRED will also be looking to capture a wider range of post exercise feedback from other stakeholders such as the Maritime and Coastguard Agency and Environment Group representatives in order to further improve the learnings from exercises and share these with industry.

Operators are aware that continued effort is needed post exercise to track and close out learnings specific to their own processes and procedures. Effort would also be well spent learning from the exercises of others within the same industry.

By sharing the learnings, both Regulator and industry can benefit with a resultant improvement in oil spill response preparedness.

## References

<sup>1</sup> Department of Business, Energy and Industrial Strategy Guidance Notes for Preparing Oil Pollution Emergency Plans. <http://www.hse.gov.uk/osdr/guidance/guidance-regulations.htm>

<sup>2</sup> Department of Energy and Climate Change Guidance on the Offshore Installations (Emergency Pollution and Control) Regulations 2002  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/536115/EPC\\_Guidance\\_-\\_Version\\_1\\_-\\_July\\_2016.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/536115/EPC_Guidance_-_Version_1_-_July_2016.pdf)