From Reactive to Proactive – A Novel Approach to Exercise Design

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Introduction

Oil Spill Response Limited (OSRL) was engaged by Exxon Neftegas Limited (ENL) to design a large-scale exercise which mirrors an oil spill originating from an offshore platform incident in the Sea of Okhotsk, Sakhalin, Russia; this was delivered in Jun 2017 and comprises both Table-top play and equipment deployment in-field over 2 days.

Aptly named 'Breeze of Okhostk', the exercise was designed to stress-test various response plans of ENL. While previous company exercises were focused on initial response, 'Breeze of Okhostk' was intended to practise personnel in managing the "Proactive Phase" of an ongoing Tier 2/3 response to an offshore oil spill incident, building on past lessons and experience.

This case study seeks to highlight the following: 1) Scale of the exercise and challenges; 2) Level of realism in the scenario; and 3) Successful delivery and effective learning through close collaboration between stakeholders.

Main Results

Exercise 'Breeze of Okhostk' was designed to stress-test different elements in the response plans of ENL, comprising crisis management, incident management and onsite response.

The specific objectives of this exercise were:

- Exercise the capability of the Incident Management Team (IMT, based in Yuzhno), and Emergency Support Group (ESG - Crisis Management Team, based in Yuzhno), to manage the proactive phase of an oil spill response;
- Practice planning process in the Incident Command System (ICS) and generate Incident Action Plan (IAP) for execution;
- Exercise IMT's capability to carry out oil spill response planning at the tactical level;
- Exercise ESG's capability to support IMT at the strategic level;
- Practise the interface and communication between ESG, IMT and Emergency Response Team (ERT, onsite response) to implement the IAP;
- Deploy oil spill response equipment, both at-sea and onshore, to verify readiness; and
- Practise the interface and coordination between ENL response resources, external contractors and state authorities.

An immense effort was required to engage multiple stakeholders (IMT; ESG; offshore platforms; production sites; staff from various departments; local and regional partners; contractors and services providers, etc.) and encourage meaningful participation in the exercise. Relevant input was also necessary to enable the design of a realistic scenario.

With an overarching drive to practise the proactive phase of the planning process, a novel approach was taken - participants did not start from 'ground zero'; instead, they started on the bases of events simulated over a 2-day period prior (Days 1 and 2). Notification to relevant internal and external stakeholders was assumed to have been completed, coupled with initial response actions.

Deliberate considerations were made to construct a realistic 'storyboard' which contained plausible timelines and logical responses by key functions. This encompassed the following:

- 1) Technical input from the drilling team, including parameters for various operations;
- 2) Actions taken by the ERT on the affected facility;
- 3) Actions taken by other facilities and production sites;
- 4) Actions taken by the IMT and ESG;
- 5) Availability of key assets and resources, real-time where possible;
- 6) Capability and capacity of oil spill response resources;
- 7) Notification to key internal and external stakeholders, including state authorities; and
- 8) Possible interest from media and non-conventional interest groups.

Working to the same level of detail, injects were scripted to extend the scenario (Days 3 and 4), each carefully written and timed to test specific elements and solicit meaningful responses from participants during the exercise. Each piece of information or inject was layered upon the previous to provide realism.

Participants were given a brief before the exercise, along with a refresher training on ICS. Key appointments in the IMT and ESG were given a comprehensive 'Handover Pack' containing information on Days 1 and 2 to set the scene.

Upon commencement of the exercise, injects were carefully managed by exercise controllers and role players to pace the scenario, and keep participants on track and focussed. In tandem, facilitators and coaches provided necessary guidance on the ICS to enable due processes which culminated in incident action plans for implementation; the field deployment tasks were performed by ENL personnel and contractors.

Instant messaging was used extensively to enable common understanding between role players, controllers, facilitators and coaches, and the overall coordinator on the progress of the exercise; achievement of objectives was also monitored. This initiative proved useful in steering exercise participants towards the intended outcome within the stipulated time.

The close collaboration between ENL, OSRL and specialist contractors, namely *The Response Group* (TRG) and *Polaris Applied Sciences* (Polaris) proved fundamental to the success of the endeavour. While the design and delivery of the exercise was driven primarily by OSRL, TRG provided webIAP (incident management software based on ICS) support, and Polaris, which authored the response plans, provided coaching to the IMT. The Regional Emergency Preparedness and Response Advisor from ExxonMobil was also present to coach the ESG.

Supporting Images or Graphs

The selected photographs below illustrate aspects of the exercise (with permission from ENL):



Figure 1: Initial brief by IMT IC



Figure 2: Discussion in the ESG



Figure 3: Planning Meeting/ approval of IAP



Figure 4: Equipment deployment in-field

Conclusion

The robust exercise provided the emergency response teams in ENL with the opportunity to practise skills required to manage an ongoing major oil spill incident, and interaction to enhance working relationships under stressful circumstances. Complex decision making was guided by established processes and fundamental principles in ICS.

Overall, the highly tailored and interactive exercise provided valuable learning to all personnel involved. ENL response plans and key procedures were validated, with areas for enhancement identified; these include: 1) heath and safety; 2) roles and responsibilities; 3) interface between ESG and ICS planning processes; 4) communications; and 5) stake holder engagement.

Most importantly, the exercise helped build the confidence of individuals involved and undoubtedly enhanced their preparedness to respond to any oil spill from their operations.

References

Not Applicable.