



Shannon Estuary Anti – Pollution Team
Response Capability 2016 Annual Review

SEA-PT

Braemar Technical Services

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1. Scope and Purpose

This document forms part of an on-going independent review of the Shannon Estuary Anti-Pollution Team (SEA-PT) equipment, plans, processes and undertakings. This document provides the SEA-PT leadership and stakeholders with feedback and observations following the 2015 review executed on the 14th of December 2015.

This is the ninth review undertaken for SEA-PT undertaken by Zal Rustom and for the first time his colleague John Tulloch. The continuity of this audit project and the number of completed actions identified in previous audits continues to demonstrate the embedded commitment to progressive development and the management led pursuit of excellence for SEA-PT.

This review document is not intended to be a curative document, it is a development document and aims to serve as guidance and not instructions.

2. Previous Review Items

It should be recognised that a significant number of historic action items have been brought to a successful close in 2016 or in progress of completion, see Table 2:1 Outstanding Audit Actions, and the evolution of SEA-PT is progressing in a very positive manner.

This year's review is pleased to acknowledge the extension of the warehousing facility, providing additional storage space and unobstructed access to a high proportion of the equipment stock pile.

Table 2:1 Outstanding Audit Actions

Seq	Designation	Priority	Status
1	Consider One-Page-Plan project	Low	In progress as part of OSCP development
2	Consider electronic version of plan and preparation of a structured pdf edition	High	In progress will be actioned post OSCP completion – <i>Additional comments within this document</i>
3	Consider the development of an 'app'/ application for smart phones and portable devices.	Medium	In progress, tied to Seq 2. <i>Additional comments within this document.</i>

Seq	Designation	Priority	Status
4	Define a set of predetermined loads for response to pre-identified operations	High	In progress – <i>Close to completion</i>
6	Complete Tactical Response Cards in line with risks identified by members	High	Completed
7	Establish ad-hoc news/ case history bulletins to promote SEA-PT	High	Completed and in development – additional comments within.
8	Define simple, working, robust 24/7 contact process	High	Completed
9	Plan Review and alignment to Irish Coast Guard 2016 expectations	Critical	In progress
10	Define equipment disposal/ write off process	Low	Not completed
12	Identify skills levels of members	High	In progress
13	Undertake HNS exercise with nominated response parties (Fire Service and Braemar Howells)	High	Completed
14	Test Cascade call-out/ contact details	High	Completed
15	Consider test tank for equipment demonstration and post maintenance testing	Low	Not Completed

3. Current Activities

The Shannon Estuary OSCP is currently being updated by MWI Risk Management which demonstrates SEA-PT continuous development at the forefront of incident response within Ireland.

Updating of the plan provides an opportunity to identify the changes in spill risk within the Shannon Estuary, abstract all relevant information contained within the previous plan, capture previous plan learnings, stream line notification procedures, ensure contact lists are current and provide a bench mark for OSCPs throughout Ireland.

The SEA-PT Shannon Estuary GIS response planning tool is currently being updated and modified. The planning tool captures all socioeconomic and environmental resources at risk following a spill incident, predetermined boom deployment locations, tactical response plans associated to spill risk, and live spill trajectory modelling utilising real time weather, tides and current data.

4. Stockpile Review

Management maintenance standards of the equipment stockpile remain high with over 90% of the resourced equipment available and ready for use (this adds a comfortable margin to the targeted 85% readiness).

Remaining outstanding is the development of an equipment review for refurbishment, resale or disposal process. This will be carried forward in 2017 as part of SEA-PT development plan.

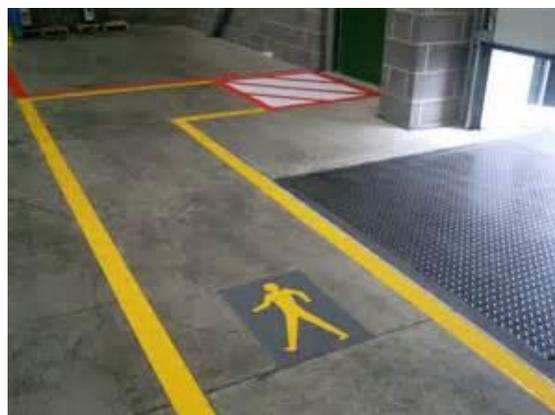
When reviewing the equipment maintenance forms it was apparent that close out of maintenance was not clearly identified, this is partial due to a daily maintenance form serving for multiple days. This issue could be resolved by a slight adaptation of the current form, *see Appendix 1*.

To eliminate all sources of manual data entry, paper files and easily track equipment movement from load out, on site and return to warehouse inventory management software could be introduced to the equipment stockpile through a barcode and scan system. Similar systems are being installed for a number of Tier 1 – 3 response equipment stockpiles around the globe, including the MCA.

The software system could assist with the predetermined attendance list of equipment and mobilisation tracking, be interlocked with the GIS system which could display live location of equipment throughout an incident response, and rapidly increase the load out/mobilisation time of equipment by removing the requirement of manual data entry.

The additional storage space has allowed for easy access to a high percentage of the equipment increasing mobilisation efficiency. It is recommended to mark/identify walkways on the ground of the warehouse similar to that shown in Figure 4-1. This demonstrates that traffic routes and pedestrian safety has been a primary concern with the development of the warehouse, especially as the facility is regularly visited by school groups and other community members.

Figure 4-1 Example of warehouse markings for walking visitors



5. Response Preparedness

Previous reports highlighted the requirement for predetermined attendance or Predetermined Equipment Deployment List (P.E.D.L). A draft copy of the PEDL is available which clearly demonstrates the high risk spill scenarios and the primary response equipment required in the initial response. However, it is thought it could contain additional details by combining the current PEDL and the equipment inventory. This would provide greater detail for members and greater resilience in terms of load out procedures. In addition, when completed the PEDL list could be circulated through SEA-PT members for addition/attachments into contingency plans. Braemar consultants are willing to assist in mentoring its development.

The exercise debrief report from the oil spill response exercise held in 2016 identified that there is a high practical oil spill response equipment deployment skillset within the members of SEA-PT with a high number of attendees in practical deployment exercise, which was successfully completed with no incidents. The exercise did identify a participation gap in terms of the incident management element of the exercise. The ability to successfully command and control an incident from an emergency command centre is critical in executing a response that is both efficient and effective. It is thought that the incident response training matrix will help identify which personnel will be required in attending incident management exercises, and areas to improve their knowledge on spill response management.

The rewrite of the Shannon Estuary OSCP poses an exciting time for SEA-PT where mobilisation procedures, response strategies and risk assessments can be reviewed and redefined as previously identified in past reports. The plan should be made accessible to not only members of SEA-PT but the wider Shannon Estuary Community allowing for accessible notification procedures, quick guides on spill assessment as well as incident management procedures. This could be achieved through a website platform breaking the plan into differing segments. A good starting point for idea development is the [IPIECA oil spill response project website](#).

Previous reports have identified the requirement for an app, this could be developed for on scene commanders/ responders with the internet based OSCP as a guide for incident management teams. The initial on scene commander/ responder app could allow for easy notification, spill assessment, hazard identification and completion of report forms. Braemar consultants are more than willing to assist in providing insight into the app.

6. Mobilisation Resilience

SEA-PT have increased their mobilisation resilience by adopting a cascade call out for both PWS and Oil Wildlife Response Network (ORW). This cascade call system has not only increased the integrity of the response services but further developed it as an autonomous entity.

The cascade callout system will allow key members within SEA-PT a certain degree of relief and downtime ensuring they are not on call 365/24/7, like previously observed. It is best practice to undertake regular notification exercises to identify that the procedure is both efficient and relevant.

A cold call out exercise should be conducted to inspect the SEA-PT equipment mobilisation procedure ensuring that the equipment is deployed efficiently and within the contracted guidelines.

The cold call out exercise should be unannounced and entail a notification to the aforementioned call out systems of a spill scenario then a practical deployment of equipment. This will truly test the resilience of the mobilisation procedure and identify both strengths and weaknesses.

7. Hazardous Noxious Substances

2016 saw the positive validation of SEA-PT HNS response capacity through an exercise held between the Fire Service, key HNS SEA-PT Stakeholders and Braemar HNS response teams. This exercise established strengths, capabilities, response procedures and weakness in responding to a HNS incident.

It is important that these notes get captured within the new Shannon Estuary oil spill contingency plan. It is best to not lose momentum on developing the processes and procedures of successfully and efficiently responding/managing a HNS incident by organising another validation exercise in 2017.

The validation exercise could involve:

- Joint deployment of resources between Braemar Howells and the Fire Brigade
- Notification exercises
- Incident management through a detailed table top exercise.

8. Personnel Information

Previous reports identified the requirement for a skills matrix to be developed for SEA-PT stakeholders and key contractors. This is currently being developed by PWS and should be used to identify the different roles and skillsets of personnel from tactical response teams to incident commanders. The training matrixes should be live documents being continually updated after every training course or exercise.

The training matrix should also be developed to capture member's capability in navigating the GIS oil spill trajectory and planning tool following its recent upgrade. The tool can prove an invaluable asset throughout a response and therefore should not be limited to a small number of proficient operators.

The skills matrix will also assist in identifying training requirements ensuring the appropriate personnel are assigned to the correct training course. The training provider could be supplied the training matrix before the training course allowing for bespoke training to match the required skillset in the view of ensuring a truly resilient incident management team.

Towards the end of 2017 the skills matrixes could be developed to include that of the HNS response and incident management teams.

9. Reputation and Social Involvement

Community involvement is encouraged sharing SEA-PT development through open days and school educational workshops. The reports received from the educational workshops appear positive with both teachers and pupils enjoying the experience.

It is thought this could be advanced through the inclusion of the OWR and introduction of a test tank to demonstrate how equipment works whilst also completing a maintenance task.

It is advised to review the format of the newsletter before releasing it to the wider community. The newsletter should have a standard, attractive, format which as a minimum, clearly identifies the document as a SEA-PT newsletter, contains the activation number, and identifies what SEA-PT offers as an autonomous entity.

Consideration of a response tag line which summaries SEA-PT should be considered for inclusion into the newsletter. Braemar's response tag line for example *"Great Service from a Trusted Team"*

10. Conclusion

The annual audit clearly identifies that SEA-PT is continuing its pursuit for incident response and preparedness excellence. The review of the OSCP and web based form in conjunction with the GIS spill trajectory model will armour the SEA-PT and Stakeholders with two fantastic incident command tools. Table 10.1 identifies the recommend actions for 2017 and onwards as part of the continuous development process.

Table 10.1 Recommended actions for 2017

Seq	Designation	Priority	Ownership
1	Consider One-Page-Plan project	Medium	SEA-PT
2	Consider electronic version of plan for on line web application	Medium	SEA - PT
3	Consider the development of an 'app'/ application for smart phones and portable devices for tactical response teams.	Medium	SEA - PT
4	Conduct a cold call out exercise	Medium	SEA-PT
5	Complete set of predetermined loads for response to pre-identified operations	High	PWS
6	Upgrade ad-hoc news/ case history bulletins to promote SEA-PT.	High	SEA - PT
7	Ensure exercise participation from an appropriate level.	High	SEA - PT
8	Ensuring training is being received at the right levels and tailored if possible.	Medium	SEA - PT
9	Plan Review and alignment to Irish Coast Guard 2016 expectations	Critical	SAE -PT
10	Define equipment disposal/ write off process	Medium	PWS
11	Identify skills levels of members including GIS	High	PWS
12	Consider test tank for equipment demonstration and post maintenance testing	Low	SEA-PT
13	Pedestrian/ traffic identification pathways for warehouse.	Low	PWS
14	Introduction of digital equipment barcode software response data base.	low	SEA-PT and PWS

Appendix 1: Recommended Form Correction

Equipment Designation			
Desmi Skimmer			
Stock Code	Location	PMS Interval	
	Skimmers	Annual	
Maintenance Pattern Description			
Annual Maintenance Programme will be a full operational deployment Part of HVSS System stored in Container "C"			
Maintenance Task	Workshop Notes	Comment	
Execute monthly PMS	Report all defects and repairs carried out.		
Review unit for damage	Record all operating hours		
Observations		Date	Completed by
Manufacturer			
Returned to Service	Cost Centre	Stores Group	Sheet
			1 of 1

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