Integration of post-incident monitoring and impact assessment into spill management systems - an international perspective



Importance of post-incident monitoring

- Post-incident monitoring activities are (or should be) an important component of most incident responses
- Should be a formal process helps to secure scarce resources for the activity
- May in any event be a regulatory requirement
- Critically important in:
 - Evaluating the spill situation
 - Confirming the source(s) of the oil
 - Gathering and comparing with pre-impact baseline data (e.g. from shoreline surveys)
 - Evaluating response options and developing a response plan



How to integrate into the response?

- National response systems and related emergency response planning may vary
- Only one approach widely promoted and adopted internationally



BS ISO 22320:2018

BSI Standards Publication

Security and resilience — Emergency management — Guidelines for incident management





GUIDANCE DOCUMENT ON THE IMPLEMENTATION OF AN INCIDENT MANAGEMENT SYSTEM (IMS)

HAMMO.

International industry also promoting the approach

- "IMS" widely adopted across the associations' membership
- Can be adapted and aligned to a national system as needed



Premiam principles (Section 2.8)

- Emphasizes importance of **co-ordinated** and **integrated** approach
- Can be a complex process
- May be limited or constrained resources in early phase of response
- Efficient to embed the monitoring programme in overall incident management
 - Align to response objectives and priorities
 - Avoid competition for logistics
 - Clarify financial support



2.	The p	rinciples of a monitoring plan	. 11
2.1	When do we need to monitor?		12
2.2	Why do we monitor?		12
2.3	What do we monitor?		13
2.4	Where do we monitor?		14
2.5	How frequently do we monitor?		15
2.6	When to stop monitoring		15
2.7	7 Survey design		17
	2.7.1	Comparison of post-and pre-incident data	18
	2.7.2	Data comparison from impacted and reference sites	18
	2.7.3	Longer-term analysis of data for trend and recovery	19
2.8	Co-ordi	nation and an Integrated Approach	19

Premiam Monitoring Co-ordination Cell (Appendix 1)

130

- Description of roles and responsibilities in England*
- Some other countries reflect UK national oil spill management organization, many do not
- Consider whether reference to IMS would be beneficial

* Complimentary versions developed for other three nations of the UK



Post-incident monitoring guidelines 1. The Premiam Monitoring Co-ordination Cell

INTRODUCTION

In order to facilitate the promptness in monitoring initiation the decisionmaking process for the mobilisation of initial sampling and analysis needs to be straight forward with clear responsibilities identified. In addition, it needs to be recognised that any initial mobilisation, sampling or analysis will incur costs and therefore a pre-considered mechanism for funding this initial activity is essential. A programme of marine monitoring for a significant incident can be extremely complex as it may need to co-ordinate many service contributors and take account of an ever-changing scenario. Therefore, under the auspices of the Premiam group it is recommended that, for significant incidents, a Premiam Monitoring Co-ordination Cell (PMCC) is formed, often on a virtual basis. The role of the PMCC is outlined in this guidance as well as its important links to the standing EG process. This guidance is the result of a series of workshop/meeting(s) involving the key UK government bodies with responsibilities for: i) taking the decision to initiate/continue/cease monitoring activities; and, ii) funding monitoring activities. It aims to detail the decision making and funding process with respect to post-spill monitoring and how that process is managed and developed as the incident proceeds. As such it forms a deliverable from the Premiam group aimed at clarifying and improving post-spill monitoring processes across the UK. This document forms the agreed guidance for England. Complementary versions have been developed for Wales, N. Ireland and Scotland to reflect any national and organisational differences. PREMIAM MONITORING CO. CO.

Monitoring and Sampling Team lead within IMS Planning Section



Integration into the IMS organization



How it works in IMS

- The IMS has a structured cycle: the 'Planning P'
- Integrates response, across all functions
- Mitigates conflicts
- Post-spill monitoring becomes embedded into response
- Incorporates financial approvals



Proposal #1 to consider

- Add a new 'international' part to Appendix 1
- Include reference to IMS as a widely used approach to incident command and control
- Provide brief overview of IMS organization and procedures
- Provide guidance on where Premiam's content can be integrated i.e. within Planning Section



A final thought... on Specific Resources (section 5.4)

62

- Currently limited to UK context
- Arctic, sub-tropical and tropical habitats and wildlife not covered

Proposal #2 to consider

- Expand coverage of habitats and wildlife
- For example mangroves, tropical corals, turtles, manatees



Post-incident monitoring guidelines 5.4 ECOLOGICAL ASSESSMENT -SPECIFIC RESOURCES: HABITATS AND WILDLIFE The guidance provided in the following sections is primarily derived from experience gained from studies carried out during oil spills. Similar studies have not generally been undertaken following chemical spills in the marine environment. Similar considerations will generally apply, although the broader range of physicochemical properties and behaviours of chemicals will affect the applicability of the guidance depending on the chemical(s) spilled. [Note: several habitats and species groups described in the following sections may include populations of protected species of conservation importance. Any surveys that could affect those species will therefore require licensing via an emergency wildlife licence (for more details see 5.4.1 Terrestrial maritime habitats Known vulnerability and sensitivity – Habitats above the level of spring high tides are not normally vulnerable to marine oil or chemical spills. Few studies have therefore been carried out on impacts to terrestrial