

SEATEC N.V.

Oil Spill Response Plan for Salvage Operations, offshore Southern Ireland

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Developed by Oil Spill Response Ltd. (OSRL)

IRCG LETTER OF APPROVAL

To be placed here when IRCG approval has been received.

Seatec to submit to IRCG.

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Introduction

This section provides a brief outline of the purpose, scope, objectives, and circumstances in which the plan shall be activated.

Purpose of the Plan

The primary purpose of this Oil Spill Response Plan (OSRP) is to ensure preparedness in the event of an oil spill incident by providing a roadmap for anticipating, preparing for, and managing oil spill incidents to ensure environmental protection, legal compliance, and public safety while also safeguarding the reputation of the relevant organization.

Specifically, this plan builds upon the information contained within the N35 Salvage Vessel SOPEP to:

- **Enable Rapid Response:** Clear, comprehensive, and well-structured guidelines enable response teams to activate quickly and tackle spills efficiently, helping to minimize environmental damage.
- **Outline Roles and Responsibilities:** It defines the roles and responsibilities of all involved parties, allowing for better coordination and collaboration, and more effective decision-making under pressure.
- **Ensure Legal Compliance:** A comprehensive plan ensures that all local, national, and international regulatory guidelines are adhered to, helping to avoid non-compliance penalties, and facilitating coordination with regulatory bodies.
- **Facilitate Training and Readiness:** Regular training and drills based on the plan enhance the readiness of the teams to respond to actual incidents, reducing the potential for confusion or inaction during a crisis.
- **Manage Communication:** It includes a strategy to inform and update relevant authorities, stakeholders, media, and the public, to manage perception and maintain transparency.
- **Assist in Recovery and Compensation:** Post-incident guidelines assist in recovery, restoration, damage evaluation and compensation processes to restore the ecosystem and fulfill the company's liabilities.

Scope

This plan details the contingency arrangements for Seatec to respond to a pollution incident effectively and efficiently within its area of operation. It follows international good practice and the Ireland's National Maritime Oil/HNS Spill Contingency Plan 2020 (NCP), ISO 15544:2000 and the IMO Manual on Assessment of Oil Spill Risk and Preparedness. The tiered preparedness and response framework in this OSCP is consistent with the OPRC Convention.

Objectives

The key objectives of this OSRP include:

- **Minimizing Impact:** Limit the immediate and long-term environmental, economic, and social impact of an oil spill.
- **Safety Management:** Protect the safety and health of all responders and affected community members.
- **Fast Response:** Enable swift, effective, and coordinated actions following an oil spill to contain the spread.
- **Resources Mobilization:** Ensure resources, such as equipment, trained personnel, and funding, are readily accessible to respond effectively.
- **Regulatory Compliance:** Adhere to all relevant local, national, and international regulations and guidelines.
- **Communication:** Provide open, transparent, and timely communication to all stakeholders, including workers, regulators, the media, and local communities.

- Cleanup and Restoration: Facilitate effective cleanup efforts and environmental restoration following an incident.
- Continuous Improvement: Review and revise the plan based on lessons learned from drills and actual spill incidents to continuously improve response efforts.

These objectives provide a framework for prioritizing and managing efforts during an oil spill response, with a central focus on environmental protection, human safety, and effective remediation.

SeaTec N.V.

Seatec N.V. is a Belgian based company founded by Capt. Pim de Rhooes, who specializes in a wide variety of underwater salvage services including heavy and light marine salvage, wreck removal, and the refloating of sunken or grounded vessels.

Capt. Pim de Rhooes will be the highest level of Designated Person Ashore (DPA) as he has access to all levels of management both ashore and on-board the vessel and will act as a key link between the N35 vessel and the Seatec N.V. organization. It will be his, or a nominated delegate, responsibility to ensure that all relevant policies and procedures are adhered to during the operation, including the monitoring of the health, safety and environmental aspects of the vessel operations.

Vessel Information.

N35 Offshore Tug/Supply Ship, IMO 8119637 (Salvage Vessel)

Name of Ship: "N35"

Type: Platform supply vessel - UT 705 for deep water operations.

Distinctive Number or Letters: 3EXY8

IMO Number: 8119637

Port of Registry: PANAMA

Name and Address of Registered Owner: SEATEC NV, Verversrui 15, 2000 Antwerp, Belgium.

SS Ohio (Target Vessel)

Name of Ship: SS Ohio.

Type: Cargo Ship.

Date built: 1914.

Propulsion: Steam.

Tonnage: 8719 grt

Dimensions: 135.6 x 18.7 x 8.4 m

Cargo: Part of the cargo consisted of 6000 tons of metals. 4600 tons steel, 721 tons brass, 250 tons zinc and 250 tons copper. There are also truck parts and general food.

History: On March 7th, 1917, SS Ohio, on a voyage from New York to Havre was torpedoed and sunk by the German submarine U-44 (Paul Wagenführ), 152 miles northwest from the Skelligs.

Location of Wreck: 51° 52.720" N 014° 16.880" W (130 NM from the Irish territorial waters).



Figure 1: Location of SS Ohio

Current Situation: The vessel is destroyed in two pieces and laying upright like a bathtub, leaving all the cargo visible from the top. Many parts of the vessel itself and the cargo are scattered around the wreck site. The SS Ohio is currently divided into two sections, with both parts resting upright at a depth of approximately 330 meters. The separation occurred at cargo hold number 2, where part of the brass was originally stored, and it now lies on the ocean floor. Cargo holds 1, 3, and 4 remain intact and accessible. Notably, the accommodation castle and center bridge is destroyed. The bow of the wreck points at a bearing of 325°, while the stern, situated approximately 50 meters away, points at a bearing of 115°. After a thorough assessment, it has been determined that the vessel does not pose an immediate risk of oil pollution as the SS Ohio is a World War I era vessel with boilers, rather than internal combustion engines. The cargo holds are not close to any machinery while the bunkers are filled with coal, which are located away from the cargo holds.

Environmental surroundings: The wreck is situated outside of any designated protected marine areas. An initial assessment of the seabed revealed that the primary environmental concern is the presence of the cargo of non-ferrous metals dispersed throughout the seabed due to the impact of the torpedoes and the wreck itself.

Hydrocarbon Inventory

Oil Types Carried on the N35

Gas Oil (diesel)

PSN: GAS OIL UN Number: 1202

Pollution category: A IMO Class: 3

Stowage: Bunker tanks (835m³ maximum capacity)

Petrol (gasoline)

PSN: Gasoline UN Number: 1203

Pollution category: A IMO Class: 3.1

Packaging: Steel Jerry cans, 20lt Stowage: On deck

Use of this OSRP

This OSRP consists of two main parts and four Appendices

- Part 1, **Oil Spill Response Action Plan** (Sections 1 to 5) should be utilized in the event of an oil spill emergency
- Part 2, **Reference Information** (Sections 6 to 10) is primarily for regulatory approval and background information.
- Appendix 1, **Contacts Directory** Direct contact information for response resources including:
 - Response personnel – Seatec and External Contractors.
 - Third parties - those likely to have an interest in an incident, e.g. police, media, parties likely to be impacted, and other authorities.
 - Primary response equipment - government, private contractor and oil industry equipment.
 - Experts and advisors - personnel with detailed knowledge of oil pollution, the local coastal environment (particularly of flora and fauna), safety, etc.
- Appendix 2, **Forms** Contains the basic forms required by the ERT and Management Team (MT) during an oil spill response operation including:
 - Notification Forms,
 - Individual Logs,
 - Action Records, and
 - Agency Report Forms
- Appendix 3, **Maintaining Oil Spill Preparedness** describes the process Seatec will use to implement, assess and maintain its chosen level of oil spill preparedness for the duration of the operation covered by this OSRP.
- Appendix 4, **Termination and Post Spill Monitoring** Describes the process Seatec will use in deciding at what point an oil spill response operation should be terminated and the post spill monitoring that would subsequently be carried out.




Should an oil spill occur, the Crew aboard the N35 will follow the directions as detailed in the vessels Shipboard Oil Pollution Emergency Plan (SOPEP), deploying appropriate containment booms, skimmers, and sorbent materials to contain and mitigate the spill as of Tier 1 (up to 7 tons).

In the event of an oil spill larger in scale or complexity then this plan will be used to provide the response team with the additional information regarding communication, reporting, containment, and clean-up procedures to be followed in the event of a larger scale response operation being conducted in order to mitigate the oil spill.

Oil Spill Response Action Plan

1 Initial Actions: Communication

1.1 Initial Communication Matrix

Table 2 Initial Communication Matrix					
Position	Notifies	Notification			Radio / Telephone
					
Spill Observer	Officer Of the Watch (OOW)	YES	No	Immediately	
Officer Of the Watch (OOW)	Vessel Master	YES	No	For all incidents above a Tier 1 level or at the Vessel Master’s Discretion	
	Duty / Chief Engineer	YES	POLREP and Basic Site Risk Assessment		
	Chief Officer	YES		Once the decision has been made to mobilize the response team	
Vessel Master	Vessel Owner / Manager	YES	POLREP (if available, do not wait for POLREP before informing)	As soon as practically possible	<div></div> <div></div> <div></div>
	Marine Rescue Coordination Centre	YES		For all incidents above a Tier 1 level or at the Vessel Master’s Discretion (for Spills at Tier 1 level)	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>
	Irish Coast Guard (IRCG)				<div></div> <div></div> <div></div> <div></div>
	Harbor Master	YES			Duty Manager
Vessel Owner / Manager	Oil Spill Response Ltd (OSRL)	YES	No (for initial notification)	As soon as assistance is required for any tier level	Duty Manager <div></div> <div></div>
	Protection and Indemnity Club	YES	No	As soon as assistance is required	Standard Club London <div></div> <div></div>
	Hull and Machinery Insurance	YES	No	As soon as assistance is required	Standard Club London <div></div>

1.2 Initial Communication Flow and Subsequent Actions

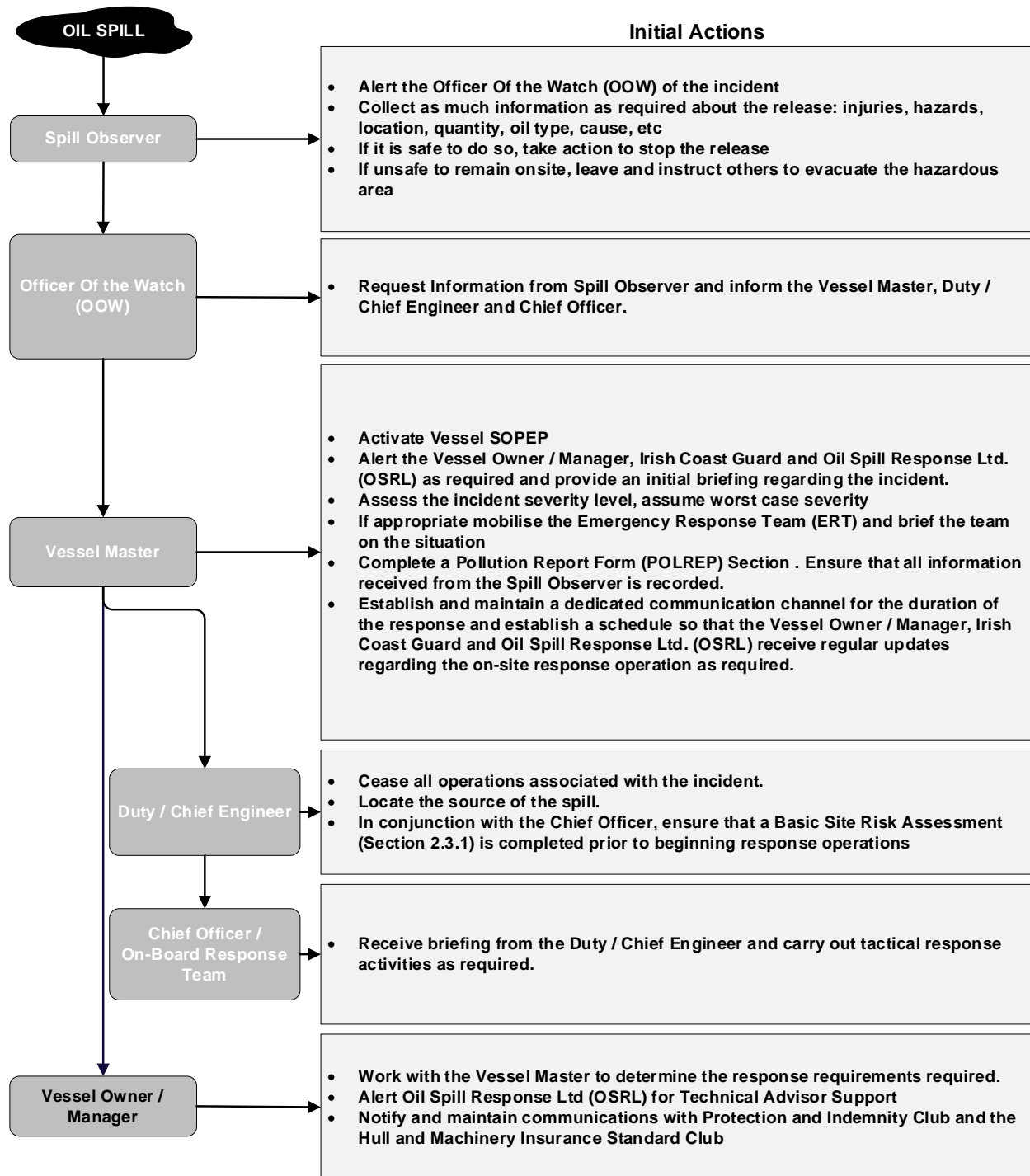


Figure 2: Initial Communication Flow and Subsequent Actions

2 Risk Assessment

This section identifies the possible risks related to the oil spill, their potential effects, and preventive measures to avoid or minimize these risks.

2.1 Risk Identification

The oil spill risk assessment process starts by defining the context of the assessment such as objective, scope, methods, boundaries, risk tolerance criteria, etc. and describing the activity to be assessed. This process is designed to answer the following questions:

- What can go wrong to lead to the potential release of oil (hazard identification)?
- How likely are the identified scenarios?
- What happens to the spilled oil (consequences)?
- What are the key environmental (both ecological and socio-economic) receptors?
- What is the risk for environmental damage?
- How is the established risk utilized in oil spill response planning?

This risk assessment is a fundamental element of the contingency planning process used to design and build a tiered response capability. Potential oil spill scenarios are identified, and the resultant risk estimated. The tiered response capability is then outlined commensurate to the risk identified. This information culminates in the Risk Register and Risk Assessment Matrix (RAM).

2.1.1 Oil Types Carried on the N35

1. Gas Oil (diesel)

PSN: GAS OIL UN Number: 1202

Pollution category: A IMO Class: 3

Stowage: Bunker tanks (835m³ maximum capacity)

2. Petrol (gasoline)

PSN: Gasoline UN Number: 1203

Pollution category: A IMO Class: 3.1

Packaging: Steel Jerry cans, 20lt Stowage: On deck

2.2 Mitigation Measures

All crew members are equipped with personal protective equipment (PPE), and daily safety meetings and briefings are conducted before commencing tasks. Continuous equipment inspection and thorough daily reviews ensure operational safety. The safety officer works closely with the ship's master and crew to maintain a secure environment onboard. Emergency response protocols adhere to SOLAS and SOPEP regulations, with communication primarily conducted via VHF radios.

During the salvage operation a large percentage of risks are related to the crane operation, however as the N35 is fitted with an electrically powered crane, the chance of any lifting operations resulting in an oil spill are minimal. The recovery target's location (wreck cargo) will be pre-determined using ROVs with USBL sonars to minimize impact on the wreck. Considering the steam-powered nature of the wreck, oil is absent onboard, further eliminating the risk of oil spills. Should any waste materials be retrieved during the operation they will be responsibly stored and disposed of upon arrival at port.

2.3 Risk Evaluation

The oil spill risk assessment methodology consists of five key steps and meets the International Maritime Organisation (IMO) guidance as issued in the Manual on Oil Spill Risk Evaluation and Assessment of Response Preparedness (2010 Edition). Each step has been undertaken collaboratively with key representatives from Seatec.

Note: Since the SS Ohio is a World War I era vessel with boilers (Steam Powered), rather than internal combustion engines, after a thorough assessment, it has been determined that the vessel does not pose an immediate risk of oil pollution. Because of this, and the location of the operation site, the risk assessment contained in this OSRP focusses on the N35 during its typical operations.

Step 1 Oil Spill Scenarios	<p>Potential scenarios that may lead to an accidental release of oil are identified. The source of the spill, event, oil type and volume are considered. This has been achieved by:</p> <p>Conducting risk assessment surveys and engaging with Seatec staff to gather an understanding of all the processes and issues that may result in potential oil spills.</p> <p>This information is recorded in the Risk Register.</p>
Step 2 Likelihood and Consequence	<p>The likelihood and consequence of all oil spill scenarios identified are semi quantitatively measured in accordance with industry best practise risk assessment process. For the purposes of this oil spill risk assessment only the likely consequence and impact to the surrounding environment is considered.</p> <p>The likelihood of each scenario has been based on a degree of mathematical data derived from historical data sources. Likelihood is considered with an understanding of the oil spill mitigation measures that are already in place.</p> <p>The consequence for each scenario has been predicted based on the way the oil will behave when spilled and the environmental and socioeconomic sensitivities which may be affected.</p> <p>The potential oil spill scenarios and assigned likelihood and consequence values are recorded in the Risk Register.</p>
Step 3 Oil Spill Scenario Impacts	<p>The potential impact and likely trajectory of an oil spill identified in the oil spill scenarios outlined in the Risk Register has been assessed by completing a historical impact review of other incidents that have occurred in the region of operations.</p>
Step 4 Tiered Response	<p>The tiered response approach and response strategy suitable for each scenario has been defined. Influencing factors include oil type, spill volume, climate, proximity to sensitive resources and response capability.</p> <p>This information is recorded in the Risk Register.</p>
Step 5 Risk Assessment Matrix	<p>The risk profile is completed using the Risk Assessment Matrix (RAM). The RAM highlights the scenarios which are deemed low, medium, or high risk.</p>

2.3.1 Definition of Consequence Categories

Severity	Environment
1	Slight impact
2	Minor local impact
3	Moderate regional impact
4	Major national impact
5	Extensive international impact

2.3.2 Definition of Likelihood Categories

Likelihood	Definition
O	Practically not credible (in theory could happen)
A	Rare
B	Unlikely
C	Credible
D	Probable
E	Likely / Frequent

2.4 Risk Register: Oil Spill Scenarios and Risk Control Measures

SCENARIO										
#	Source	Event	Oil Type	Spill Volume	Impact	Likelihood	Consequence	Risk	Response Strategies	Initial Actions and Tiered Response Resources
1	N35 Offshore Tug / Supply Ship Failure of pipework / bunkering lines during a bunkering operation	Integrity failure of Vessel or facility pipework / bunkering lines	Marine Gas Oil	0.01m³ (10lts) to 1m³ (1,000lts)	Release to the water’s surface probable, possible shoreline impact dependant on location and quantity released.	C	1	L	Tier 1 Response Strategies plus Shoreline Response if applicable and Waste Management operation	Tier 2 The source of the oil has been controlled however the initial response actions that focussed on preventing the oil spreading to unimpacted areas have been overwhelmed. Additional Response Resources are required from OSRL.
2	N35 Offshore Tug / Supply Ship System / Process / Operator error	Failure of a system or process during operations, i.e. tank overflow				C	1	L		
3	N35 Offshore Tug / Supply Ship Vessel Grounding	Vessel runs aground whilst manoeuvring rupturing the largest Fuel storage tank		B		3	M			
4	N35 Offshore Tug / Supply Ship Vessel Collison	Vessel collision with barge, vessel, or another object rupturing the largest Fuel storage tank					M			
5	N35 Offshore Tug / Supply Ship Total Structural Failure of Vessel or Barge	Partial or Total loss of vessel		Worse Case 835m³ (835,000lts) (if full loaded and a total loss)		A	4	M	Tier 1 and 2 Response Strategies	Tier 3 International Oil Spill Response Resources from OSRL

2.5 Risk Assessment Matrix

The risks have been recorded and plotted on the following RAM to identify risks of low, medium or high severity.

Table 3 Risk Assessment Matrix

Consequence		Increasing Likelihood					
Severity	Environment	0	A	B	C	D	E
		Practically not credible (in theory could happen)	Rare	Unlikely	Credible	Probable (may occur several times a year)	Likely / Frequent (will occur routinely)
1	Slight impact				1, 2		
2	Minor local impact						
3	Moderate regional impact			3, 4			
4	Major national impact		5				
5	Extensive international impact						

Risk Severity Levels			
Key:	Low	Medium	High
	Manage for continuous improvements by application of best practice	Incorporate risk reduction measures in balanced approach	Urgent remedy and resources required for immediate risk reduction

3 Key Roles and Responsibilities (Action Checklists)

3.1 Spill Observer

Person(s) who initially observes the oil spill offshore (i.e. vessel crew) and takes instant action. Refer to the Shipboard Oil Pollution Emergency Plan (SOPEP) for a Tier 1 response from the Vessel.

STEP	ACTION	✓
SAFETY	Make safety the priority.	
	If area is unsafe, leave and contact all personnel near the source of the spill and warn of any hazards.	
	If safe, assess any hazards and check for fire / explosion risks.	
	If safe to do so: <ul style="list-style-type: none"> Take immediate action to stop the source of the spill. Cease hot work / isolate ignition sources and any live equipment, if applicable. Shut down or move machinery, if necessary. Muster/evacuate personnel as required. 	
INITIAL ACTIONS	Immediately notify the Vessel Master.	
	If safe to do so, take reasonable actions to contain or reduce the leak or spill: <ul style="list-style-type: none"> Only approach the spill from up wind of the source with an area gas monitor and appropriate Personal Protective Equipment (PPE); Do not allow oil to encounter the skin; Close off the affected area; Close all drains. 	
	Start a Personal Log and record time and details of own actions.	
FURTHER ACTIONS	Inform the Vessel Master of the following:	
	<ul style="list-style-type: none"> Potential hazards and/or injuries 	
	<ul style="list-style-type: none"> Source of the spill 	
	<ul style="list-style-type: none"> Cause of the spill 	
	<ul style="list-style-type: none"> Time and duration of incident / observation 	
	<ul style="list-style-type: none"> Location of spill/incident 	
	<ul style="list-style-type: none"> Hydrocarbon type (e.g. Marine Gas Oil, Lubrication Oil, Hydraulic Oil.) 	
	<ul style="list-style-type: none"> Appearance of the oil 	
	<ul style="list-style-type: none"> Estimation of quantity of hydrocarbon spilled 	
	<ul style="list-style-type: none"> Spill contained or release ongoing 	
	<ul style="list-style-type: none"> Any other relevant information 	
RESPONSE ACTIONS	Contact all personnel near the source of the spill and warn of any hazards.	
	If safe to do so, stay near the spill and continue observation.	
	Direct the On-board Response Team (ORT) to the spill.	
	Act as instructed by the Vessel Master.	
FINAL ACTIONS	If trained, required and safe to do so, assist the ERT in responding to the spill.	
	Give Personal Log to the Vessel Master.	
	Complete demobilisation procedures.	
	Attend and take part in the debrief.	
	Offer support to the incident investigation.	
	Restart normal operations as advised.	

3.2 Officer Of the Watch (OOW)

Informs the Vessel Master and runs operations until the Vessel Master takes control. Gives further help as needed.

STEP	ACTION	✓
DOCUMENT	Begin Personal Log.	
SAFETY	Make safety the priority of any response.	
	If area is unsafe, leave and tell others as well.	
ALERT	The Vessel Master, Chief Engineer, and Chief Officer. Ensure that all personnel on board are aware of the incident, especially regarding any safety hazards posed by the spill or the response activities.	
COMMUNICATIONS	Set up on site communications and make sure communication channels are kept clear in case of emergency.	
RESPONSE ACTIONS	Get and record information from the Spill Observer including: Safety and status of personnel Location of incident Source and cause of spill Extent of spill and whether it is ongoing or under control. Time and duration of spill Hydrocarbon type Potentially hazardous aspects Any further useful or relevant information	
	Pass all information provided by the Spill Observer to the Vessel Master.	
	Tier 1 equipment – put on standby or use if safe to do so.	
	Act on instructions received from the Vessel Master.	
FINAL ACTIONS	Give Personal Log to Vessel Master.	
	Complete demobilization procedures.	
	Attend and take part in the incident debrief.	
	Offer support to the incident investigation.	
	Restart normal operations as told.	

3.3 Vessel Master

As previously mentioned for minor incidents, the organization and processes as detailed in the Vessels SOPEP will be followed, and the incident will be mitigated by the On-board Response Team (ORT).

STEP	ACTION	✓
SAFETY	Ensure safety of personnel (muster/evacuate personnel as required).	
	Assess any potential hazards and/or injuries/casualties.	
	Assess any safety issues that require to be resolved.	
IDENTIFY SOURCE OF SPILL	If unknown, determine source of spill.	
	Take appropriate action to stop or control the spill.	
OPEN INCIDENT LOG	Record an accurate time of events.	
	Record actions taken.	
	Record contacts made/received.	
	Record the sequence of events.	
ASSESS THE INCIDENT	Request full details of the incident from the Spill Observer, including:	
	• Potential hazards and/or injuries	
	• Source of the spill	
	• Cause of the spill	
	• Time and duration of incident / observation	
	• Location of spill/incident	
	• Hydrocarbon type (e.g. crude oil, Marine Gas Oil, gasoline)	
	• Appearance of the oil	
	• Estimation of quantity of hydrocarbon spilled	
	• Spill contained or release ongoing	
	• Any other relevant information	
REPORT THE SPILL	Mobilise the Chief Officer and ORT, if required.	
	Report spill to the Irish Coast Guard, Harbor Master, and Vessel Owner / Manager	
	Complete and send the Pollution Report Form (POLREP) to the Irish Coast Guard, Harbor Master, and Vessel Owner / Manager.	
ASSESS & MONITOR THE SPILL	With the Spill Observer, conduct surveillance and tracking of the slick.	
	Complete oil spill tier assessment.	
	If observation from the Vessel is not sufficient, request via the Vessel Owner / Manager if an aerial surveillance aircraft of opportunity can be sourced, with trained observers (via OSRL) also mobilised.	
	If tracking of slick is not possible, request oil spill modelling from OSRL via the Vessel Owner / Manager.	
	Identify suitable response strategies.	
	If safe to do so, request the ORT to mobilise Tier 1 response equipment.	
OBTAIN SAMPLE	Request that the Spill Observer or other nominated person to obtain a sample of the hydrocarbon.	
	• Sampling of a slick will only be carried out if confirmed as safe to undertake. • Ensure suspected 3rd party spills in the vicinity are also sampled if it is confirmed as safe to undertake.	
COMMUNICATIONS	Receive incident status reports from the ERT Leader.	
	Conduct incident briefings with the ERT at suitable frequencies, outline: • Changes to the incident situation	

STEP	ACTION	✓
	<ul style="list-style-type: none"> The effectiveness of the response strategies being employed Support requirements Site safety concerns 	
	Through the Vessel Owner / Manager request additional resources.	
RESPONSE TECHNIQUE DECISION	Coordinate activity for all ORT members in line with the incident objectives and priorities.	
	Coordinate the arrival of Tier 2 / 3 resources and personnel. Identify equipment lay down areas and logistics requirements to support Tier 2 / 3 resources and personnel.	
	If additional personnel have arrived on site ensure they are fully briefed, placing emphasis on health and safety associated with that site and particularly related to the incident.	
	Collect and maintain relevant documents for response operations.	
MONITORING RESPONSE TECHNIQUE	Inform the Vessel Owner / Manager to advise if the spill is dispersing or not.	
	Assist the Vessel Owner / Manager with any further actions regarding responding to the spill.	
INCIDENT STAND DOWN	Liaise with the Vessel Owner / Manager to determine cessation of incident.	
	On closure of incident, ensure incident log is collated and filled.	
	Collect Personal Logs for all members of the ORT.	
	Complete demobilisation procedures.	
	Lead the incident sites debrief and relay findings to the Vessel Owner / Manager.	
	Provide support for the incident investigation and analysis as required.	
	Ensure Tier 1 resources are returned to standby.	
	When safe, restart normal operations.	

3.4 Duty / Chief Engineer

STEP	ACTION	✓
SAFETY	Ensure that safety is the priority.	
INITIAL RESPONSE ACTIONS	Receive an initial briefing from the Vessel Master	
	Respond immediately to any oil spill notification; follow instructions from the Vessel Master.	
	Assume there is a fire or explosive risk until proven otherwise.	
	Observe the correct safety procedures for work, handling containment and recovery equipment and / or dispersant spraying equipment.	
	Know the locations and tasks of others on site and ensure that they are aware of your location and task.	
	Regularly reassess safety hazards to yourself and to other team members.	
FINAL ACTIONS	Complete demobilization procedures.	
	Attend and participate in the incident debrief.	
	Provide support for the incident investigation and analysis as required.	
	Resume normal operations as instructed.	

3.5 Chief Officer

Responsible for leading the On-board Response Team (ORT) under direction and advice from the Vessel Master.

STEP	ACTION	✓
DOCUMENT	Begin Personal Log.	
SAFETY	Ensure that safety is the first priority.	
	Identify a Site Safety Officer and ensure they make all ORT members aware of all hazards in field of operations.	
	Ensure the appropriate Safety Data Sheets (SDS) for the substance spilt is available.	
	If the spill is from the vessel: <ul style="list-style-type: none"> Stop operations Prevent further release if possible If required, move the vessel to a safe location 	
ALERT	Mobilize the members of the ORT and brief them on the required response.	
ASSESS THE SPILL	Provide the members of the ORT with assessment of the spill as required.	
COMMUNICATIONS	Receive brief from the Vessel Master.	
	Conduct incident briefings with the Vessel Master at timely intervals, outline: <ul style="list-style-type: none"> Changes to the incident situation The effectiveness of the response strategies being employed Support requirements Site safety concerns 	
	Lead the onboard ORT.	
	Act on instructions from the Vessel Master.	
RESPONSE ACTIONS	Coordinate with other vessels in the vicinity or assisting with emergency operations.	
	Be aware of danger/exclusion zones and the areas where entry is forbidden for people/boats/helicopters.	
	Ensure work is undertaken within the designated zones to prevent the spread of oil into 'clean' areas.	
	Compile and maintain relevant paperwork and documentation for response operations.	
	Submit Personal Log to Vessel Master.	

FINAL ACTIONS	Ensure Tier 1 resources are returned to response ready state.	
	Participate in incident debrief.	
	Provide support for the incident investigation and analysis as required.	
	Resume normal operations as instructed.	

3.6 On-board Response Team (ORT) Members

STEP	ACTION	✓
SAFETY	Ensure that safety is the priority.	
	Make yourself and those around you aware of hazards in the working environment. For example, gases, explosive vapor fire risk and dangers when using response equipment or chemicals.	
INITIAL RESPONSE ACTIONS	Receive an initial briefing from the pre- identified Team Leader	
	Respond immediately to any oil spill notification; follow instructions from the Team Leader.	
	Collect Personal Protective Equipment (PPE) and safety equipment (including gas monitor).	
	Collect communications equipment. Ensure all is in good working order.	
CONTINUED RESPONSE ACTIONS	Assume there is a fire or explosive risk until proven otherwise.	
	Know what actions to take if someone is injured (i.e., first aid).	
	Deploy oil spill response equipment as instructed by the Team Leader.	
	Observe the correct safety procedures for work, handling containment and recovery equipment and / or dispersant spraying equipment.	
	Know the locations and tasks of others on site and ensure that they are aware of your location and task.	
	Work within the designated site safety zones to prevent the spread of oil into 'clean' areas.	
	Regularly reassess safety hazards to yourself and to other team members.	
FINAL ACTIONS	Complete demobilization procedures.	
	Attend and participate in the incident debrief.	
	Provide support for the incident investigation and analysis as required.	
	Resume normal operations as instructed.	

3.7 Vessel Owner / Manager

STEP	ACTION	✓
DOCUMENT	In conjunction with the Vessel Master and the POLREP complete an Incident Briefing Form and Begin Personal Log.	
SAFETY	Ensure that safety is the priority for all onsite operations.	
ALERT	Receive Pollution Report Form from the Vessel master.	
	Move to or establish an Emergency Response Room or Control Centre.	
	Mobilize the Seatec Corporate Team as required and establish an appropriate organization level.	
	Ensure that the following organizations have been notified of the incident: <ul style="list-style-type: none"> Competent National Authority Spill Notification Point Port and Harbours Authority Other Government Regulatory Authorities as required. 	
RESPONSE ACTIONS	Confirm the oil spill tier level and applicable response strategies based on the spill information received from the Vessel Master.	
	Assess the overall effectiveness of the spill response so far.	
	Assess the need for further oil spill response resources, i.e., OSRL.	
	Receive incident status reports from the Vessel Master at regular intervals.	
	Conduct incident briefings with the Vessel Master at timely intervals, outline: <ul style="list-style-type: none"> Incident objectives Developing incident objectives Limitations and constraints Developing tasks for Seatec Corporate Team The time of the next meeting 	
	Maintain communications with the Government Regulatory Authorities.	
	Determine the impact of the incident upon business continuity, with reference to any shut down operations.	
	Identify and obtain authorization for extraordinary expenditure.	
	Ensure a media spokesperson is identified.	
	Sign off all media statements.	
	Approve requests for additional resources or for the release of resources.	
	Ensure the Finance Team Leader is continually updated with costs and expenditure incurred throughout the incident.	
FINAL ACTIONS	Collect Personal Logs for all members of the Seatec Corporate Team.	
	Order the demobilization of the incident when appropriate.	
	Complete demobilization procedures.	
	Lead the debrief for the response and relay findings to the Seatec Corporate Team. Provide support for the incident investigation and analysis as required.	
	Feedback to those involved in the response with regards to changes and developments to response arising from their experiences.	

3.8 Oil Tier Classification Assessment

Use the checklist below to establish the tier level appropriate to the incident that has occurred.

The spill tier is identified by satisfying any characteristic in the highest tier, i.e. always assume worst case.

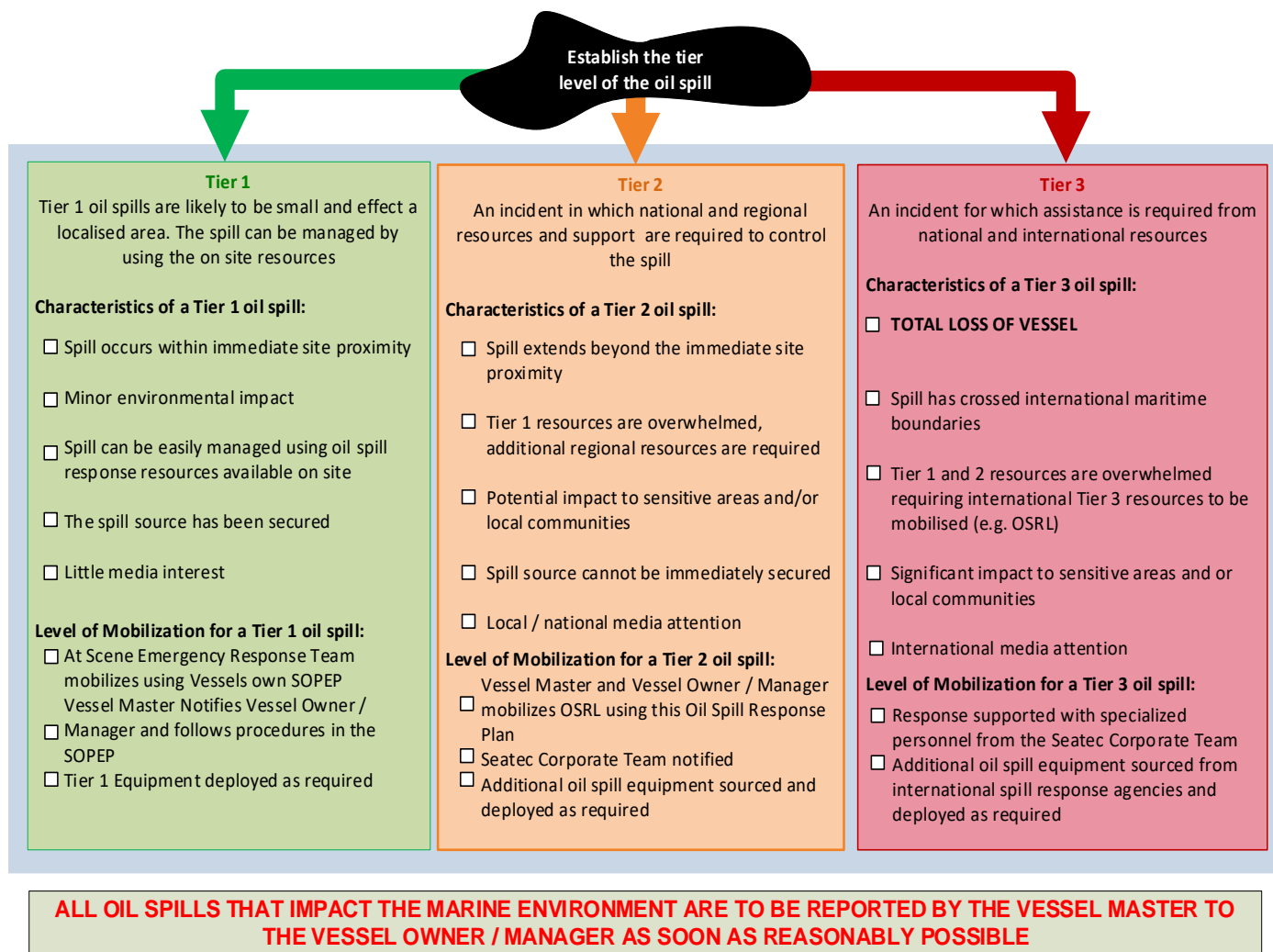


Figure 3 Oil Spill Tier Classification Table

3.9 Oil Spill Response Strategies

This section provides a comprehensive plan on how to approach the oil spill response, prioritize environmental protection, the different response levels, and the selection of clean-up tools and techniques.

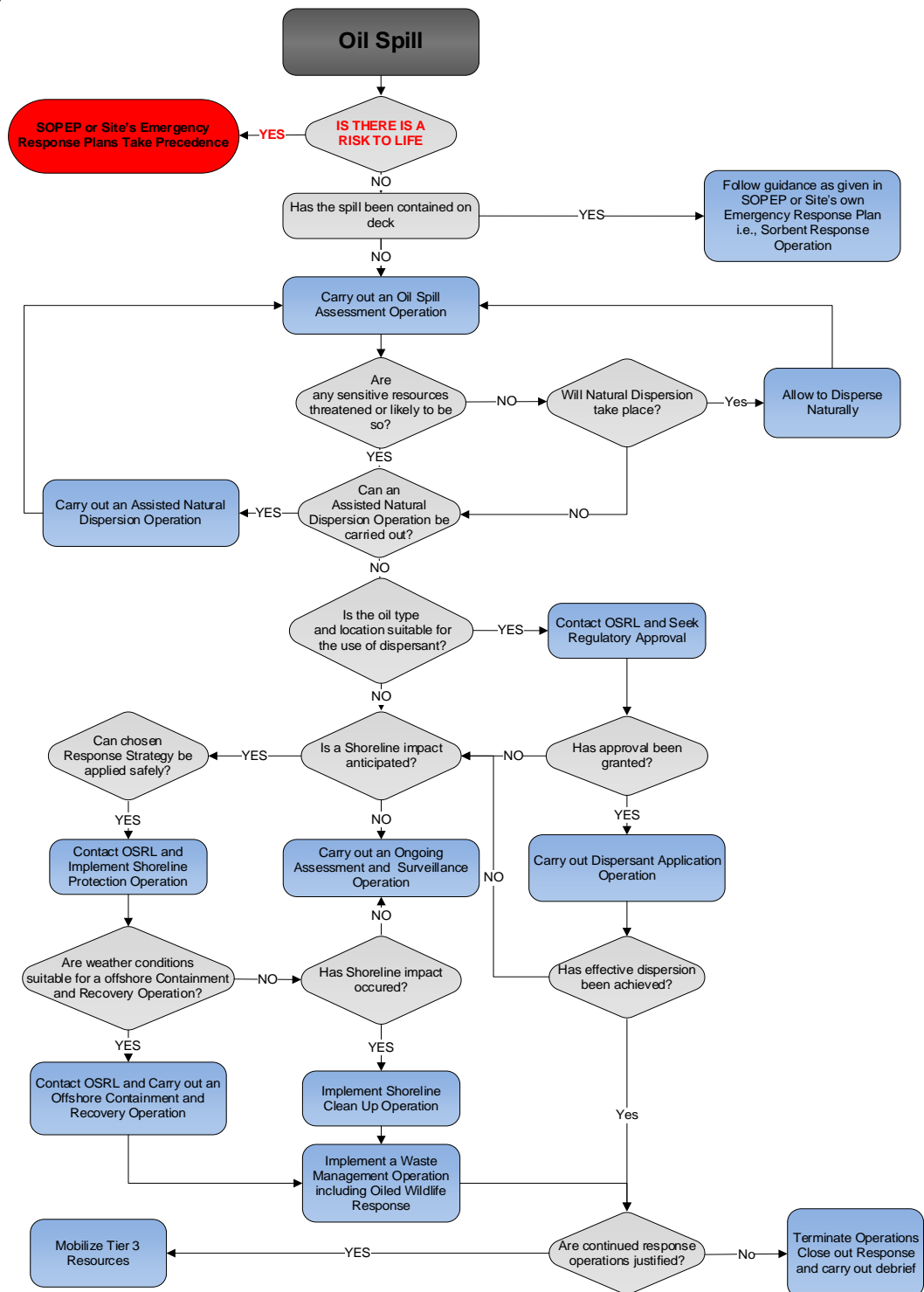


Figure 4: Oil Spill Response Decision Making Flowchart

3.9.1 Response using Sorbent Material

- **Sorbent Pads**
 - Techniques for use:
 - Pads are placed onto pooled spills to collect small quantities of liquid oils.
 - Oleophilic properties allow the pads to soak up oils not water allowing the pads to be used in water.
 - Pads can be wrung out and re-used for low viscosity products.
 - Pads are effective in protecting walkways, boat decks, working areas, previously uncontaminated or cleaned areas; can be used to cover areas used as temporary storage sites for oiled materials.
 - Once oiled the pads are classed as hazardous waste and required the correct procedures to be followed for disposal.
- **Sorbent Boom**
 - Techniques for use:
 - The booms can be used to absorb and contain liquid oils on land and on water but are only effective in very calm waters.
 - They are most effective on water when used to absorb thin films of liquid oil.
 - When used on land the boom will need to be weighed down to ensure a good seal between the ground and the boom to prevent the liquid oil from seeping underneath the boom.
 - Disposal is accomplished by placing boom into a suitable container for hazardous waste in preparation for appropriate disposal.
- **Sorbent Pillow**
 - Techniques for use:
 - Can be placed on the surface of pooled oils to absorb product for ease of collection or used to contain the spread of oil.
 - Sorbent Pillows are not recommended for use in spills on water.
 - Contents of pillows can be used to spread on pooled oils although the sorbent materials are susceptible to being scattered by wind in non-sheltered areas increasing the risk of cross contamination.
 - Once oiled the pillows are classed as hazardous waste and required the correct procedures to be followed for disposal.
- **Sorbent Granules / Sawdust**
 - Techniques for use:
 - Can be placed on the surface of pooled oils to absorb product for ease of collection or used to contain the spread of oil.
 - Sorbent granules are not recommended for use in spills on water.
 - Granules can be used to spread on pooled oils although the sorbent materials are susceptible to being scattered by wind in non-sheltered areas increasing the risk of cross contamination.
 - Disposal is accomplished by manual collection of the oiled sorbent granules and placing into a suitable container for hazardous waste in preparation for appropriate disposal.

3.9.1.1 Flowchart for Sorbent Use Operation

Any trained response personnel observing or initially responding to a Tier 1 oil spill should take the following actions:

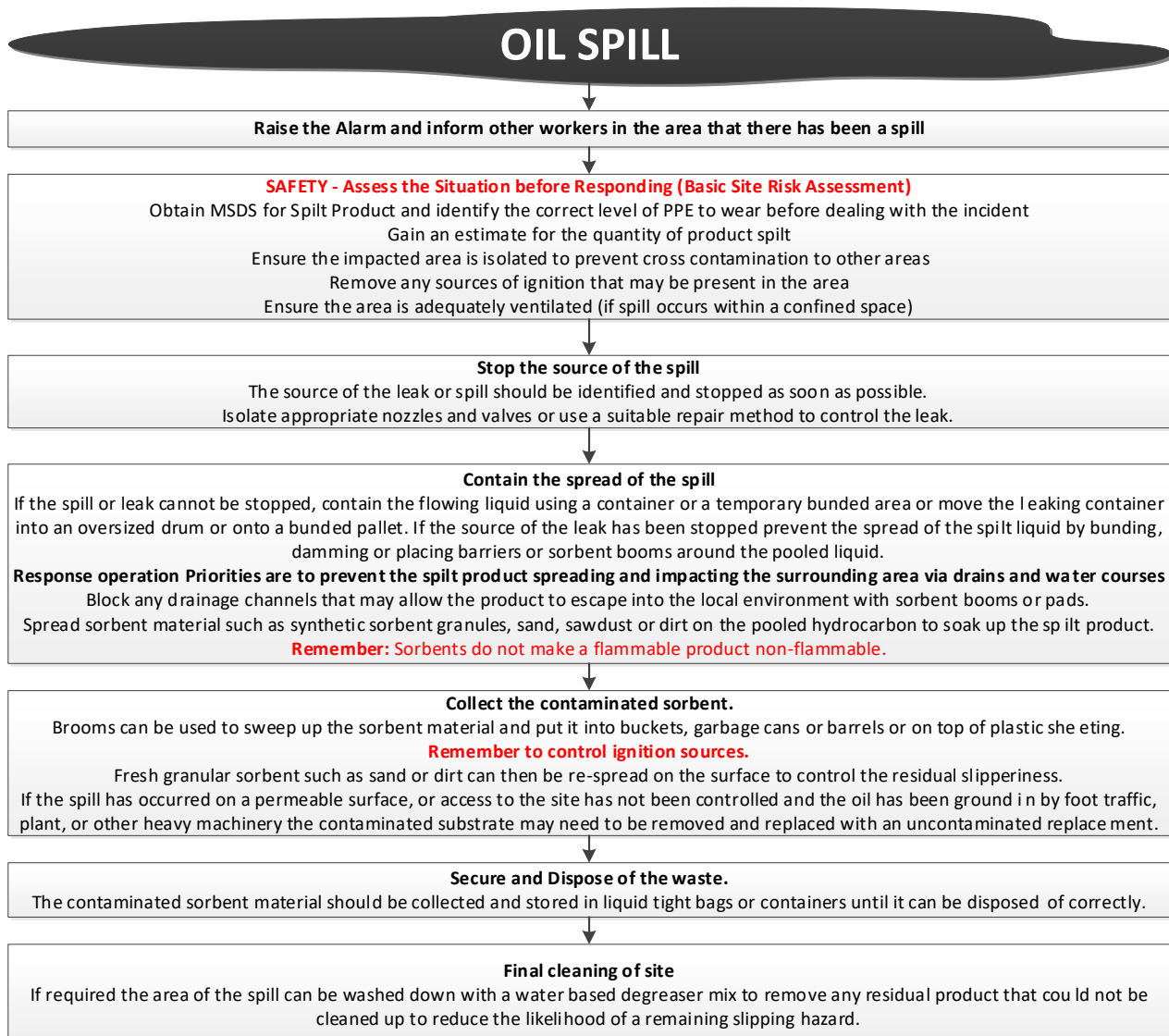


Figure 5 Sorbent Response Action Flowchart

3.9.2 Assessing the Spill

Surveillance and monitoring should be considered initially, and this can be carried out by mobilizing the any nearby operation vessel or an aerial surveillance aircraft of opportunity. The monitoring operation should look to gather information on the status of any oil (the position (direction of travel, area covered) and the character (percentage cover, gross changes to oil character (e.g., emulsification)) of the slick) as well as make predictions as to any future movement and impact of an oil spill in the immediate future.

Trained surveillance personnel can be mobilized via OSRL as part of the Technical Advisor Service in the event of a Tier 1, 2 or 3 responses.

In some oil spill situations, predicating the slick trajectory can be calculated manually from wind, current and oil data or by using computer-based oil spill trajectory models.

An initial response to small spills is to allow biological and physical processes to disperse oil naturally. The physical appearance of the slick should be monitored closely and if there are changes in the oil or conditions which may influence the perceived impact, alternative response resources should be considered and prepared for mobilization.

3.9.3 Assisted Natural Dispersion (AND) Operation

An assisted natural dispersion (AND) operation is a strategic response used to manage oil spills in the sea or other bodies of water. AND enhances the natural dispersion process of oil droplets into the water column through the combined effect of natural oceanic processes and mechanical agitation of the water's surface. This technique is suitable for spills of low to medium viscosity oils. Evaporation will be rapid, and normally it will be difficult to see any remaining oil in the water 24 hours after the spill. Increased wind speed will result in increased evaporation. This technique should not be used with heavier oils as the process will not aid dispersion of this type of oil and simply fragment the spill.

Note: Apart from the natural spread of oil on water, tidal current has the main influence on oil movement on water, with wind speed and direction playing a smaller role. Ensure other water users are notified of the spill and enforce exclusion zones if required.

The key steps in carrying out an AND Operation are:

- **Assessment of the Situation:** First, the oil spill is evaluated in terms of size, type, weather conditions, currents and potential impact on the shoreline and marine environment. This helps in determining whether an AND operation is the most appropriate cleanup method. The decision to use AND should be based on Net Environmental Benefit Analysis (NEBA) considering all environmental and socio-economic factors.
- **Safety:** Undertake gas monitoring to ensure there are no Health and Safety Risk associated with the operation. Approach the slick upwind and at 90° to the direction of the current.
 - Selection of a suitable method of oil/water agitation:
 - Enhanced Agitation through Water Application
 - Natural dispersion processes may be assisted using fire-fighting hoses spraying sea water onto the surface of the oil slick to break up and aid dispersion of the slick.
 - Propeller Assisted Agitation
 - Vessel "prop wash" can be implemented to mechanically assist break up and spread of slick. Vessel should be directed through the slick focusing on the thicker leading edge.

Note: Do not deploy booms. This will reduce the spread of oil on water and as such surface area of oil exposed to dispersion and evaporative processes.

- AND operations work to reduce the surface tension between the oil and the water, allowing the naturally occurring wave energy to break the slick into tiny oil droplets. These microscopic oil droplets mix with the sea water and are carried away by the ocean currents and natural turbulence, leading to a significant reduction of the oil slick on the water surface.

Note: The M.V. N35 carries a small amount of dispersant and an applicator onboard as part of their Tier 1 oil spill response resources and could use that dispersant during this step provided approvals for its use *were provided by the IRCG*.

- Monitoring and Evaluation: After AND operation, the area is closely monitored to evaluate the effectiveness of the dispersion process, track the dispersed oil droplets, and study the impact on marine and shore environments. It's important to consider the potential effects on wildlife, as dispersed oil can introduce toxins into the food chain and various ecosystems.

3.10 Other Response Techniques

There is the potential for Seatec to call upon OSRL to assist in conducting a response operation to an oil spill incident outside of the normal Seatec response parameters. In this case it is important that Seatec personnel have an understanding of other oil spill response techniques that could be used to combat the impacts from an incident.

3.10.1 Vessel Based Dispersant Spraying Operations.

Among various response options, dispersants are now recognized as one of the most effective at-sea response techniques for many major open water spills, making them a primary response tool rather than an alternative strategy. This widespread acceptance stems from a growing awareness that:

- Traditional on-water mechanical response encounters only a small part of a large slick and can be severely limited by rough weather and seas, often resulting in recovery of not more than 10% of spilled oil.
- Advances in dispersant formulations have dramatically reduced their toxicity and improved their effectiveness. Today's dispersants do not add to the toxicity of dispersed oil. Recent tests have shown the latest dispersant formulations to be effective for a wider range of oils and at lower concentrations.
- Dispersed oil droplets dilute rapidly in open water and have not shown significant toxic effects on marine or benthic life. Where minor effects have occurred, biological recovery has been rapid.

Note: The prudent use of dispersants can reduce the overall impact of an oil spill on environmental and economic resources. Nonetheless, the decision to use dispersant should always be a careful one based on sound analysis of the overall environmental benefit.

3.10.2 Containment and Recovery Operations.

Containing floating oil within booms for recovery by specialized skimmers is often seen as the ideal solution to a spill at sea as this aims to physically remove oil from the marine environment. As a result, it is the primary at-sea response strategy adopted by many governments around the world.

For containment and recovery of oil to be successful, there are some key challenges that must be overcome. The drifting floating oil must be located, and the equipment deployed in an effective arrangement. The sea state and weather conditions must be sufficiently calm to permit the selected equipment to function well and for the response personnel to safely operate the equipment. The oil must also be in a state that is amenable for recovering using the available skimmers. These interrelated challenges commonly combine to limit the proportion of spilled oil that can be recovered to 10-15%. However, where the environment conditions and response factors allow, containment and recovery can be an important strategy.

There is a long list of equipment and logistical support required to undertake an at sea containment and recovery operation. However, the two primary pieces of equipment required are a boom, to contain and concentrate the oil, and a skimmer, to recover the oil from the sea surface and pump it into a suitable storage container.

3.10.3 Aerial Dispersant Spraying Operations.

Dispersant application is a specialized operation that requires preparation and trained operators. In the interests of safety and effectiveness it is desirable to use spotter aircraft to guide and coordinate spraying vessels and aircraft. The crew of the spotter aircraft should be able to identify the heavier concentrations of oil or the slicks posing the greatest threat and they need to have good communication with the spraying aircraft in order to guide them to the target.

Good organization on the ground is also needed to enable spraying operations to continue for the maximum available time during daylight hours. This may require routine maintenance and transport of additional supplies of fuel and dispersant to be carried out at night. Consequently, stockpiles of dispersant should be sufficiently well stocked and conveniently located in order to supply aircraft with the minimum delay. Thought should also be given to the equipment required for reloading aircraft, such as high-capacity pumps and road tankers.

3.10.4 Shoreline Recovery Operations.

The purpose of shoreline clean-up should be to produce a net environmental benefit; however, public pressure and the location of economic resources may contribute to influencing which sites are cleaned first. To avoid conflicts the balance of priorities must be resolved. It is important to involve technical advisors and community representatives from the outset of operations, and to make use of any environmental sensitivity maps or coastline studies. The relevant Local Authority will coordinate the shoreline clean-up operations with the support from the Incident Management Team.

The selection of the most appropriate clean-up techniques requires a rapid evaluation of the degree and type of contamination, together with the length, nature and accessibility of the affected coastline. Where possible, it is important to start removing oil from contaminated shorelines as quickly as practicably possible. As time passes and the oil weathers, it will stick more firmly to rocks and sea walls and may become mixed or buried in sediments.

Shoreline clean-up operations are often considered in three stages; Stage 1 - bulk oil is removed from the shore to prevent remobilization; Stage 2 - removal of stranded oil and oiled shoreline material which is often the most protracted part of shoreline clean-up, and; Stage 3 - final clean-up of light contamination and removal of stains, if required. Depending upon the nature of the contamination, progression through each of these stages may not be required. Consideration will also need to be given to the environmental and social sensitivity of the shoreline so as to ensure the planned level of cleaning will not cause more harm than leaving the oil in place.

3.10.5 Inland Recovery Operations.

A range of oil recovery options are available such as sorbent recovery, mechanical containment and recovery, in-situ burning, natural remediation (biodegradation) and flooding, dependent on resources and accessibility for inland oil spill recovery operations. Choose the suitable response technique for inland recovery operations after considering oil type, land surface type, degree of oiling, environmental, social and cultural sensitivities, NEBA and HSE requirements. Each technique will require a level of expertise, coordination and is likely to generate waste.

The response to pooled liquid oil should be a priority, prior to the liquid permeating into the soil/sand substrate if on a permeable surface. Groundwater may be contaminated as oil penetrates through permeable ground.

3.10.6 In-Situ Burning Operations.

In-situ burning is the term given to the process of burning oil slicks at sea, at or close to the site of a spill. Burning may be seen as a simple method which has the potential to remove large amounts of oil from the sea surface. In reality, there are a number of problems which limit the viability of this response technique. These include: the ignition of the oil; maintaining combustion of the slick; the generation of large quantities of smoke; the formation and possible sinking of extremely viscous and dense residues; and safety concerns.

The decision whether or not to burn a slick at sea is often contentious. Issues such as the distance of the oil from the damaged vessel or from a populated area; the potential toxicity of the resultant smoke; the nature of the oil; the likelihood of the burn being successful; and the fate of any unburned residues all require careful attention before attempts are made to ignite the oil.

3.11 Oil Spill Response Resources

3.11.1 List of oil spill response equipment carried on board the M.V. N35

Table 4 Tier 1 Oil Spill Response Equipment Carried On-board the M.V. N35	
ITEM	QUANTITY
Absorbent sweep	2
Absorbent pillows	30
Absorbent pads (blue)	50
Absorbent boom	14
Absorbent material - granules	2 bags
Absorbent material – sawdust	3 bags
Absorbent material – synthetic	1 bag
Oil dispersant	25lts
Oil dispersant applicator	1
Chemical suits	2 sets
Waterproof boots size 9	2 pairs
Waterproof gloves	6 pairs
Plastic bags - large	4
Squeegees	2
Shovels	2
Yellow buckets	3
Brooms	2

3.11.2 Oil Spill Response Ltd. (OSRL)

3.11.2.1 OSRL Technical Advisor Service for Tier 2 Incidents and above

OSRL provide a Technical Advisory service to assist in making response decisions for Tier 2 size incidents, through the provision of sound technical advice thereby overcoming barriers to response which can cost precious time.

Step 1: Call the Duty Manager on:

AMER [REDACTED]

EMEA [REDACTED]

APAC [REDACTED]

Step 2: Agree requirements. An initial telephone conversation with our Duty Manager is essential to build an understanding of the incident so that recommendations can be made in terms of required skills and

numbers of technical personnel, up-to the allotted five. Now an email confirmation will be sent from the Duty Manager to the mobilising party for good order.

Note: No mobilisation form is required since this service is free of charge for the first five days. The duty manager will ensure that the agreed support is mobilised as soon as possible.

Step 3: Arrange meet and greet. To make best use of our technical personnel we ask that members support us in-country by providing meet and greet so that we can hit the ground running on arrival.

Step 4: Integrate the expertise. Integration of our spill response specialists into the response effort is an essential ingredient in maximising the value we can bring.

Step 5: Extend or stand-down. If the incident requires a sustained presence beyond the first five days a standard mobilisation form will be required, and normal day-rate charges will commence. Any additional personnel will be integrated into the response of up to 18 personnel as per SLA. If our staff are no longer required, we will simply stand down from the incident.

Note: Upon receipt of the first Technical Advisor, the five-day term commences. A total of five staff can be requested within five consecutive days.

3.11.2.2 Tier 3 Arrangements

Seatec Members with OSRL, and therefore has immediate access to Tier 2/3 oil spill response personnel, resources, equipment and expertise, 365 days a year on a 24-hour basis.

Seatec can initiate a request for OSRL to mobilise any oil spill response personnel, resources, and equipment. OSRL must receive official notification to mobilise from one of the Seatec Nominated Call-Out Authorities using the 'Mobilisation Authorisation Form', (See Appendix 2). The Nominated Call-Out Authorities are personnel within Seatec who have been appointed to approve the expenditure of mobilising Tier 3 resources. In addition, the 'Notification Form' should be provided to OSRL to convey technical details of the oil spill incident (See Appendix 2).

Once OSRL has been mobilised, to maximise communication efficiency, it is recommended that one person acts as the Seatec point of contact to OSRL. The Vessel Owner / Manager would then be in direct communication with the OSRL Duty Manager who would assist in coordinating the response.

Table 5 summarises the service level agreement that defines the level and performance of the response services offered by OSRL.

Table 5 OSRL Service Level Agreement (SLA) summary

Service	Oil Spill Response Information			
Membership Type	Seatec are a Member of OSRL.			
Response notification, mobilisation, service, and advice	Notification of a spill should be placed to one of the following locations:			
	OSRL Base	Southampton, UK	Loyang, Singapore	Fort Lauderdale, USA
	Telephone			
	Fax			
	Email			
	Forms	Refer to Appendix 1.		
	The Duty Manager will speak and advise Seatec immediately, or call Seatec back within 10 minutes.			
Nominated Contact	OSRL must receive an official mobilisation authorisation from one of Seatec’s Nominated Call-Out Authorities (any person within Seatec can notify OSRL).			

Service	Oil Spill Response Information
Spill response equipment	<p>SLA response equipment is housed in secure facilities in Southampton, Fort Lauderdale, Bahrain, and Singapore. Response equipment is customs cleared response ready.</p> <p>For a complete list of equipment see OSRL's website at www.oilspillresponse.com, and refer to the equipment stockpile status report: http://www.oilspillresponse.com/activate---us/equipment---stockpile---status---report</p>
	<p>As per the SLA, OSRL can provide Seatec with up to 50% of its equipment stockpile (including nearshore and shoreline response equipment). If there is more than one spill Seatec can mobilise 50% of what remains.</p>
SLA dispersant stockpile	<p>Following an incident, Seatec is entitled to 50% of the dispersant located in Southampton, Singapore, Fort Lauderdale, and Bahrain. OSRL may be able to obtain further dispersant through the Global Response Network (GRN) and other organisations, if required.</p> <p>Global aerial dispersant coverage provided by aerial platforms and application systems¹:</p> <ul style="list-style-type: none"> • Aerial Dispersant: Boeing 727-252F Aerial Dispersant Aircraft (with Aviation VHF, Satellite Phone, TERSUS Dispersant Spray System). • Wheels up within 4 hours of mobilisation.
World-wide transportation of equipment	<p>Once OSRL have been mobilised, the following outlines approximate timings for the equipment to reach Ireland:</p> <ul style="list-style-type: none"> • Approximately 15 hours, including aircraft chartering, re-positioning, flight time to Cork, clearing customs and in country transit. <p>The equipment would then require to be transferred via ground transport to the operational site, or via vessel for nearshore and nearshore operations.</p> <ul style="list-style-type: none"> • Timings will also require to be added for in country transit, loading the equipment onto a suitable vessel and steaming time to the spill location nearshore/nearshore or to a forward operating base on the shoreline, and then deploying the equipment. <p>OSRL can provide more accurate timescales at the time of a real incident.</p> <p>It is the responsibility of Seatec to arrange for the equipment to clear customs and onwards transport of the equipment from the point of entry to the operational site (including the arrangement of suitable hauliers).</p>
Oil spill trajectory and tracking	<p>An on-call modelling team can provide surface and/or subsurface oil spill modelling on request using the OILMAP Oil Spill Modelling:</p> <ul style="list-style-type: none"> • Response Time (daylight hrs): Max 2 hrs. following receipt of all requested information.
	<p>Satellite imagery services can be provided on request.</p>
Response personnel	<p>As per the SLA, Seatec is guaranteed access to a team of 18 oil spill response personnel. This team of 18 is comprised of:</p> <ul style="list-style-type: none"> • 1 x Senior Oil Spill Response Manager • 1 x Oil Spill Response Manager • 15 x Oil Spill Response Specialists / Responders • 1 x Logistics Service Branch coordinator <p>In a prolonged incident, if Seatec determine that more support from OSRL is required, they will require to make OSRL aware of this, so that an escalation plan for responders can be activated.</p>
	<p>Technical Advisors (TA's) can be deployed to support Seatec during an actual or potential oil spill incident. The first 5 response personnel (Technical Advisor's) are free of charge for the</p>

¹ All response times are subject to suitable weather conditions, over flight clearances. Additional time may be required to ensure timely application of applicable visas for Oil Spill Response Specialists.

Service	Oil Spill Response Information
	first five days. If a full response team is mobilised, these TA's will form part of the overall team headcount.

Due to the various locations to which OSRL could be requested to respond too, it is not possible to organise the logistics at Seatec's end destination.

In addition to this it is often found that Seatec, who are already working in that area, have already built-up existing logistics network and relationships in the areas of customs clearance, storage, and transportation as part of their existing business and is therefore better placed to handle these arrangements. Therefore, OSRL expects Seatec logistical operations assistance for OSRL personnel and equipment both at the airport and any final destinations.

An overview of the responsibilities for Seatec and OSRL are presented in Figure 7.

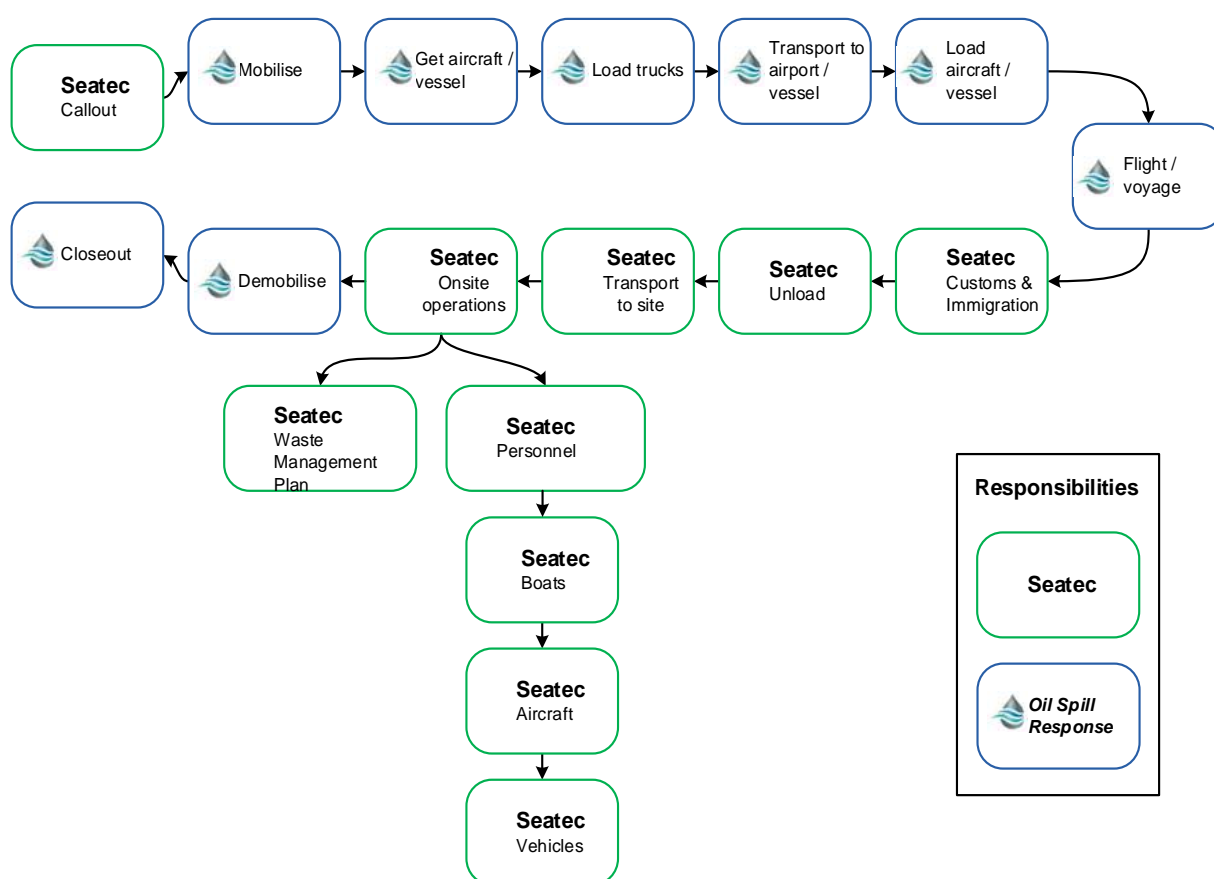


Figure 6 Overview of logistical responsibilities

3.11.2.3 Oiled Wildlife Response

Through OSRL, Seatec has access to an external international wildlife response capability. The Sea Alarm Foundation (SAF) (<http://www.sea-alarm.org/>) has extensive experience in dealing with oiled wildlife emergencies. Specialized wildlife response equipment is pre-packaged, custom approved and stockpiled at OSRL in Southampton. This equipment and trained OSRL personnel can be mobilized on request by Seatec. The mobilization of additional Tier 3 wildlife emergency teams through Sea Alarm is not guaranteed and will depend on availability and voluntary commitment. This equipment is available 365 days a year on a 24hr basis, as part of the Service Level Agreement. Experts from outside of OSRL and SAF are required to operate the equipment.

3.11.2.4 Global Response Network

OSRL can facilitate the mobilization of further resources through the Global Response Network (GRN). The GRN is a collaboration of six major oil industry funded spill response organizations whose mission is to harness cooperation and maximize the effectiveness of oil spill response services worldwide. It includes:

- Alaska Clean Seas (ACS)
- Australia Marine Oil Spill Centre (AMOSOC)
- ECRC (formerly, Eastern Canada Response Corporation)
- Marine Spill Response Corporation (MSRC)
- Western Canada Marine Response Corporation (WCMRC)

Reference Information

4 Incident Management and Coordination

Seatec will utilize an Incident management and Coordination system to manage any oil spill incident resulting from their operations in Ireland.

The use of an Incident Management and Coordination System (IMCS) during a response to an oil spill is vital for a multitude of reasons. It provides a structural framework for a systematic, coordinated, and effective response, minimizing the environmental and socioeconomic impacts of the crisis.

- **Structure and Organization:** IMCS offers a structured and organized system for the management, interfacing, and coordination of different organizations involved in the response. This system improves clarity about role divisions and collaboration, reducing redundancies and optimizing efficiency.
- **Resource Management:** With an inspectable overview of the available resources, IMCS can ensure the adequate allocation and optimal utilization of resources. It manages logistics and supply chain by tracking personnel availability, equipment, and materials, in real-time, ensuring effective use and minimum wastage.
- **Communication and Information Sharing:** A robust IMCS promotes effective internal and external communication and information sharing. It ensures all stakeholders, including responders, government agencies, local communities, and the media, are appropriately informed in a timely and efficient manner.
- **Decision-making Support:** By providing real-time data and information about the spill and the response tactics, IMCS aids the decision-making process. It helps estimate potential impacts, evaluate response strategies, and adjust plans as required.
- **Documentation and Record Keeping:** The system records and documents all actions and decisions made during the response. This data can be used during the post-spill review to evaluate the effectiveness of the response, enhance future preparedness plans, and for legal and insurance purposes.
- **Training and Preparedness:** IMCS aids in training and simulation exercises, enhancing preparedness for potential future incidents.
- **Public Confidence:** An organized and systemic approach to managing the incident can instill public confidence in the effectiveness of the response, thus alleviating societal stress during the incident.

In conclusion, the use of an Incident Management and Coordination System is instrumental for a successful and efficient response to an oil spill incident. It merges vital functions such as planning, operations, logistics, and communications into one cohesive system, significantly enhancing the effectiveness of the response actions.

4.1 Documentation and Record Keeping

Completing necessary documentation and retaining records after an emergency response operation is critical for various reasons:

- **Accountability:** Proper documentation ensures accountability and transparency in actions initiated during emergency operations. It helps in maintaining an accurate record of decisions made, actions taken, resources used, and people involved. This can be crucial for auditing, legal inquiries, or possible litigation.
- **Performance Evaluation:** Records can provide data and information that can be analyzed to assess the performance of the emergency response. This evaluation can identify what actions were effective, what went wrong, and why, leading to better preparedness in the future.

- **Learning Opportunities:** Detailed records provide an invaluable learning tool for future training. They can be used to create case studies, scenarios, and simulations that can help prepare future responders and officials.
- **Continuity:** In ongoing or long-term situations, records ensure that information is not lost in transitions between teams or shifts. They serve as a common platform of knowledge for incoming personnel.
- **Financial tracking and reimbursement:** In many cases, cost recovery is a critical part of an emergency response, especially in large-scale incidents. Detailed records of expenses incurred during the operation, such as personnel cost, equipment used, resources expended, can support claims for reimbursement from local, state, or national emergency management agencies or insurance companies.
- **Public Trust:** Transparent and well-documented emergency responses can increase public trust in the institutions involved in emergency management. This can be especially significant in times of crisis where public faith and cooperation are needed.
- **Legal Requirement:** In many cases, it's a legal requirement to retain records for a certain period after any incident to comply with local regulations or law enforcement agencies.

Overall, proper documentation and record retention is a critical part of any emergency response operation.

5 Environmental and Socioeconomic Sensitivities

Refer to the Seatec SS Ohio Salvage Plan for details of the Special Areas of Conservation (SAC) within the west-southwest Exclusive Economic Zone (EEZ) of Irish Waters.

The southern coast of Ireland is remarkably diverse and sensitive, rich in natural and socioeconomic resources. An oil spill along this coast could have significant environmental and socioeconomic impacts on the following:

5.1 Environmental Sensitivities:

5.1.1 Marine Life:

The waters are teeming with marine life, including various species of fish, seabirds, seals, and dolphins. An oil spill could lead to the death of these organisms and disrupt food chains.

5.1.2 Protected Habitats and Species:

Areas such as the Copper Coast European Geopark, and the West Cork Marine Special Area of Conservation (SAC) are important sites of conservation. Oil spills can seriously damage these protected habitats, harming endangered species, and impacting biodiversity.

5.1.3 Beaches & Tidal Flats:

Southern Ireland is known for its sandy beaches and tidal flats which are particularly sensitive to oil pollution. Oil spills can have long-lasting effects on these ecosystems, harming wildlife, and altering natural processes.

5.2 Socioeconomic Sensitivities:

5.2.1 Fishing & Aquaculture:

The southern coast of Ireland has a strong fishing and aquaculture industry. Oil spills could lead to fishery closures, impact livelihoods, and damage to aquaculture facilities.

5.2.2 Tourism:

Ireland's southern coast is a significant tourism destination, known for its picturesque landscapes, beautiful beaches, and marine wildlife attractions. Damage to these natural amenities from an oil spill could result in a significant decline in tourism and related businesses.

5.2.3 Cultural Heritage:

Many areas along the coast have historical and archaeological significance. Damage to these sites due to an oil spill can result in a loss of cultural heritage.

Local Communities:

The sense of place and community wellbeing can be impacted. Cleanup efforts and environmental recovery can strain local resources and affect community health.

Note: Balancing economic development with the protection of the environment is a continuous challenge and key for sustainable development. The potential implications of an oil spill are a crucial consideration in maritime and environmental planning and policy along the southern coast of Ireland.

6 Legal and Regulatory Obligations

This section provides a summary of local and international laws, responsibilities, and liabilities pertaining to the oil spill, including penalties for non-compliance.

6.1 National Legislation

6.1.1 The National Maritime Oil & HNS Spill Contingency Plan (NMOSCP) 2020².

The NMOSCP establishes Ireland's establishes a national framework and strategy to coordinate marine pollution preparedness and response. It addresses all oil and HNS pollution whether it originates from ships, harbors, offshore units or oil/HNS handling facilities and land-based sources. It covers waters in the Irish Exclusive Economic Zone (EEZ).

The NCP outlines the roles and responsibilities of main governmental bodies in a response and details IRCG involvement in developing and coordinating an effective regime for response to marine casualty incidents, monitoring or intervening in marine salvage operations, and preparedness and response to pollution by oil and HNS within Irish EEZ.

Supporting the NMOSCP are the following additional publications:

- SOP 01-2020 Assessment and notification of a pollution incident.
- SOP 02-2020 Establishment and operation of the ICS.
- SOP 03-2020 Oil Spill Control Agents.
- SOP 04-2020 Establishing a Shoreline Response Centre.
- SOP 05-2020 Content and implementation of an oil-HNS spill contingency plan.
- SOP 06-2020 Places of refuge decision making.

6.1.2 The Sea Pollution Act

The Sea Pollution Act in Ireland has been updated several times, with three significant versions released in 1991, 2006, and 2009.

The Sea Pollution Act of 1991 is a key piece of legislation in Ireland designed to prevent pollution of the sea by oil and other harmful substances from ships, offshore installations, and pipelines, to provide for the prompt and effective cleanup of such pollution and to provide for implementing international conventions relating to such matters.

Main provisions of the Sea Pollution Act 1991 include:

- The prevention of pollution by oil or other harmful substances through the discharge of such substances from any ship onto or into the sea.
- The implementation of international agreements into Irish law including the Liability Convention 1969, the Fund Convention 1971, the Prevention Convention 1972, the CLC/Fund Protocols 1976 and 1984, and the Prevention Protocol 1978.
- The requirement for Irish ships to have insurance.
- The establishment of a reporting system for incidents and potential incidents regarding sea pollution.
- Levying penalties for violations.

Note: Amendments to this Act over time have been made to keep the legislation up to date with changes in international conventions and regulations.

The Sea Pollution (Amendment) Act in 2006 mainly extended the application of civil liability and compensation provisions for oil pollution damage from ships.

² <https://www.gov.ie/en/publication/79e5d-national-maritime-oilhns-spill-contingency-plan-nmoscp/>

The Sea Pollution (Amendment) Act 2009 was another significant amendment, which gave further effect to conventions regarding sea pollution including the International Convention on Civil Liability for Bunker Oil Pollution Damage of 2001 and the 2001 International Convention on the Control of Harmful Anti-fouling Systems on Ships.

6.2 Coordination with Relevant Authorities

6.2.1 Irish Coast Guard (IRCG)

In the event of an oil spill incident at sea, the Irish Coast Guard (IRCG) serves a critical role as a coordinating body for response and remediation efforts. The IRCG's responsibilities include:

- **Detection and Assessment:** The IRCG would likely be among the first to detect an oil spill incident. The detection could occur either through routine patrols or reports from other vessels. They would assess the situation, likely collaborating with marine geologists, oceanographers, or environmental groups to understand the nature and scale of the spill.
- **Reporting and Communication:** The IRCG would notify other relevant authorities and international partners about the incident. Under some international agreements, neighboring countries could be alerted if the oil spill could potentially affect their waters.
- **Response Coordination:** The primary role of the IRCG would be to coordinate the response to the oil spill. This includes activating the National Oil Spill Contingency Plan and mobilizing appropriate resources to contain the spill and mitigate its impacts.
- **Oil Spill Containment and Cleanup Efforts:** This involves deploying oil-spill response equipment, such as booms and skimmers, to contain and recover the spill. They might also use chemical dispersants to break up the oil if deemed necessary and environmentally acceptable.
- **Monitoring and Evaluating Efforts:** The IRCG is also essential in monitoring the effectiveness of the cleanup efforts and adjusting strategies as necessary.
- **Investigation and Enforcement:** In collaboration with other authorities, the IRCG may be involved in investigating the incident's causes and enforcing penalties if negligence is found.
- **Public Communication:** They also manage communication with the public, keeping them informed about the incident's status, potential risks, cleanup efforts, and preventative measures for future incidents.

Note: the exact roles and responsibilities of the IRCG would vary depending on the specific circumstances of an oil spill, the severity of the incident and the collaboration with other national and international agencies.

Appendix

Appendix 1: Contact List

N35 Vessel Crew

Contact Name	Position	Contact Information
Willem de Rhooes	Kapt - SSO	Vessel N35 Call Sign: [REDACTED] Satellite phone: [REDACTED]
James Nelson	Chief Officer SSO	
Wuil Jandiz Parda Velasquez	Chief Engineer	
Angelique Corneille	Able Seamen	
Eddy Leon Verstraelen	Passenger	
Miguel Moreno Dapena	Ordinary Seamen	
Patrick Sloom	Able Seamen oiler	
Yuyus Marzuki	Chief Cook	
Johonie Martinez Martinez	Able Seamen	

Seatec Company Office

Contact Name	Address	Telephone Number / Email
Owner / Master	SEATEC NV, [REDACTED] [REDACTED]	MAIN TEL.: [REDACTED] [REDACTED] E-MAIL: [REDACTED]

Irish Maritime Authorities

Organisation	Contact Name/Position	Telephone Number	Email
Irish Coast Guard (Oil & HNS) Department of Transport Leeson Lane Dublin 2	Marine Rescue Coordination Centre	[REDACTED]	E-mail: [REDACTED]
Port of Cork Tivoli Terminal Building Tivoli Dock & Industrial Estate Tivoli Cork T23 YNT9	Capt. [REDACTED] [REDACTED] Harbour Master / Chief Operations Officer	[REDACTED]	Email: [REDACTED]
Shannon Foynes Port Harbour Office, Foynes, Co. Limerick, Ireland V94R232	[REDACTED] Harbour Master	Tel: + [REDACTED] Fax: + [REDACTED]	Email: [REDACTED]

Technical Resources

Organisation	Contact Name/Position	Telephone Number	Email
Oil Spill Response Ltd (OSRL) Lower Williams Street Southampton Hampshire SO14 5QE United Kingdom	Duty Manager	Tel: [REDACTED] [REDACTED] [REDACTED] [REDACTED]	Email: [REDACTED]
Port Disbursement Account (PDA)	[REDACTED]	Tel: [REDACTED] [REDACTED]	
Flag State Contact	[REDACTED]	Tel: [REDACTED] [REDACTED]	
P&I Club	Maritime Mutual Blue Card	Tel: [REDACTED] [REDACTED]	

Appendix 2: Forms

Oil spill reporting form - POLREP

Various information will be requested by the IRCG when receiving reports of marine pollution. This will support the incident appraisal process and help determine potential response actions at the national level.

Those reporting should endeavor to have as much information as possible available but should not delay reporting if some information is absent or unknown.

INITIAL POLLUTION REPORT (POLREP)			
TO:	MRCC Dublin Tel: [REDACTED] Email: [REDACTED]		
FROM:	Name of Reporting Entity	Date and Time of Report:	
1	DATE & TIME OF OBSERVATION	Month, day, and time that pollution was observed	
2	NAME & CONTACT OF OBSERVER	Indicates who has reported the incident. If a ship, name, home port, flag and call sign must be given	
3	POLLUTION POSITION AND EXTENT	Indicates the main position of the pollution in latitude and longitude in degrees and minutes and may in addition give the distance and bearing of some prominent landmark known to the receiver. Estimated amount of pollution (e.g., size of polluted areas, number of tonnes of oil spilled, or number of containers, drums, etc. lost). Indicates length and width of slick given in nautical miles.	
4	POLLUTION CHARACTERISTICS	Gives type of pollution, e.g., type of oil with viscosity and pour point, packaged or bulk chemicals. For HNS give proper name or United Nations number if known. For all, also give appearance, e.g., liquid, floating solid, liquid oil, semi-liquid sludge, tarry lumps, weathered oil, discoloration of sea, visible vapor. Any markings on drums, containers, etc. should be given	
5	POLLUTION SOURCE AND CAUSE	E.g., from vessel, offshore unit or other. If from vessel, say whether because of a deliberate discharge or casualty. If the latter give brief description. Where possible, give name, type, size, call sign, nationality, and port of registration of polluting vessel. If vessel is proceeding on its way, give course, speed, and destination	
6	WIND DIRECTION & SPEED	Indicates wind direction and speed in degrees and m/sec or knots. The direction always indicates from where the wind is blowing.	

7	CURRENT OR TIDE	<i>Indicates current direction and speed in degrees and knots and tenths of knots. The direction always indicates the direction in which the current is flowing.</i>
8	SEA STATE AND VISIBILITY	<i>Sea state indicated as wave height in meters. Visibility in nautical miles</i>
9	POLLUTION DRIFT	<i>Indicates drift course and speed of pollution in degrees and knots and tenths of knots. In case of air pollution (gas cloud) drift speed is indicated in m/s.</i>
10	FORECAST	<i>E.g., arrival on beach with estimated timing. Results of mathematical models.</i>
11	IDENTITY OR SHIPS ON SCENE	<i>Indicates who has reported the incident. If a ship, name, home port, flag and call sign must be given. Ships on scene can also be indicated under this item by name, home port, flag and call sign, especially if the polluter cannot be identified and the spill is of recent origin.</i>
12	ACTION TAKEN	<i>Any action taken to combat the pollution.</i>
13	PHOTOGRAPHS OR SAMPLES	<i>Indicates if photographs or samples from the pollution have been taken. Communication addresses of the sampling authority should be given</i>

OSRL Notification Form**Warning! Please telephone the Duty Manager before e-mailing or faxing this form**

To	Duty Manager		
OSRL Base	Southampton, UK	Loyang, Singapore	Fort Lauderdale, USA
Telephone			
Emergency Fax			
Email			

Guidance: This information will be used to develop and recommend the most appropriate response strategy. If new information should become available, or the situation changes, please inform the Duty Manager as soon as possible.

Section 1 – Contact Details				
Member Company				
Name of Person Notifying OSRL				
Job Title (Designation)				
Direct Phone Number	Country code		Number	
Mobile Number	Country code		Number	
Fax Number				
Email Address				
Command Centre Address				
Date and Time of Notification	Date and Time		Time Zone	

Section 2 – Location					
Country / Region of Spill					
Latitude of spill (north/south)					
Longitude of Spill (east/west)					
Area Affected	<input type="checkbox"/> Offshore	<input type="checkbox"/> Subsea	<input type="checkbox"/> Shoreline	<input type="checkbox"/> Estuary	<input type="checkbox"/> Other
	<input type="checkbox"/> Port	<input type="checkbox"/> Harbour	<input type="checkbox"/> Inland	<input type="checkbox"/> River	
Water Depth (if applicable)					

Section 3 – Spill Details					
Date and Time of Spill				Time Zone	
Source of Spill					
Cause of Spill					
Status of Spill		<input type="checkbox"/> Secured	<input type="checkbox"/> Uncontrolled	<input type="checkbox"/> Unknown	
Product Properties	Product Name / Type				State Units Provide an assay sheet if available. <input type="checkbox"/> Assay sheet provided
	Specific Gravity		API		
	Pour Point				
	Wax Content				
	Asphaltene				
	Sulphur Content				
	Viscosity		Reference Temperature	°C	
Type of Release	Instantaneous Release	<input type="checkbox"/>	Volume		
	OR				
	Continuous Release	<input type="checkbox"/>	Release Rate		

Section 3 – Spill Details continued				
Description of Observed Spill	Estimated Quantity			State Units
	Size			
	Appearance			
	Direction of Travel			
Section 4 – Weather and Modelling				
Weather forecast provided. e.g., Excel/Word		<input type="checkbox"/> Yes	<input type="checkbox"/> No, OSRL to source a weather forecast	
Sea Temperature				State Units
Sea State				
Visibility				
Cloud Base				
Do you require Oil Spill Trajectory Modelling?		<input type="checkbox"/> Surface 2D	<input type="checkbox"/> Sub-surface 3D Additional time and costs apply	<input type="checkbox"/> Not currently
Sub-surface 3D Modelling Information if requested		Gas to Oil Ratio	Sm ³ /m ³	Release Hole Diameter m
Section 5 – Safety and Security				
Highlight any known safety or security risks. e.g. high levels of H ₂ S, high risk country				<input type="checkbox"/> Not Applicable
Describe security arrangements for OSRL staff				<input type="checkbox"/> Not Applicable
Section 6 – Resources at Risk (if available)				
Environmental or socio-economic sensitivities that may be impacted. Provide the relevant oil spill contingency plan and sensitivity maps if available.				<input type="checkbox"/> Contingency plan included. <input type="checkbox"/> Sensitivity maps included
Section 7 – Equipment (if available)				
Equipment already deployed or being mobilised (other than OSRL resources)				
Section 8 – Further Information				

OSRL Mobilisation Form

Please do not hesitate in contacting the duty manager at the earliest opportunity in the event of an incident or potential incident. Please ensure you telephone the Duty Manager before e-mailing or faxing this completed form.

Safety and Security

Oil Spill Response Limited's safety policy requires us to work closely with the mobilising party to ensure all aspects of safety and security are addressed for our personnel.

To	Duty Manager		
OSRL Base	Southampton, UK	Loyang, Singapore	Fort Lauderdale, USA
Telephone			
Emergency Fax			
Email			

Details of Authorised Contact			
Incident Name			
Mobilising Company			
Name of Person Authorising OSRL			
Position of Authorising Representative			
Direct Phone Number	Country Code	Number	
Mobile Number			
Fax Number			
Email Address			

Invoice Address if available	
Purchase Order Number	

I, the above-named Authorising Representative for the Mobilising Company, approve activation of Oil Spill Response Limited and its resources in connection with the above incident under the terms of the Agreement in place between the above stated Company and Oil Spill Response Limited.				
Signature:		Date / Time:		

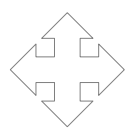
If Oil Spill Response Limited personnel are to work under another party's direction, please complete details below:

Directing Party's Details	
Company	
Contact Name	
Position in Incident	
Direct Phone Number	
Mobile Number	
Fax Number	
Email Address	

Personal log template

[illegible]

Basic Site Risk Assessment

BASIC SITE RISK ASSESSMENT						
Description of Incident Site			Date	DD/MM/YY	Time	00:00
Product(s)				MSDS	Yes/ No	
Surface Type Spill has Impacted	Solid Surface/ Permeable Surface/ Water/ Bunded Area/ Vessel		Weather Conditions	Sun/ Rain/ Strong Wind		
Identified Site Hazards	Fire/ Hot Work/ Slips, Trips and Falls/ Boat Safety/ Heat Stress/ Chemical hazards/ Water Hazards/ Tides/ Cold Stress/ Manual Handling/ Trenches/ Drum Handling/ Motor Vehicles/ Equipment Operations/ Noise/ Visibility/ Electrical Hazards/ Work Near Quayside/ Other					
Is there a need for Air Quality Monitoring to be Carried Out?					Yes/ No	
Does the Response Involve Working in Confined Spaces?					Yes/ No	
What Personal Protective Equipment is Required?	Foot Protection/ Coveralls/ Head Protection/ Impervious Suits/ Eye Protection/ Personal Floatation/ Ear Protection/ Respirators/ Hand Protection/ Other					
What Site Facilities Required for Spill Response?	Spill Kits/ Hand Tools/ Sorbents/ Booming Strategy/ Containment Strategy/ Sanitation Area/ First Aid/ Decontamination Area					
Has an Emergency Evacuation Route Been Identified?					Yes/ No	
Have the Necessary Notifications been made if Additional Resources are Required?					Yes/ No	
Sketch of Site showing source of spill, extent of pollution, drains, culverts and water hazards, gas/electricity points or other sources of ignition, access points, safe zones etc. as required.						
						
Assessment Completed By					Date/ Time	

Appendix 3: Maintaining Oil Spill Preparedness Training and Exercises

Training Program

Seatec recognizes the importance of this Oil Spill Response Plan (OSRP) and places the utmost emphasis on rigorous personnel training. Seatec commitment to this critical component of response strategy offers numerous benefits.

- **Efficiency and Effectiveness:** Seatec trained personnel know their roles, responsibilities, and the steps they need to take. This expertise translates to a quick, effective response in the event of an oil spill, reducing response time and minimizing the incident's impact.
- **Safety Ensured:** Safety is a cornerstone of Seatec corporate responsibility. Seatec training ensures the correct, safe handling of oil and associated equipment, and a comprehensive understanding of safety protocols to reduce the risk of accidents or injuries during the recovery process.
- **Regulatory Compliance:** Seatec values the importance of staying within the bounds of regulatory guidelines. Seatec personnel training includes comprehensive coverage of these guidelines to ensure full compliance and mitigate the risk of penalties or legal action.
- **Mitigating Environmental Damage:** Seatec trained personnel possess the skills necessary to minimize environmental damage. They make informed decisions on containment, recovery, and mitigation strategies, acting as stewards of the environment.
- **Preserving Seatec Reputation:** Seatec understands that proper handling of an oil spill can significantly protect the company's reputation. Seatec trained staff communicate effectively with stakeholders, depicting a transparent picture of the steps taken to limit the spill's impact.
- **Post-spill evaluation and Learning:** Seatec's emphasis on training extends beyond immediate response protocols. We use every incident as a learning opportunity, refining this OSRP based on real experiences to continually improve future response strategies.

In conclusion, Seatec investment in personnel training is more than a standard business practice; it is a commitment to safety, resilience, continuous improvement, and above all, environmental responsibility. It exemplifies Seatec proactive approach, protecting Seatec resources, and safeguarding both the company's and the environment's future.

Exercise Program

Seatec takes the readiness to mitigate potential oil spill incidents very seriously. Seatec assure that their team consistently stays prepared by carrying out regular drills and exercises, which form a crucial part of our Oil Spill Response Plan (OSRP). Here are some reasons underpinning Seatec's dedication to this initiative:

- **Mastery of Skills:** Seatec's regular drills ensure that each member of the team has ingrained the roles and responsibilities they hold during an incident. This practice takes the theoretical knowledge acquired during training and translates it into actionable skills.
- **Realistic Experience:** The exercises provide Seatec's personnel with exposure to a realistic environment. This hands-on experience helps minimize panic, encourages swift decision-making, and streamlines action during an actual event.
- **Procedure Accuracy:** Through these repeated drills, Seatec can continuously test and refine their established procedures and strategies. These exercises help Seatec identify any potential weaknesses that they can promptly address, bolstering the strength and effectiveness of this OSRP.
- **Team Integration:** Seatec's drills foster improved communication and coordination among the members of the team. This cultivation of seamless interaction is essential in managing an oil spill, where quick, harmonized actions can drastically reduce the incident's impact.
- **Regulatory Compliance:** The execution of regular drills is a testament to Seatec's commitment to meeting regulatory standards. It is a demonstration of their readiness to manage oil spills effectively and efficiently, thereby fortifying our corporate responsibility.

- **Boosted Confidence:** These exercises instill confidence in every member of the team, knowing that they are well-equipped and competent to handle even the most challenging scenarios. This practice promotes a culture of readiness, responsibility, and resilience within the Seatec team.

Seatec's ongoing dedication to regular drills and exercises helps them maintain a state of optimal preparedness, aligns us with regulatory expectations, and ultimately guards the company's reputation. By training proactively, they demonstrate their unwavering commitment to resource protection and environmental stewardship.

Appendix 4: Termination and Close-out

Termination of Response

When the oil spill is under control, an assessment should be made by the Management Team to determine when a response is no longer needed. This decision must be communicated to all concerned and external agencies. The response will need to be scaled down before it is terminated, as decided by the Incident Management Team. Endpoints for the response should be defined based on the environmental characteristics of an area.

Demobilization Procedures

If Tier 3 resources were used, such as OSRL, notification must be sent to stand-down the response. A Demobilization Authorization Form will need to be completed.

Once the Management Team considers the oil spill incident has been stabilized and secured, a decision will be made to commence demobilization of resources (personnel and equipment) and the Management Team as appropriate. A debriefing will be held immediately afterwards with all members of the Management Team and a debriefing within 24 hours for all parties involved in the Management Team. Separate debriefings will be held for other parties involved in the oil spill incident depending upon the location and the role assumed. Every team member is responsible for closing out actions under their scope after demobilization. During the debriefing, a summary of any outstanding actions will be made, and the Management Team function will be reviewed and areas for improvement listed.

Two reports will be made by the Emergency Coordinators:

- Management of the oil spill incident (Management Team functioning, site functioning)
- The oil spill incident

The purpose of a timely and orderly demobilization is to ensure that all resources are effectively terminated. This will save resources, time and money for all stakeholders involved. Demobilization should be done in a phased approach, reducing resources, equipment, and personnel in accordance with the demands of the shoreline or area of operation. All cleanup operations should be continually monitored and evaluated using information from aerial surveillance and personnel on site. Strategic decisions can be reassessed whether the scale of the response is appropriate for the size and severity of the spill incident. As the response progresses and the response moves through to various stages, different resources will be required.

Response techniques deemed to be ineffective or cause more damage to the environment (than leave alone) must be terminated immediately. The costs associated with a response operation have a considerable influence on the decision to terminate and when and should be monitored closely.

Intense pressure can be placed on those managing the response in the Management Team to adopt non-technical criteria and to retain resources that are excessive or not required. Over-cleaning may be conducted due to external pressures. The end points and the involvement of external agencies developing the initial surveys should facilitate the demobilization procedure and bring the operation to a successful close.

Rehabilitation of Response Equipment

Once the oil spill response has ended, cleanup of the environment and rehabilitation and maintenance of any response equipment should continue as required. These measures will be directed by Seatec's normal chain of command and not under the emergency response structure.

Appendix 5: A Guide to Incident Management Briefings and Meeting

Overview

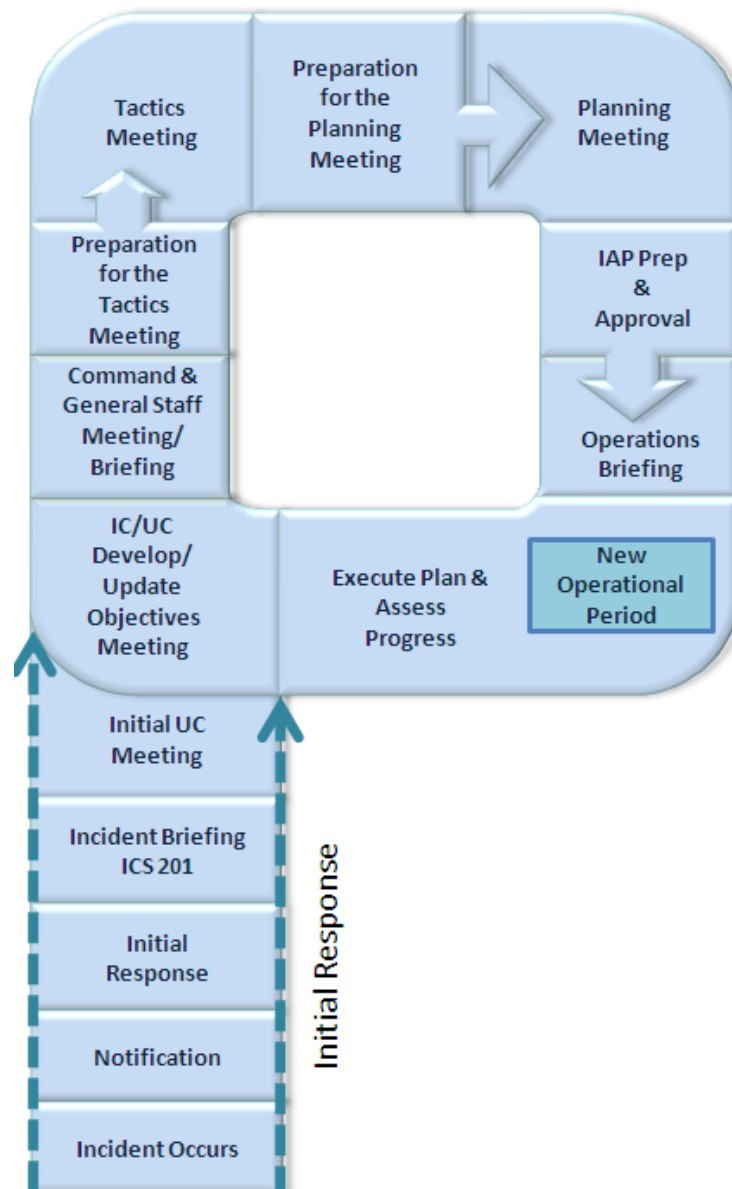
This Appendix provides guidance for members of an Incident Management Team on how to follow the operational planning cycle and meeting guidance to prepare, plan and execute the response management operations.

The Operational Planning Cycle

The Operational Planning Cycle describes the incident action planning process to be followed by members of the Incident Management Team when planning their operational strategic goals and objectives, and development of an Incident Action Plan that details the strategies and tactics, as well as the resources and supporting activities, that will be put into operation during the next operational period.

The incident action planning process is built on the following phases:

1. Understand the situation
2. Establish incident objectives
3. Develop the plan
4. Prepare and disseminate the plan
5. Execute, evaluate, and revise the plan



Best Practices for Effective Video Conferencing

Prior to a meeting:

1. When using equipment or locations not regularly used, test your meeting connections in advance.
2. Ensure that you have a camera, microphone, and headphones or speakers available. Earbuds or headphones are preferable to avoid audio feedback and echo.
3. If connecting from a laptop, plug in the laptop wall power. Battery use can adversely affect video quality.
4. When possible, establish online video conferencing connections several minutes before the meeting start time.
5. Create a backup communication plan in case you have trouble connecting with other participants. A backup plan can include asking one of the other participants to connect to the meeting through their laptops, using a mobile or speakerphone, and/or collaborating through an online collaboration tool (e.g., Google docs).

During a meeting:

1. Please share your video but mute your audio when not speaking. No lurkers!
2. Be aware of your behavior. Because you are on a video conference, people can see what you are doing at all times.
3. Ensure that you can see and hear all other participants, as appropriate. If you can't, please speak up or type a comment in the chat.
4. Ensure that your locations lighting does not limit your visibility (e.g., avoid backlighting from windows or lamps).
5. There will be an exercise facilitator for the drill. The facilitator will ensure that:
 - a. All participants are aware of the objectives of the drill, the drill scenario and our expectations of them,
 - b. All participants have access to the supporting documentation that they will need to refer to during the drill,
 - c. All participants are able to engage with the IMT so that everyone can actively contribute to the success of the drill,
 - d. There will be a limit to any "side conversations" and/or multitasking during the drill, and
 - e. The chat room and raise hand features are monitored so that all questions can be answered.

Post Meeting

1. Make sure any participants not able to attend the drill are able to access a recording of it using the appropriate online tools (e.g., Google docs) whenever possible.

Meeting Ground Rules

The following ground rules have been developed so that all meeting / briefing attendees have a clear understanding of what is expected of them during a meeting / briefing and how best they can support the briefing or decision making process.

1. Show up on time and come prepared
 - a. Be prompt in arriving to the meeting and in returning from breaks.
 - b. Be prepared to contribute to achieving the meeting goals.
 - c. Come to the meeting with a positive attitude.
2. Stay mentally and physically present
 - a. Be present, and don't attend to non-meeting business.
 - b. Listen attentively to others and don't interrupt or have side conversations.
 - c. Treat all meeting attendees with the same respect you would want from them.
3. Contribute to meeting goals
 - a. Participate 100% by sharing ideas, asking questions, and contributing to discussions.
 - b. Share your unique perspectives and experience, and speak honestly.
 - c. If you state a problem or disagree with a proposal, try to offer a solution.
4. Think before speaking
 - a. Seek first to understand, then to be understood.
 - b. Avoid using idioms, three letter acronyms, and phrases that can be misunderstood.
 - c. It's OK to disagree, respectfully and openly, and without being disagreeable.
5. Listen with an open mind
 - a. Value the learning from different inputs, and listen to get smarter.
 - b. Stay open to new ways of doing things, and listen for the future to emerge.
 - c. You can respect another person's point of view without agreeing with them.
6. Think before speaking
 - a. Seek first to understand, then to be understood.
 - b. Avoid using idioms, three letter acronyms, and phrases that can be misunderstood.
 - c. It's OK to disagree, respectfully and openly, and without being disagreeable.
7. Stay on point and on time
 - a. Respect the groups' time and keep comments brief and to the point.
 - b. When a topic has been discussed fully, do not bring it back up.
 - c. Do not waste everyone's time by repeating what others have said.
8. Attack the problem, not the person
 - a. Respectfully challenge the idea, not the person.
 - b. Blame or judgment will get you further from a solution, not closer.
 - c. Honest and constructive discussions are necessary to get the best results.
9. Close decisions and follow up
 - a. Make sure decisions are supported by the group, otherwise they won't be acted on.
 - b. Note pending issues and schedule follow up meetings as needed.
 - c. Identify actions based on decisions made, and follow up actions assigned to you.
10. Record outcomes and share
 - a. Record issues discussed, decisions made, and tasks assigned.
 - b. Share meeting reports with meeting participants.
 - c. Share meeting outcomes with other stakeholders that should be kept in the loop.

The Initial Incident Briefing (using the ICS 201 form) provides the Incident Commander and the Command and General Staff members with basic information regarding the incident situation and the resources allocated to the incident.

- What, when where and how the incident happened.
- What is happening right now and what is predicted to happen?
- What the potential impact of the incident could be (worst case).
- What the initial objectives for the response operation are.
- What critical action items are required by the responders currently working to control or mitigate the impacts of the incident.

The outcomes of the briefing are that:

- The incoming Incident Command assumes command of the Incident, assesses the need for a Unified Command Team and organizes their Incident Management Team.
- The Safety Officer can begin developing an ICS215a Incident Safety Analysis (Appendix 6).
- The Operations Section Chief can start organizing their team to support the current response activities as well as begin developing additional strategies and tactics based upon the current response operations objectives.
- The Planning Section Chief can start organizing their team, gather any current documentation related to the incident, prepare for the next incident planning meeting and develop a meeting schedule Daily Meeting Schedule.
- The Logistics Section Chief can start organizing their team to support the needs of the current response activities as well identifying possible solutions to any identified issues or resource shortfalls.
- The Finance and Administration Section Chief can start organizing their team to support the current response activities as well as determine if additional funding is required based upon the incident level.

The ICS201 Incident Briefing Form (Appendix 1) is prepared by the Initial Response Team Leader or Person in Charge for presentation to the incoming Incident Commander along with a more detailed oral briefing. The form should be duplicated and distributed before the initial briefing of the Command and General Staff members or other key personnel as appropriate.

[illegible]

Initial Incident Briefing		
WHEN	Once the Incident Management Team has been assembled the Incident Briefing serves as an opportunity to provide initial information gathered by the initial response team to the Incident Commander, key Incident Management Team and contracted / government agency personnel. It is also suitable for briefing individuals newly assigned to the Command and General Staff.	
FACILITATOR	The Initial Response Team Leader / Person in Charge (typically a Duty or Operations Manager).	
ATTENDEES	<ul style="list-style-type: none"> Initial Response Team Leader / Person in Charge Incoming Incident Commander Command Staff General Staff Senior Government Representatives Senior Contractor Representatives 	
BRIEFING AGENDA	TOPIC	PRESENTED BY
	Introduction & Welcome (<i>Please silence radios and telephones</i>)	Initial Response Team Leader / Person in Charge
	<p>Short recap of the events leading up to the Incident and the Current Situation Summary (Page 1 of the ICS201 Form).</p> <ul style="list-style-type: none"> Introduce the incoming Incident Commander and any Senior Government or Contractor representatives, Ensure that the team are clear on the name of the incident and the duration of the initial operational period, If possible, use a Situation Status display map to provide an overview of the geographic operational and impacted area, weather conditions, response sites / facilities / staging areas / command posts etc. along with any issues and concerns. (Page 1 of the ICS201 Form) 	
	Provide an overview of current Health and Safety activities (Page 1 of the ICS201 Form)	
	Communicate the Initial and Planned Response Objectives and the Priorities of the response operation. Ensure the team is clear on the focus of the initial response operation (Page 2 of the ICS201 Form)	
	Describe the Initial and Planned Response Actions, (including Strategies and Tactics) (Page 2 of the ICS201 Form). Provide details on the notifications made to internal and external agencies and their activities.	

	Brief the team on the current Response Team Organization (Page 4 of the ICS201 Form) and the communication protocols / procedures that have been established.	
	Provide details of any in-use, assigned or ordered response resources (Page 3 of the ICS201 Form) and identify any shortfalls in resource availability.	
	Questions	
	Conclusion (Turn radios and telephones back on)	

Initial Incident Commander / Unified Command Meeting

The purpose of the initial Unified Command Meeting is to ensure that the Incident Management Team's Command and General Staff groups and the Key Stakeholders representatives understand each others' roles and responsibilities and begin the process of becoming one unified Incident Management Team, setting the priorities for the response and working towards common objectives. The Incident Commander along with the most senior person from the Key Stakeholders group sets the expectations regarding team interaction, information sharing, and team processes for planning, decision making, coordination, and communication. The Incident Commander will go on to describe the composition of the Unified Command Team and their plans for integrating other members of the Key Stakeholder group into the Incident Management Team.

The Planning Section Chief (PSC) typically facilitates the Initial Unified Command Meeting.

Documents Required

Decisions made during this meeting would be used to populate sections of the ICS202 Incident Objectives (Appendix 2) and ICS203 Organization Assignment List (Appendix 3) documents.

Initial Unified Command Meeting		
WHEN	Immediately after the decision has been taken to establish a Unified Command this meeting should be held prior to the first Objectives Meeting	
FACILITATOR	The Incident Commander, a Unified Command Member or the Planning Section Chief if available.	
ATTENDEES	<ul style="list-style-type: none"> Incident Commander Unified Command Planning Section Chief 	
MEETING AGENDA	TOPIC	PRESENTED BY
	Introduction & Welcome (Please silence radios and telephones)	Planning Section Chief
	Validate makeup of newly formed UC, based on: <ul style="list-style-type: none"> The specifics of the incident, Determinations outlined in existing response plans. <i>Note: The makeup of the UC may change as an incident progresses in order to account for changes in the situation.</i>	Incident Commander / Unified Command Member
	Negotiate and agree on key decisions: <ul style="list-style-type: none"> Unified Command jurisdictional boundaries and focus Name of incident Overall response organisation including integration of assisting and cooperating agencies Location of Incident Command Post and other critical facilities Operational period length start time and work shift hours Best qualified Operations Section Chief and Deputy 	

	<ul style="list-style-type: none">• Other key Command and General staff assignments and technical support• Summarise and document key decisions	
	Summarize and document key decisions	Planning Section Chief
	Questions	
	Conclusion (Turn radios and telephones back on)	

Incident Commanders / Unified Command Objectives Meeting

Management by objectives is a key characteristic of the Incident Command System (ICS). Incident objectives are defined as statements of guidance and direction necessary for the selection of appropriate strategies and the tactical direction of resources. Incident objectives are based on realistic expectations of what can be accomplished when all allocated resources have been effectively deployed.

The Incident Commander or the Unified Command formulates incident objectives based on several factors: incident priorities and other direction from a higher authority, the situation, and members' professional judgment and experience. Incident objectives should be clear, measurable, achievable, and flexible. They must include sufficient detail to ensure understanding, but are not be so prescriptive as to preclude innovation.

Documents Required

Products of this meeting as well as decisions and direction from the Initial Unified Command meeting will be presented at the Command and General Staff meeting using the ICS202 Incident Objectives Form.

The ICS233 Open Actions Tracker Form is used by the Incident Commander or the Unified Command to assign and track tasks / actions given to IMT personnel. The document is duplicated and provided to Command and General Staff members, giving them the open tasks/actions needing to be completed and a means to track the open tasks/actions they have been assigned.

Incident Commanders / Unified Command Objectives Meeting		
WHEN	Prior to Command and General Staff meeting.	
FACILITATOR	Planning Section Chief or Incident Commander / Unified Command Member.	
ATTENDEES	<ul style="list-style-type: none"> Incident Commander Unified Command Planning Section Chief Relevant Command and General Staff as requested by the IC/UC 	
MEETING AGENDA	TOPIC	PRESENTED BY
	Introduction & Welcome (Please silence radios and telephones)	Planning Section Chief
	Review and update key decisions regarding the management of the incident (safety, information management, resource management etc.)	Incident Commander / Unified Command Member
	Develop / review response priorities, limitations and constraints	
	Develop / review incident objectives for the next operational period using ICS202 Incident Objective Form (Appendix 2) and agree on division of Unified Command workload	
	Develop / review key procedures: <ul style="list-style-type: none"> Managing sensitive information Information flow Resource ordering Cost sharing and accounting Security 	

	Develop / review tasks for Command and General Staff to accomplish using ICS233 Open Action Tracking Form (Appendix 2) Review / document or resolve status of any open actions.	
	Prepare for the Command and General Staff meeting	Planning Section Chief
	Summarize and document key decisions	
	Questions	
	Conclusion (Turn radios and telephones back on)	

Command and General Staff Meeting

The Command and General Staff meeting is the opportunity for the Incident Commander or the Unified Command to meet with the staff to gather input or to provide immediate direction. It is also the opportunity for the Incident Commander or the Unified Command to articulate and approve incident objectives for the next operational period and to share important information regarding incident management.

The Planning Section Chief (PSC) facilitates this meeting. The Incident Commander or the Unified Command presents the priorities and incident objectives and articulates guidance on how incident operations should proceed. The participants review the incident objectives and discuss strategies for accomplishing the objectives.

Documents Required

The ICS202 Incident Objectives Form describes the basic incident strategy, incident objectives, command emphasis/priorities, and safety considerations for use during the next operational period.

The ICS233 Open Actions Tracker Form is used by the Incident Commander or the Unified Command to assign and track tasks / actions given to IMT personnel. The document is duplicated and provided to Command and General Staff members, giving them the open tasks/actions needing to be completed and a means to track the open tasks/actions they have been assigned.

Command and General Staff Meeting		
WHEN	Prior to Tactics Meeting.	
FACILITATOR	Planning Section Chief.	
ATTENDEES	<ul style="list-style-type: none"> Incident Commander Unified Command Command and General Staff 	
	TOPIC	PRESENTED BY
	Introduction & Welcome (Please silence radios and telephones)	Planning Section Chief
	Briefly recap on the current status of the response to the Incident	
	Provide update on current safety issues and / or actions	Safety Officer
	IC/UC to discuss the following with the IMT: <ul style="list-style-type: none"> Provide overall comments about the nature of the response and IC/UC expectations Review key decisions, priorities, constraints, limitations, critical information requirements and the ICS202 Incident Objectives. Assign ICS233 Open Action Tracker items and task to appropriate Command and General Staff personnel including expected timeframe for completion. Communicate the agreed upon organizational structure (i.e. day and night shift structure). Communicate and assign the expected components (forms and supporting plans) of the Incident Action Plan for the next operational period. 	Incident Commander / Unified Command Member

	Question the IMT regarding any questions or concerns regarding the ICS202 Incident Objectives, the ICS233 Open Action Tracker Items, organizational structure and the components of the Incident Action Plan	Planning Section Chief
	Conclusion (Turn radios and telephones back on)	

Tactics Meeting

The purpose of the Tactics Meeting is to review and finalize the ICS234 Work Analysis Matrix and draft the ICS215 Operational Planning Worksheets. To accomplish this, the Operations Section Chief (OSC) leads participants in reviewing the work assignment drafts to determine whether they are complete and whether they support the incident objectives and strategies. Participants also identify gaps and duplication in work assignments and resolve any conflicts or coordination issues.

Developing the Operational Planning Worksheets are an essential part of the incident action planning process. The worksheets are particularly important to the success of response and recovery operations on larger incidents. The Operational Planning Worksheet aids Operations personnel in capturing their tactics and in identifying resource assignments prior to the operations tactics meeting. Reviewing these worksheets during the operations tactics meeting facilitates discussion and focuses on the review of tactics and resource assignments.

Documents Required

The ICS234 Work Analysis Matrix is designed to help select the best strategies and tactics to achieve the operational objectives. This optional form assists staff in carrying out incident objectives by outlining the who, what, where, when, and how of the response. The tactics from this form carry forward to the "Work Assignment" on the ICS215. Another purpose of the ICS234 is that it presents alternative strategies and tactics to respond to bad weather, sudden changes in operational conditions, etc.

The ICS215 Operational Planning Worksheet communicates the decisions made by the Operations Section Chief during the Tactics Meeting concerning resource assignments and needs for the next operational period. The ICS 215 is used by the Logistics Section Chief for ordering resources for the incident and the Planning Unit complete the ICS204 Assignment Lists. The ICS215 is shared with the rest of the Command and General Staffs during the Planning Meeting.

The ICS215A Incident Safety Analysis is to aid the Safety Officer in completing an operational risk assessment to prioritize hazards, safety, and health issues, and to develop appropriate controls. This worksheet addresses communications challenges between planning and operations, and is best utilized in the planning phase and for Operations Section briefings.

Tactics Meeting		
WHEN	Prior to Planning Meeting.	
FACILITATOR	Planning Section Chief.	
ATTENDEES	<ul style="list-style-type: none"> Operations Section Chief Logistics Section Chief Situation Unit Leader Documentation Unit Leader Communications Unit Leader Resource Unit Leader Safety Officer Technical Specialists (as required) 	
MEETING AGENDA	TOPIC	PRESENTED BY
	Introduction & Welcome (<i>Please silence radios and telephones</i>)	Planning Section Chief
	Review current field operations and detail what is expected to be completed by the end of the current operational period to frame discussions on activities to be conducted during the next operational period.	Operations Section Chief
	Review the ICS202 Incident Objectives for the next operational period	Planning Section Chief
	Review / develop the ICS234 Work Analysis Matrix and demonstrate that the chosen strategies / tactics have been chosen to meet the incident objectives	Operations Section Chief
	Review the ICS215 Operational Planning Worksheet to finalize strategies, tactics and resource requirements for the next operational period.	

	Safety Officer reviews and or completes the ICS215a Incident Safety Analysis and identifies any safety issues in the chosen strategies / tactics	Safety Officer
	Discusses and resolves any potential logistics or resourcing issues	Planning and Logistics Section Chiefs
	Question the team regarding any questions or concerns regarding the ICS234 Incident Objectives, the ICS233 Open Action Tracker Items, organizational structure and the components of the Incident Action Plan	Planning Section Chief
	Conclusion (Turn radios and telephones back on)	

Planning Meeting

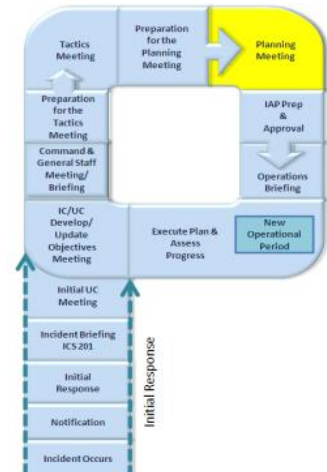
The Planning Meeting provides the opportunity for the Command and General Staff, as well as other incident management personnel, agency officials, and cooperating/assisting agencies and organizations to discuss and resolve any outstanding issues before assembling the IAP. The Planning Meeting is facilitated by the Planning Section Chief (PSC).

Documents Required

The Operational Planning Worksheet (ICS 215) details the decisions made by the Operations Section Chief and used by the Logistics Section in ordering resources and the Planning Section in completing Assignment Lists (ICS204).

The Incident Safety Analysis (ICS 215A) is to aid the Safety Officer in completing an operational risk assessment to prioritize hazards, safety, and health issues, and to develop appropriate controls.

PLANNING MEETING		
WHEN	After the Tactics Meeting.	
FACILITATOR	Planning Section Chief.	
ATTENDEES	<ul style="list-style-type: none"> Incident Commander / Unified Command Safety Officer Liaison Officer Public Information Officer Operations Section Chief Planning Section Chief Logistics Section Chief Finance and Administration Section Chief Technical Specialists (as required) Agency Officials (as required) 	
MEETING AGENDA	TOPIC	PRESENTED BY
	Introduction & Welcome (<i>Please silence radios and telephones</i>)	Planning Section Chief
	Review the current situation and Incident Objectives <i>Refer to the Initial Incident Briefing Form (ICS 201) or the Incident Objectives (ICS 202).</i>	Incident Commander / Unified Command
	Describe the current and predicted weather conditions	Planning Section Chief
	Review the current and planned operational response activities (strategies and tactics). <i>Refer to the Operational Planning Worksheet (ICS 215)</i>	Operations Section Chief
	Review any operational hazards, safety, and health issues <i>Refer to the Incident Safety Analysis (ICS 215a)</i>	Safety Officer
	Review the status of the current and planned logistics activities. <i>Refer to the Operational Planning Worksheet (ICS 215)</i>	Logistics Section Chief
	Review the status of the current and planned finance and administrative activities.	Finance and Administration Section Chief

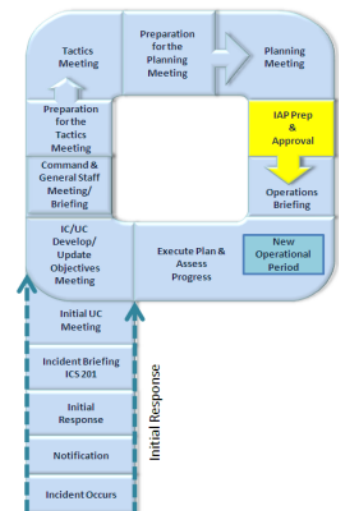


	Outline issues related to assisting and cooperating agencies	Liaison Officer
	Consider information issues internal and external to the incident	Public Information Officer
	Review and approve the development of Incident Action Plan (IAP)	Planning Section Chief
	Request the components to the Incident Action Plan (IAP) to be submitted by a specific time to the Planning Section (1-2 hours)	Planning Section Chief
	Questions	Planning Section Chief
	Conclusion (<i>Turn radios and telephones back on</i>)	Planning Section Chief

Incident Action Plan Development

The Attendees of the Planning Meeting prepare their assignments for the Incident Action Plan early enough to permit timely Incident Commander approval and duplication of sufficient copies for the Operations Briefing.

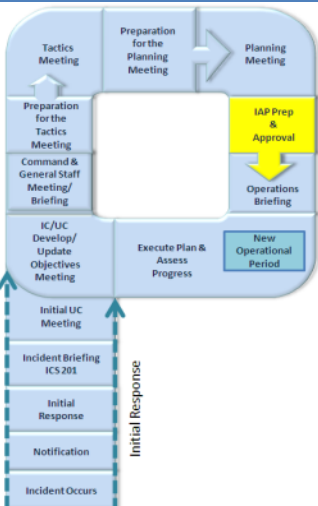
Incident Action Plan Development	
WHEN	After the Planning Meeting.
FACILITATOR	Planning Section Chief facilitates the process.
ATTENDEES	None this is not a meeting but a period of time.
COMMON PLAN ELEMENTS	<ul style="list-style-type: none"> Incident Objectives (ICS 202) Organisation List (ICS 203) Organisation Chart (ICS 207) Assignment Lists (ICS 204) Communication Plan (ICS 205) Situation Map
OPTIONAL PLAN ELEMENTS	<ul style="list-style-type: none"> Medical Plan (ICS 206) Air Operations Summary (ICS2 220) Traffic Plan Demobilisation Plan Waste Management and Disposal Plan



Operations Briefing

The Operations Section Chief (OSC) conducts the operations briefing before each operational period begins, ensuring that those who need the information have access. The purpose is to roll out the Incident Action Plan (IAP) for the upcoming operational period. The Operations Section Chief may adjust work assignments or resource allocations during the briefing.

Once the IAP has been distributed and the operations briefing has been held, the IAP is executed. As field personnel perform their work assignments, supervisors assess the progress and the effectiveness of the work. This assessment often requires field visits to observe progress. Individuals, crews, and task forces inform their supervisors of the status of assignments. The Operations Section personnel, in turn, keep the Planning Situation Unit apprised.

Operations Briefing		
WHEN	Following IC / UC Approval of the Incident Action Plan (IAP).	
FACILITATOR	Operations Section Chief facilitates the process.	
ATTENDEES	<ul style="list-style-type: none"> Incident Commander Unified Command Command Staff General Staff Senior Responding Government Representatives Senior Contractor Representatives 	
INCIDENT ACTION PLAN ELEMENTS	<ul style="list-style-type: none"> Incident Objectives (ICS 202) Organisation List (ICS 203) Organisation Chart (ICS 207) Assignment Lists (ICS 204) Communication Plan (ICS 205) Situation Map 	
AGENDA	<ul style="list-style-type: none"> Brief opening statement made by the Incident Commander / Unified Command Operations Section Chief reviews incident objectives Situation Unit Leader review weather conditions and forecast Operations Section Chief presents an overview of the current situation Operations Section Chief briefs operations field personnel Communications Unit Leader present overview of communications plan Logistics Section Chief provides overview of logistics operations Safety Officer provides overview of current safety activities Finance Section Chief provides overview of current financial situation Technical Specialists provide details in other relevant activities Brief closing statement made by the Incident Commander / Unified Command 	

1. Incident Name:	2. Incident Number:	3. Start Date/Time:	ICS201
<p>4. Map/Sketch (include sketch, showing the total area of operations, the incident site/area, impacted and threatened areas, overflight results, trajectories, impacted shorelines, or other graphics depicting situational status and resource assignment):</p>			
<p>5. Situation Summary and Health and Safety Briefing (for briefings or transfer of command): Recognize potential incident Health and Safety Hazards and develop necessary measures (remove hazard, provide personal protective equipment, warn people of the hazard) to protect responders from those hazards.</p>			
<p>6. Prepared by: Name: _____ Position/Title: _____ Signature: _____</p>			
ICS 201, Page 1		Date/Time: _____	

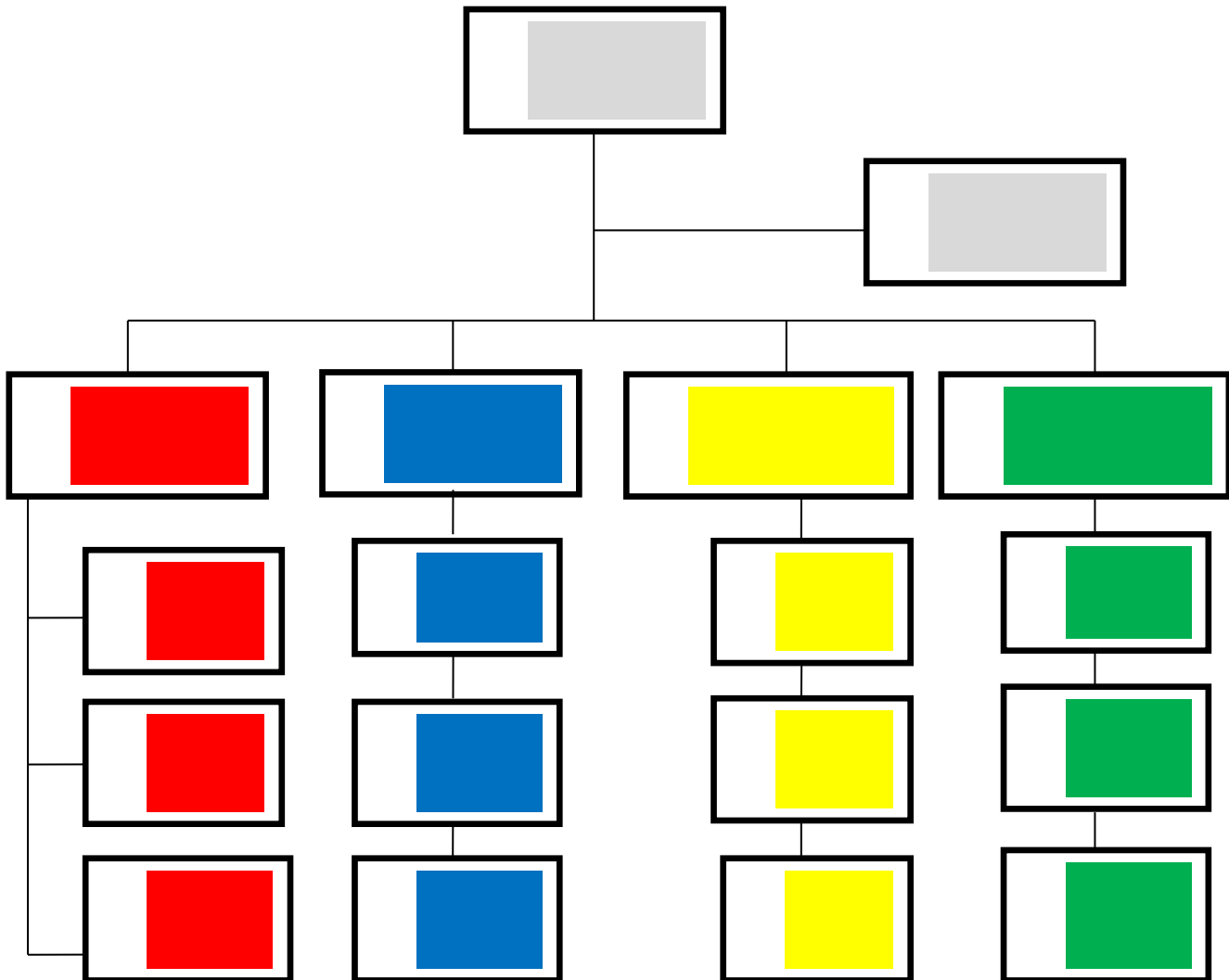
10. Resource Summary:

1. Incident Name:		2. Incident Number:		3. Start Date/Time:		ICS201
Resource	Resource Identifier	Date/Time Ordered	ETA	Arrived	Notes (location/assignment/status)	
6. Prepared by: Name: _____ Position/Title: _____ Signature: _____						
ICS 201, Page 3		Date/Time: _____				

1. Incident Name:

2. Incident Number:

3. Start Date/Time:

ICS201**11. Current Organisation**

6. Prepared by: Name: _____ Position/Title: _____ Signature: _____

ICS 201, Page 4

Date/Time: _____

INCIDENT OBJECTIVES

1. Incident Name:	2. Incident Number:	3. Start Date / Time	ICS202
4. Objective(s):			
5. Operational Period Command Emphasis:			
General Situational Awareness:			
7. Site Safety Plan Required? Yes <input type="checkbox"/> No <input type="checkbox"/> Approved Site Safety Plan(s) Located at:			
8. Incident Action Plan (the items checked below are included in this Incident Action Plan):			
<input type="checkbox"/> ICS 203 <input type="checkbox"/> ICS 204 <input type="checkbox"/> ICS 205 <input type="checkbox"/> ICS 206 <input type="checkbox"/> ICS 208	<input type="checkbox"/> Map/Chart <input type="checkbox"/> Weather Forecast/Tides/Currents	Other Attachments: <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____	
9. Prepared by: Name: _____ Position/Title: _____ Signature: _____			
10. Approved by Incident Commander: Name: _____ Signature: _____			
ICS 202 Page 1	IAP Page _____	Date/Time: _____	

ORGANIZATION ASSIGNMENT LIST

1. Incident Name:		2. Incident Number:		3. Start Date / Time		ICS203	
3. Incident Commander(s)/ Agency Incident Coordinator and Command Staff: (include location)				7. Operations Section:			
<input type="checkbox"/> IMT IC/UCs				Chief			
<input type="checkbox"/> IMG AIC				Deputy			
Deputy				Staging Area			
Safety Officer				Branch			
Public Info. Officer				Branch Director			
Liaison Officer				Deputy			
4. Agency/Organization Representatives:				Division/Group			
Agency/Organization		Name		Division/Group			
				Division/Group			
				Division/Group			
				Division/Group			
				Branch			
				Branch Director			
				Deputy			
5. Planning Section:				Division/Group			
Chief				Division/Group			
Deputy				Division/Group			
Resources Unit				Division/Group			
Situation Unit				Division/Group			
Documentation Unit				Branch			
Demobilization Unit				Branch Director			
Technical Specialists				Deputy			
				Division/Group			
6. Logistics Section:				Division/Group			
Chief				Division/Group			
Deputy							
Support Branch							
Director							
Supply Unit							
Facilities Unit				8. Finance/Administration Section:			
Ground Support Unit				Chief			
Service Branch				Deputy			
Director				Time Unit			
Communications Unit				Procurement Unit			
Medical Unit				Comp/Claims Unit			
Food Unit				Cost Unit			
9. Prepared by: Name: _____				Position/Title: _____ Signature: _____			
ICS 203		IAP Page _____		Date/Time: _____			

1. Incident Name:		2. Incident Number:		3. Start Date / Time		ICS205			
4. Incident communication information:									
Incident Assigned Position		Name (Last, First)		Primary Number	Secondary Number	Other Method (s) of Contact (pager, email, radio, etc.)		Remarks	
5. Special Instructions:									
6. Prepared by (Communications Unit Leader): Name: _____ Signature: _____									
ICS 205		IAP Page _____		Date/Time: _____					

OPEN ACTION TRACKING FORM

1. Incident Name		2. Incident Number:		3. Start Date / Time		ICS233	
No.	Item	For	Status	Start Date	Briefed	Target Date	Actual Date
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Prepared by: Name: _____ Position/Title: _____ Signature: _____							
Approved by Incident Commander: Name: _____ Signature: _____							
ICS 233 Page 1	IAP Page _____	Date/Time: _____					

WORK ANALYSIS MATRIX

1. Incident Name:	2. Incident Number:	3. Start Date / Time	ICS234
4. Operation's Objectives	5. Optional Strategies	6. Tactics/Work Assignments	
DESIRED OUTCOME	HOW	WHO, WHAT, WHERE, WHEN	
7. Prepared by: Name: _____ Position/Title: _____ Signature: _____			
8. Approved by Incident Commander: Name: _____ Signature: _____			
ICS 202 Page 1	IAP Page _____	Date/Time: _____	

OPERATIONAL PLANNING WORKSHEET

1. Incident Name:			2. Incident Number:								3. Start Date / Time					ICS215				
3. Branch	4. Division, Group, or Other	5. Work Assignment & Special Instructions	6. Resources																	7. Overhead Position(s)
			R e q u i r e d																	
			H a v e																	
			N e e d																	
			R e q u i r e d																	
			H a v e																	
			N e e d																	

			R e q .																
			H a v e																
			N e e d																
			R e q .																
			H a v e																
			N e e d																

11. Total Resources Required																	14. Prepared by: Name: _____ Position/Title: _____ Signature: _____ Date/Time: _____		
12. Total Resources Have on Hand																			
13. Total Resources Need To Order																			

1. Incident Name:		INCIDENT SAFETY ANALYSIS		ICS215 A	
2. Date/Time Prepared: Date: Time:		3. Operational Period: Date From: Date To: Time From: Time To:			
4. Incident Area	5. Hazards/Risks		6. Mitigations		
7. Prepared by (Safety Officer): Name: _____ Signature: _____					
Chief): Name: _____ Signature: _____ Date/Time: _____					

OSRL has produced this OSRP, using the information provided by Seatec.

This OSRP is for guidance purposes and must be tested, exercised, and updated by Seatec to ensure its validity during a real incident. OSRL makes no warranties and will not accept any liability in relation to the advice, modelling or other information contained in this OSRP or to the merchantability or fitness for a particular purpose. The variables that cause an oil spill and the consequences on the environment can only be addressed on an individual basis.

The OSRL Duty Manager and Technical Advisor are available 24 hours a day, seven days a week, for such advice during the initial and ongoing stages of an incident.