# LITTLEHAMPTON HARBOUR

# **Oil Spill Contingency Plan** REDACTED VERSION FOR STAKEHOLDERS

Littlehampton Harbour Board, Harbour Office, Pier Road, Littlehampton, BN17 5LR

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Updated January 2022 by:



In collaboration with:



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#### **List of Plan Holders**

Сору	Organisation
MASTER (Hard)	Littlehampton Harbour Board
1 (Digital)	Environment Agency
2 (Digital)	Natural England
3 (Digital)	Marine Management Organisation
4 (Digital)	MCA CPSO
5 (Digital)	Fareham NMOC
6 (Digital)	West Sussex County Council
7 (Digital)	Arun District Council
8 (Digital)	Littlehampton Town Council
9 (Digital)	Sussex Police
10 (Digital)	Adler and Allan Ltd – Marine Response Division
11 (Digital)	Arun District Council - Emergency Planning Officer
12 (Digital)	Tarmac (Littlehampton)
13 (Digital)	West Sussex Fire and Rescue Service

#### **Revision Procedure**

This plan will be revised annually; such revisions will take account of experience gained from exercises and/or actual spill incidents, changes in risk or port operations or legislation.

The responsibility of the upkeep, amendment and review of this contingency plan has been assigned to the Harbour Master. It is the harbour master's responsibility to ensure that the plan is kept up to date and reviewed in accordance with the legislative requirement.

A formal review of the plan will be conducted at 5 year intervals and the plan re-submitted for approval before its expiry date (i.e. during year five).

#### **Amendment Record**

Amendment No.	Date	Amended by (print name)	Amendments Made
REV01	FEB 2011	Edge Enviro Services Ltd	Formal review of plan and pending consultation and approval
REV02	JAN 2014	Littlehampton Harbour	Updated personnel training record (10.5)
REV03	JAN 2014	Littlehampton Harbour	Updated contact details (9.1-9.2)
REV04	NOV 2016	Littlehampton Harbour & Adler and Allan Ltd	Full review including National Contingency Plan updates
REV05	JULY 2017	Littlehampton Harbour - DHM	Tier 1 resources (9.4) and Refuelling Operations (11.3 – 11.4)
REV06	AUG 2018	Littlehampton Harbour - HM	New joining staff training update (10.5)
REV07	JUL 2020	Littlehampton Harbour - HM	Updated contact details (9.1-9.2) Staff training update (10.5)
REV08	MAR 2021	Littlehampton Harbour - HM	Updated notification contacts post Tier 2 IME (9.1-9.2)
REV09	JAN 2022	Littlehampton Harbour - HM	Various minor updates to connected plans/contact details/equipment held by others following 5yr recertification consultation in Dec 2021

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# **SECTION 1**

# INTRODUCTION

	Contents
1.1	Statutory Requirement
1.2	Purpose of the Plan
1.3	Scope of the Plan
1.4	Interfacing Oil Pollution Contingency Plans
1.5	Consultation
1.6	Classification of Oil Spills
1.7	Places of Refuge

#### 1. Introduction

#### **1.1 Statutory Requirement**

This Oil Spill Contingency Plan has been developed to conform with the Merchant Shipping (Oil Pollution Preparedness, Response and Co-operation Convention) Regulations 1998, SI 1998 No. 1056, which entered into effect on the 15th May 1998. The plan clearly defines the statutory responsibilities placed on the Harbour Authority for responding to oil pollution within the harbour area.

#### **1.2 Purpose of the Plan**

The plan is provided to assist the Harbour Authority and other organisations in dealing with an accidental discharge of oil. Its primary purpose is to set in motion the necessary actions to stop or minimise the discharge and to mitigate its effects. Effective planning ensures that the necessary actions are taken in a structured, logical and timely manner.

This plan guides the Harbour Master and his Deputy through the decisions which will be required in an incident response. The tables, figures and checklists provide a visible form of information, thus reducing the chance of oversight or error during the early stages of dealing with an emergency situation.

For the plan to be effective, it must be:

- familiar to those with key response functions in the Harbour;
- regularly exercised; and,
- reviewed and updated on a regular basis.

This plan uses a tiered response to oil pollution incidents. The plan is designed to deal with Tier One and Tier Two incidents and to provide guidance for the response to a Tier Three incident. Where a spillage is associated with a wider emergency, then additional factors involving the safety of personnel will take precedence over the pollution response. The salvage and casualty management of any vessel, which poses a threat of pollution are priority considerations.

During oil spill response activities account must be taken of the following:

- site hazard information;
- adherence to permit procedures;
- spill site pre-entry briefing;
- boat safety;
- COSHH Regulations and material safety data sheets;
- personal protective equipment needs;
- heat stress, cold stress and hypothermia; and
- decontamination.

#### **1.3** Scope of the Plan

The plan details the contingency arrangements for responding to actual or threatened oil pollution incidents within jurisdictional limits of Littlehampton Harbour. The harbour limits are illustrated in Figure 1.1.

The response strategy for the Littlehampton Oil Spill Contingency Plan (OSCP) has been developed taking into account the spill risks and possible sources of spillage associated with the operations taking place within the Harbour Masters statutory jurisdictional area.

The Plan consists of three important elements:

#### Section 1: Strategy Plan (Sections: 1 & 2)

Describes statutory requirements and the purpose and scope of the plan, including the geographical coverage. It shows the relationship of the plan to the National Contingency Plan for Marine Pollution from Shipping (NCP) and plans of local organisations. Also included are perceived risks, and the Incident Response Organisation and responsibilities of individuals for defined categories of spill.

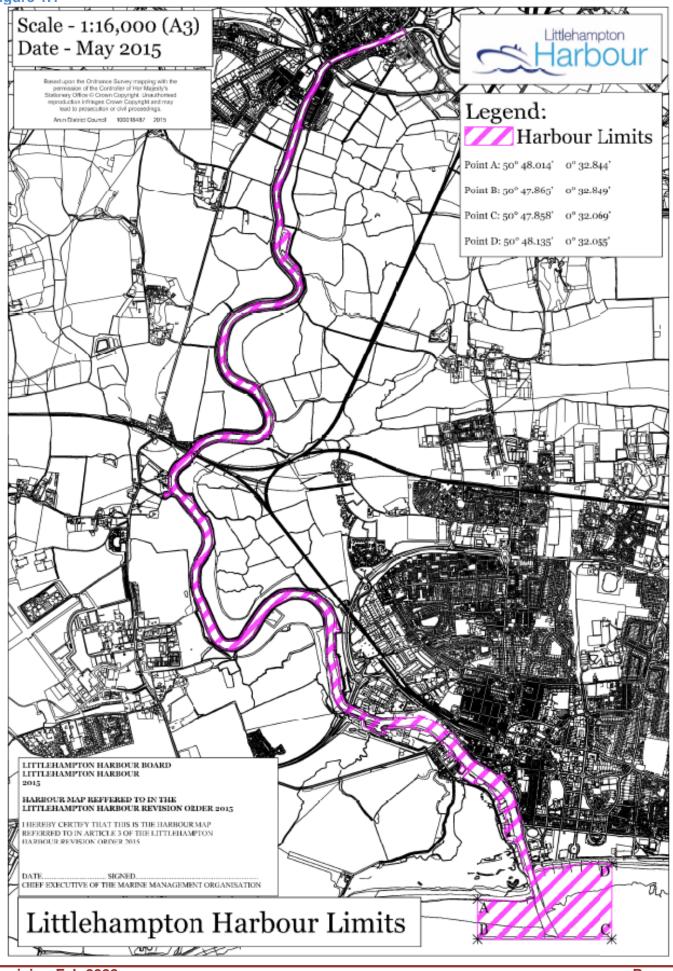
#### Section 2: Action Plan (Sections 3-8)

Sets out the emergency procedures that will allow rapid mobilisation of resources and an early response to the situation.

#### Section 3: Data Directory (Section 9-15)

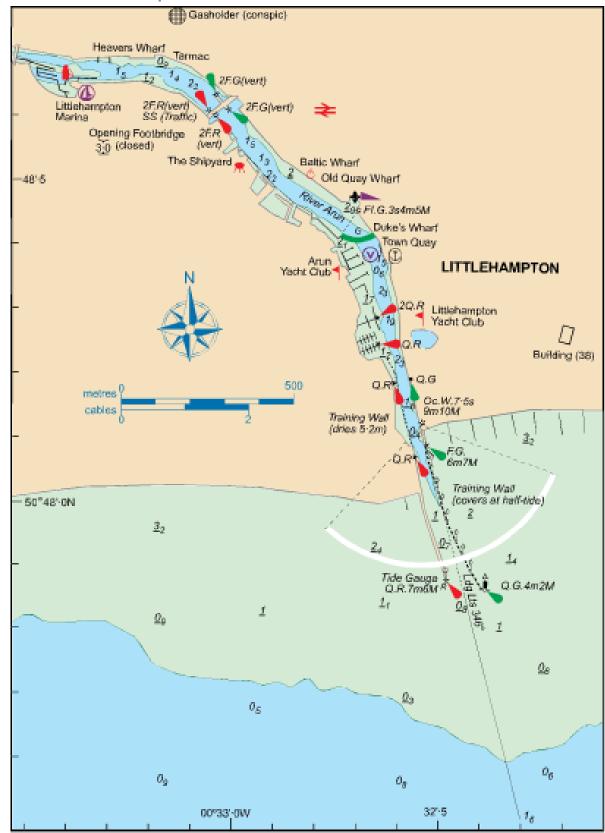
Contains all supplementary information relevant to the performance of the plan such as; Contact Directory, Training and Exercise Policy, Risk Assessment, Sensitivity maps, Roles and Responsibilities of Government and Other Agencies, Resources Directory and Product Information Sheets.





**Revision Feb 2022** 

The River Arun and the estuary thereof below the line of high water mark of ordinary spring tides on the south side of Arundel Bridge, the seaward boundaries being defined by point A (North 50 degrees 48.014 minutes West 0 degrees 32.844 minutes) point B (North 50 degrees 47.865 minutes West 0 degrees 32.849 minutes point C (North 50 degrees 47.858 minutes West 0 degrees 32.069 minutes) and point D (North 50 degrees 48.135 minutes West 0 degrees 32.055 minutes).



#### Figure 1.2: Chart of Littlehampton

**Revision Feb 2022** 

#### 1.4 Interfacing Oil Spill Contingency Plans

#### 1.4.1 Port Plan

No.	Owner	Title
1.	Littlehampton Harbour Board	Emergency Plan

#### **1.4.2 Local Authority Plans**

In the event of actual or threatened shoreline impact, the appropriate local or County Authority oil pollution plan will be implemented. The level of activation will be dictated by the incident classification.

The interfacing plans are:

No.	Owner	Title
1	West Sussex County Council	Coastal Pollution Plan
2	West Sussex County Council	Corporate Response and Recovery Plan
3	Arun District Council	Generic Emergency Plan
4	Arun District Council	Coastal Oil & Pollution Plan
5	Littlehampton Town Council	Emergency Plan

#### 1.4.3 Adjacent Areas / Operations Oil Spill Contingency Plans.

Inherited oil spill incidents may mean that a different oil spill contingency plan has been activated. If this is the case, the Littlehampton Harbour OSCP should interface closely with:

The adjacent plans are:

No.	Owner	Title
1.	Chichester Harbour Conservancy	OPRC Compliant Oil Spill Contingency Plan
2.	Shoreham Harbour	OPRC Compliant Oil Spill Contingency Plan

#### 1.4.4 National Contingency Plan

In the event of an oil spill incident, which calls for a regional level response under Tier 2 or a Tier 3 response, the Maritime and Coastguard Agency (MCA) may decide to implement the National Contingency Plan (NCP). In this event, the MCA will take control of at-sea counter pollution measures from either the Harbour Masters Office in Littlehampton or from their own Marine Response Centre (MRC). Any formal hand-over of responsibility to MCA for dealing with an oil pollution incident should be formally documented. If required the Harbour's oil spill response resources and facilities would be made available to MCA.

A Tactical Coordinating Group (TCG) would be established and would exercise overall co-ordination of the shoreline clean up in accordance with the procedures and guidance given in the National

Contingency Plan. The appropriate members of the Oil Spill Management Team will re-deploy to the TCG and/or the MCA MRC as required.

The NCP can be accessed via the link below:

https://www.gov.uk/government/publications/national-contingency-planncp

#### 1.4.5 Standing Environment Group

The NCP plan may activate the Environment Group, specifically the "South East Environment Group". https://www.gov.uk/government/publications/standing-environment-groups

#### 1.5 Consultation

The following authorities and organisations are considered to be statutory consultees and have been formally consulted with during the preparation of this plan:

- Natural England
- Environment Agency
- Marine Management Organisation
- West Sussex County Council
- Arun District Council
- Littlehampton Town Council

#### 1.6 Classification of Oil Spills

Oil spills will be categorised in accordance with the internationally recognised three Tier, classification system:

#### TIER 1

Small operational spillage which can be dealt with using the resources immediately available.

#### TIER 2

Medium sized spillage which requires a substantial commitment of the Plan resources and which may involve regional assistance.

#### TIER 3

Large spillage which may exceed the full resources of the Plan and which may require national assistance and / or the implementation of the NCP and the formation of a TCG.

Irrespective of the spill classification, Form CG77 POLREP will be completed and submitted to HM Coastguard by the Duty VIS Officer for doubtful, probable and confirmed oil spills.

#### **1.7** Places of Refuge

The UK has an obligation under the Safety of Life at Sea Convention (SOLAS) to provide shelter for maritime casualties which may require use of waters within a port as a place of refuge (PoR). The MCA and SOSREP are responsible for discharging the SOLAS obligation and have requested that harbour authorities make assessments and plans for this eventuality and incorporate them as an

adjunct to their OPRC Plans. To assist with an assessment the information listed below follows the headings prompted by the Guidelines for Ports.

- Littlehampton Bar has a charted depth of 0.9 acd.
- Mooring facilities are generally geared to vessels of less than 18m loa.
- The holding ground is generally good largely comprising mud, sand and shingle.
- Tidal streams can be strong reaching a published maximum of 4.5 knots at the harbour entrance.
- For vessels drawing less than 2 metres shelter can be found from the wind, regardless of direction.
- Littlehampton Harbour is an extremely popular venue for small boat sailing and there are 500 vessels over 3m registered in the harbour. It is also very popular with walkers, bird watchers and people enjoying the west beach
- There are 2 marinas, 3 sailing clubs and associated infrastructure of boatyards and engineers required to service the leisure fleet.

With regards to the availability of facilities

- Berths and jetties are designed for leisure vessels less than 18 m loa
- There are no harbour tugs
- Tier 1 stocks as listed in 14.1
- No dry docks, and repair facilities are geared towards small leisure vessels.

# **SECTION 2**

### **INCIDENT RESPONSE ORGANISATION**

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2.3	Tier 1
2.4	Tier 2 / 3
2.5	Tactical Coordinating Group (TCG)
2.6	Setting up the Regional Response Units
2.7	The Salvage Control Unit

#### 2 Incident Response Organisation

#### 2.1 Harbour Master

The Harbour Master (or his nominated deputy) has overall responsibility for the conduct of oil spill response operations and for vessel casualty management within the Harbour. He will be supported in his role by Harbour personnel and by the Oil Spill Management Team.

#### 2.2 Oil Spill Management Team (OMT)

An Oil Spill Management Team (OMT) will be established at the Harbour Office, under the chairmanship of the Harbour Master, for Tier Two and Tier Three incidents.

Depending on the circumstances of the incident, an OMT may be set up for a Tier One response. The OMT will convene at the Harbour Office and will provide the command and control structure to co-ordinate and direct the incident response.

The OMT will consist of representatives from the following organisations and authorities:

Management Team	Support Team
Harbour Authority:	Harbour:
Harbour Master	Marine Engineer
Deputy Harbour Master	Marine Operations Assistants
	Part Time Administrator
Tier Two Contractor:	Part Time Clerk
Adler and Allan	Part Time Patrol Staff
External Bodies:	Local Authority:
MCA (if appropriate)	W. Sussex County Council
Police (if appropriate)	Arun District Council
Local Fire Service (if appropriate)	Littlehampton Town Council
	External Bodies:
	Natural England
	Environment Agency
	Marine Management Organisation
	Public Health England

In the event of a Tier Three incident and the implementation of the National Contingency Plan, the OMT will assist MCA and appropriate members of the OMT will re-deploy to the Tactical Coordinating Group (TCG).

The Harbour Office Incident Control Centre will remain active unless superseded by the MCA MRC.

The Harbour Master will require the transfer of responsibility for managing the incident response to be formally documented prior to relinquishing overall control of counter pollution measures to MCA.

#### 2.3 Tier One Incident

The Duty Harbour Master will decide whether or not to set up an Oil Spill Management Team during a Tier One incident.

The Duty Harbour Master will be responsible for initiating the appropriate response actions and ensuring that the management of the response is in line with the day to day management structure of the Harbour.

#### 2.4 Tier Two / Three Incident

Regardless of the location of a Tier Two / Three incident, the Oil Spill Management Team (OMT) should convene.

Representatives from interested parties will differ, dependent upon the tier and specific circumstances.

The appropriate members of the OMT (including external organisations), who may be represented are on the previous page.

#### 2.5 Tactical Coordinating Group (TCG)

The implementation of the NCP may involve MCA agreement to the establishment of a TCG, under the chairmanship under the chairmanship of a senior Local Authority Officer to co-ordinate shoreline clean-up activities with the Duty Harbour Master.

The Harbour Master will offer the Harbour Office or adjacent facilities for use as a TCG but should it be located elsewhere, appropriate members of the OMT will re-deploy to the TCG as requested by MCA, the Duty Harbour Master and the Local Authorities.

#### 2.6 Setting up the National Response Units

Reference should also be made to the National Contingency Plan.

During the management of a counter pollution response to an incident, the hierarchy of aims is:

- to prevent pollution occurring;
- to minimise the extent of any pollution that occurs; and
- to mitigate the effects of that pollution.

Separate, but linked, response units direct operations. There may be units to handle salvage (the Salvage Control Unit (SCU)), action at sea (the Marine Response Centre (MRC)) and action on the shore (the TCG). An Environment Group provides environmental advice to all of these units. Not all incidents require all these response units. However, the arrangements for managing the incident must allow for the possibility of salvage operations, action at sea and action on shore taking place simultaneously.

The accommodation for each unit should have sufficient telephone lines to enable full liaison with outside bodies. Internet access is essential. Fixed VHF equipment would be desirable. Television and video facilities can be extremely useful for playing back videotapes from aircraft and helicopters, as well as watching local and national coverage of the incident. Wall space to display several charts and situation boards is essential. Those holding responsibility for keeping the situation boards continuously updated should be aware that their objective is to present a summary of the current situation and response actions being taken.

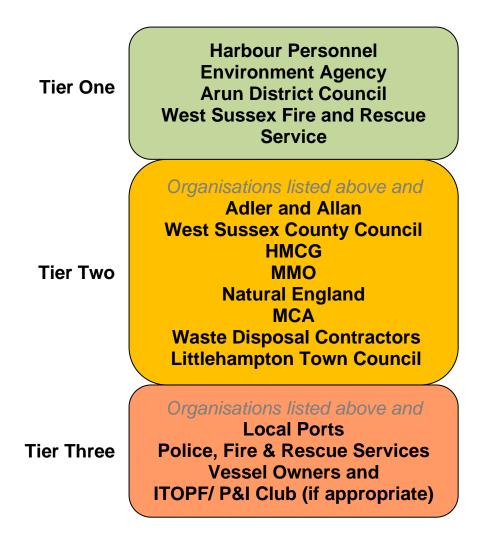
#### 2.7 The Salvage Control Unit (SCU)

The Secretary of State's Representative (SOSREP) will decide whether the salvor has the capability to carry out the necessary salvage actions, in terms of personnel and material. He decides whether it is necessary to set up a SCU. If the size of the incident merits the establishment of a SCU, SOSREP travels to the scene of the incident at an appropriate time.

The members of the SCU are as follows:

- SOSREP;
- the salvage Manager from the salvage company appointed by the ship owner;
- the Harbour Master, if the incident involves a harbour or its services;
- a single representative nominated by agreement between the ship owner and the insurers (for both the physical property and their liabilities);
- a Counter Pollution and Salvage Officer (CPSO);
- an Environmental Liaison Officer, nominated by the Chair of the Environment Group; and
- if SOSREP decides to appoint one, SOSREP's personal salvage adviser.

#### Representation of the OMT:



## **SECTION 3**

## **REPORTING PROCEDURES**

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3.1	Use of Section
3.2	Notification Table
3.3	POLREP CG77
3.4	Oil Spill Progress Report
3.5	Tier Two Contractors Briefing Report

#### 3 **Reporting Procedures**

#### 3.1 Use of Section

This section sets out the reporting procedures that should be followed in the event that an oil spill occurs within Littlehampton Harbour.

The extent of notification of external organisations and authorities will be determined by the initial classification of the incident. Responsibility for external notification and the completion of POLREP CG77 rests with the Harbour Master.

The statutory requirement, placed on the Harbour Master under Statutory Instrument 1998 No. 1056, to report all actual or probable discharges of oil to the sea to MCA - HM Coastguard is noted:

#### Extract from Statutory Instrument 1998 No. 1056

#### **Reporting of incidents: harbour authorities and oil handling facilities**

6. - (1) A harbour master, or other individual having charge of a harbour, and any individual having charge of an oil handling facility (except those which are pipelines), who observes or is made aware of any event involving a discharge of or probable discharge of oil, or the presence of oil in the sea shall without delay report the event, or the presence of oil, as the case may be, to MCA -HM Coastguard

(2) A report under this regulation shall so far as appropriate as to form and content comply with the standard reporting requirements.

#### 3.2 Notification Table.

For the telephone numbers of the following organisations, refer to section 9, contact directory.

Organisation	Tier
HM Coastguard (via CG77)	1/2/3
Environment Agency	1/2/3
Littlehampton Town Council	2/3
Waste Disposal Contractors	2/3
Natural England	1/2/3
Arun District Council	1/2/3
W. Sussex County Council	2/3
Marine Management Organisation	2/3
Adler and Allan	2/3
Police	2/3
Fire and Rescue Service	1/2/3
Other Specialists	2/3
Communication Companies	3

#### 3.3 POLREP CG77

	INSTRUCTIONS FOR COMPLETING FORM CG77 (POLREP)		
PA	PART 1 – INFORMATION WHICH SHOULD BE PROVIDED IN AN INITIAL REPORT		
	CG77 POLREP		
Α.	CLASSIFICATION of report - (I) Doubtful, (ii) Probable, (iii) Confirmed.		
В.	DATE and TIME pollution observed/reported, and identity of observer/reporter		
C.	POSITION (Always by LATITUDE & LONGITUDE) and EXTENT of pollution. If possible, also state range and bearing from a prominent landmark or Decca position and estimated amount of pollution (e.g. size of polluted area, number of tonnes of oil spilled or number of containers, drums etc. lost). When appropriate, give position of observer relative to the pollution.		
D.	TIDE, WIND speed and direction.		
E.	Weather conditions and SEA state.		
F.	F. CHARACTERISTICS of pollution. Give type of pollution e.g. oil (crude or otherwise), packaged or bulk chemicals, or garbage. For chemicals 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, and discolouration of sea, visible vapours etc. should be given.		
G.	SOURCE and CAUSE of pollution e.g. from vessel or other undertaking. If from vessel, say whether as a result of apparently deliberate discharge or a casualty. If the latter, give a brief description. Where possible give name, type, size, nationality and Port of Registry of polluting vessel. If vessel is proceeding on its way, give course, speed and destination.		
Н.	Details of VESSELS IN THE AREA. To be given if polluter cannot be identified and the spill is considered to be of recent origin.		
Ι.	NOT USED		
J.	Whether PHOTOGRAPHS have been taken and/or SAMPLES for analysis.		
К.	REMEDIAL ACTION taken or intended to deal with the spillage		
L.	FORECAST of likely pollution (e.g. arrival on beach), with estimated timing.		
М.	NAMES of those informed other than the addressee		
N.	Any OTHER relevant information (e.g. names of other witnesses, references to other instances of pollution pointing to source).		

#### To be sent via email to zone15@hmcg.gov.uk

DART	PART II - SUPPLEMENTARY INFORMATION TO BE PROVIDED LATER		
(This section may be disregarded when POLREPs are for UK internal distribution			
only)			
0.	RESULT of SAMPLE analysis		
Ρ.	RESULTS of PHOTOGRAPHIC analysis		
Q.	RESULTS of SUPPLEMENTARY ENQUIRIES (e.g. inspections by Surveyors, statement of ship's personnel etc. if applicable)		
R.	RESULT OF MATHEMATICAL MODELS		
	NOTES		
1.	POLREPs should be used for oil, chemical or dangerous substance spillages and for illegal discharges of garbage.		
2.	All messages should be pre-fixed by the codeword POLREP followed by a serial number issued by the originator. Subsequent updating or amplifying reports should repeat this information and add a SITREP number, e.g. "POLREP 21/SITREP 1" would be followed by "POLREP 21/SITREP 2". The first report is assumed to be Sitrep 1 with subsequent reports being numbered sequentially.		
3.	<b>3.</b> Groundings, collisions or breakdowns of oil tankers or other vessels carrying pollutants, including bunkers, should be treated as potentially serious incidents with a classification of "PROBABLE" until proved otherwise. The use of link calls or inmarsat calls to Masters of ships is often the best method of obtaining information.		
4.	Local C/P alerting plans should establish the following responsibilities :		
(a)	(a) Coastguard to inform the County Oil Pollution Officer (COPO) in England and Wales, the Local Oil Pollution Officer in Scotland, Department of Environment in Northern Ireland, or the appropriate authority in the Channel Islands or Isle of Man where there is an immediate or potential risk of oil coming ashore in their area.		
(b)	In England, Scotland and Wales, HM Coastguard to inform COPOs/LOPOs in the counties immediately adjacent to counties at risk, that they may be at risk.		
5.	Although Chief Surveyors of Marine Regions are not directly involved with C/P operations, it is necessary to include them as addressees to give them notice of possible involvement with salvage, surveying a casualty or possible prosecutions under current regulations.		
6.	Care should be taken to avoid undue escalation of UNCONFIRMED pollution incidents with consequent misleading publicity.		

#### 3.4 Oil Spill Progress Report

Oil Spill <u>Progress</u> Report				
Incident Name:				
Updated by:				
Date:	-	Tim	e (local):	
Summary of Incider	nt Response Operations:			
Summary of Incide	ent Response Resource	e U	tilisation:	
Number of Recover	ry Devices:		Length of Booms in Use:	m
Sorbent Used:		kg	Number of Storage Devices:	
Number of Personn	el:		Number of Vessels:	
Number of Vehicles:				
Specialist Equipme	nt:			
Oil Spill Balance S	Sheet:			
Total amount of oil	spilled:			litres/tonnes
Total amount of oil	recovered:			litres/tonnes
Outstanding amour	Outstanding amount of spilled oil:			litres/tonnes
Mass balance:				
Estimated Natural Weathering: litres/tonne		litres/tonnes		
Mechanically agitated:			litres/tonnes	
Skimmer recovered	Skimmer recovered			litres/tonnes
Sorbent recovered:			litres/tonnes	
Manually recovered	ł:			litres/tonnes
Other			litres/tonnes	

# **SECTION 4**

# **ACTION SHEETS**

	Contents
4.1	Observer of the Incident
4.2	Duty Harbour Master / Harbour Supervisor
4.3	Harbour Master
4.4	Oil Spill Incident Checklists

#### 4. Action Cards

The following section contains action cards and checklists for use during an oil spill incident.

The action cards follow a methodical checklist styles, in order that they effectively guide the person fulfilling the role through the actions that they are expected to take and also the responsibilities falling upon them during an oil spill response incident.

The job cards are split into four sections:

- Alert This section lists the different notifications that will be required, both internally and externally.
- Initial Actions Those that will be required to be carried out immediately to initiate the response operation.
- Further Actions Those that will be required to be carried out when the response operation is underway.
- Final Actions Those that will be required to be completed before the response operation can be officially stood down.

Action cards can be found for the following positions:

- **1.** Observer of the incident
- 2. Duty Harbour Master
- 3. Harbour Master

4.1	Observer of the Incident	
Step	Actions Additional Information	
Alert	<ul> <li>Notify:</li> <li>Duty Harbour Master</li> </ul>	<ul> <li>If out of hours, contact Duty HM via duty mobile telephone or via HM Coast Guard to alert Duty Harbour Master of incident</li> <li>VHF Radio, telephone office/mobile or via MRSC (HM Coast Guard)</li> <li>Provide as much information as possible</li> <li>Location of Spill, oil type, estimated quantity, source of spill</li> <li>Use Log Sheet C4</li> </ul>
Initial Actions	IF SAFE to do so, attempt to either stop or reduce leakage	<ul> <li>DO NOT:</li> <li>allow naked flames</li> <li>allow operation of non-intrinsically safe equipment</li> <li>allow oil to directly contact skin</li> <li>approach spill site downwind</li> </ul>
Further Actions	<ul> <li>Standby to guide response personnel to scene and assist if possible</li> <li>Act on instructions of the Harbour Master or his deputy.</li> </ul>	
Final Actions	<ul> <li>When finished / unable to lend further assistance, submit log to the Harbour Master</li> </ul>	Include: • time of events • what you saw • what you did • who arrived and when • what they did Use Log Sheet C4

4.2	Deputy Harbour Master	
Responsibilities	<ul> <li>DHM to alert Harbour Master</li> <li>DHM to alert A&amp;A and HMCG</li> <li>Verify classification (confirm / amend)</li> <li>Provide accurate situation reports to the Harbour Master</li> <li>Complete CG 77 and submit to HM Coastguard (cc. Harbour Master)</li> <li>Collect evidence and / or statements</li> <li>Assume role of On Scene Commander</li> </ul>	
Step	Actions	Additional Information
Alert	Harbour Master	VHF Radio, Mobile, Telephone
Initial Actions	<ul> <li>Proceed to incident location</li> <li>Provide on scene co-ordination of the incident response</li> <li>Investigate cause / source of spill</li> <li>Communicate all information to the Harbour Master</li> <li>Take samples of spilled oil</li> <li>Initiate personal log</li> <li>Take photographic evidence</li> <li>Collect evidence and take statements</li> </ul>	Stopped or ongoing see STOp Notice 4/2001 (Table C.5 – 4.4.5) also see appendices. Use Sample Kit – C5 – 4.4.5 Use Log Sheet – C3 – 4.4.3 and C4 – 4.4.4
Further Actions	<ul> <li>Provide detailed situation reports to the Harbour Master</li> <li>Survey the shoreline</li> </ul>	
Final Actions	<ul> <li>Decontamination of personnel and equipment</li> <li>Submit personal log to the Harbour Master</li> <li>Attend debrief</li> </ul>	Use Log Sheet C4

4.3	Harbour Master	
Responsibilities	<ul> <li>Confirm / amend initial classification</li> <li>Ensure completed CG77 submitted to MCA</li> <li>Manage the Littlehampton Harbour Board response</li> <li>Authorise expenditure</li> <li>Mobilise Tier 2 Contractor (A&amp;A)</li> <li>Liaise with Environment Group (if appropriate)</li> <li>Convene Oil Spill Management Team</li> <li>Approve Press Statements</li> <li>Amend Contingency Plan</li> </ul>	
Step	Actions	Additional Information
Alert	<ul> <li>Ensure completed CG 77 POLREP submitted to MCA</li> <li>Tier 2 Contractor – A&amp;A</li> <li>Initial calls to External Organisations as required</li> </ul>	via CG77 see mobilisation form section (3.5) EA, Local Authorities, A+A and Emergency Services
Initial Actions	<ul> <li>Verify / amend spill classification</li> <li>Liaise with the Deputy Harbour Master for updated SITREP</li> <li>Convene Oil Spill Management Team</li> <li>Authorise mobilisation of Tier 2 Contractor</li> </ul>	
Request Additional Support from Arun District Council	<ul> <li>Specifically:</li> <li>Office support x 2 (1 x loggist and 1 x office support)</li> <li>PR and media support (even if off-site)</li> <li>Representation on WSCC SRF TCG</li> <li>To augment or relieve Harbour 2P Staff</li> <li>Radio comms support if necessary</li> </ul>	
<ul> <li>Ensure full contact list notification completed</li> <li>Chair the Oil Spill Management Team meetings</li> <li>Liaise with SRF and Environment Group (if appropriate)</li> <li>Constantly review the strategy being employed and advise of changes where necessary</li> <li>Consider waste management</li> <li>Consider situation to be called end point</li> <li>Approve all expenditure commitments</li> <li>Brief Press Representative as required</li> </ul>		MMO, Natural England et al.
Final Actions	<ul> <li>Terminate the clean-up</li> <li>Collate personal logs.</li> <li>Prepare the incident report.</li> <li>Hold full debriefs involving all members.</li> <li>Amend contingency plan(s) as required.</li> </ul>	Log Sheets C4

#### 4.4 Oil Spill Incident Checklists

The following pages contain checklists designed to ensure consistency for all response personnel throughout the incident response. The checklists are as follows:

#### • Oil Spill Assessment Checklist (C1).

Checklist to ensure that the initial assessment of the oil spill is accurate and all aspects likely to affect the classification, quantity and likely fate of the spilled oil are investigated thoroughly.

#### • Incident Briefing Checklist (C2).

Checklist to ensure that all personnel involved in the Incident Management are given a thorough briefing of the incident, and are then able to give a consistent and effective briefing to personnel falling under their management during the incident.

#### • Personal Log Checklist (C3).

Checklist to ensure that all personnel involved in the incident response record correct and relevant information throughout the operation and consistent logs are then able to be submitted to the Duty Harbour Master upon completion for use in subsequent reports and actions.

#### • Incident Log Sheet (C4).

This log sheet should be copied and used by the Log keeper in order that an accurate log can be kept of the incident for use as required during and after the incident.

#### • Oil Spill Sampling Checklist (C5).

This checklist should be used a guidance for taking samples of the spilled oil that may be used legally at a later date. By following this checklist ensures that sufficient sample is taken and that it is packaged and labelled correctly. For further information regarding sampling, refer to STOp notice number 4/2001, which is appended to this document.

#### 4.4.1 Oil Spill Assessment Checklist

<b>C1</b>	
-	

### **Oil Spill Assessment Checklist**

This checklist is designed to assist those personnel who have the responsibility of initially assessing and subsequently assessing the oil spill incident. These personnel are likely to be:

- Deputy Harbour Master
- Harbour Master

STEP	GUIDANCE
Assess safety hazards	
Determine Oil Spill Source	If source unknown, investigate with care. Instigate actions to stop spillage at source IF SAFE TO DO SO!
Estimate quantity of Oil released if exact amount unknown	
<ul> <li>Assess prevailing and if possible future weather conditions.</li> </ul>	Determine: • wind speed and direction • state of tide and current speed • sea state
<ul> <li>Predict oil fate; determine direction and speed of oil movement in addition to weathering characteristics</li> </ul>	

# **C2**

### **Incident Briefing Checklist**

This checklist is designed to facilitate an effective response team briefing and should be used by supervisory personnel				
STEP	NOTES			
Specify Safety Hazards				
Extent of Problem	Size of spillage, type of oil, source			
Slick trajectory	Tide and Wind conditions			
<ul> <li>Response actions</li> </ul>	Strategies to utilise			
Resource mobilisation	Equipment and personnel			
Planning Cycle	Meetings schedule			
<ul> <li>Additional Information</li> </ul>	Communications, Waste Disposal, Weather Forecast			

<b>C</b> 3	Personal Log Checklist					
This c	This checklist is designed to facilitate and provide consistency in the response teams log keeping.					
ITEM		GUIDANCE				
Safe	ety Hazards	Note potentially unsafe response activities and measures taken to mitigate the hazard. Record all accidents/near miss incidents regardless of how/potentially how serious result				

### **Personal Log Checklist**

ITEM	GUIDANCE
Safety Hazards	Note potentially unsafe response activities and measures taken to mitigate the hazard. Record all accidents/near miss incidents regardless of how/potentially how serious result.
Initial Notification	Record time of notification of oil spill incident and the name of the person informing you.
<ul> <li>Daily Activities</li> </ul>	<ul> <li>Keep a daily record of all response activities undertaken, including time and location.</li> <li>Also include: <ul> <li>Meetings attended</li> <li>Instructions received / given</li> <li>Site visits and movements</li> <li>Contacts with outside agencies</li> </ul> </li> </ul>
Personal Contacts	Generate a list of relevant contacts made, including contact details.
D Photographic / Video records	Note time and location of any photographs / video taken.
Oil Distribution	Make sketches of oiled areas with notes.
□ Site Supervision	Keep a record of all staff under supervision, including hours of work etc. List all equipment utilised.
Expenditure Incurred	Record all expenditure and keep receipts.

	Incident Log sheet	
ne		
	Page Number	
-	Comment / Action / Detail	

|--|

### **Oil Spill Sampling Checklist**

This checklist is designed to give guidance on taking samples of spilled oil. By following this checklist, it will be possible to ensure that sufficient oil has been collected, packaged correctly, labelled correctly and handled in such a way that it may be used as part of a legal claim/prosecution.

ITEM	GUIDANCE
Number of samples required	By law, a single sample of the spilled oil should be collected. However, it would be desirable to take at least three samples.
Sample frequency	Whenever an incident is ongoing, at least one sample of spilled oil should be taken per day, where the oil pollution is on the water. Where shoreline impact has occurred, then one sample per every 1km of impacted shoreline should be taken per day.
Sample size	Generally, at least 500ml of liquid should be taken or in the case of polluted shoreline, at least 50 grams.
<ul> <li>Method of sampling</li> </ul>	Where the oil is free floating, it is imperative that the oil is skimmed from the waters surface, and that no excessive amount of water is recovered. Where oil has impacted on the shoreline then oil should be scraped from rocks etc and placed in the sample container.
Sealing of sample containers	Samples should be placed in screw top bottles and the top sealed with a means of ensuring that it cannot be tampered with, such as an adhesive label placed over the top and bottle.
Labelling of Samples	Sample bottle should be labelled in accordance with STOp notice number 4/2001 (appended to this document).
□ Information	The samples should be sent to the address given in the STOp notice. In addition to this, the MCA should be informed of the fact.

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# **SECTION 5**

# **RESPONSE GUIDELINES**

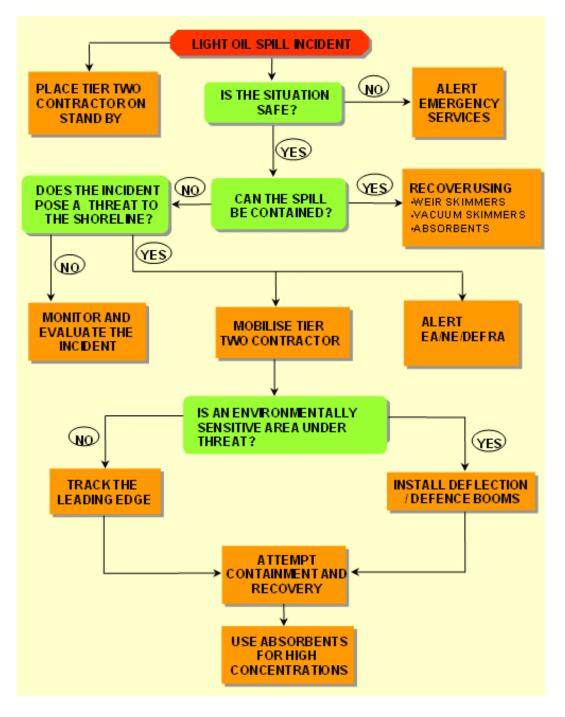
	Contents
5.1	Oil Spill Response Decision Flowchart (Light Oil Type)
5.2	Oil Spill Response Decision Flowchart (Heavy Oil Type)
5.3	Tactical Response Plans
5.4	Booming Plan
5.5	Response Strategies

#### 5 Response Guidelines

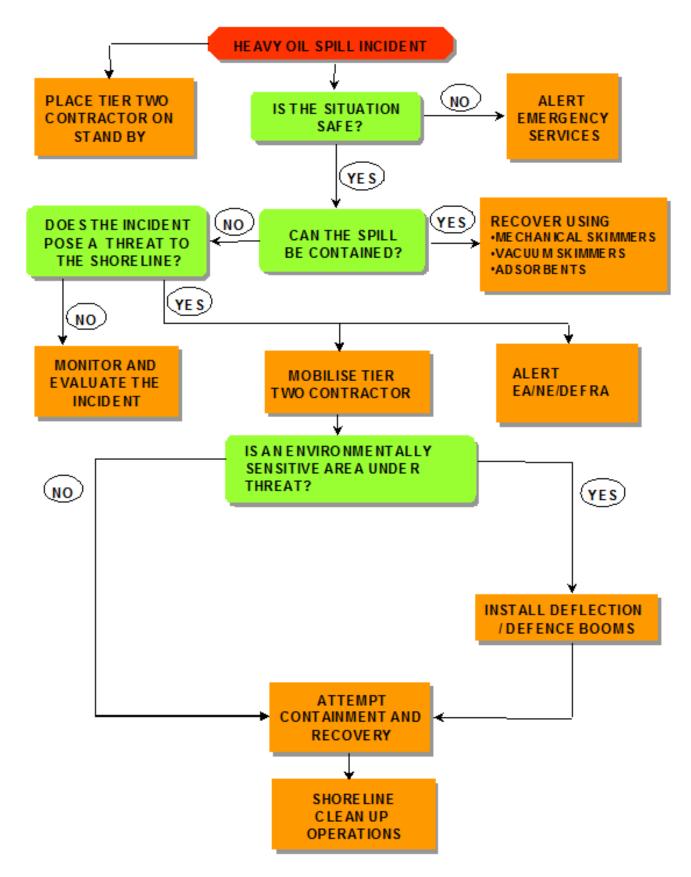
The following section gives details of the strategies to employ for the various types of oil spill incidents which could occur within Littlehampton Harbour jurisdictional waters. The section contains a flow chart that is designed to enable a swift decision to be made as to what strategy / tactics to employ in response to an incident dependent upon oil type and the location of the spillage.

By using the flow chart, it will be possible to determine which of the two Tactical Response Plans to employ. These Tactical Response plans give details of what tactics should be employed and considerations / requirements that should be complied with or made before implementing the plan.

#### 5.1 Light Oil Type Spill Response Guidelines Flowchart



#### 5.2 Heavy Oil Type Spill Response Guidelines Flowchart



#### 5.3 Tactical Response Plans

TACTICAL RESPONSE PLAN 1							
Location: Open Water / Approaches	Oil Type: Light Oil						
Primary Strategy: Monitor	Secondary Strategy: Agitation / Absorbents						

#### Introduction:

Light oils (such as diesel) are not as volatile as spirit, but still evaporate and disperse quite rapidly in the correct environment. It is generally acceptable to monitor the spillage and allow it to disperse / evaporate naturally, where there is little risk of shoreline impact. It is also possible to assist the natural dispersion / evaporation by agitating the oil spill manually.

Safety:

- Stop all operations in the area
- Prohibit smoking and Naked Flames
- Ensure all personnel wear full PPE
- Persons using vessels should use lifejackets.

#### Tactical Response:

- Establish a vessel exclusion zone around the spillage be prepared to change the position of this
  exclusion zone as the spillage moves.
- If possible, arrange Aerial Surveillance to monitor the size and movement of the spillage.
- If this is not possible, monitor the spillage from a vessel
- If the oil spill does not appear to be approaching the shoreline, do not undertake an active response, merely monitor the situation on a regular basis.
- If the spillage appears to be approaching the shoreline, approach the spillage by vessel from upwind and agitate the spillage by fire hose from vessels. It is also possible to use the vessels propeller wash and bow wave to assist dissipation.
- For large concentrations that are not evaporating / dispersing, use either absorbent booms or pads to remove these concentrations from the waters surface.

Considerations / Requirements:

- Specialist organisations are able to provide computer modelling of spillage's to give indications of the likely timescale for the spillage to evaporate / disperse naturally. Information that will be required to do this is: water temperatures, air temperature, wind speed, oil type, and approximate size of spillage.
- It is essential that all used absorbents be disposed of in the correct manner. The Environment Agency should be consulted with regard to this matter.

TACTICAL RE	SPONSE PLAN 2
Location: Open Water / Approaches	Oil Type: Spirit (Petroleum etc)
Primary Strategy: Monitor	Secondary Strategy: Agitation / Absorbents
Introduction:	
spillage, due to the many light ends. There is little	is likely to evaporate rapidly in the first few hours after a that can be done actively to recover spirit from the water to encourage the products to evaporate and disperse
Safety:	
<ul> <li>Stop all operations in the area</li> </ul>	
<ul> <li>Prohibit smoking and Naked Flames</li> </ul>	
<ul> <li><u>DO NOT</u> attempt to contain the spillage – allow</li> </ul>	•
<ul> <li><u>DO NOT</u> allow vessels to close to within 800 n</li> </ul>	
<ul> <li>Where possible, remain UPWIND of the spillag</li> </ul>	e
Tactical Response:	
<ul> <li>Establish a vessel exclusion zone around the exclusion zone as the spillage moves.</li> </ul>	e spillage - be prepared to change the position of this
<ul> <li>If possible, arrange Aerial Surveillance to monit</li> </ul>	tor the size and movement of the spillage.
<ul> <li>If this is not possible, monitor the spillage from</li> </ul>	a vessel
<ul> <li>Apart from Monitoring the Spillage DO NOTHII THE FIRST TWO HOURS.</li> </ul>	NG TO ACTIVELY RESPOND TO THE INCIDENT FOR
	y vessel from upwind and agitate the spillage by fire hose els propeller wash and bow wave to assist dissipation.
<ul> <li>It is important that any agitation should be direct</li> </ul>	cted seaward to protect shoreside habitats
Considerations / Requirements:	
<ul> <li>Specialist organisations are able to provide co likely time scale for the spillage to evaporate / or</li> </ul>	omputer modelling of spillages to give indications of the disperse naturally.
<ul> <li>Information that will be required to do this: Wat Approximate size of spillage.</li> </ul>	er temperature, Air temperature, Wind Speed, Oil Type,

	TACTICA	L RESPONSE PLAN 3						
Location: Open Wa	ter / Approaches	Oil Type: Heavy Oil						
Primary Strategy: I	Dispersant	Secondary Strategy: Containment / Recovery						
Introduction: Heavy Oils do not evaporate and disperse as readily as light oils and spirits. It is for this reason that they are referred to as 'Persistent Oils'. For oil spills like this in deep open water areas, the most appropriate strategy to employ is the use of Chemical Dispersant, if approved, to disperse the oil into the water column. Specialist equipment is required to contain and recover spilled oil. It should be noted that a mechanical recovery strategy is unlikely to have a high success rate. Although dispersant use may be the most appropriate strategy for oil spills of heavy oil or crude in open water offshore where the use of dispersant may prevent oil reaching shallow waters and the shoreline, it is not an appropriate strategy in shallow waters with a high nature conservation value and which sustain important fisheries, such as those present in Littlehampton.								
<ul> <li>Safety:</li> <li>Stop all operations</li> <li>Prohibit smoking a</li> <li>Ensure all persons</li> <li>Persons using vestions</li> </ul>	nd Naked Flames nel wear full PPE	rs edge should use lifejackets.						
<ul> <li>containment and r</li> <li>Due to the sensitive recovery is consid</li> <li>Contact should be Equipment.</li> <li>Establish a vessel as the spillage mo</li> <li>If possible, arrange</li> </ul>	ecovery ineffective or import re nature of the surroundin ered as the immediate resp made with A&A who will b exclusion zone around the ves.	g environment within Littlehampton Harbour containment and ponse option. The able to mobilise specialist Containment, Recovery and Storage the spillage – be prepared to change the position of this exclusion zone ponitor the size and movement of the spillage.						
<ul> <li>storage devices, the Potential Beachhee</li> <li>Specialist organisation</li> <li>Specialist organisation</li> <li>Information that with Approximate size</li> <li>Given the importation</li> <li>Given the importation</li> </ul>	all recovered oil is dispose then the Environment Agen ad storage sites are identif ations are able to provide of pillage to evaporate / dispo- ill be required to do this: W of spillage. In nature conservation inte se of or store oily waste m <b>not an option</b> because of	d of in the correct manner. If it is necessary to use temporary cy should be consulted regarding Waste Disposal Licensing. fied in LHB's Port Waste Management Plan. computer modelling of spillage's to give indications of the likely erse naturally. 'ater temperature, Air temperature, Wind Speed, Oil Type, rest of the area, Natural England should be consulted over aterial to ensure that sensitive areas are not affected. the sensitive nature of the surrounding environment within						
<ul> <li>Prevention of the of</li> <li>Removal of loose the risk of other had</li> </ul>	oil from the margins of the abitats being impacted;	<u>p Operations:</u> ats is always a better option that attempting removal; a habitat should, if access allows, always be undertaken to minimise amage than leaving the pollutant in situ.						

ΤΛΟΤΙΟΛ	AL RESPONSE PLAN 4
Location: Open Water / Approaches	Oil Type: Crude Oil
Primary Strategy: Dispersant	Secondary Strategy: Containment / Recovery
However, once the light ends have evaporat Although dispersant use may be the most a open water offshore where the use of dispers	appropriate strategy for oil spills of heavy oil or crude in deep sant may prevent oil reaching shallow waters and the shoreline, vaters with a high nature conservation value and which sustain
<ul> <li>Safety</li> <li>Stop all operations in the area</li> <li>Prohibit smoking and Naked Flames</li> <li>Ensure all personnel wear full PPE</li> <li>Persons using vessels / working on the vessel / working on the vessel</li></ul>	vaters edge should use lifejackets.
<ul> <li>and recovery is considered as the immed</li> <li>Contact should be made with A&amp;A who we storage Equipment.</li> <li>Establish a vessel exclusion zone around exclusion zone as the spillage moves.</li> </ul>	will be able to mobilise specialist Containment, Recovery and d the spillage – be prepared to change the position of this o monitor the size and movement of the spillage.
<ul> <li>temporary storage devices, then the Envi Licensing. Tarmac Wharf site has been i</li> <li>Specialist organisations are able to prov likely timescale for the spillage to evapor</li> <li>Information that will be required to do the Approximate size of spillage.</li> <li>Given the important nature conservation proposals to dispose of or store oily was</li> </ul>	disposed of in the correct manner. If it is necessary to use ronment Agency should be consulted regarding Waste Disposal dentified under the LHB Port Waste Management Plan. vide computer modelling of spillage's to give indications of the rate / disperse naturally. is: Water temperature, Air temperature, Wind Speed, Oil Type, interest of the area, Natural England should be consulted over te material to ensure that sensitive areas are not affected. e of the sensitive nature of the surrounding environment within
General Environmental Principles for All	Clean-up Operations:
<ul> <li>Removal of loose oil from the margins o minimise the risk of other habitats being</li> </ul>	abitats is always a better option that attempting removal; f the habitat should, if access allows, always be undertaken to impacted; is damage than leaving the pollutant in situ.

#### 5.4 Booming Plan

A number of sites have been investigated regarding their suitability for deploying oil booms in the event of an oil spill occurring either inside Littlehampton Harbour or to its approaches.

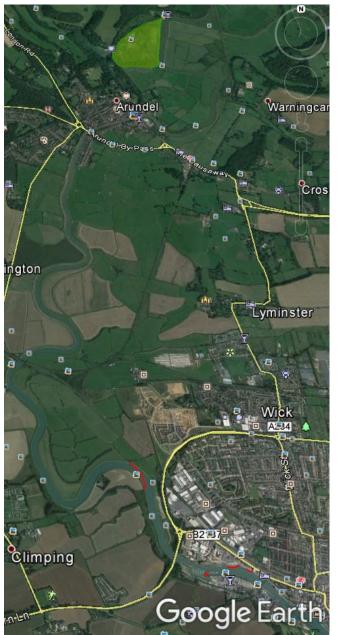
Although this oil plan has been produced to deal effectively with oil spills that might occur in the harbour, booming sites investigated also included those outside the harbour. The primary objective of this study was to identify sites that could be protected in the event of a serious spill occurring outside Littlehampton Harbour and the resources used would be those of other organisations. It is likely that in an event of a spill of this magnitude a TCG will already have been set up before the oil enters the harbour.

The use of effective booming within the harbour will be very limited and would only be effective during periods of slack water (tide of 6 knots). Ideally if at all possible oil protection measures should be taken outside of the harbour to prevent oil entering. These sites have had booming exercises carried out on them and proved successful due to access, tidal rip and anchoring.

Overview plans of booming sites with reference to local environmentally sensitive areas are shown below.



Overview of planned booming sites with Climping Beach SSSI LNR (in green)



Overview of Arundel Wetlands Centre (in green) upstream of A259 on River Arun

#### 1 - West Pier - Harbour Entrance

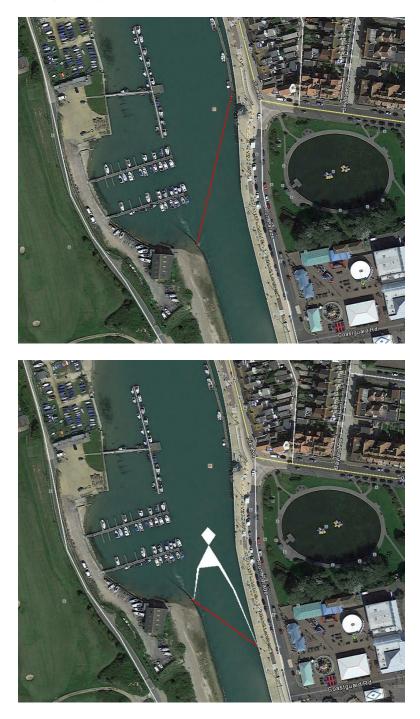
The tidal current flows eastward across the mouth of the River Arun for approximately 4.5 hours and an angled 'Inflation Skirt Boom' of approx. 200 metres could deflect the spill on to the East Beach as a sacrificial beach. Consultation would have to be taken by all parties prior to this deployment due to the predicted consequences. Teams would be required within the narrows to collect oil slippage through the barrier.



#### 2 - Inner Entrance to the Harbour - The Narrows

It should be noted that the deployment of this booming plan would be significantly influenced by tidal flow through the narrows. Anchorage point would be on the West Training Wall, approximately 660 metres inland from the entrance, the area between the black shed and the Littlehampton Yacht Club moorings, going off at approximately 20 degrees to the end of the Pier Road pontoon moorings. Approximately 120 metres of 'Inflation Skirt Boom' would be required to be deployed to make this boom effective and would result in pollutants being deflected into a cut by the Nelson Steps and Pier Road moorings for easy recovery.

Alternatively a Harbour Buster type boom could be deployed across the Narrows from the West Training Wall pile to a tidal riser in the sheet piling on the East Bank a width of approximately 40m (62m pile to pile).



#### 3 – Yacht Clubs and Public Slipway

As exercised in the March 2021 Incident Management Exercise, two inflatable booms in a chevron arrangement could be used to direct incoming oil on the flooding tide into a suitable collect area on the hard alongside the Public Slipway on the east bank.

It should be noted that the deployment of this booming plan would be significantly influenced by tidal flow and would not be appropriate on springs. It relies on inflatable boom to fixed to cleats and then towed by vessels/fixed by an anchor system mid channel. Anchorage points would be on the Side of the Public Slipway and the Littlehampton Yacht Club's upriver most pontoon pile. Approximately 90 metres of 'Inflation Skirt Boom' on the east bank and 50 meters on the west bank would be required to be deployed to make this boom effective.

Another advantage is that small vessel traffic into and out of the harbour can continue.



#### 4 - Upstream of A259 Road Bridge

This site has been proven on a flood tide, but the boom is best deployed at slack water due to the tidal flow. Designated anchor points ashore are found at either end. Once in position the boom would deflect the pollutant and allow effective skimming operations; around 300 metres of 'Inflation Skirt Boom' would be required for this operation.

Alternative arrangements in this area could use temporary staked anchor points on the riverbank as required by tidal height and flow.



#### 5 – Single Point Spillage

Perhaps the most likely scenario for Littlehampton is a single point spillage associated with the fuelling facilities at the Harbour Board workshops, Marina fuel berth or during bunkering ops on a commercial caller to the Tarmac wharves. It is possible to rig containment booms using cleats on pontoons or weighted anchor lines hung from bollards on the commercial quays. Between 50 to 100m of boom would be required for these responses and effectiveness would have to be monitored throughout ebb and flood cycles.



#### 5.5 Response Strategies

The previous flowcharts (5.1 & 5.2) indicate the different strategies that may be implemented depending on the type of oil spill. A brief explanation of these follows:

#### 5.5.1 Dispersant Use

The use of chemical dispersant is not permitted within the area covered by this plan. Under The Marine and Coastal Access Act 2009 and the Marine Licensing (Exempted Activity) Order 2011, it is a legal requirement that oil treatment products may only be used in English or Welsh waters if they have been formally approved for this purpose by MMO. In addition, specific permission from MMO must be obtained before any such products are used in shallow waters - these are defined as any area of the sea which is less than 20 metres deep, or within one nautical mile of such an area.

#### 5.5.2 Recovery using Weir skimmers

Weir skimmers function by creating a weir just below the oil / water interface. Oil flow is induced into the weir by gravity and pumped away. The main disadvantage of this system is the fact that usually, a great deal of water is also recovered posing problems for temporary storage.

#### 5.5.3 Recovery using Vacuum skimmers

As the name suggests, vacuum skimmers recover oil from the water surface by vacuum. Like the weir skimmer, this type of recovery is prone to recovering large quantities of water. Another disadvantage of this skimmer is that it cannot be used on oil types having a low flashpoint. This is due to the heat generated through friction possibly igniting the oil.

#### 5.5.4 Recovery using Sorbents

For relatively small oil spills, the oil can be recovered using sorbent material, either natural or synthetic. Sorbents come in a variety of designs, from pads to small lengths of boom. Sorbents pose a problem in that they can prove difficult to dispose of if used in large numbers, particularly if of the synthetic variety.

#### 5.5.5 Monitor and Evaluate

This response strategy is used where the spilled oil is inaccessible, or where a recovery operation may cause more damage to the environment than merely leaving the oil alone and allowing nature to take its course. If this strategy is employed, it is essential that the oil spill is regularly monitored and that alternative strategies can be employed if the oil begins to move to another area, where this strategy may be unacceptable.

#### 5.5.6 Defence and Deflection Booms

If particularly sensitive areas are under threat, it is sometimes possible to strategically position booms as an attempt to deflect the oil away from the area.

If this strategy is employed, care should be taken on deciding where to place the booms and their configuration. Trained personnel should only undertake this task; otherwise there is a severe risk that the boom will fail.

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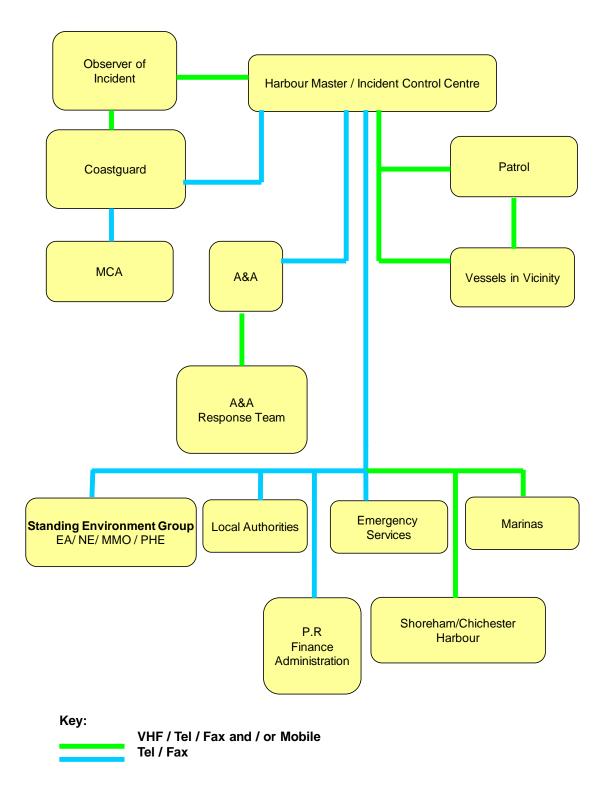
# **SECTION 6**

# COMMUNICATIONS & PUBLIC AFFAIRS PLANS

		Contents
(	6.1	Communications Plan
	6.2	Public Relations / Media Procedure

#### 6 Communications Plan

#### 6.1 Communications Flowchart



#### 6.2 Public Relations / Media Guidelines

Oil spill incidents generally arouse significant public and media attention. In order that the incident response operations can be undertaken efficiently without hindrance from the media and also that the correct information is passed onto the public at the correct time, the following guidelines should be followed:

- Wherever possible, private VHF/ UHF radio channels and telephones (mobile or fixed) should be used as the primary means of incident communication. This can prevent eavesdropping by non-incident personnel and greatly reduce the potential of information being misinterpreted by the media.
- Digital mobile phones can be regarded as secure unlike earlier analogue models.
- For Tier 1 and Tier 2 incidents media liaison will be handled in-house utilising the Publicity and Information Officer. For Tier 3 incidents all media enquiries should be directed to the Media & Public Relations Team at the TCG. This allows the OMT to undertake their roles without interruption.
- A room should be set aside as a press reception area / press conference room. This room should be away from the incident room.
- The Duty Harbour Master or his Deputy should pass on regular SITREPs to the Publicity & Information Officer, who will then be able to formulate these into a Press Statement, using the form in Section 6.2.2.
- Press conferences should be held twice per day if required, to ensure that the correct information is being passed on.
- All enquiries regarding from the media / public shall be directed to the Littlehampton Harbour Office PR personnel.
- Under no circumstances should any person connected with the incident response speculate to the press as to the cause of the incident, nor comment on any aspect of the response operation.

#### 6.2.1 Preliminary Media Statement

 Timed at: - .....hrs
 .....day
 Date

 At .......hrs on ........day
 20 ,

 an oil spill occurred at (location).....
 20 ,

 The estimated quantity of oil (state type) spilled is .....litres / tonnes, or

 The quantity of oil (state type) spilled is not yet known.

Littlehampton Harbour has initiated spill response measures and is investigating the cause.



NEXT PRESS STATEMENT AT ...... HRS

# ALL PRESS ENQUIRIES TO "PRESS OFFICE" Littlehampton Harbour Board Publicity & Information Officer

TEL :

#### 6.2.2 Press Statement

Incident Name :	
Date Prepared :	Time Prepared :
Operational Period:	
Start :	Finish:
Message	
Contact for Further	
Approved by:	Date:

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# **SECTION 7**

# **HEALTH & SAFETY PLAN**

	Contents
7.1	Introduction
7.2	Legislation
7.3	Site Hazards

#### 7. Health and Safety Plan

#### 7.1 Introduction

Full account must be taken of the health and safety requirements for all personnel involved in oil spill response activities. The Site Specific Health and Safety Plan Assessment Form (Section 7.3) lists site characteristics, site hazards and personal protective equipment and site facility needs.

This plan is intended to act as an aide-memoir to ensure that all applicable health and safety requirements are considered and appropriate actions are taken.

#### 7.2 Legislation

#### 7.2.1 Employers Duties

The principal duty of an employer is that imposed by the Health and Safety at Work Act 1974. The Act states: the employer is to ensure, as far as is reasonably practicable, the health, safety and welfare of their employees and anyone else that may be affected by their business activities whilst at work.

The Management of Health and Safety at Work Regulations 1999 impose specific duties on employers to:

- carry out a risk assessment of their work activities in order to identify protective and preventative measures - significant findings must be recorded if there are five or more employees;
- make arrangements for the planning, organisation, control, monitoring and review of the preventive and protective measures. When there are five or more employees these arrangements must be recorded;
- provide employees with appropriate health surveillance, where this is shown to be necessary by risk assessment;
- appoint a competent person(s) to help ensure compliance with health and safety law;
- set up emergency procedures;
- only allow persons with sufficient health and safety instructions to have access to restricted areas;
- provide employees with comprehensive health and safety information relating to the details above;
- full co-operation with other employers sharing the workplace;
- provide the relevant health and safety information to any outside employer working within their premises, including relevant instruction and information;
- provide the relevant health and safety training to employees; and
- provide all temporary workers with relevant information on health and safety requirements appropriate to their position within the company.

#### 7.2.2 Employees Duties

All employees have a duty under The Health and Safety at Work Act 1974, to take reasonable care for the health and safety of themselves and their colleagues at work who may be affected by their acts or omissions.

Under the Health and Safety at Work Act 1974 employees have a duty to co-operate with their employer and colleagues enabling them to comply with statutory duties and requirements.

Additionally, the Health and Safety at Work Act 1974 states that employees must not intentionally or recklessly misuse any equipment and the like provided for them in the interests of health, safety or welfare.

#### The Management of Health and Safety at Work Regulations 1999, further oblige employees to:

- use any of the equipment etc, provided in the interests of safety;
- follow health and safety instructions;
- report any problem they consider to be a danger; and
- report any shortcomings in the protection arrangements for health and safety.

#### 7.3 SITE HAZARDS

### BIRD HANDLING

Handling of birds must be carried out by properly trained personnel to ensure the protection of both bird and handler. Wild birds have no understanding of human intentions. Even a greatly weakened bird can inflict serious injury to handlers, especially to human eyes. Open wounds on hands and arms from such injuries can present opportunities for oily contaminants and disease to enter the handler's blood system.

Bird Handling is usually best left to experts, or to volunteers who have had some training. It is easy to put the birds under more stress by chasing and man handling them.

If you see an oiled bird, notify the Beach Master who will provide advice on what action to take. If a decision is taken to catch an oiled bird take the following actions:

Equipment:

- Thick gloves (able to withstand nasty pecks)
- Overalls
- Safety footwear
- Cardboard Box with lid of a suitable size to give the bird some room for movement
- Goggles to protect eyes
- Optional long- handled net to help catch bird.

#### Procedures:

- Do not let the bird get close to your head, as it may try to peck your eyes.
- Catch the bird by hand or with the aid of a long-handled net. Do not put the birds under any more stress than necessary. Only attempt to capture the bird if it can be done quickly and efficiently.
- Hold the bird with both hands, holding the wings in.
- Put the bird in a cardboard box lined with absorbent material (e.g. newspaper), with a lid.
- Do not wrap the bird up in anything it may get too hot and will cause additional stress.
- Take the bird to a cleaning station as soon as possible. Let them know where and when the bird was caught.
- Keep a note of all birds caught and sent to cleaning station. Make a note of species if possible.

### **BOAT SAFETY**

Boat operators must familiarise themselves and passengers with safety features and equipment on their boats.

Qualified individuals must operate boats.

- Personnel on boats must wear Lifejackets.
- Use of cold water immersion suits is particularly critical under conditions of cold stress.
- Boats should generally not be used after sunset for oil recovery.
- If this is required or boat use poses minimal risk, areas of operation should be carefully prescribed. Individual boat operators should maintain a communication schedule with a shore base. Each boat should be fully equipped with appropriate navigation lights.

- Boat operators must keep their supervisors informed on their area of operation, especially when they change their work area (i.e. if plans call for a boat to move to another location during a shift, the operator should advise the supervisor of his actual time of departure).
- Portable fuel tanks should be filled outside of the boat. All sources of ignition in the area of refuelling should be isolated.
- Personnel working in or operating boats should wear appropriate non-slip footwear.
- Fixed ladders or other substantial access/egress should be provided at boat transfer locations from low water line to platform.
- Workers should be cautioned about using their arms or legs to fend off during berthing, or getting their hands, arms, or legs between vessels and docks or fixed structures.

## CHEMICAL HAZARDS

Material Safety Data Sheets for all hazardous substances likely to be used at a spill site are located in the appendices.

# **COLD STRESS**

Cold stress can occur among responders as a result of prolonged exposure to low environmental air temperatures or from immersion in low temperature water. It can lead to a number of adverse effects including:

- frostbite;
- · chilblains; and
- hypothermia.

The single most important aspect of life-threatening hypothermia is a fall in the deep core temperature of the body. Workers shall be provided with warm clothing, rest opportunities, exposure protection, and warm and/ or sweet fluids. Boat crew personnel need to wear immersion suits in the water where temperatures are below 15°, or the combined water and air temperature is less than 48° Celsius.

	WIND CHILL CHART											
Strength	Speed		Temperature Celsius									
Calm	0km	10	4	-1	-7	-12	-18	-23	-29	<sup>1</sup> -34	1 <b>-40</b>	<sup>1</sup> -45
Breeze	16km	4	-2	-9	-15	-23	-31	<sup>1</sup> -44	<sup>1</sup> -51	<sup>1</sup> -51	<sup>1</sup> -57	<sup>2</sup> -64
Moderate	32km	0	-8	-15	-23	<sup>1</sup> -32	1 <b>-40</b>	1 <b>-48</b>	<sup>1</sup> -55	<sup>2</sup> -64	<sup>2</sup> -72	<sup>2</sup> -80
Near Gale	48km	-2	-10	-19	-28	<sup>1</sup> -36	1 <b>-45</b>	<sup>1</sup> -53	<sup>2</sup> -62	<sup>2</sup> -71	<sup>2</sup> -79	<sup>2</sup> -88
Gale	64km	-4	-12	-21	-31	<sup>1</sup> -38	1 <b>-48</b>	<sup>1</sup> -57	<sup>2</sup> -66	<sup>2</sup> -74	<sup>2</sup> -83	<sup>2</sup> -92

Little danger to properly dressed personnel

#### <sup>1</sup>Danger of freezing exposed flesh

<sup>2</sup>Greatest Danger

## DRUM HANDLING / MANUAL HANDLING

Drum handling at a spill site primarily involves drums of waste and contaminated clothing. Several types of drums and containers may be used. These range from 25 to 200 litres in size. All drums and containers must be properly labelled.

#### If in doubt as to the contents of a drum - seek advice.

Manual lifting and movement of drums should be kept to a minimum. A guide to manual handling is as follows:

- Wear gloves
- Assess the weight of the load and get help if it is beyond your capacity. Where appropriate use mechanical aids provided
- Size up the job remove any obstructions, note any snags and make sure there is a clear space where the load is to be set down. Ensure that you can see over the load whilst carrying it
- Look out for any splinters, projecting nails, sharp edges or wire
- Stand close to the object with your feet 20 to 30cm apart, place one-foot in advance of the other, pointing in the direction you intend to move
- Hold your chin inwards avoid moving your head backwards or forwards
- Bend your knees to a crouch position, keeping your back straight
- Get a firm grip at opposite corners of the load with the palm of the hand and the roots of the fingers. Arms should be as close to the body as possible
- Lift with your thigh muscles and extend body/straighten your legs
- Apply the above principles, to any movement such as pushing, pulling, digging, shovelling etc.

Use the reverse procedure when setting down the load.

### **EQUIPMENT OPERATIONS**

Heavy Equipment:

- Operators of heavy equipment, such as front-end loaders, graders, and bulldozers must be trained and qualified in their safe operation.
- The operator and banksman must be familiar with agreed signalling techniques. Where appropriate, the banksman should use protective headgear
- Buckets must not be used for personnel transport.

Forklifts:

- Only trained and authorised operators shall be allowed to operate forklifts.
- Only stable or safely arranged loads that do not exceed the capacity of the truck shall be handled
- Operators are expected to carry out daily checks of the forklift to be operated. All inspection defects are to be corrected prior to its operation. If it cannot be rectified immediately, the truck should be taken out of service.

## ELECTRICAL HAZARDS

Electrical hazards shall be identified and marked with suitable placards, barricades, or warning tape as necessary.

## FATIGUE

Working long hours without rest may be required, especially during the early phase of response. This coupled with the stress of the situation and wearing required PPE, can contribute to fatigue.

Symptoms include:

- loss of concentration;
- errors in judgement;
- irritability;
- sleepiness; and
- soreness and stiffness in joints and muscles.

Rest and sleep are the primary treatments for fatigue. Stress can be addressed by relaxation techniques, such as deep breathing, stretching and taking breaks.

### FIRE AND EXPLOSION

Flammable and combustible materials may be encountered at the spill site. These may be fuels for vehicles and equipment or the spilled material itself. However other chemicals may be used during the response. Refer to the container label and MSDS for more information on these materials.

Precautions should be taken when working with either flammables or combustibles:

- No smoking
- Store in approved, labelled containers
- Provide fire extinguishers in areas where these materials are used.

# HEAT STRESS

Heat stress can result whilst responders perform heavy labour work in protective and/or impermeable clothing. This clothing does not breathe or allow for the normal dissipation of body heat. Heat build up can lead to a number of adverse health effects including, heat rash, heat cramps, dehydration, heat exhaustion or heat stroke.

The incidence of heat stress is dependent on a number of factors such as temperature, humidity, a person's fitness, age, weight and clothing worn. Therefore supervisors should continually monitor their employees when workloads are heavy and temperatures and/or humidity are high.

Fluids shall be available at all times and personnel will be encouraged to drink these during rest periods. Shaded rest areas will be made available where feasible.

	HEAT INDEX									
			AIR	TEMPE	RATURE	E CELSII	JS			
Relative Humidity	21º	24º	26°	30°	32°	35°	38°	40°	44º	46º
20%	19º	22°	25°	28°	31°	34°	37º	*410	* <b>45</b> °	*49°
40%	20°	24º	26°	30°	34°	39°	*44 <sup>0</sup>	*51°	** <b>58</b> º	** <b>66</b> º
60%	21º	25°	28°	32°	38°	*46°	** <b>56</b> º	**65 <sup>0</sup>		
80%	22º	26°	30°	36°	* <b>4</b> 5°	** <b>58</b> º				

\* Heat cramps or exhaustion likely. Heat-stroke possible.

\*\* Heat-stroke highly likely.

## AIR MONITORING

Monitoring Plan:

- 1. Air monitoring at the spill site and surrounding areas will be carried out to ensure site worker and community safety particularly in the event of a Tier 2 / 3 incident.
- 2. Air monitoring will be done during site characterisation and on each work shift during clean up activities until results indicate no further monitoring is required.
- 3. All monitoring done at the clean up site will be documented and the data maintained by qualified personnel on site.

Initial Site Monitoring:

1. Monitoring will be done during initial site entry.

This monitoring is to include checking for:

- Oxygen (O<sub>2</sub>) deficiency using a direct reading oxygen meter;
- flammable atmospheres (% Lower Explosive Limit [LEL]) using a combustible gas indicator;
- benzene, hydrogen sulphide and other gases as needed using direct reading instruments, indicator tubes or other accepted methods.
- 2. Competent personnel will carry out tests.
- 3. Instrument calibrations will be carried out prior to use.
- 4. All monitoring will be documented

On Going Monitoring:

- 1. Monitoring for oxygen deficiency and flammable atmospheres will be made if confined spaces are encountered, or as required.
- 2. Monitoring for benzene, hydrogen sulphide or other identified gases will be done at work shift start as needed.

Results of site monitoring will be made available to interested parties.

### **MOTOR VEHICLES**

Drivers shall maintain a safe speed at all times, and shall not be allowed to operate vehicles in a reckless manner.

### NOISE

Appropriate hearing protection shall be used in designated high noise areas where personnel noise exposure exceeds 85 dBA, time weighted average over an 8 hour workshift/ period. Additionally, no person shall be exposed to greater than 115 dBA at any time without the use of appropriate hearing protection.

### **OVERHEAD AND BURIED UTILITIES**

If work has to be carried out near overhead lines, consultation with the organisation that operates the supply system should be undertaken. A safe working distance from these overhead lines should be determined and the area cordoned off.

The estimated location of buried utilities such as sewer, telephone, fuel, electric or water should be predetermined before work begins. Utility companies or owners must be contacted, advised of the proposed work and informed of the urgency of the situation.

## PUMPS AND HOSES

Pumps and hoses may be used at the spill site to apply water, steam or chemical for clean up and/or decontamination. They may also be used for transfer of liquid waste. Caution should be used when working in these areas where hoses are being used as they represent a tripping hazard.

Additionally, when using pumps and hoses, determine their last contents to avoid unnecessary contamination.

## SLIPS, TRIPS AND FALLS

Slips, trips and falls on oily surfaces are the major cause of injuries at an oil spill site. Many of these injuries occur in the first few minutes of work before workers are totally familiar with the conditions and before precautionary measures have been taken.

When entering a spill site, walk slowly and carefully in oil coated areas. Be especially careful when walking on oil covered rocks. Oil resistant safety footwear with non-slip soles should be worn.

It is best to clear an access/egress route than walk through oiled areas.

### **HELICOPTER OPERATIONS**

Helicopter Operations may be in use at the spill site for:

- overflight surveillance;
- site characterisation;
- personnel/equipment transport; and
- rescue/medical transport.

Safe working practices for passengers and other personnel include:

• Passengers must receive a safety briefing from the pilot prior to takeoff. The briefing shall include, safety features and equipment location on the aircraft, helicopter underwater escape procedures when appropriate and emergency information.

• Passengers and ground crew should approach/depart from the FRONT of the helicopter only when signalled by the pilot and shall never walk under or around the tail rotor or exhaust.

• Loose fitting clothing, hats or other gear which might be caught in the rotor down wash, must be secured or removed within 100 feet of operating helicopters.

• Passengers shall wear seat belts at all times and personal flotation devices when flying over water.

• Passengers and ground crew shall wear hearing protection (which may include communication headsets) at all times around operating helicopters.

• During emergency landing on water, do not exit until instructed to do so by the pilot after rotor blades stop turning or pilot signals all clear, do no inflate personal flotation devices until outside of the helicopter.

## LIFTING

Cranes must be operated in accordance with the manufacturer's instructions and established construction practices. Only trained and authorised operators shall be allowed to operate cranes.

Outriggers must be fully extended to assure maximum stability of the equipment.

Cranes must only be operated where the ground provides adequate support.

Rigging components must be inspected daily. Only certified wire rope slings or web strops shall be used.

Each sling or strop must be clearly marked or tagged with its rated capacity and must not be used in excess of this rating.

Personnel should not be allowed under the jib or load except for the minimum time necessary to hook or unhook the load.

Site Specific Health and Safety Plan - Assessment Form												
1. A	PPLIE	S TO SIT	E :									
2. D	ATE :			:	3. TIME : 4. IN			INCIDEN	INCIDENT			
5. P	RODU	CT(S) :		1							(Att	ach MSDS)
6. S	ite Ch	aracterisa	ation									
6a. /	6a. Area					□ Inshore □ R water				Saltmarsh	۱	□ Mudflats
		□ Shore	eline		I Sar	nd		Shingle		Docks		
6b.	Use	□ Comn	nercial		l Ind	ustrial		Public		Gov		Recreational
		□ Resid	ential		l Oth	ner						
7. S	ite Ha	zards										
	□ Bo	oat safety				Fire, ex	plos	ion		□ Slips	, trip	os and falls
		nemical ha	azards			Heat sti	ress			□ Stear	n ai	nd hot water
		old stress				Helicop	ter o	peration	s	□ Tides	5	
	🗆 Dr	um handli	ing			Lifting				□ Trend	ches	s, excavations
		quipment erations			□ Motor vehicles				□ Visibility			
		ectrical ha	azards		Noise				□ Weather			
	🗆 Fa	atigue			Overhead/buried utilities				□ Work near water			
	🗆 Ot	hers			Pumps and hose			hoses				
8. A	ir Mon	itoring (C	Dil con	npai	ny in	cident	)					
		2		EL	□ Benzene			$\Box$ H <sub>2</sub> S		□ Other		
9. P	ersona	al Protect	ive Ec	uip	men	t						
ΠF	oot Pr	otection						□ Co	vera	lls		
ΠH	lead P	rotection						🗆 Im	perv	ious suits		
	ye Pro	otection						D Pe	Personal Floatation			
	ar Pro	tection						□ Re	Respirators			
ПH	land P	rotection						□ Otl	□ Other			
10. 3	Site Fa	acilities										
ΠS	anitati	on				□ Firs	st Aio	k			De	contamination
11. (	Conta	ct details	:									
Doctor								Phone	Э			
Hospital								Phone	Э			
□ Fire								Phone	Э			
ПΡ	olice	_						Phone	Э			
ΠC	Other			1				Phone	e			
12.	Date P	lan Comp	leted									
13.	Plan C	ompleted	by									

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# **SECTION 8**

# WASTE MANAGEMENT PLAN

	Contents
8.1	General
8.2	Temporary Storage
8.3	Disposal Methods
8.4	Waste Disposal Contractors

# 8 Waste Management Plan

# 8.1 General

Wherever possible, spilled oil should be recovered for recycling and re-use. However, any shoreline clean-up operation is likely to result in amounts of oily waste, far in excess, of the original oil on the shoreline.

For an oil spill not involving an oil company, the Harbour Authority may provide a bunded lay down area as temporary storage for drums and skips. In this event consultation should be sought with the Environment Agency and Natural England and care must be taken not to mix different categories of waste.

Responsibility for the arrangements to dispose of shoreline pollution waste rests with:

Location of Pollution	Responsibility for clean up lies with:
On the water	Harbour Authority
Jetties / wharves / structures	Harbour Authority
Beach / shoreline owned by the harbour authority	Harbour Authority
Shoreline (including land exposed by falling tide)	Local Authority

In consultation with the Environment Agency, Natural England should be consulted over proposals to dispose of or store oily waste material to ensure that nature conservation sites are not affected.

The following are types of waste that may arise during/after a clean up operation:

- recovered crude oil (not heavily contaminated)
- water in oil emulsion untreated
- water in oil emulsion treated with dispersant
- thick weathered oil lumps
- semi-solid bunker oil
- oil and sand mixtures
- dry waste
- oiled shingle
- heavily oiled seaweed and other debris
- dead wildlife, birds etc.
- oiled equipment, PPE etc.
- oiled sorbents.

Oil recovered from harbour waters will be removed by a waste disposal/recycling contractor.

# 8.2 Temporary Storage

Clean up activities may quickly produce vast quantities of oil and oily debris, generally resulting in larger quantities of waste than can be properly disposed of. Therefore, temporary storage will be necessary. Intermediate Bulk Containers (IBCs) are available from LHB as a temporary storage measure.

Littlehampton Harbour Board maintain a Port Waste Management Plan (PWMP). The PWMP can be located in Appendix H.

Type of Oil/Waste	Storage Facility	Comments
Liquid	Barges	Suitable for initial storage
	Road Tankers	Ideal for routing to final disposal site
	Pits	Must be lined with sand to protect essential heavy duty
		plastic liner
	Bunds	Cheaper than pits
		Liners required
Liquid/solid	Pits	As above
mixture	Bunds	As above
	Skips	Versatile, robust and cheap
	Oil Drums	Difficult to handle when full
	Plastic Containers	Quick deployment
		Useful for inaccessible areas
	Heavy Duty Plastic Bags	Ideal for manual clean up
		Cheap & easy to deploy
		Can create disposal problems themselves
Solids	Hardstanding	Preferably use on sloping site with drainage
	Lorries	Restricted to solid debris
		Access problems may occur

Following is a summary of storage methods, which can be used:

With permission from the Environment Agency, Fastanks and other temporary storage measures could be set up at:

- Railway Wharf (commercial vessel incident)
- Littlehampton Marina (fuelling pontoon incident)
- East Bank Walkway (large scale inherited incident from sea)

## 8.3 Disposal Methods

## 8.3.1 Recovery to Oil Processing Installations

Reprocessing is the preferred option. In general only pure oil and possibly oil / water mixtures will be acceptable.

#### 8.3.2 Landfill

Only Disposal Sites which are 'licensed' to accept oily wastes, which is now classified as 'hazardous waste', may legally accept it (Environmental Protection Act 1990). Note: apart from small amounts of oily waste, any contact with landfill sites and contractors should be made through, or with the knowledge of the Environment Agency and the County Waste Disposal Manager.

A Contractor who is a registered waste carrier must carry out removal of any waste.

# 8.3.3 Stabilisation

This is an expensive method but is likely to be used increasingly as landfill becomes further restricted.

# 8.3.4 Land Farming

This can only make a limited contribution to oil spill disposal and is becoming less acceptable. However it may be suitable for small quantities of oily waste such as contaminated seaweed.

#### 8.3.5 Combustion

Uncontrolled combustion is unsatisfactory due to the air pollution 'burning' causes. Commercial waste incinerators can dispose of limited quantities of oily waste.

# 8.4 Waste Disposal Sites and Contractors

Note:- Apart from small amounts of oily waste contact with the following sites and contractors should be made through or with the knowledge of the Environment Agency and the County Waste Disposal Manager.

The following disposal sites are capable of taking oil waste:

# Oil Refineries with available storage

ESSO Petroleum Co. Ltd Esso Refinery Fawley Southampton SO45 1TX		Tel No. 02380-89 2511
Hampshire Waste Services Ltd Paulsgrove landfill PORTSMOUTH	all waste types Max. 1500 tonnes	Tel:02392-374299

Note. apart from small amounts of oily waste, contact with the above sites and contractors should be made through, or with the knowledge of, the County Waste Regulation Officer and the County Waste Disposal Manager.

#### Waste Oil Recycling Contractors

Cleansing Service Group Ltd	Tel. 01489-782232 (office hours)
Grange Road	
Botley	Tel. 0800 5977877 (24 hours)
Southampton	Emergency: Request Duty Manager out of
S030 2DG	hours

#### **Resources:**

Oily waste disposal service, skip supplier, waste oil recycling service - capable to refine oil-water mixture and sludge with 5% silt. Sludge's with more than 5% silt would be land filled at a local site. Operate an emulsion breaker on site for dealing with sludge's. Current basis charge is for oil water mixtures with increasing cost for high silt content. Wastes should arrive at the cleaning Services group by tanker. Any special wastes would be dumped at a licensed toxic tip.

#### Veolia Ltd

Office Tel: 02380-660555 (24 hours, call centre out of hours)

Unit 6 Marchwood Industrial Park Normandy Way Southampton S040 4PB

## **Resources:**

Vacuum tankers, skid mounted storage tanks, waste oil reception and disposal facility, tank cleaning facilities

## **SKIP HIRE**

<b>Southcoast Skips</b> Unit H9 Hanger 3 Rudford Industrial Estate Ford	Tel: 01903 734056
<b>Arun Skip Hire</b> Orchard Business Park North End Road Yapton Arundel	Tel: 01243 555445
<b>Skip It Containers Ltd</b> Garcia Trading Est. Worthing	Tel: 01273 457547

# ADLER AND ALLAN

Waste can be disposed of using the Tier 2 contractor, Adler and Allan. A&A have two waste management plants, one based in Rainham, Essex and the other in Manchester. Adler and Allan are fully licensed to handle commercial and industrial waste disposal including waste oil collection and the disposal of hazardous waste. The plants arrange for collection and will classify, package and arrange disposal of most types of waste in accordance with the Hazardous Waste Regulations. Waste types include bulk quantities of liquid industrial wastes, packaged hazardous wastes and include laboratory chemical smalls packing service. These facilities can accept, manage and treat a varied range of waste materials and acceptance criteria encompass toxics, flammables, oxidizers as well as non-hazardous materials. The sites can accept materials in quantities ranging from lab smalls to bulk tanker loads.

A&A operate a fleet of 26 full ADR spec tankers (as of 2017) around the country. In addition to the ADR resource, Adler and Allan also offer 14 non ADR Vacs nationwide for general work. Adler and Allan also have 22 rigid fuel distribution tankers and 8 articulated fuel tankers (6 x 44tonnes and 2 x 34tonnes urban) all multipurpose, most of which have a fuel uplift capability in addition to their normal delivery function.

# **SECTION 9**

# **CONTACT & RESOURCE DIRECTORY**

	Contents
9.1	Initial Actions Contact Directory
9.2	Follow-up Actions Contact Directory
9.3	Communications
9.4	Tier I Resources
9.5	Tier II Resources

# 9.1 Initial Actions Contact Directory

Organisation	Telephone Number	Contacted Yes/No and Time
LHB Duty Officer	Redacted	
Adler and Allan Ltd		
Environment Agency		
Arun District Council		
West Sussex County Council (Resilience & Emergencies Team)		
HMCG – NMOC		
MCA HQ (CPSO office)		
ММО		
DEFRA		
Natural England		
RSPB		
Sussex Wildlife Trust		
RSPCA		
Southern Water		
WADARS		
Harbour Board Insurers		
Littlehampton Town Council		
Arundel Town Council		
Littlehampton Marina		
Arun Yacht Club		
Littlehampton Yacht Club		
Ship and Anchor Marina		
Foreshore Office		
RNLI		
Tarmac Weighbridge		

# 9.2 Follow-up Actions Contact Directory

Organisation	Telephone Number	Contacted Yes/No and Time
Valkyrie Diving Shoreham	Redacted	
Arun Waste		
Southern Cranes and Access		
Sussex Police HQ		
Ambulance Lewes HQ		
W/Sussex Fire & Rescue		

# 9.3 Communications

FOR ALL INCIDENTS	
PRIMARY	SECONDARY
VHF 71	Staff Mobile Phone Numbers Redacted

The Harbour Workshop has at least 5 handheld personal radios which would be given to I/C's of teams.

The Harbour Office and Workshop have VHF base stations, handheld VHF radios available and the Pilot vessel/ Workboat is fitted with VHF. The Harbour Authority has a mobile phone available to the Duty Officer (24 hour service) and LHB staff has made their personal mobile phone numbers available for use during oil spill incidents. It should be noted that the EA prefer to utilise mobile phones whilst attending an incident and would hand over relevant numbers on arrival.

# 9.4 Tier I Resources

In Littlehampton Harbour oil spills can arise from vessels colliding or grounding, bunkering operations, or, on a smaller scale, from the refuelling of recreational craft. There is also the possibility that a larger scale incident at sea could effect beach frontage within the harbour area.

#### **Commercial wharves**

Tarmac as sole commercial operator of wharfs in Littlehampton are to hold an adequate stock of oil clean up equipment capable of dealing with a Tier One incident should it occur.

#### **Recreational mooring providers**

Mooring providers within the SHA should maintain adequate oil cleansing equipment to deal with minor spills in their areas of operation. When a request for information was sent to all mooring providers, in December 2022, the following stores were reported:

# Redacted

#### District Council

Arun District Council retains c.7 people trained to respond to beach oil pollution. No specific resources are held and support would be called in from cleansing and other contractors to augment any response.

#### Harbour Board

The Harbour Board retains a limited amount of absorbent boom/mats at the Harbour Board Workshop to deal with Tier 1 spills and in the event of a Tier 1 spill occurring in the harbour, other organisations in the harbour that hold oil spill equipment will be contacted if required.

The Littlehampton Harbour Board hold (audited 18<sup>th</sup> June 2021) the following equipment to deal with Tier 1 spills:-

Oil Spill Response Kit Bag No. 01
1 x Yellow kit bag
2 x <u>Full</u> PPE kits (overalls, gloves, mask, goggles)
1 x spare mask
5 x spare overalls
1 x knife
1 x 5m polyprop line
40 x Pads 50/40cm
4 x Socks 8/120cm
1 x Sock 8/300cm
1 x Cushion 30/35cm
1 x Cushion 35/45cm
3 x Disposal sacks with Ties
1 x Contents List
1 x Contact Numbers list

# Oil Spill Response Kit Bag No. 02

1 x Yellow kit bag 3 x Yellow buckets with handles 2 x Full PPE Kits + 5 x Respirators 2 x Groundsheets 390/560cm 2 x High Visibility Jackets 2 x Shovels 2 x Contamination sacks 6 x Tamperproof seals 1 x 1.2kg Imbiber Beads Tube \* 1 x Sample Tubs 1 x Current Tide Table 1 x Note Pad, 3 x Pens

# **Oil Spill Response Kit Bag No. 03**

1 x Kit box 3 x Grey Bilge Pillows 3 x 46/120cm White (9<sup>2</sup>) Pads 14 x 54/38cm White (6<sup>2</sup>) Pads 55 x Grey Ground Mats (Dry Mats Areas Only) 2 x Contamination Sacks 4 x Imbiber Beads 1.2kg Tubes \*

# **General Equipment and OSR Stores**

1 x 50m Floating Boom 1 x 1m<sup>3</sup> Holding Tank (with drain nozzle) 12 x 4m/125mm hydrocarbon Absorbent Boom 650 litre waste oil tank Sampling Kit

NOTE: MMO have responsibility for deposits in the sea. MMO approval is not needed for those items above marked with \* if used on the quayside provided it is kept out of harbour waters. Plugs and dykes products used on land to stop oil draining into the harbour waters are acceptable. Loose absorbents can also be used without MMO approval as long as drainage and weather conditions mean they do not end up draining into, or being blown into, harbour waters.

In the event of an oil spill, the Littlehampton Harbour Board has the following trained personnel available to respond.

Harbour Master Deputy Harbour Master Harbour Ops Assistants x3

In the event of a Tier Two incident, or Tier One which has escalated or been under assessed, the Harbour Master will decide whether an Oil Spill Management Team is required and will take the necessary steps to activate the Marine Response Centre. The notification process, activation, manning and management of the incident is described in the following paragraphs.

The Harbour Board has entered into a contract with Adler and Allan Ltd for the provision of equipment and personnel to deal with Tier 2 spills and proof of this contract can be seen in Appendix A.

# 9.4 Tier 2 Resources

These resources will be available from Adler & Allan Limited, on a call out basis. During working hours the reaction time to scene is <4.0hours, out of working hours the reaction time to scene is <6.0hours. All areas needing to be cleaned will be undertaken by Adler and Allan.

No.	Description		
	Vehicle	8.5 tonnes	
	Inshore skimmer	Portable weir skimmer and hoses (minimax)	
	Pumps	Spate pump 3"	
	Oil storage	Fastank – 2000gallons	
8	Shore sealing boom	Inflatable Silverbeach 10m 550	
8	Inshore fence boom	Rigid fence boom 10m (50P boom)	
8	Inflatable sea boom	Silverboom 20m 75i	
4	Inflatable sea boom	Silverboom 10m 75i	
	Inflatable boom	Air fan – echo PB6000	
	Inflatable boom	Air fan – echo PB2400	
	Shore sealing boom	Water pump – Honda WP20X	
8	Inshore boom	Bruce anchors	
	Inshore boom	Tripping buoys	
	Inshore boom	Connectors and lines	
	Inshore boom	Anchor chains	
	Decontamination equipment	n/a	
	Sorbents	Booms and pads, various	
	Inflatable vessels	Yamaha 2.65S	
	Outboard motors	Mariner 4S	
	Generator	Belle Minigen 2000 – Honda EC4000B	
	Portable lighting	Twin floodlight 500w 110v	
	Medical equipment	First aid kit	
	Ancillary equipment	Toolkit	
2	Fire fighting equipment	Powder 2kg	
	Spare PPE container	Basic consumables	
3	Grab bag	Personal safety and communications	

Further information / resources can be accessed via the schedule of charges (A&A).

# **SECTION 10**

# **TRAINING & EXERCISE POLICY**

	Contents
10.1	Training Policy & Standards
10.2	Exercise Policy
10.3	Training / Exercise Records
10.4	Returns
10.5	Record or Training Courses & Exercises
10.6	Training Matrix
10.7	Exercise Matrix

# **10.** Training and Exercise Policy

The importance of training for harbour personnel who may become involved in the response to oil spill incidents is recognised and acknowledged.

All members of the Management Team and Supervisors will undergo periodic training in line with the following matrix.

Courses undertaken are accredited by the Nautical Institute for the Maritime and Coastguard Agency; the syllabus of the courses matches the requirements of the UK Oil Spill Training standards.

#### **10.1 Training Standards**

Harbour Master/Harbour Manager is required to maintain a valid UK Level 4P qualification.

Deputy Harbour Master is required to maintain a valid UK Level 4P qualification.

Operators: 2-key port operators maintain valid UK Level 1P qualifications or above.

#### 10.2 Exercises

A series of annual exercises should take place for the personnel of Littlehampton Harbour in accordance with the training matrix.

#### 10.3 Training / Exercise Records

The Harbour Master will be responsible for the upkeep of records relating to personnel training and exercises.

#### 10.4 Returns

Post incident and incident management exercise reports will be sent to the MCA CPSO. An end of year summary report will also be sent to the MCA CPSO.

# 10.5 Record of Training Courses

No.	Member of Staff	Training Courses	Date
	Redacted	MCA 2P Training Course	October 2012
		MCA STMO3 5P Training Course (OSRL)	November 2012
		MCA 2P Training Course	March 2013
		MCA 4P Training Course	July 2013
		MCA 4PR Training Course	July 2016
		MCA 2P Training Course	March 2016
		MCA 2P Training Course	March 2016
		MCA 5PR Training Course	April 2016
		MCA 2P Training Course	November 2016
		MCA Beach Supervisor Course	March 2017
		MCA Beach Supervisor Course	March 2017
		MCA 2P Training Course (A+A)	July 2018
		MCA 2P Training Course (A+A)	July 2018
		MCA 2P Training Course (A+A)	July 2018
		MCA 4P Training Course (A+A)	February 2020
		MCA 2P Training Course (A+A)	November 2020
		MCA 2P Training Course (A+A)	November 2020
		MCA 2P Training Course (A+A)	November 2020
		MCA 4P Training Course (A+A)	February 2021
		MCA 2P Training Course (A+A)	January 2022
		MCA 2P Training Course (A+A)	January 2022
<u> </u>			

# Exercise records are held on file separately.

The pro forma on the following pages shall be completed and forwarded to the appropriate organisations when either

- (a) Equipment deployment exercises
- (b) Notification exercises/table top exercise or stand alone management exercises are to be carried out.

# **10.6 Training Matrix**

	Duration	Harbour Master /Deputy	Operators	Frequency	Notes
Course					
Oil Spill Clearance Course UK 4PAccredited	4 days	•		Once 3 Yearly Refresher	For persons who may have either a role or responsibility within an oil spill response organisation.
Oil Spill Equipment Operators Course	1 day		• 2 of	Once 3 Yearly Refresher	All staff whom operate with Oil Spill Response Equipment must be fully conversant with correct and safe deployment techniques.

# 10.7 Exercise Matrix

Exercise	Harbour Master / Deputy	Others	Frequency	Notes
Notification Exercise	•		6 Monthly	Test communication systems, may be used to test actual mobilisation times for individuals and resources. Should be tested without prior warning.
Table Top Exercise	•		Annual	Consist of interactive discussions of a simulated scenario among members of a response team. May incorporate mobilisation and deployment of local response resources.
Equipment Deployment Exercise	•	•	Annual	Test the capability of a local team to respond to a Tier 1 or 2-type spill.
Incident Management Exercise	•	•	At least every 3 years	Demonstrate spill response management capabilities, integration of roles of different parties, focus on overall incident management aspects. Should include Tier 2 deployment.

# **SECTION 11**

# **RISK ASSESSMENT**

	Contents
11.1	Introduction
11.2	Port Operations
11.3	Bunkering Operations
11.4	Specific Risks
11.5	Shipping Traffic outside the River Arun
11.6	Summary
11.7	Effects of Oil pollution in the River Arun
11.8	Fate of Spill Oil - General
11.9	Oil Spill Quantification
11.10	Oil Spill Movement
11.11	Classification of oil spills
11.12	Environmental Sensitivities and Priorities for Protection
11.13	Definition of Environmental Site Designations
11.14	Environment Agency assets on the River Arun

#### **Risk Assessment**

#### 11.1 Introduction

Littlehampton Harbour is limited to commercial vessels of less than 78 metres in length which, effectively, restricts the size of the vessel to about 2000 gross tonnes. In recent years there has been a decline in commercial vessels movement, currently standing at around 12 vessels per year.

The harbour is extensively used for recreation with numerous moorings. Diesel oil and petroleum spirit is dispensed at only one location; the fuelling pontoon at Littlehampton Marina.

#### **11.2 Harbour Operations**

#### 11.2.1 Pilotage

All vessels of 60GT and above are subject to compulsory Pilotage. Pilotage Exemption Certificates (PEC) are available for regular users of the harbour after they have gained the appropriate experience.

#### **11.2.2 Shipping Channels**

The entrance to Littlehampton Harbour is limited to certain states of tide due to the formation of a bar. Both sides of the approach are well lit.

The main shipping channels from the sea to the commercial wharfs clearly follow the river and are in deeper water than the entrance.

The Harbour Board is responsible for maintaining the navigation marks and for any dredging.

## **11.2.3 Harbour Control**

All vessels subject to Pilotage are required to report their movements to the Harbour Office prior to entering or leaving harbour. A Duty Officer and Pilot is available 24 hours a day throughout the year and all piloted/PEC holder vessels are escorted to and from there berths and therefore all movements are fully controlled and monitored. The purpose of this measure is to enable the authority to monitor all large vessel movements and thereby respond immediately on matters of safety, emergency and traffic management within the harbour.

The risk of oil spillage as a direct result of a vessel grounding in the harbour approaches or being involved in a collision or berthing incident is considered to be small but is nevertheless acknowledged.

Because of the nature of the sea bed which is predominantly sand, shingle or mud it is considered that significant hull damage would not occur should a vessel ground. At no time are two or more ships underway at the same time within the harbour. The risk of collision between two ships underway is therefore non-existent. The only time a collision could occur would be during berthing manoeuvres and in view of the low number of ship movements this is most unlikely.

#### 11.3 Bunkering (refuelling) Operations

LHB have implemented a Bunkering Checklist for larger vessel bunkering operations within harbour limits and a standard operating procedure (SOP 17) has been implemented for dispensing fuel at the Harbour Board Workshop. Bunkering of large commercial vessels via tanker in the harbour has not occurred for the last several years. See Appendix E.

# 11.3.1 Railway Wharf

This quay is normally visited about twice a month by a variety of vessels. The largest of these has a maximum of 80 tonnes of fuel oil on board when fully fuelled.

It is most uncommon for these vessels to bunker at Littlehampton but if so programmed it would be delivered by 25 tonne road tanker (min load 3,000 litres) and pumped aboard. Lubricating oil would be delivered by drum (208 litres). In the unlikely event of an accident occurring then it is assumed that the worst possible scenario would result in approximately 200 litres being spilt. The company has a Marine Incident Response Plan in existence that deals with spillages of fuel and chemicals and other environmentally damaging substances and holds a stock of both absorbent pads/granules to soak up most pollutants on the ground and absorbents booms/pads to soak up FOG pollutants on the water.

All vessels using the quay have their own unique on board Oil Pollution Emergency Plans and carry equipment to deal with any oil spill.

# 11.3.2 Littlehampton Marina, LM

Littlehampton Marina operates a pontoon for both resident and visiting vessels where fuel oil can be purchased. Fuel dispensing facilities are available both ashore and from a pontoon. Since the fuel is dispensed to vessels using small diameter flexible hoses with an automatic cut off facility only small quantities of fuel could be spilled into the harbour should an accident occur whilst taking fuel on board.

In the event of a minor spill occurring, the marina retains absorbent booms and trained staff to deal with all minor incidents.

Diesel and petrol is regularly sold and the fuel tank is filled approx. every 6 weeks. When oil is delivered to the fuel tanks ashore stringent safety procedures are adhered to minimise any accidents and the diesel fuel tank is located below ground. See Appendix G for Littlehampton Marina Risk Assessment. Current tank quantities include 18,000 litre diesel and 18,000 litre petrol stored in underground tanks and a 1,000 litre bunded waste oil tank landside.

## 11.3.3 Osborne of Arun, Shipyard

Osborne of Arun operate a shipyard on the western bank of the River Arun with a broad spectrum of tenants on site including CRS Tanks, an oil tank company who replace and destroy old oil tanks onsite. The is a 3500 litre bunded waste oil tank and a portable 2500 litre bunded oil tank landside and a large underground sump used in the event of flooding.

There is onsite a 10,000 litre bunded oil tank and associated pump for dispensing into vessels on the pontoon below, between tenancies of Enterprises Fisheries and Landowner.

#### 11.3.4 Littlehampton Harbour Workshop

The Littlehampton Harbour Board own and operate a 2300 litre diesel fuel tank for dispensing into their own craft and the occasional commercial / charter vessel. A 650 litre bunded waste oil tank is also stored landside.

# 11.4 Other Potential Land-Based Sources

Other potential land based sources of pollution could include road traffic accidents (RTA) and surface water sewer discharges. The most serious of these would be a road tanker accident on the A 259 road bridge which could (dependant on tidal condition) seriously pollute the River Arun. The risk of oil spillage as a direct result an RTA is considered to be small but is nevertheless acknowledged

## 11.5 Shipping Traffic outside the River Arun

The Solent and its approaches are very busy for shipping and the possibility always exists for an oil spillage to occur at the location possibly resulting in oil entering the River Arun depending on tidal/wind conditions as well as landing on the SSSI on Climping Beach. The oil spill contingency plan for the SSSI is covered by the ADC Emergency Plan. The LHB would willingly assist with any incident that would occur on the SSSI; but it is likely that the MCA, Counter Pollution Branch would be involve together with other large organisations.

#### 11.6 Summary

In view of the low volume of commercial shipping and small quantities of oil in transit the overall risk assessment for the River Arun is low and the tabulation below summarises the oil spill risks in the harbour.

LOCATION	MAXIMUM SPILL	PRODUCT
UMA WHARF	200 LITRES	FUEL OIL
UMA WHARF	200 LITRES	LUB OIL
RAILWAY WHARF	200 LITRES	FUEL OIL
RAILWAY WHARF	200 LITRES	LUB OIL
MARINA	25 LITRES	DIESEL

# **11.7 Effects of Oil Pollution in The River Arun**

The impact of an oil spill in the River Arun is dependent on many factors including the weather and state of tide when the spill occurred; these factors would be closely analysed following a spill to decide on the best strategy to follow. The surface area of water in the river is considerably reduced at low water with areas of mud flat exposed, but at high tide the oil would spread rapidly throughout the river.

If oil was spread on the mud banks the appropriate course of action if necessary would be to try and collect the oil with a skimmer when sufficient depth of water was available.

The greatest toxic damage by oil has been caused by spills of lighter oil, particularly when confined to a small area.

Spills of heavy oil such as crude may blanket areas of shore and kill organisms mainly through smothering. It should be noted that prior to any removal beach shingle the Environment Agency would have to be consulted as this may have a impact on the local flood defences.

Oil toxicity is reduced as oil weathers so that crude oil spill which reaches a shore quickly will be more toxic to the shore life than if the slick had been weathering at sea for several days before stranding.

The River Arun shoreline is variable in terms of its composition and therefore the effects of oil arriving at the beach or mud flats will vary considerably and its subsequent effects on wildlife. It is therefore essential that the RSPB be contacted for advice concerning birdlife in the harbour to try and minimise any pollution affects

# Shingle Beaches - Light Oil (Diesels, etc.)

# As found at Climping SSSI and LNR (see section 11.13)

Light or moderate spillage's can normally be left undisturbed where they will quickly evaporate.

# Shingle Beaches - Medium or Heavy Oils (Crude)

As found at Climping SSSI and LNR (see section 11.13)

These oils should be removed by scraping a layer of shingle off the beach, into stockpiles to be removed to tip. Care must be taken to avoid taking too much beach material.

# Shingle Beaches - Tarry Lumps

## As found at Climping SSSI and LNR (see section 11.13)

Light deposits of tarry lumps or oily seaweed are best collected by hand into dustbins for removal to skips. Moderate or severe deposits are most unlikely, but should be scraped into heaps as one would do for medium to heavy oils, although it should be possible to keep the scraped layer thinner.

# Other Harbour Foreshore - Light Oils (Diesel, etc..)

# As found inside the harbour

In all situations, light oils, whether or severe spillage's, are best left undisturbed where they will quickly evaporate. No dispersant shall be used.

# Other Harbour Foreshore - Medium or Heavy Oils (Crudes, etc..) As found inside the harbour

Only where reasonable access is available can any action be taken. Light spillages are generally left alone to degrade and disperse unless they are in a sensitive area where boats are moored or where there is easy public access to the foreshore. Then as with medium or severe spillage's, an attempt may be made to scrape up material without too much of the foreshore if it is considered appropriate.

# Other Harbour Foreshore

# As found inside the harbour

Action will again be restricted by access and will be restricted to gathering into bins.

# Conclusions

In view of the comparatively low risk of a significant oil spill occurring in the harbour the chances of more than one spill at any one time is considered to be small. Since the Harbour Board has a stockpile of equipment to deal with a Tier One Spill and has an agreement with A&A to respond to a Tier 2 spill at short notice, it is considered that the harbour has the capability available to respond and deal with any day to day oil spill incidents.

# 11.8 Fate of Spilled Oil – General.

In considering the fate of oil on the water a distinction is frequently made between non-persistent oils, which tend to dissipate rapidly from the sea's surface and persistent oils, which do not.

Non persistent oils are commonly referred to as white oils and have an API > 45. Persistent oils are commonly referred to as black oils and have an API < 45.

The physical and chemical changes which spilled oil undergoes are collectively known as "weathering" (see figure below). Knowledge of these processes and how they interact to alter the nature and composition of the oil with time is valuable in preparing and implementing this contingency plan for effective oil spill response.

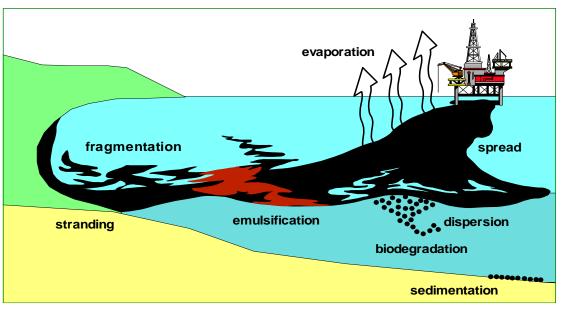


Figure 11.1 - Combined weathering process of spilled oil

# 11.9 Oil Spill Quantification.

Estimating the initial release volume of an oil spillage is notoriously difficult to establish, unless accurate information regarding flow rates, exact time of spillage and duration of spillage are all known.

The simplest method of quantifying 'on water oil slicks' is by visual appearance. The colour of the oil slick gives an indication of the thickness and type of oil. However, it should be remembered that oil slicks do not spread uniformly and as such, the estimate of oil remaining at sea is open to potentially large errors.

The table in section 3.5 should be used in the estimation of oil spill quantity.

The table below depicts the new Bonn Agreement Oil Appearance Code (BAOAC).

Code	Description Appearance	Layer Thickness Interval (µm)	Litres per km <sup>2</sup>
1	Sheen (silvery/grey)	0.04 to 0.30	40 - 300
2	Rainbow	0.30 to 5.0	300 – 5000
3	Metallic	5.0 to 50	5000 – 50,000
4	Discontinuous true oil colour	50 to 200	50,000 – 200,000
5	Continuous true oil colour	200 to More than 200	200,000 - More than 200,000

# 11.10 Oil Spill Movement

Spilled oil on water moves as a function of the current and wind. The current has a 100% effect on the speed and direction of an oil slicks movement, for example, if the current heads north at 3 knots, then the oil slick will travel north at a rate of 3 knots. Wind, on the other hand, has only a 3% influence on the movement of the oil slick. This is shown in the following diagram.

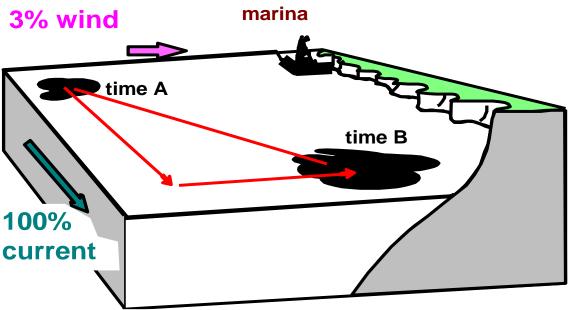


Figure 11.2 Oil movements on sea surface

# **11.11 Classification of oil spills**

The initial response to an oil spill will be graded by the level of resources required to deal with the spill rather than the quantity of oil spilt.

- **Tier One** Small operational spill, which can be dealt with immediately using local resources without assistance from other areas.
- **Tier Two** Medium sized spill which requires regional assistance from other areas, may involve assistance from Local Authorities.
- **Tier Three** Large spill which is beyond the capacity of local and regional resources, and will require national assistance through implementation of the National Contingency Plan.

# 11.12 Environmental Sensitivities and Priorities for Protection

The harbour, being tidal, has at low water areas of mud and sand. If oil enters the harbour or an oil spillage occurs within the harbour, due to the strong currents that prevail it will be very difficult to limit its area of spread. The converse of this is also true in that any spill within the harbour would be quickly swept out to sea on the ebb stream.

There are a few points that are suitable for booming - and only one upstream of the A259 road bridge (this site has been successfully trailed by the EA although they no longer do booming with most assets now transferred to Adler and Allan). Whereas the lower boom position allows access for disposal of contaminated material it is suitable for use only on the flood tide and would therefore be of use only to prevent pollution entering the harbour. This location is technically difficult but worthy of consideration. The upstream booming point is, again, only suitable for preventing pollution reaching further upriver and impacting the Arundel Park SSSI.

In view of this, for spills outside the harbour the priority would be to prevent entry of any contamination into the harbour. If oil enters the harbour it will spread very quickly into all areas and its clear up will be very difficult. The use of dispersants has been considered and ruled out since the oil types most likely to be spilled are non-resistant, such as diesel and lubricating oil which should not normally be chemically dispersed and given the conservation sensitivities within the harbour it would not be appropriate to use dispersants. If for any reason there is a reversal of policy MMO must and would be consulted and agree to their use, having

first taken advice from Natural England. The benefits of using dispersants are debatable since once the oil has polluted areas, oil deposits will properly have to be left to degrade naturally.

Weathered lumps of oil could be collected from parts of the shoreline, access permitting, after a 'do nothing' approach has produced such lumps. For spills inside the harbour the priority would be to prevent the spread of contamination upriver towards the Arundel Park SSSI.

As any spills within the harbour are likely to be extremely limited and consist of light oils only, the only practical solution would be to prevent contamination upriver and allow these small quantities to be flushed out to sea on the ebb tide where natural wind and wave action would rapidly effect dispersal. The overall priority is thus to prevent contamination travelling upriver towards the Arundel Park SSSI.

Also within the river are European eel (Anguilla anguilla) and sea lamprey (Petromyzon marinus) have been recorded in the river Arun. These two species are protected and therefore consideration should be given in order to minimise their disturbance in response to an oil spill event.

# 11.13 Definition of Site Designations

Site	Designation	Description	Level of Importance
Climping Beach	SSSI and LNR	Climping Beach is a stretch of coast with a vegetated shingle beach; a nationally uncommon habitat supports specialised plant communities. Fragile and often unstable and dune systems are located behind the vegetated shingle beach, susceptible to erosion but some areas have become stabilised to support plant species. The intertidal zone consists of soft muds and sands which support large populations of marine invertebrates. These are an important food source for the wintering bird populations and the numbers of wintering sanderling, in particular, are of European significance.	Nationally and internationally designated site
Arundel Park	SSSI	Arundel Park is an old deer park consisting of a series of spurs and deep dry valleys on the Upper Chalk of the South Downs. Swanbourne Lake is an ancient artificial lake in the main valley to the south. Chalk grassland with dense or scattered scrub and mature semi-natural woodland occupy much of the site. There are small areas of mixed plantation, marshy grassland and also several chalk exposures. The breeding bird community includes birds of woodland and scrub such as hobby, tawny owl, nightingale and all three British species of woodpecker. On Swanbourne Lake shelduck, little grebe and tufted duck are found and there are also important numbers of wintering wildfowl such as gadwall and pochard. The reedbed in the Wildfowl Reserve supports a locally notable population of breeding sedge and reed warblers.	Nationally and internationally designated site

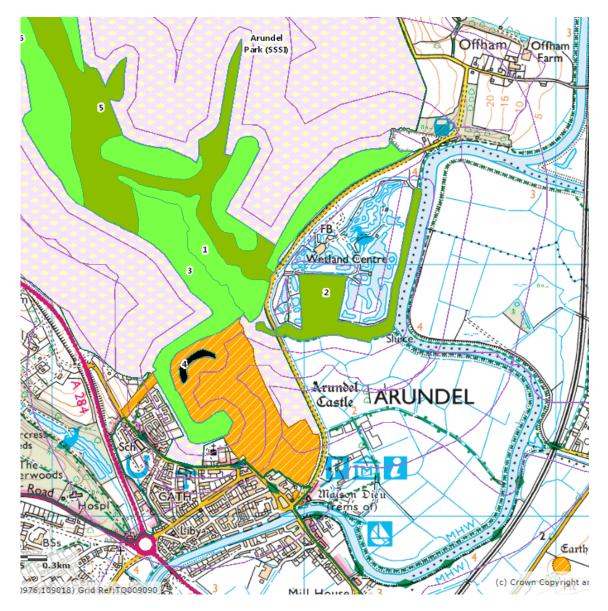
# **Climping Beach Habitat Map**

A Dice Magic	Am and and a second sec	dim dim dim dim dim dim dim dim		H HO	Car Park B Pier e Gauge
MAGIC	MAgio		MA	gic	
Climping Beach SSSI Unit Unit name Condition	Condition Threat Risk	Habitat	Area (ha)	GridRef	
Ont         INTERTIDAL         Favourable	Medium	LITTORAL SEDIMENT	18.8055		View map
002 2 Favourable	No identified Condition Threat	SUPRALITTORAL SEDIMENT	6.6302		View map
OD2         2         Fravourable           003         CLIMPING DUNES         Unfavourable - Recovering	No identified Condition Threat	SUPRALITIORAL SEDIMENT	6.6284		View map
000 CLIMEING DUNES Onavourable - Recovering	No identified Condition Threat	SUF RALLI TUKAL SEDIMENT	0.0204	102 021 011	view map

Area 001 (below MHW) consists of intertidal sand and mud flats – favourable condition Area 002 (above MHW) consists of vegetated shingle – favourable condition Area 003 consists of a dune system – unfavourable recovering condition

The area hatched is also designated as a Local Nature Reserve.

# Arundel Park Habitat Map

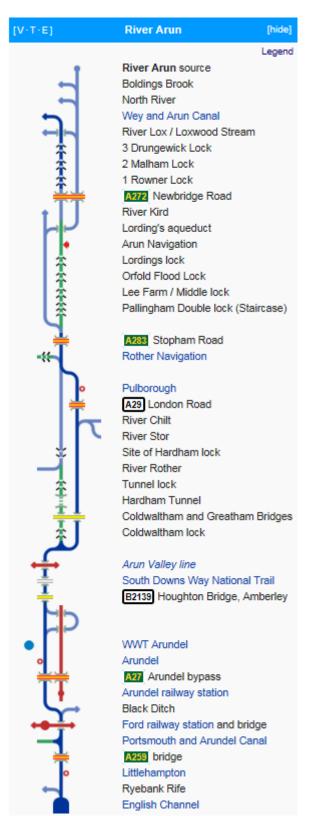


Arundel Park SSSI

Unit	Unit name	Condition	Condition Threat Risk	Habitat	Area (ha)	GridRef	
<u>001</u>	SWANBOURNE LAKE	Favourable	No identified Condition Threat	STANDING OPEN WATER AND CANALS	5.931	TQ 016 080	View map
002	WILDFOWL AND WETLANDS TRUST REEDBED	Unfavourable - Recovering	No identified Condition Threat	FEN, MARSH AND SWAMP - Lowland	7.1766	TQ 021 078	View map
<u>003</u>	WOODLAND WITH BOX	Favourable	No identified Condition Threat	BROADLEAVED, MIXED AND YEW WOODLAND - Lowland	24.7643	TQ 016 080	View map
<u>004</u>	FIELD CRICKET SITE	Destroyed	No assessment of Condition Threat undertaken	CALCAREOUS GRASSLAND - Lowland	0.5229	TQ 015 076	View map
005	SWANBOURNE VALLEY GRASSLAND	Unfavourable - Recovering	No identified Condition Threat	CALCAREOUS GRASSLAND - Lowland	32.0714	TQ 011 087	<u>View map</u>
006	THE GALLOPS	Favourable	No identified Condition Threat	BROADLEAVED, MIXED AND YEW WOODLAND - Lowland	21.7664	TQ 008 089	View map
<u>007</u>	WHITEWAYS GRASSLAND	Unfavourable - Recovering	No identified Condition Threat	CALCAREOUS GRASSLAND - Lowland	15.6737	TQ 008 108	<u>View map</u>
<u>008</u>	WHITEWAYS WOODLAND	Favourable	Low	BROADLEAVED, MIXED AND YEW WOODLAND - Lowland	26.0731	TQ 008 107	<u>View map</u>

Area 002 (adjacent to the River arun) consists of reedbed - unfavourable recovering condition

# 11.14 Environment Agency Assets on River Arun



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# **SECTION 12**

# **ROLES & RESPONSIBILITIES**

	Contents
12.1	Harbour Authority
12.2	Local Authority
12.3	Maritime and Coastguard Agency (MCA)
12.4	Marine Management Organisation (MMO)
12.5	Natural England (NE)
12.6	The Environment Agency (EA)
12.7	The Environment Group (EG)
12.8	Oil Spill Management Team (OMT)
12.9	Tactical Coordinating Group (TCG)
12.10	Commercial Shipping Operators
12.11	Royal Society for the Protection of Birds

#### 12 Roles and Responsibilities

#### **12.1 Harbour Authority**

The Merchant Shipping (Oil Pollution Preparedness, Response and Co-operation Convention) Regulations 1998 came into force on 15 May 1998 (SI 1998 No. 1056).

- 3. (1) of the Regulations states " In their application to harbours and oil handling facilities these Regulations apply to :
- (a) any harbour for which there is a statutory harbour authority having an annual turnover, as defined in the schedule in the regulations, of more than £1 million.
- 4. (1) states " Every -
- (a) harbour authority of a harbour to which these regulations apply:

shall have an oil pollution emergency plan in accordance with the regulations."

There may be joint plans between the harbour authority and the operators of oil handling facilities within an area. A Harbour Authority must submit an oil pollution emergency plan for its harbour(s), within 15 months of the regulation coming into force, to the Maritime & Coastguard Agency for approval.

In preparing an oil pollution emergency plan a harbour authority or an oil handling facility shall take into account any guidance issued by the Maritime & Coastguard Agency. The Statutory Harbour Authority has a responsibility under Section 133 of the Merchant Shipping Act 1995 for bringing prosecutions for the offences of discharge of oil, or a mixture containing oil, into the waters of the harbour.

#### **12.2 Local Authorities**

#### **12.2.1 Arun District Council**

The District Council, namely Arun District Council have accepted a non-statutory responsibility for dealing with oil on the shoreline and beaches down to the low water line within the limit of their resources. The TCG remains responsible for managing the operational clearance of the shoreline.

#### 12.2.2 West Sussex County Council

West Sussex County Council will coordinate the response to a pollution incident which affects, or threatens to affect, some or all of its coastline. It will do so by establishing a TCG where inter-agency coordination is required.

# **12.3** Maritime and Coastguard Agency (MCA)

The Maritime & Coastguard Agency, an executive agency of the Department for Transport (DfT) which includes the MCA - HM Coastguard (HMCG), discharges DFT's responsibility for both the co-ordination of civil maritime Search and Rescue and counter-pollution operations in UK waters.

In the event of an oil spill incident, which calls for a Tier 3 response, the National Contingency Plan (NCP) may be implemented. In this event, and after the formal transfer of responsibility, the MCA will take control of at-sea counter pollution measures from their Marine Response Centre (MRC); the Port's oil spill response resources and facilities will be made available to MCA.

A TCG would be established and exercise overall co-ordination of the shoreline clean-up in accordance with the procedures and guidance in the NCP.

### 12.3.1 SOSREP role and responsibilities

The role of the SOSREP is to represent the Secretaries of State for the Department for Transport (in relation to ships) and for the Department of Energy and Climate Change (in relations to offshore installations) by removing or reducing the risk to safety, property and the UK environment arising from accidents involving ships, fixed or floating platforms or sub-sea infrastructure. SOSREP's powers extend to UK territorial waters (12 nautical miles from the coast/baseline) for safety issues and to the UK Pollution Control Zone (200 miles or the median line with neighbouring states) for pollution. SOSREP is empowered to make crucial and often time-critical decisions, without delay and without recourse to higher authority, where such decisions are in the overriding UK public interest.

Working closely with the MCA, its parent organisation the Department for Transport (DfT) and the Department for Business, Energy and Industrial Strategy, SOSREP's key responsibilities include:

- acting at the earliest point during a shipping or offshore incident to assess the risk to safety, to prompt the end of any such incident and to ensure that increasing risk is evaluated and appropriate measures taken to prevent or respond to escalation;
- monitoring all response measures to significant incidents involving shipping and the offshore industry;
- if necessary, exercising ultimate control by implementing the powers of intervention, acting in the overriding interests of the UK and its environment;
- participating in major national and international exercises;
- reviewing all activities after significant incidents and exercises.

# **12.4** Marine Management Organisation (MMO)

The Marine Management Organisation (MMO) plays a major role in the protection of the marine environment, particularly in respect of fisheries and in ensuring the safety of the aquatic food chain, including the safety of consumers of fish and shellfish. The Marine Management Organisation is the statutory authority for approving deposits in the sea.

Under the terms of the Food and Environment Protection Act 1985 and the Deposits in the Sea (Exemptions) Order 1985, it is a legal requirement that oil treatment products may only be used in English or Welsh waters if they have been formally approved for this purpose by the Marine Management Organisation. In addition, specific permission from the MMO must be obtained before any such products are used in shallow waters – these are defined as any area of the sea which is less than 20 metres deep, or within one nautical mile of such an area. This includes any use in tidal docks and locks and on beaches, shorelines or structures such as piers and breakwaters.

No standing approval has been agreed between the Marine Management Organisation and Littlehampton Harbour Board to permit use of dispersants. MMO will therefore need to be consulted about any intended use of dispersants and agree to their use before any dispersants can be used in Littlehampton's jurisdiction.

# 12.5 Natural England (NE)

Natural England is the body responsible for advising Government on nature conservation in England. At the time of an oil pollution incident, Natural England responsibilities are to provide advice on:

- nature conservation including designated sites and site features;
- the environmental 'appropriateness' of proposed response actions e.g. shoreline clean- up or dispersant application;
- monitoring the environmental effectiveness of response actions.

In addition, Natural England will play a key role in the long term monitoring of an impacted environmental site, (alongside other agencies, landowners and managers), planning for site recovery.

# 12.6 Environment Agency (EA)

The Environment Agency is a non-departmental public body with statutory duties and powers in relation to water resources, pollution control, flood defence, fisheries, recreation, conservation and navigation in England and Wales. Under the Water Resources Act, 1991, The Environment Agency is responsible for the control of pollution and water quality in all controlled waters, which include groundwaters, fresh waters, estuaries and relevant territorial waters (these extend 3 miles seaward from specific baselines).

The Environment Agency has powers to prosecute for pollution offences under Section 85 of the Water Resources Act, 1991. Also, the Environment Agency may under Section 161 of the Water Resources Act 1991, take action preventing polluting matter entering controlled water, and under the same Section, legally recover its costs.

The Environment Agency is the current chair of the South East Environment Group. This is a role normally rotated between the Environment Agency and Natural England.

Oil Spills within Littlehampton Harbour

• If an oil spill occurred within the River Arun the Littlehampton Harbour Board would take the lead role, and has overall responsibility for an incident of pollution within the harbour.

Environment Agency would:-

- Support and assist the Littlehampton Harbour Board and other agencies where possible
- Provide advice on the collection, temporary storage and subsequent disposal of any wastes arising
- Investigate the incident, take evidence and undertake enforcement action where appropriate.
- Monitor the effect on the environment
- Provide liaison officers at strategic and tactical command centres as necessary.

#### **12.7** The Environment Group (EG)

The concept of the Environment Group (EG) is to provide public health and environmental advice to all response units with a role in responding to a significant maritime pollution incident which was recommended by Lord Donaldson in his 'Review of the Salvage and Intervention and their Command and Control' (The Stationary Office, Cm 4193, March 1999). This recommendation was accepted by Government and incorporated in the National Contingency Plan for Marine Pollution from Shipping and Offshore Installations (NCP). Reference STOp Notice 2/16.

#### 12.8 Oil Spill Management Team (OMT)

OMT is the nomenclature used to describe the command and control team established for a spill incident within Littlehampton Harbour, with representatives of organisations attending in accordance with the category of oil spill response established, as described in Section 2.2.

The OMT will convene at the Harbour Office, under the chairmanship of the Harbour Master.

#### **12.9 Tactical Coordinating Group (TCG)**

A Tactical Coordinating Group (TCG) will be established by Local Authorities if there is a need to coordinate a clean-up operation between local authority areas. Management of the onshore clean-up would at all times remain with the Local Authority and the TCG's prime purpose would be to coordinate the clean-up.

# Strategic Coordinating Group

The role of the Strategic Coordinating Group (SCG) is to take overall strategic coordination of the multi-agency management of the on-shore elements of the emergency and establish the framework within which the tactical groups can work. The SCG provides strategic direction and decision-making and determines longer-term and wider impacts and risks.

This group will identify the short, medium and longer term issues that the TCG need to consider. This should identify significant and potentially significant issues for the response strategy as a whole looking at time frames of say: the next 1-3 days, 3-10 days and beyond 10 days.

#### **12.10** Commercial Shipping Operators

One company operates in the harbour area: Tarmac. They will initiate first response actions in the event of oil spills at their wharves. The company concerned will either complete the clean up in Tier One situations or, in the case of larger spills, will deploy their resources as agreed by the Oil Spill Management Team (OMT).

In the event of actual or potential releases of oil as a result of marine incidents in which the companies have an interest, technical assistance will be made available by the company concerned so that they can work in close co-ordination with Harbour, Local and National Authorities.

#### **12.11** Royal Society for the Protection of Birds

The RSPCA co-ordinate the recovery of wildlife including the recovery of birds, but are assisted by the RSPB in this role.

In doing so, the RSPB's role in an oil spill is:-

- i. To conduct surveys to identify birds at risk or affected;
- ii. To advise those managing an incident about birds at risk and to minimise risks to birds needing rescue and later, advising on release sites.