



Oil Spill Contingency Plan

2016

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Date of Issue:

January 2016



Maritime &
Coastguard
Agency

APPROVAL OF OIL SPILL CONTINGENCY PLAN

Issued in accordance with the requirements of
the Merchant Shipping (Oil Pollution Preparedness Response and Co-operation Convention) Regulations 1998,
under the authority of the Government of
the United Kingdom of Great Britain and Northern Ireland
by the Maritime and Coastguard Agency
an Executive Agency of the Department for Transport.

Name of Port / ~~Harbour /~~
~~Oil Handling Facility~~ *

SOUTHAMPTON

Category of Port

A & B

Name of ~~Operator~~ / Company *

Associated British Ports

Address

ABP Southampton

Ocean Gate

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Post Code

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APPROVAL

Pursuant to the Merchant Shipping (Oil Pollution Preparedness Response and Co-operation Convention) Regulations 1998, the Oil Contingency Plan submitted by the above is hereby approved by the Secretary of State for the Department for Transport.

Date of Plan

01 January 2016

Plan version
(where applicable)

Jan 2016

This Plan is valid until

14 March 2021

Issued by the Maritime and Coastguard Agency.

Issued at

MCA HQ (UK)

(Place of issue)

Signed

(Signature of duly authorised official issuing the Approval)

Date

15 March 2016

(Date of issue)

Name

ANDREW HEALY

(For and on behalf of the Secretary of State)



* Delete as appropriate

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List of Plan Holders

| Copy | Name | Organisation | Location |
|-------------|-------------------------------------|---|--|
| Master Copy | | Associated British Ports, Southampton Ocean Gate, Atlantic Way, Southampton SO14 3QN | Deputy Harbour Master 02380 608202 rblair@abports.co.uk |
| 1 | Harbour Master | Associated British Ports, Southampton | VTs |
| 2 | Deputy Harbour Master | Associated British Ports, Southampton | VTs |
| 3 | Pilotage Manager | Associated British Ports, Southampton | VTs |
| 4 | Harbour Control Manager | Associated British Ports, Southampton | VTs |
| 5 | Duty VTs Watch Manager | Associated British Ports, Southampton | VTs |
| 6 | Senior Marine Officer | Associated British Ports, Southampton | VTs |
| 7 | Marine Response Centre | Associated British Ports, Southampton | VTs |
| 8 | Marine Officer (Patrol) | Associated British Ports, Southampton | Harbour Patrol Launch |
| 9 | Marine Officer (Berthing) | Associated British Ports, Southampton | VTs |
| 10 | Communications Manager | Associated British Ports, Southampton | Head Office, London |
| 11 | Head of Port Compliance & Safety | Associated British Ports, Southampton | Ocean Gate |
| 12 | Spare | Associated British Ports, Southampton | |
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Glossary

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|--------|---|
| ABP | Associated British Ports |
| BP | British Petroleum |
| CCA | Civil Contingencies Act |
| CCTV | Closed Circuit Television |
| CEFAS | Centre for Environment, Fisheries and Aquaculture Science |
| COPO | County Oil Pollution Officer |
| COSHH | Control of Substances Hazardous to Health |
| CPSO | Counter Pollution and Salvage Officer |
| DfT | Department for Transport |
| DEFRA | Department for Environment, Food and Rural Affairs |
| DHM | Deputy Harbour Master |
| EA | Environment Agency |
| EG | Environment Group |
| ELO | Environment Liaison Officer |
| FEPA | Food and Environmental Protection Act |
| FMT | Fawley Marine Terminal |
| HCC | Hampshire County Council |
| HM | Harbour Master |
| HMCG | Her Majesty's Coastguard |
| HQ | Headquarters |
| HW | High water |
| ITOPF | International Tanker Owners Pollution Federation |
| JNCC | Joint Nature Conservation Committee |
| LNR | Local Nature Reserve |
| LOPO | Local Oil Pollution Officer |
| LRF | Local Resilience Forum |
| LW | Low water |
| MCA | Maritime and Coastguard Agency |
| MCC | Marine Control Centre |
| MMO | Marine Management Organisation |
| MoU | Memorandum of Understanding |
| MoD | Ministry of Defence |
| MPZ | Moving Prohibited Zone |
| MRC | Marine Response Centre |
| MSDS | Material Safety Data Sheet |
| NCP | National Contingency Plan |
| NE | Natural England |
| NGO | Non-Governmental Organisation |
| NMOC | National Maritime Operations Centre |
| NT | National Trust |
| OMT | Oil Spill Management Team |
| OSRL | Oil Spill Response Limited |
| P&I | Protection and Indemnity (Insurance) |
| PHE | Public Health England |
| POLREP | Pollution Report |
| PSP | Perenco Purbeck-Southampton Pipeline |
| QHM | Queen's Harbour Master (Portsmouth) |
| Ro-Ro | Roll-on Roll-off vessel |
| RSPB | Royal Society for the Protection of Birds |
| RSPCA | Royal Society for the Prevention of Cruelty to Animals |

| | |
|-------------|--|
| SAC | Special Area of Conservation (EU Habitats Directive) |
| SCAT | Shoreline Clean up Assessment Team |
| SCG | Strategic Coordinating Group |
| SCU | Salvage Control Unit |
| SEG | Solent Environment Group |
| SITREP | Situation Report |
| SMC | Sea Mounting Centre (Ministry of Defence, Marchwood) |
| SOSREP | Secretary of States' Representative |
| SPA | Special Protection Area |
| SPMUG | Southampton Port Marine Users Group |
| SSSI | Site of Special Scientific Interest |
| STAC | Scientific and Technical Advice Cell |
| STOp Notice | Scientific, Technical and Operational Advice Note |
| TCG | Tactical Coordinating Group |
| TPH | Tonnes Per Hour |
| VLCC | Very Large Crude Carrier |
| VTS | Vessel Traffic Services |
| VTSMW | Vessel Traffic Services Watch Manager |

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 15 May 1998. The plan is designed to meet 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 relevant organisations in dealing with an accidental discharge of oil or, indeed, other polluting substances. 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 Duty Officers 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 Port;
- 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 1 and Tier 2 incidents, and to provide guidance for the initial response to a Tier 3 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. In this case, reference must be made to the Solent and Southampton Water Emergency Response Plan (SOLFIRE). 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
- decontamination
- environmental sensitivities
- record keeping
- public relations
- waste disposal

1.3 Scope of the Plan

The plan details the contingency arrangements for responding to actual or threatened oil pollution incidents within the statutory limits of the Port of Southampton. The Port extends from its northern limit (Redbridge Causeway on the River Test and Woodmill on the River Itchen) to a line between Egypt Point and Stansore Point (south western limit) and to a line between Hillhead and Old Castle Point (eastern limit). The eastern limit of the Port of Southampton represents the western limit of the Dockyard Port of Portsmouth. The northern limit of Cowes Harbour is also the southern limit of the Port of Southampton. The statutory port area is shown in Figure 1.1

The response strategy has been developed taking into account the spill risks and possible sources of spillage associated with the port's operations, including those at the Esso Fawley Jetty and Refinery, the BP Hamble Jetty and Perenco Purbeck – Southampton Pipeline from Wytch Farm, the Sea Mounting Centre, Marchwood and other marine facilities within the Port. The plan consists of three important elements:

Element 1: Strategy Plan- (Sections: 1 & 2)

This describes statutory requirements and the purpose and scope of the plan, including its geographical coverage. It shows the relationship of the plan to the National Contingency Plan for Marine Pollution from Shipping and Offshore Installations (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.

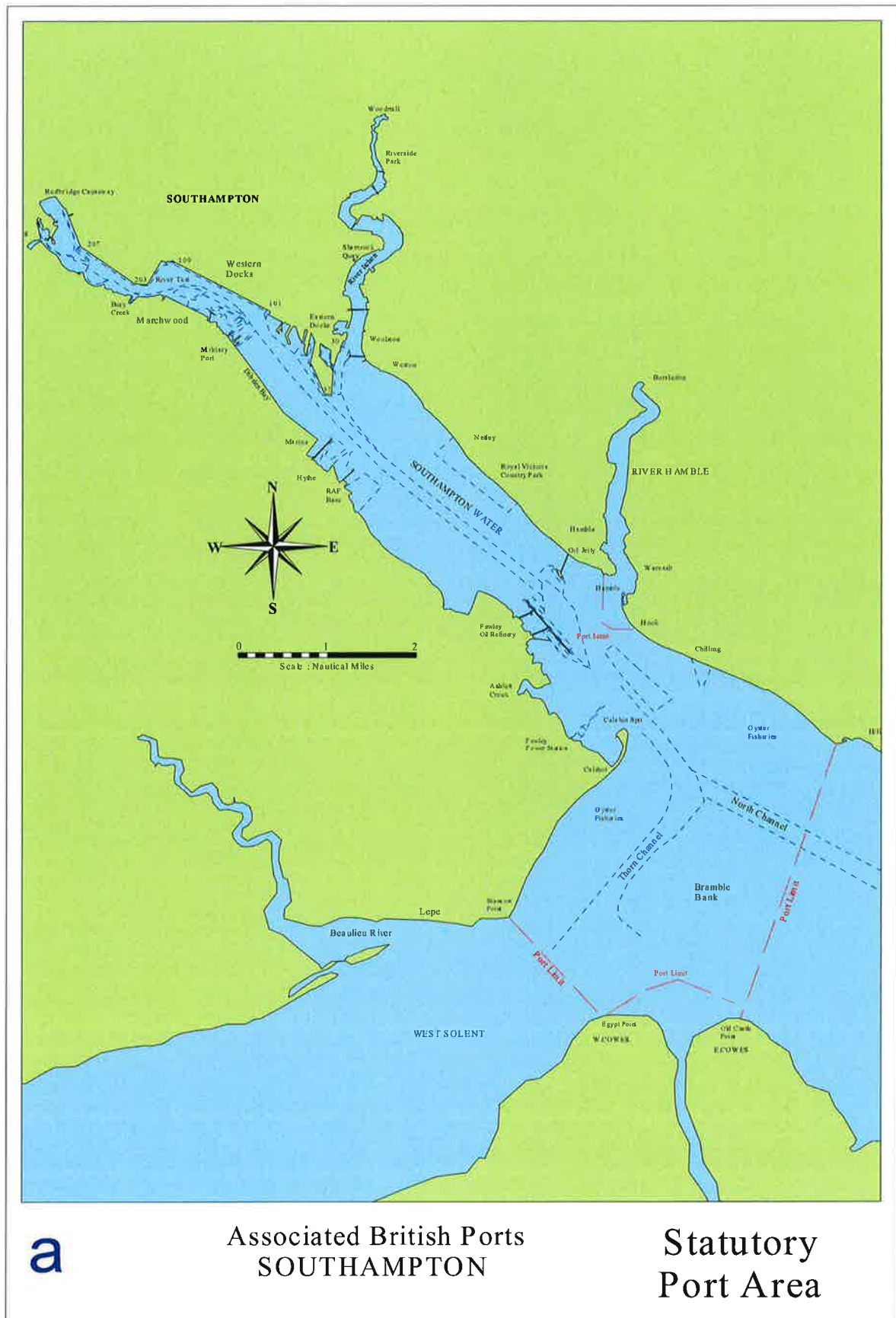
Element 2: Action Plan - (Sections 3,4,5,6, 7 & 8)

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

Element 3: Data Directory - (Section 9, 10, 11, 12, 13, 14 & 15)

This 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.

Figure 1.1



1.4 Interfacing Oil Spill Contingency Plans

See Figure 1.2

1.4.1 Oil Company and Local Installation Plans

See Figure 1.2 and Appendices 1a and 1b

BP Oil UK operates an oil installation at Hamble, importing ground fuels and jet fuel and exporting crude oil. BP has published a contingency plan which details its response to Tier 1 incidents at the Hamble site. BP will initiate the appropriate first response actions in the event of an oil spill at their installation: these will include immediately informing the Harbour Master via the Duty VTS Watch Manager who will activate the appropriate notification procedure. BP will either complete the clean-up to the satisfaction of the Harbour Master, or in the event of larger spills, will deploy their resources as directed by the Oil Spill Management Team (OMT) convened at Southampton VTS Marine Response Centre (MRC).

Perenco Wytch Farm (PWF) exports Wytch Farm crude oil to the Hamble Oil Terminal. Perenco has published a Contingency Plan which details its response to Tier 1 to Tier 3 incidents from its well sites / flow line / gathering station / pipeline operation. This plan interfaces with the Hamble Terminal OSC Plan, Fawley MT OSC plan (for the pipeline section through Esso Fawley Refinery) and ABP Southampton's OSC Plan (for the pipeline under Southampton Water). Perenco will initiate the appropriate initial response actions via its Gathering Station Central Control Room (GSCCR), which will include informing the Harbour Master, via the Duty VTS Watch Manager, who will activate the appropriate notification procedure. Perenco will either complete the clean up to the Harbour Master's satisfaction or will deploy its resources as directed by the OMT convened at Southampton VTS MRC.

Esso Petroleum Company has individually published a contingency plan which details its response to Tier 1 and Tier 2 incidents at the Fawley site. Esso will initiate the appropriate first response actions in the event of an oil spill at their installation: these will include immediately informing the Harbour Master via the Duty VTS Watch Manager who will activate the appropriate notification procedure. Esso will either complete the clean-up to the satisfaction of the Harbour Master, or in the event of larger spills, will deploy their resources as directed by the Oil Spill Management Team (OMT) convened at either the Southampton VTS Marine Response Centre (MRC), or at the Esso Site.

The Sea Mounting Centre (SMC), Marchwood has also published its own plan for response to spill incidents at Tier 1, 2 and 3 levels. SMC will initiate the appropriate response in each case, including immediately notifying the Harbour Master via the Duty VTS Watch Manager for activation of the appropriate Port response, and activating call out of the MOD Emergency Spillage Response Contractor. Again, SMC will either complete the clean-up to the satisfaction of the Harbour Master, or in the event of larger spills, will deploy its resources as directed by the Oil Spill Management Team (OMT) convened at the Southampton VTS Marine Response Centre (MRC).

Subsidiary Tier 1 oil spill contingency plans are as in the table below – the Areas of Responsibility for these plans are shown at Appendices 1a and 1b. Copies of these plans are available on the Southampton VTS website at:

[http://www.southamptonvts.co.uk/Port Information/Emergency Planning/](http://www.southamptonvts.co.uk/Port%20Information/Emergency%20Planning/)

| No. | Owner | Title |
|-----|--------------------------------|---|
| 1. | BP Oil UK Limited | Hamble Terminal Oil Spill Contingency Plan |
| 2. | Perenco – Wytch Farm | Wytch Farm Oil Spill Contingency Plan Volume 1 |
| 3. | Esso Petroleum Company Limited | Fawley Marine Terminal Oil Spill Contingency Plan |
| 4. | Sea Mounting Centre Marchwood | Unit Spill Response Plan and Reporting Procedures |

1.4.2 Local Authority Plans

In the event of actual or threatened shoreline impact, the appropriate unitary, district or county authority plan(s) will be implemented. The level of activation will be dictated by the incident classification (refer Section 1.7).

The interfacing plans are:

| No. | Owner | Title |
|-----|--------------------------------|---------------------------------|
| 1. | Hampshire County Council | Coastal Pollution Plan |
| 2. | Southampton City Council | Oil and Chemical Pollution Plan |
| 3. | Eastleigh Borough Council | Oil and Chemical Pollution Plan |
| 4. | New Forest District Council | Oil and Chemical Pollution Plan |
| 5. | Fareham Borough Council | Emergency Response Plan |
| 6. | River Hamble Harbour Authority | Oil Spill Contingency Plan |

In addition, where there is a possibility that oil may impact on the northern shoreline of the Isle of Wight there will be close liaison with the Isle of Wight Council and an interface with the Isle of Wight Council's Marine Pollution Response Plan and Cowes Oil Spill Response Plan.

1.4.2.1 Memorandum of Understanding with Local Authorities

A Memorandum of Understanding (MoU) exists between ABP Southampton, Hampshire County Council, Southampton City Council, Eastleigh Borough Council, Fareham Borough Council, New Forest District Council and Contractor Adler and Allan to assist a cohesive, integrated response to a marine pollution incident which affects the Port area between high and low water.

The MoU is intended to inform initial deliberations within the Tactical Co-ordinating Group and Strategic Co-ordinating Group as to the appropriateness of activating the arrangement dependant on the nature, complexity and volume of the clear-up requirement and capability and availability of Adler and Allan.

The MoU is not a legally binding document and has been prepared to demonstrate mutual collaboration and inform any potential response to an oil spill on-shore.

1.4.3 Adjacent Harbour Authority Oil Spill Plans

The western limit of the Dockyard Port of Portsmouth also represents the eastern limit of the Port of Southampton. There are similar boundaries between Southampton and the Hamble River and Southampton and Cowes Harbour. Where the possibility exists that spilled oil may migrate to, or from, adjacent harbour areas, close liaison will be maintained between the Harbour Authorities.

While each Harbour will activate its own oil spill contingency plan for oil on its water, Southampton will act in support of the response for a spill that has originated in an adjacent harbour. Where a spill that has originated in the Southampton area threatens an adjacent harbour a representative of that harbour will be invited to attend the Oil Spill Management Team (OMT) at the ABP Southampton Marine Response Centre.

1.4.4 Marinas within the Port Area

The Port has a number of large yacht marinas within it, such as Hythe Marina Village, Ocean Village Marina, Shamrock Quay, Saxon Wharf and Town Quay. All have spill plans, assets and training levels commensurate with their activities. Marina Developments Limited (owner of the 4 first named marinas) has a Tier 1 and 2 contract with Cleansing Service Group (CSG) and spill bags and salvage pumps available at their sites. Town Quay is an ABP marina and has trained staff and suitable equipment for immediate response and access to ABP's Tier 2 contract with Adler & Allan.

1.4.5 National Contingency Plan

In the event of a large oil spill incident which calls for national resources to be deployed, a Tier 3 response, the Maritime and Coastguard Agency may decide to establish a Marine Response Centre (MRC) to contain, disperse and remove potential pollutants from the scene. This MRC will be established at the most appropriate location, which may be at the Southampton VTS Centre, MCA headquarters in Southampton or at the National Maritime Operations Centre (NMOC) at Fareham.

During a shipping incident, The Secretary of States' Representative (SOSREP) will monitor and tacitly approve response actions and proposals. The SOSREP role was created as part of the Government's response to Lord Donaldson's Review of Salvage and Intervention and their command and control. SOSREP will oversee, control and, if necessary, intervene and exercise 'ultimate command and control' acting in the over-riding interest of the UK in salvage operations within UK waters, involving vessels when there is a significant risk of pollution.

In certain circumstances, SOSREP is empowered to establish a Salvage Control Unit (SCU) and to take over command of all operations. Should this situation arise, there will be a formal hand-over of responsibility for dealing with the incident and the Port's oil spill response resources and facilities will be made available to SOSREP.

The SCU's primary role is to monitor salvage operations and actions that are being taken and/or proposed relating to salvage activity and to ensure that such actions do not have an adverse effect on safety or on the environment. The SOSREP determines the requirement

for an SCU taking into consideration the nature and scale of the incident. It will operate close to the incident site, at an appropriate location, as suggested above.

ABP Southampton's offices and all facilities would be made available to SOSREP in such circumstances.

When pollution threatens the shoreline, a Tactical Co-ordinating Group (TCG) and Strategic Co-ordinating Group (SCG) will be established and will 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 Port's Oil Spill Management Team will re-deploy to the TCG / SCG and/or the MCA MRC as required (See Sections 2.5, 2.6 & 13.10).

1.4.6 The SOLFIRE Plan

SOLFIRE is a contingency plan developed to deal with any marine emergency or non-routine incident occurring within the Dockyard Port of Portsmouth, the Port of Southampton and Cowes Harbour Areas of Responsibility. This area is known as the SOLFIRE Area.

For the purposes of the plan "marine emergency or non routine incident" includes all forms of marine related security, counter terrorist and environmental emergencies involving vessels underway or at anchor in the SOLFIRE Area.

The SOLFIRE Plan has been produced jointly by the Harbour Authorities of ABP Southampton, QHM Portsmouth and Cowes Harbour Commission, in consultation and agreement with the Maritime and Coastguard Agency, other emergency services and relevant local authorities. The Plan takes into account The National Contingency Plan, the Home Office crisis management model and responsibilities for fire fighting at sea.

This plan is intended to provide the command, control and communications structure to draw together and co-ordinate adequate resources to deal with any marine emergency occurring within the SOLFIRE Area. It is interfaced with and may be supplemented by other contingency and action plans held by the emergency services, local authorities, commercial facilities and marine related companies, which will be activated as necessary in response to a particular incident. The SOLFIRE Plan is available at:

[http://www.southamptonvts.co.uk/Port Information/Emergency Planning/](http://www.southamptonvts.co.uk/Port%20Information/Emergency%20Planning/)

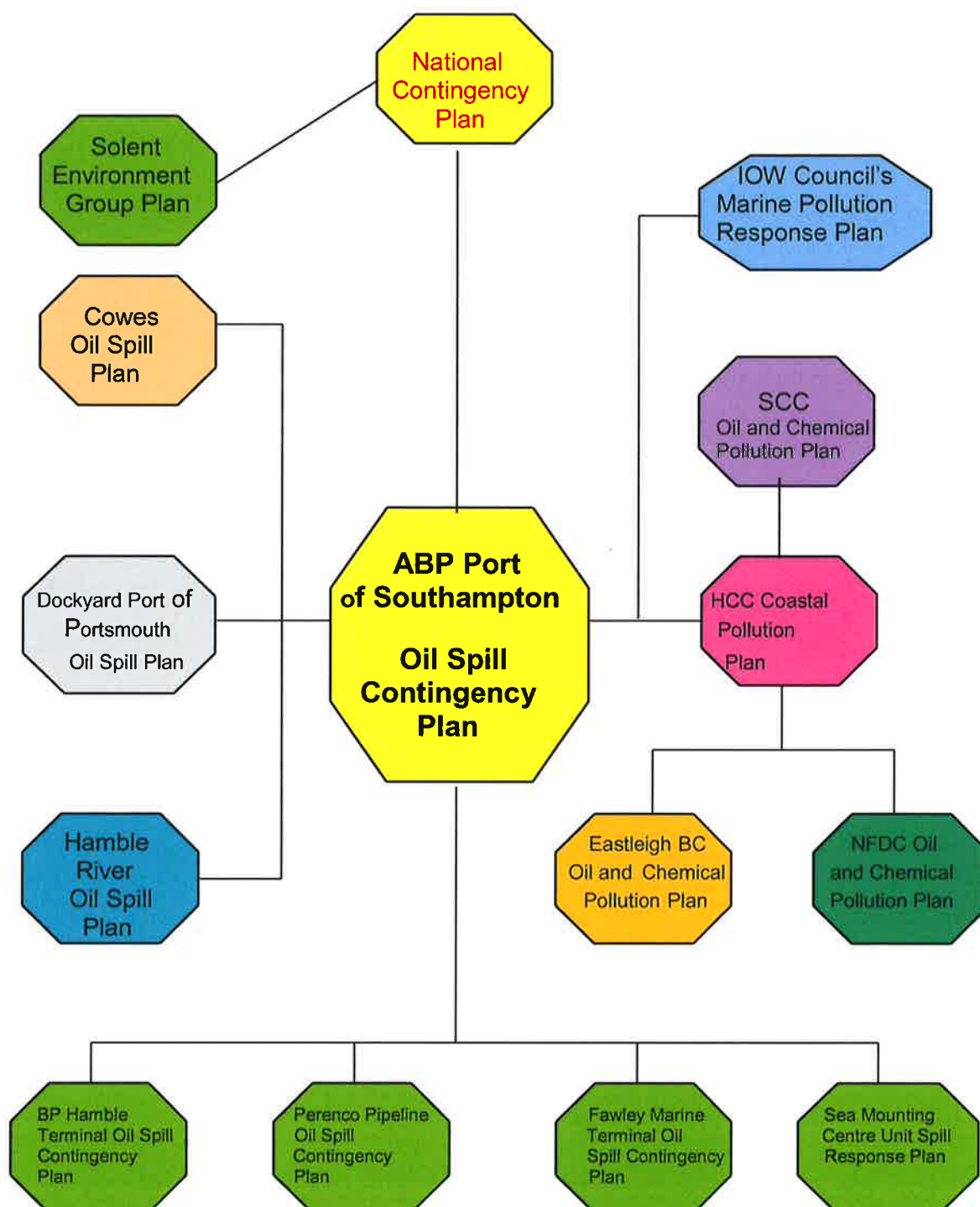
1.5 Consultation

The following authorities and organisations have been formally consulted during the preparation of this plan:

- Natural England
- Environment Agency
- Marine Management Organisation
- Hampshire County Council
- Maritime and Coastguard Agency

The requirements of these authorities and organisations have been taken into account and they have individually confirmed their general agreement to the plan details.

In addition, consultations have taken place with adjacent harbour authorities, local district and unitary councils and Isle of Wight Council.

Figure 1.2 Interfacing Oil Spill Contingency Plans

1.6 Risk Assessment Summary (for full risk assessment details refer to Section 11)

| Cause | Assessed Risk | Credible Spill Quantity (Tonnes) |
|--------------------------------|---------------|----------------------------------|
| Grounding in Thorn Channel | Low | >100 cargo, <50 fuel |
| Grounding in Southampton Water | Low | <50 fuel |
| Collision underway | Low | >500 crude, >100 fuel |
| Berthing incident | Low | <1,000 crude, <1,000 fuel |
| Tug impact | Low | >1,000 crude, <500 fuel |
| Oil Transfer Operations | Low/Moderate | <100 crude, <25 fuel oil |
| Oil tanker breakout | Low | >100 crude |
| Oil tanker hull failure | Low | >700 crude |
| Pipeline failure | Remote | <600 crude, <200 fuel |
| Bunkering Operations | Low/Moderate | <5 fuel / marine gas oil |
| Ship to ship transfers | Low | <5 slops / fuel |
| Effluent discharge | Low | <20 various |
| Miscellaneous sources | Moderate | <1 diesel / lubes |

Note: The credible spill quantities for tankers have been estimated for conventional, single hull vessels. However, the risk of spillage, and the quantities involved, as a result of grounding, collision, berthing incident or tug impact will continue to diminish as more double hulled vessels and tankers with protectively located ballast tanks enter service. Improved navigation systems and berthing tools will reduce the incidence of manoeuvring and berthing incidents.

1.7 Classification of Oil Spills

| | |
|---|--|
| Tier 1 | |
| Small operational spillages, which can be dealt with using the resources immediately available. | |
| Tier 2 | |
| Spillages which require a substantial commitment of the Plan resources and which may involve regional assistance. | |
| Tier 3 | |
| Large spillages which may exceed the full resources of the Plan and which may require national assistance and / or the implementation of the NCP. | |

1.8 Tidal Movement of Oil on Southampton Water

Southampton water is subject to the unusual phenomenon of a 'Double High Water' tidal effect. A full tidal cycle lasts approximately 13 hours with the flood tide lasting about 7 hours, a 2 hour stand at high water and an ebb tide of about 3 hours. The short duration of the ebb tide makes for a greater velocity of flow. Maximum tidal rates of up to 3.8 knots are experienced in the central Solent and 1.8 knots in Southampton Water during a spring ebb tide. Neap and flood tidal rates are considerably less.

Movement of oil in Southampton Water is likely to be parallel to the shoreline. It will be either in a north-westerly or south-easterly direction, in line with the flood or ebb tidal flows, dependant also on the effect of wind force and direction. Slack water occurs for 2 hours between the Southampton 1st and 2nd High Waters. Additionally, a considerable slackening of the flood tide occurs 2 hours after Low Water in a local effect known as the 'Young Flood Stand' which is particularly pronounced over spring tides. This lasts for about 2 hours before the final accelerated rise to High Water.

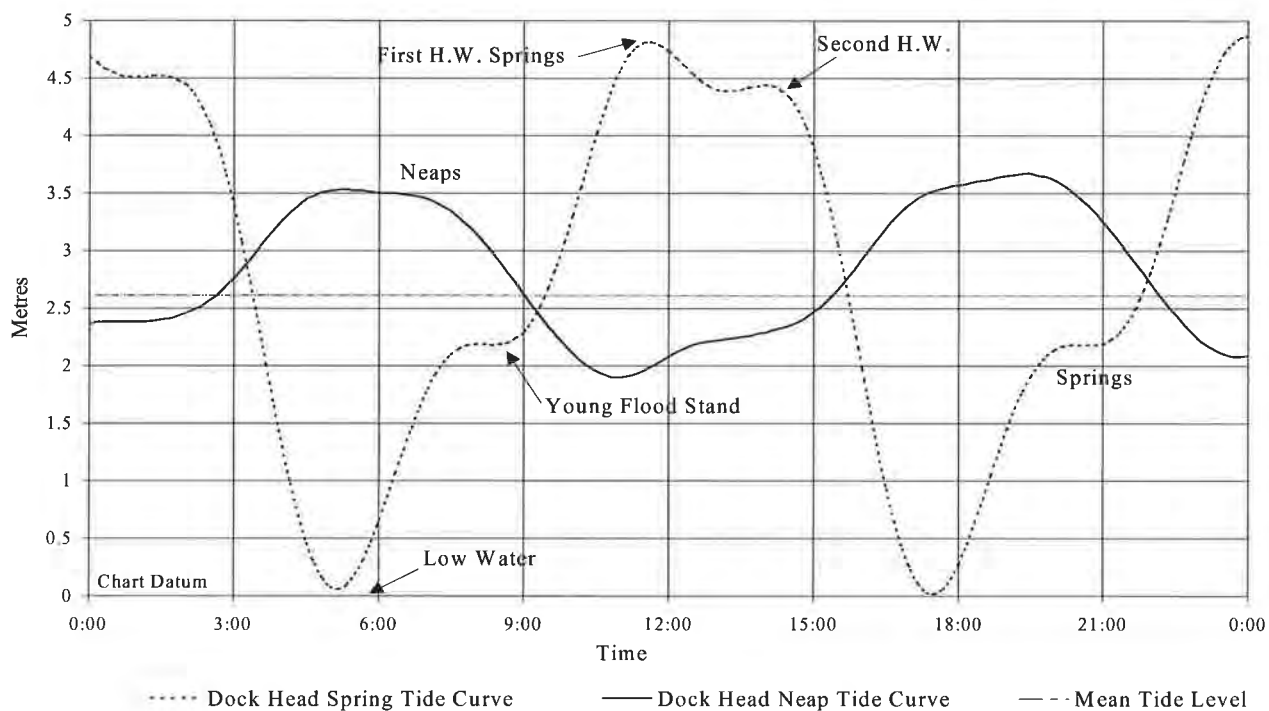
Tidal flows in the Central Solent are complex but flow with maximum rate to the west on an ebb tide off Cowes Harbour, midway between the Southampton 1st and 2nd High Waters.

The VTS Centre Southampton is equipped with tidal prediction software and live tidal information from tide gauges at 3 locations; Calshot, 37 Berth Eastern Docks and Marchwood Pile in the Western Docks.

Additionally, for assistance in the prediction of the tidal movement of oil, experienced harbour pilots are always available and ABP Mer possesses a complex mathematical model of Solent tides.

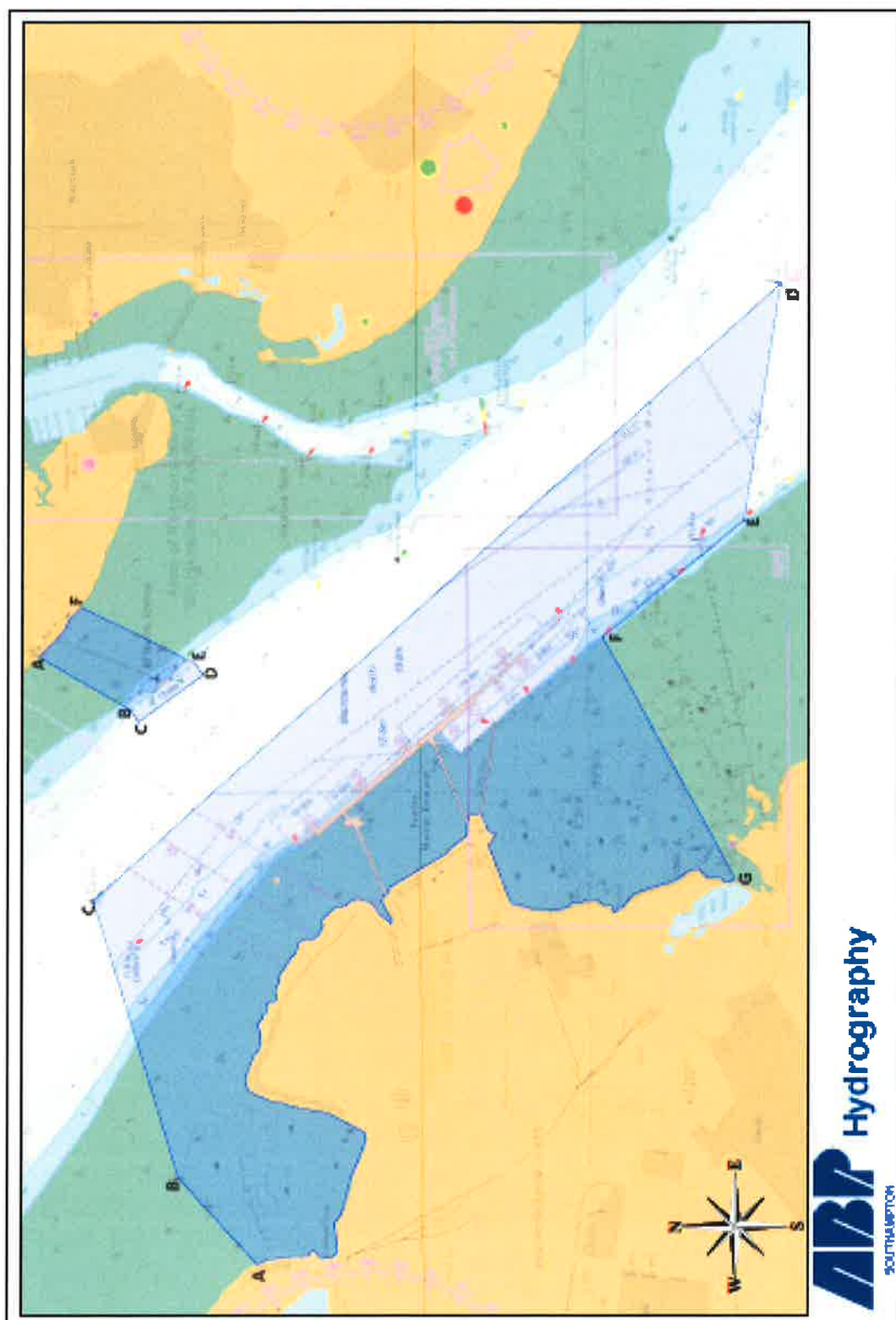
Figure 1.3

Southampton Tidal Curves for spring and Neap Tides



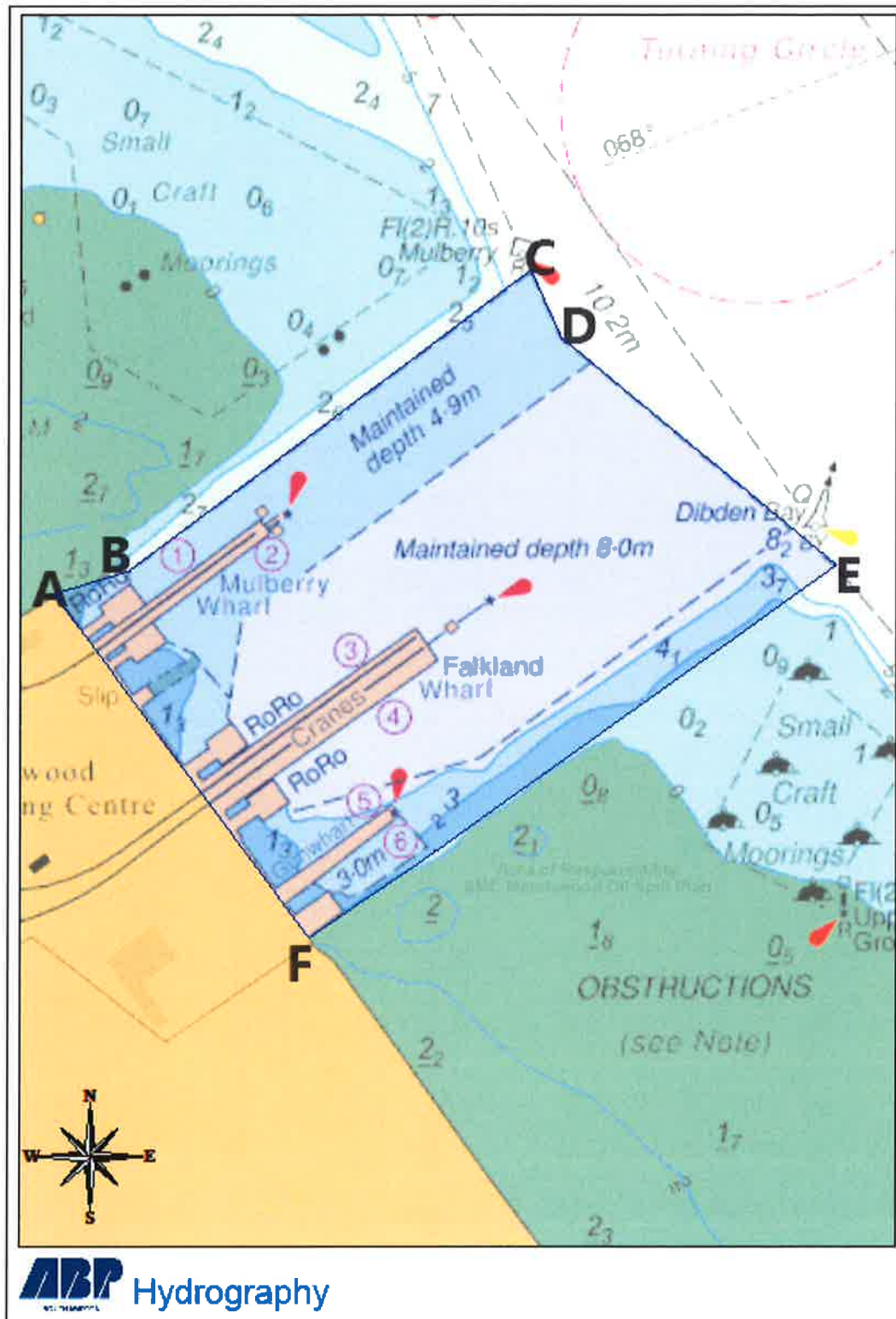
Appendix 1a

Fawley Marine Terminal and BP Hamble Terminal Areas of Responsibility



Appendix 1b

SMC Marchwood Area of Responsibility



2. Incident Response Organisation

2.1 Harbour Master

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

2.2 Oil Spill Management Team (OMT)

An Oil Spill Management Team (OMT) will, in general, be established at the Southampton VTS Marine Response Centre, under the chairmanship of the Harbour Master for Tier 2 and Tier 3 incidents. The OMT will provide the command and control structure to co-ordinate and direct the marine response to the incident. The OMT will, as required, consist of representatives from the following organisations and authorities.

| Management Team | Advisory and Support Team |
|--|--|
| Harbour Master Oil Company (if appropriate) SMC Marchwood (if appropriate) Vessel Owners P & I Club Salvor (if appropriate) MCA (if appropriate) | Adler and Allan Hampshire County Council Coastal District / Borough Councils Environment Agency Natural England MMO Associated British Ports: Administration Communications Finance and accounts |

The OMT, under the chairmanship of the Harbour Master, may use all response agencies and available assets as necessary to deal with the incident.

In the event of a Tier 3 incident and the implementation of the National Contingency Plan, the OMT will assist the MCA and appropriate members of the OMT will re-deploy to the TCG or SCG as required.

The Southampton VTS Marine Response Centre will remain active unless superseded by the MCA Marine Response Centre (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 at-sea counter pollution measures to the MCA.

2.3 Protracted Incidents

The majority of incidents experienced in the port in recent years have been dealt with within the period of a 12-hour watch, or at longest over 2 -3 days. However, consideration has to be given to a major incident which could take weeks or longer to resolve.

The Marine Department operates on a 5 watch basis for all operational staff (VTS, launch crew, Berthing Officers etc) and maintains full operational capability 24/7/365. Whilst normal out of hours numbers are limited (4 VTS staff, 2 launch crew, 1 Berthing Officer,

plus a Duty Harbour Master), these can be quickly augmented from off watch staff to ensure operational capability is maintained or enhanced as necessary.

The Duty Harbour Masters' roster is 4 strong and, whilst the normal duty period is 1 week in 4, for any major incident a 2 watch roster, with 2 Duty Harbour Masters in each, would be quickly instigated and would be sustainable over a longer period of time.

In the event of a major incident at one of the oil terminals within the port, port staff would be augmented on the ground by terminal staff and additionally by staff employed by respective Tier 2 Contractors.

Members of the Oil Spill Management Team would need to arrange reliefs from within their own organisations to ensure 24/7 requirements could be met. Incident response would be coordinated by the OMT leaving port operational staff to maintain the port's operations as close to normality as the incident allowed and ensure business as usual.

2.4 Tier One Incident

2.4.1 Oil Terminals and Local Installations (See also Section 2.10 Response at Fawley Marine Terminal)

The terminal / installation involved will immediately inform the Duty Harbour Master via the Duty VTS Watch Manager who will in turn activate the notification procedure. The terminal / installation will activate their own response centre and will initiate the appropriate response actions. The Harbour Master will send a senior representative to monitor the response being taken. That representative will advise the Harbour Master whether or not control of the response should be transferred to Southampton VTS Marine Response Centre in the event that the spill is extending or migrating beyond the immediate vicinity of the terminal, or that the response being taken is considered inappropriate.

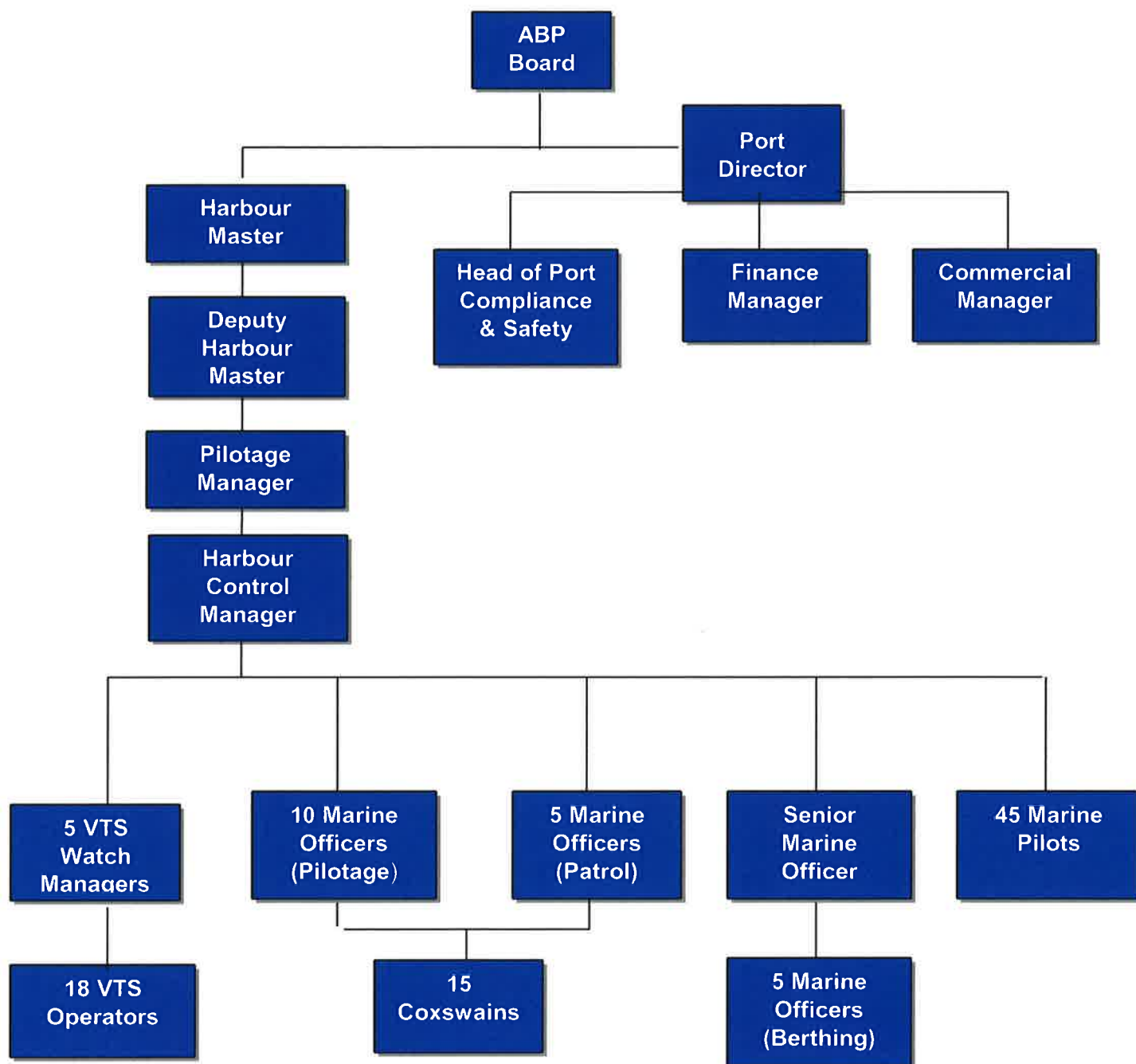
2.4.2 All Other Harbour Areas including Dock Complexes

The Duty VTS Watch Manager will initiate the appropriate response actions and will immediately advise the Duty Harbour Master and activate the notification procedure (Section 3). After the Duty Harbour Master has relieved the Duty VTS Watch Manager, management of the response will be in line with the established day-to-day management structure of the Harbour Master's Department (see Figure 2.1).

2.5 Tier Two Incident (See also Section 2.10 Response at Fawley Marine Terminal)

In addition to the actions described above and the activation of the notification procedure, the Harbour Master will decide whether or not to set up an Oil Spill Management Team and, in the event of an oil company involvement, whether the OMT will operate from the Southampton VTS Marine Response Centre or from the oil company's response centre. Depending on the circumstances of the incident, the OMT will include representatives from the following organisations and authorities:

| | | |
|----|--|--------------------------|
| 1 | Harbour Authority | <input type="checkbox"/> |
| 2 | Adler and Allan | <input type="checkbox"/> |
| 3 | Environment Agency | <input type="checkbox"/> |
| 4 | Oil Companies/ Installations (terminal spill or as required) | <input type="checkbox"/> |
| 5 | Hampshire County Council | <input type="checkbox"/> |
| 6 | Natural England | <input type="checkbox"/> |
| 7 | MMO (Marine Management Organisation) | <input type="checkbox"/> |
| 8 | Coastal District/Borough Council(s) (as appropriate) | <input type="checkbox"/> |
| 9 | Salvor | <input type="checkbox"/> |
| 10 | P & I Club / ITOPF | <input type="checkbox"/> |
| 11 | MCA | <input type="checkbox"/> |
| 12 | Vessel Owners | <input type="checkbox"/> |
| 13 | Solent Environment Group | <input type="checkbox"/> |

Figure 2.1 Normal Organisational Structure

2.6 Tier Three Incident

In addition to the actions described above for Tier 1 and Tier 2, for a Tier 3 incident an Oil Spill Management Team, under the chairmanship of the Harbour Master, will be established at the Southampton VTS Marine Response Centre and will include representatives from the following organisations and authorities:

| | | |
|----|--|--------------------------------|
| 1 | Harbour Authority | <input type="checkbox"/> T/SCG |
| 2 | Adler and Allan | <input type="checkbox"/> T/SCG |
| 3 | Environment Agency | <input type="checkbox"/> T/SCG |
| 4 | Oil Companies/ Installations (terminal spill or as required) | <input type="checkbox"/> T/SCG |
| 5 | Hampshire County Council | <input type="checkbox"/> T/SCG |
| 6 | Natural England | <input type="checkbox"/> T/SCG |
| 7 | MMO (Marine Management Organisation) | <input type="checkbox"/> T/SCG |
| 8 | Coastal District/Borough Council(s) (as appropriate) | <input type="checkbox"/> T/SCG |
| 9 | ITOPF (International Tanker Owners Pollution Federation) | <input type="checkbox"/> T/SCG |
| 10 | P & I Club | <input type="checkbox"/> T/SCG |
| 11 | Salvor (if appointed) | <input type="checkbox"/> |
| 12 | Police | <input type="checkbox"/> T/SCG |
| 13 | Hampshire Fire & Rescue Service | <input type="checkbox"/> T/SCG |
| 14 | MCA Counter Pollution and Salvage Officer | <input type="checkbox"/> T/SCG |
| 15 | MCA - HM Coastguard | <input type="checkbox"/> |
| 16 | Vessel Owners | <input type="checkbox"/> |
| 17 | Adjacent Harbour Authorities (as appropriate) | <input type="checkbox"/> |
| 18 | Solent Environment Group | <input type="checkbox"/> |

2.7 Tactical Coordinating Group (TCG) and Strategic Coordinating Group (SCG)

The implementation of the National Contingency Plan will involve establishment of a Tactical Coordinating Group (TCG) and a Strategic Coordinating Group (SCG) under the chairmanship of a senior police officer, or senior local authority officer if there is no immediate threat to life. These Groups will cover many of the functions previously carried out by the Shoreline Response Centre when pollution threatens the coastline. The SCG's primary function is to co-ordinate the overall strategic shoreline response and clean-up activity. For an incident within ABP Southampton's statutory area, it is highly likely that the SCG will be established at Hampshire Police HQ at Netley, with a fall back location at Hampshire County Council's Offices in Winchester. Appropriate members of the OMT (as indicated at 2.2 above) will re-deploy as requested by the MCA and Hampshire County Council. The OMT / TCG will retain responsibility for tactical marine response to the incident. Hampshire and Isle of Wight Local Resilience Forum Emergency Response Arrangements will also be activated at the TCG and SCG.

2.8 Environment Group

The Environment Group provides a single advisory line on public health and environmental issues at sea to all response cells. Where the incident poses a significant threat to health or the environment on land, the SCG may establish a Scientific and Technical Advice Cell (STAC) and this may be integrated with the Environment Group. At the outset of an incident, at sea, the MCA triggers the formation of an Environment Group to provide advice

requiring a local, regional or national response. The local Standing Environment Group, the Solent Environment Group (SEG), covers The Solent area and the MCA co-ordinates its contact details and call out arrangements. The SEG comprises the statutory environmental regulators, fisheries departments, nature conservation bodies and public health bodies plus a range of specialist public sector and non-government organisations. The SEG enables a co-ordinated and timely environmental input to more localised or specialised incidents.

The SEG may be stood up as a precautionary approach when there is potential for incident escalation. In more minor incidents, the SEG remains a 'virtual' group responding with advice when requested. The SEG's remit is advisory and it has no powers of direction or enforcement. The regulatory functions of individual members of the SEG will be exercised outside the Group structure and function.

Further detail on The Environment Group in Maritime Pollution Response in the UK may be found in STOp Notice 1/14 at Appendix 1 to this Section (and also at www.gov.uk/government/publications/scientific-technical-and-operational-advice-notes-stop-notes).

2.9 Simultaneous Oil Spills

In the event that a second simultaneous oil spill occurs within the harbour area then the Duty VTS Watch Manager will make an initial assessment of the priority for response based on the initial report. He/she will task the Harbour Patrol launch to the spill of greater priority and a second launch, as available, to the other spill. Following reports from the scene of the spills the response priorities will be re-assessed. Adler and Allan has the capability to respond to two simultaneous oil spills.

2.10 Response Specific to Fawley Marine Terminal (FMT)

2.10.1 Specific to Fawley Marine Terminal, there are a number of different elements to the response to an oil spill at the Terminal. Spills will be categorised as follows:

| Category | Management Team Location | | Lead |
|---------------|--------------------------|---|-------------------|
| Tier 1 | ESSO Fawley | | Esso |
| Tier 2 | 'A' | ESSO Fawley | Esso |
| | 'B' | ESSO Fawley or Southampton VTS Marine Response Centre (MRC) | Harbour Master |
| Tier 3 | Southampton VTS MRC | | Harbour Master |

In the event of a spill, FMT will inform VTS by phone, followed by a faxed / emailed copy of the Spill Report Form (template at 2.10.11) which will confirm the nature and extent of the spill and the Tier allocated. The VTS Watch Manager is to commence spill actions, as per this Plan, relevant to the indicated Tier – thus Tier 1, Tier 2 etc. Notifications should be commenced based on the assessment provided.

FMT will clarify the required Tier 2 response by suffixing Tier 2 with 'A' or 'B' – Tier 2 A indicates that the spill remains within the Fawley Marine Terminal Area of Responsibility and capability to recover and Tier 2 B that the spill extends beyond the FMT Area of Responsibility and capability to recover. As can be seen above, depending on whether Tier 2A or 2B will dictate where the Oil Spill Management Team will close up and who will be the lead.

2.10.2 The Defined Area of Responsibility is detailed in the following table:

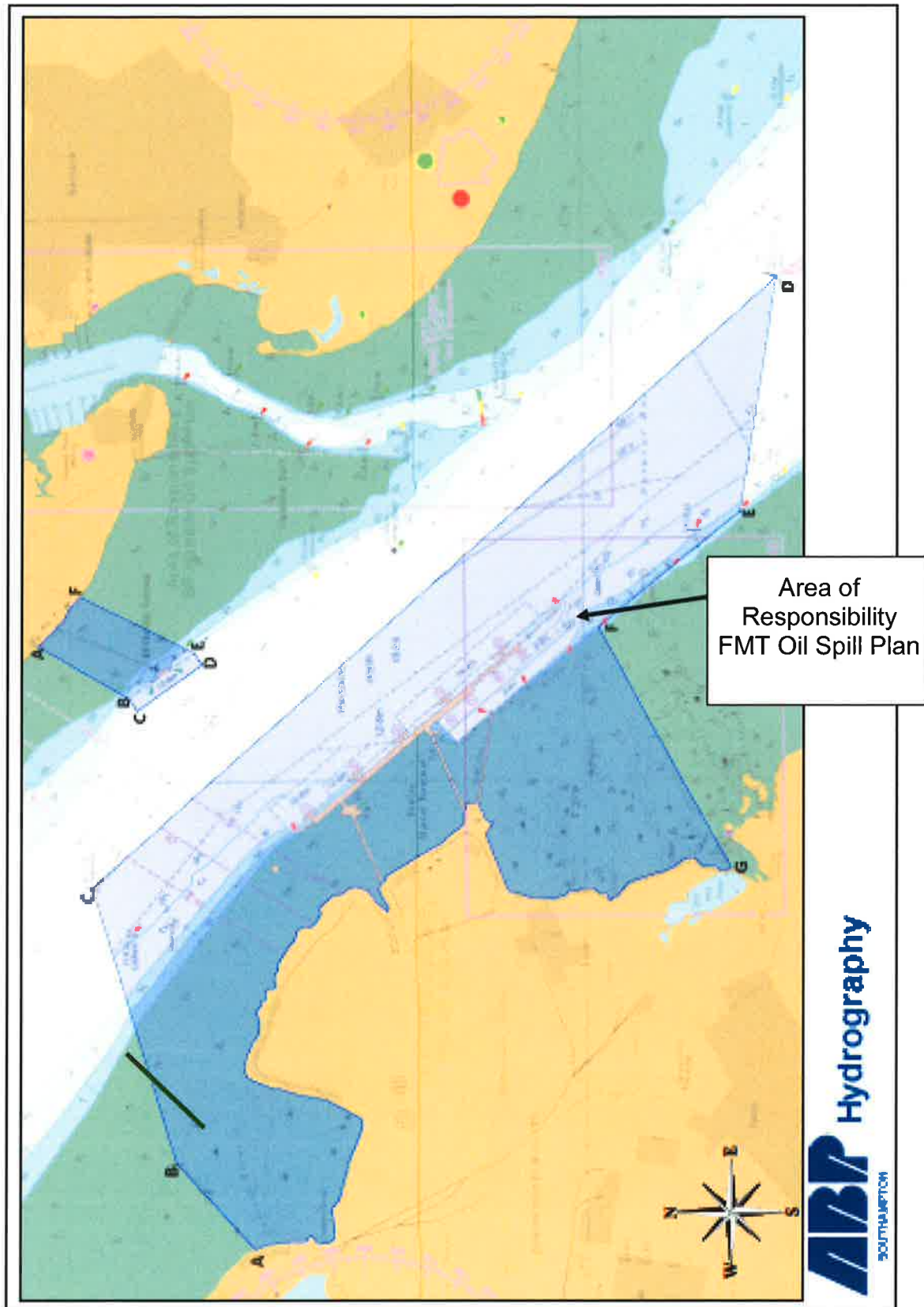
| | Latitude | Longitude | Description | X | Y |
|----------|---------------|------------|--------------------------------|--------|--------|
| A | 50 50.74 N | 01 21.66 W | Cadland Creek | 445086 | 105331 |
| B | 50 50.92 N | 01 21.35 W | Cadland Creek Mile Marker 1 | 445442 | 105658 |
| C | 50 51.11 N | 01 20.38 W | Greenland Buoy | 446583 | 106014 |
| D | 50 49.56 N | 01 18.23 W | Hook Buoy | 449131 | 103174 |
| E | 50 49.65 N | 01 19.06 W | Oil Pollution Pile 13 | 448153 | 103323 |
| F | 50 49.97 N | 01 19.47 W | Oil Pollution Pile 9 | 447670 | 103911 |
| G | 50 49.67 N | 01 20.32 W | Ashlett Creek North Bank | 446674 | 103358 |

The area of responsibility is derived from the expected location an oil slick would migrate to within 1 hour, from its source at FMT.

The reference points detailed above are physical, easily identifiable land & sea marks.

Figure 2.2 overleaf illustrates the location of Fawley Marine Terminal & the boundary for Tier 1 & 2 incidents.

Figure 2.2 FMT Location and Area of Responsibility



2.10.3 Harbour Master

At Tier 2A level, FMT has overall responsibility for the conduct of spill response operations with the Harbour Master's assistance. At Tier 2B level the Harbour Master (or his nominated deputy) has overall responsibility for the conduct of spill response operations and for casualty/salvage management within the Port and Southampton Water.

2.10.4 Oil Spill Management Team (OMT) for Fawley-based Incidents

The OMT will provide the command and control structure to co-ordinate and direct the incident response. The OMT will typically consist of representatives from the following organisations and Authorities:

| MANAGEMENT TEAM | ADVISORY / SUPPORT TEAM |
|--|--|
| Harbour Master Environment Agency Oil Company (if appropriate) Hampshire County Council | Oil Spill Response (OSR)/Adler and Allan District/ Borough Councils Vessel Owners Natural England Marine Management Organisation (MMO) P & I Club Salvor (if appropriate) MCA (if appropriate) Associated British Ports (ABP): Administration Public Relations Finance and Accounts |

The OMT, under the chairmanship of the Harbour Master, irrespective of where located may use all response agencies and available assets as necessary to deal with the incident.

The table below shows the preferred location of the OMT dependent upon the category of the spill incident:

| Category | Management Team Location | | Lead |
|----------|--------------------------|--|-------------------|
| Tier 1 | ESSO Fawley | | Esso |
| Tier 2 | 'A' | ESSO Fawley | Esso |
| | 'B' | ESSO Fawley or Southampton VTS Marine Response Centre (MRC) | Harbour Master |
| Tier 3 | Southampton VTS MRC | | Harbour Master |

Respective organisation charts are shown in Section 2.10.10.

In the event of a Tier 3 incident and the implementation of the National Contingency Plan, the OMT will assist the MCA and appropriate members of the OMT will deploy to the MCA MRC, TCG and SCG.

The Southampton VTS Marine Response Centre (MRC) or Fawley Marine Terminal Control Room will remain active unless superseded by the MCA MRC.

2.10.5 Tier 1 Incidents

2.10.5.1 Response will be as per Section 2.4.

2.10.6 Tier 2 Incidents

| TIER 2 |
|---|
| <p>Medium release within defined area of responsibility, which is likely to impact on the shoreline or migrate outside of the defined area.</p> <p>Tier 2 is divided into two levels of response:</p> <p>Tier 2 'A' a release which can be contained, recovered and dispersed by the use of support personnel and equipment that can be readily deployed. e.g. tugs, sorbent boom etc. by Fawley Refinery and its associated specialist contractor (OSR).</p> <p>Tier 2 'B' a release which requires substantial commitment of the ABP Southampton Oil Spill Contingency Plan and may involve regional assistance with the response being managed under the chairmanship of the Harbour Master.</p> |

FMT will activate the response for a Tier 2 category in the same way as a Tier 1 or, may re-categorise a Tier 1 if the pollution is likely to migrate outside the Tier 1 area of responsibility, or if it is likely that the pollution will reach the shoreline.

2.10.7 Tier 2A Incident

An Oil Spill Management Team will include representatives from the following organisations. The team will be located in **Room 4B EPCo Admin building**.

| Organisation | |
|--------------|---|
| 1 | Port of Southampton (Duty Harbour Master) |
| 2 | Hampshire County Council & Coastal District/Borough Council(s) (as advised by HCC) |
| 3 | Environment Agency |
| 4 | Fawley Site Representative (Environmental Group Head) |
| 5 | Hamble Harbour Master |
| 6 | Natural England |

2.10.8 Tier 2B Incident

An Oil Spill Management team, under the Chairmanship of the Harbour Master, will be established at the Southampton VTS Marine Response Centre or at the MCC at FMT.

Depending on the circumstances of the incident, the OMT will typically include representatives from the following organisations and authorities:

| Organisation | |
|--------------|--|
| 1 | Port of Southampton (Duty Harbour Master) |
| 2 | Environment Agency |
| 3 | ESSO Fawley Site Management Representative |
| 4 | Hampshire County Council |
| 5 | Hamble Harbour Master |

| | |
|---|-----------------|
| 6 | Natural England |
|---|-----------------|

The following organisations and authorities will be included within the OMT as required:

| | |
|----|---|
| 7 | Marine Management Organisation (MMO) |
| 8 | Coastal District/Borough Council(s) (as advised by HCC) |
| 9 | Salvor |
| 10 | P & I Club / ITOPF |
| 11 | MCA |
| 12 | Vessel Owners |
| 13 | Oil Spill Response / Adler and Allan |
| 14 | Solent Environment Group |

The above list is not exhaustive. Further contacts may be appropriate as the incident develops.

2.10.9 Tier 3 Incident

An Oil Spill Management Team, under the chairmanship of the Harbour Master, will be established at the Southampton VTS Marine Response and will typically include representatives from the following organisations and authorities:

| | |
|----|--|
| 1 | Port of Southampton (Harbour Master) |
| 2 | Oil Spill Response Ltd / Adler and Allan |
| 3 | Environment Agency |
| 4 | ESSO Fawley Site OSR Team or other Oil/Terminal OSR Team (if applicable) |
| 5 | Hampshire County Council |
| 6 | Natural England |
| 7 | Marine Management Organisation (MMO) |
| 8 | Coastal District/Borough Council(s) (as advised by HCC) |
| 9 | ITOPF (International Tanker Owners Pollution Federation) |
| 10 | P & I Club |

| | |
|----|--|
| 11 | Salvor (if appointed) |
| 12 | Police |
| 13 | Hampshire Fire and Rescue Service |
| 14 | British Telecom |
| 15 | MCA - Principal Counter Pollution & Salvage Officer. |
| 16 | HM Coastguard |
| 17 | Vessel Owners |
| 18 | Adjacent Harbour Authorities (as appropriate). |
| 19 | Solent Environment Group |

NB. Any oil spill volume calculations should be made in accordance with the Bonn Agreement Oil Appearance Code – Reference Part 3, Annex A of the Bonn Agreement Aerial Operations Handbook, 2009.

The full handbook can be downloaded from:

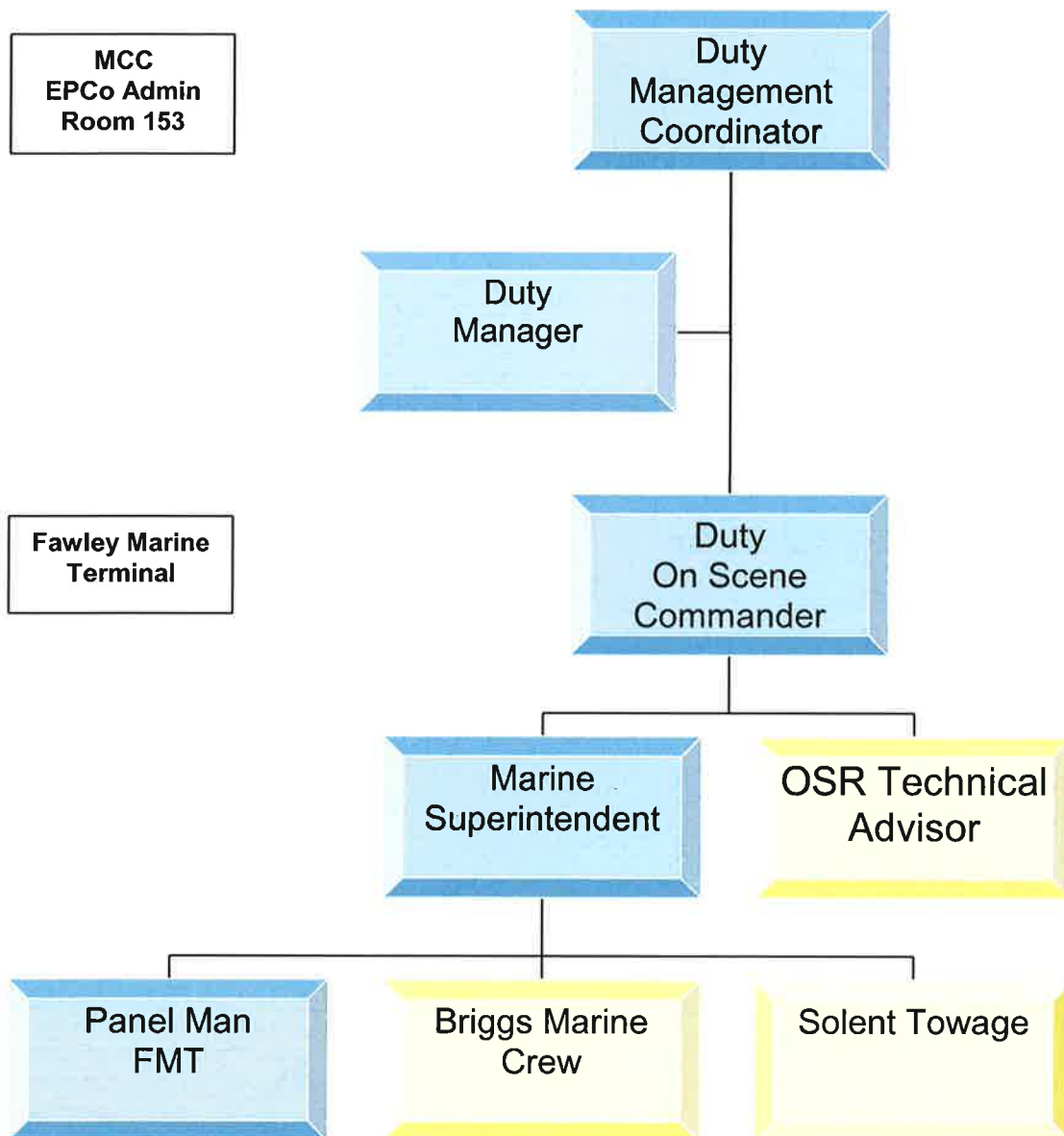
<http://www.bonnagreement.org/eng/doc/Bonn%20Agreement%20Aerial%20Operations%20Handbook.pdf>

2.10.9.1 In a declared Tier 3 incident, the Oil Spill Management Team will remain in charge until the MCA implements the National Contingency Plan and establishes a Marine Response Centre.

2.10.10 Organisation charts

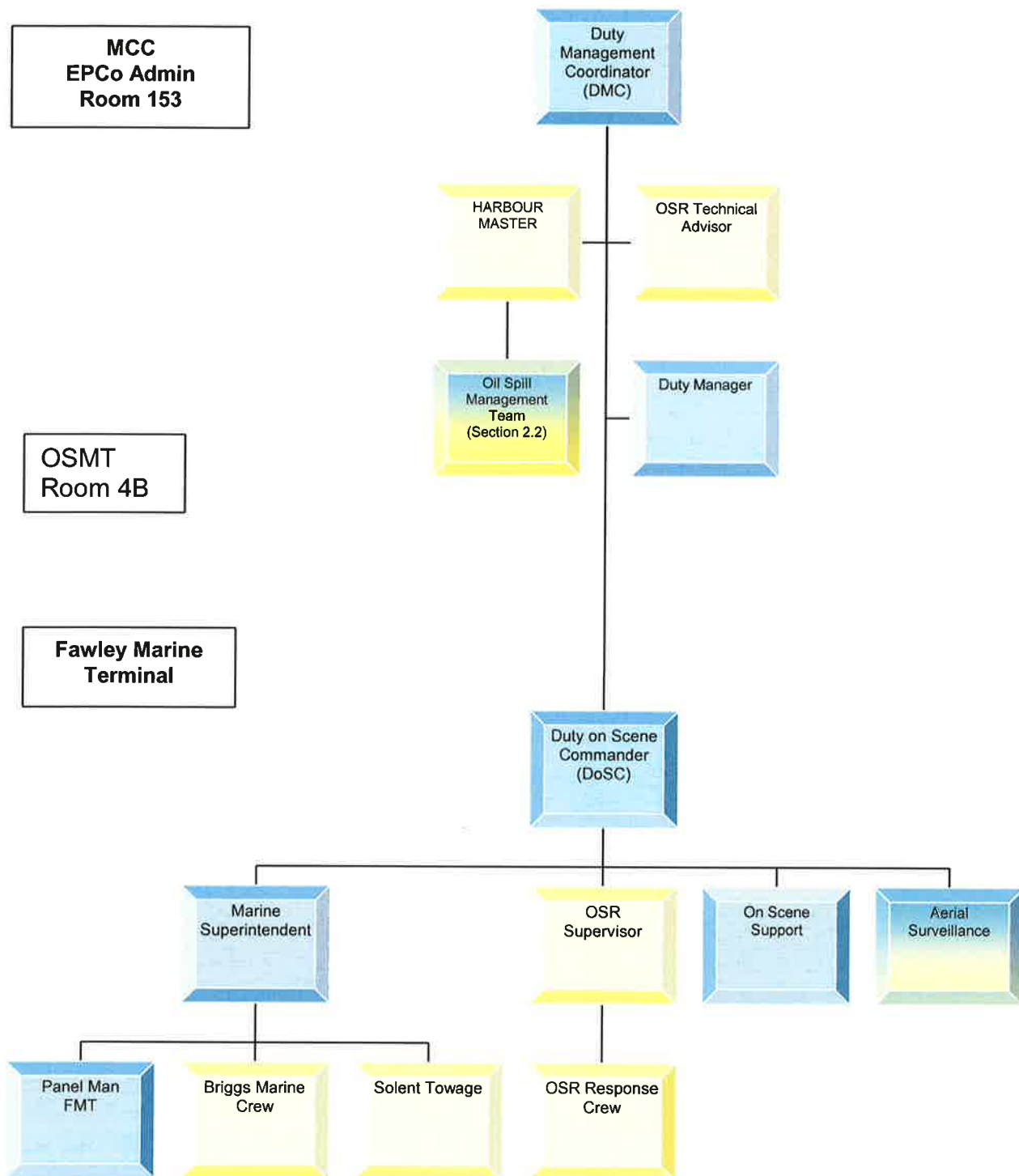
Oil Spill Management Team Organisation Chart Fawley Site

Tier 1

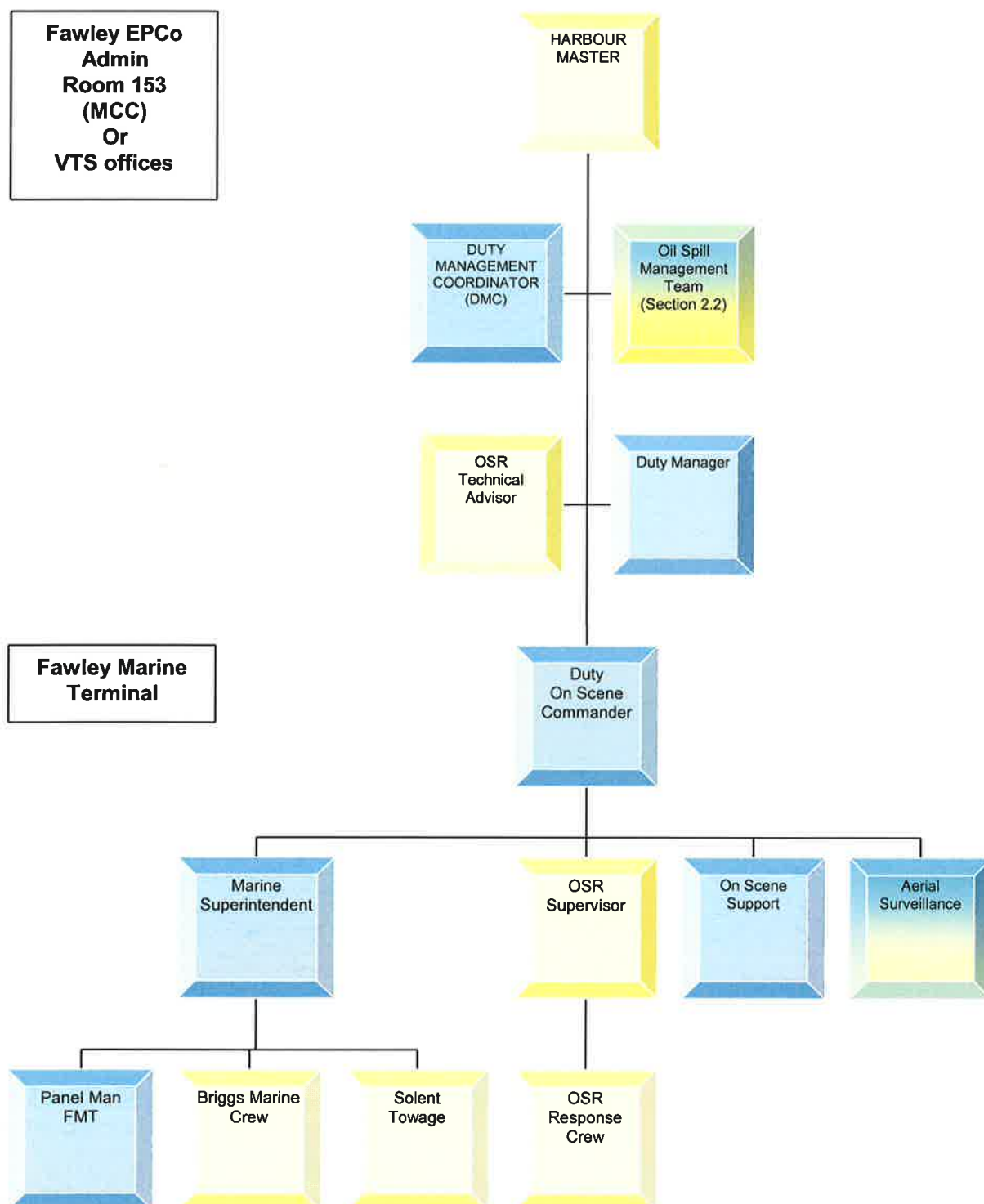


Oil Spill Management Team Organisation Chart Fawley Site

Tier 2A



Tier 2B



2.10.11

Report to be Submitted to VTS following Spill

| | | | | |
|--|--|---|--|---|
| Location: | FAWLEY MARINE TERMINAL | | | |
| Latitude: 50° 50.3'N | | Longitude: 001° 19.8'W | | |
| Compiled by: | | | | |
| Date: | | Time (local): | | |
| Tide: | Wind Dir/Spd: | | Sea State: | |
| Pollution From: (Delete as Appropriate) | SHIP: NAME: BERTH: | | SHORE VICINITY OF BERTH NO: | |
| Summary of Incident: | | | | |
| TYPE OF OIL: (Delete as appropriate) | Light Oils: Mogas, Diesel, Lube oils, Jet | Medium Oils: Crude Oil, eg Forties | Heavy Oils: Fuel Oil | Chemical: Octene, Nonene etc |
| Total amount of oil spilled: | | m3 | | |
| Leak Isolated: | | | | |
| | | YES | | NO |
| Leak Stopped to water: | | | | |
| | | YES | | NO |
| Categorisation - Delete as necessary | | Tier 1 | Tier 2A | Tier 2B |
| Shore Impact Potential: | | YES | | NO |
| MSDS ATTACHED (Delete as Appropriate) | | | | |
| | | YES | NO | PRODUCT: |

2.10.12

OIL SPILL PROGRESS REPORT

| | | | | |
|---|---|---|--------------------------------|---|
| Location: | FAWLEY MARINE TERMINAL | | | |
| Latitude: 50° 50.3'N | | Longitude: 001° 19.8'W | | |
| Updated by: | | | | |
| Date: | | Time (local): | | |
| Tide: | Wind Dir/Spd: | | Sea State: | |
| Pollution From: Delete as Appropriate | SHIP: | | SHORE | |
| | NAME: | | VICINITY OF BERTH: | |
| | BERTH: | | | |
| Summary of Incident: | | | | |
| TYPE OF OIL: Delete as appropriate | Light Oils: Mogas, Diesel, Lube oils, Jet | Medium Oils: Crude Oil, eg Forties | Heavy Oils: Fuel Oil | Chemical: Octene, Nonene etc |
| Total amount of oil spilled: (approx) | | m3 | | |
| Total amount of oil recovered: (approx) | | m3 | | |
| Outstanding amount of spilled oil: | | m3 | | |
| | | | | |
| Leak Isolated: | YES | | NO | |
| Leak Stopped to Water | YES | | NO | |
| Dispersant Used | YES | | NO | |
| | | | | |
| Other Information: | | | | |
| | | | | |
| | | | | |
| | | | | |

Appendix 1:

SCIENTIFIC, TECHNICAL AND OPERATIONAL ADVICE NOTE -

STOp Notice 1/14 Maritime Pollution Response in the UK – The Environment Group

www.gov.uk/government/publications/scientific-technical-and-operational-advice-notes-stop-notes

Contents for information:

1. Introduction
2. Purpose, Scope and Key Tasks of the ENVIRONMENT GROUP (EG)
 - 2.1 Purpose of the EG
 - 2.2 Scope of the EG
 - 2.3 Key Tasks of the EG
 - 2.4 Requirements of the EG in order to fulfil functions
3. Composition and Structure of the EG
 - 3.1 Membership of the EG
 - 3.2 Key EG personnel and their roles
 - 3.3 Structure of the EG
4. Establishment of the EG for Maritime Incident Response
 - 4.1 MCA routine alerting procedure
 - 4.2 Alerting procedure when a Standing EG (SEG) exists
 - 4.3 Alerting procedure and EG establishment where a Standing EG does not exist
 - 4.4 Standing down the EG
5. Establishment of a standing EG and Contingency Planning
 - 5.1 Geographical coverage
 - 5.2 Suggested SEG work programme

Annexes

- 1 Glossary of abbreviations
- 2 Impact Assessment
- 3 Data
- 4 Communications
- 5 Record Keeping
- 6 Wildlife Welfare
- 7 EG Chair generic check list
- 8 Generic first meeting Agenda for the EG
- 9 Checklist for Information Requirements during Maritime Pollution Incidents

3. Reporting Procedures

3.1 Use of Section

This section sets out the reporting and notification procedures which should be followed in the event that an oil spill occurs within the harbour area.

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 Duty VTS Watch Manager.**

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 in the appendices to this section; the appendices also include POLREP CG77 and an Oil Spill Progress Report.

3.2 Prevention of Oil Pollution Acts 1971 & 1986

These Acts place an obligation on persons to immediately report to the Harbour Master an oil spill which enters, or threatens to enter, Southampton Water. Persons include port users, vessel masters, oil companies and industrial firms with water frontage.

3.3 Notification Matrices

The Duty VTS Watch Manager will implement the following notification matrix in accordance with the category of oil spill incident declared.

Note: The matrices below give the primary telephone contact numbers; alternative telephone and facsimile numbers are included in Section 9.

3.3.1 Tier 1 Incident

| Organisation | Telephone No. | |
|---|--|--------------------------|
| HM Coastguard - NMOC | 02392 552100 | <input type="checkbox"/> |
| Environment Agency | 0800 807060 (24 hours) | <input type="checkbox"/> |
| Hampshire County Council (who will advise Coastal District/ Borough Council(s)) | Pager: 07623 960259 Confirm to epdutyofficer@hants.gov.uk | <input type="checkbox"/> |
| Southampton City Council Emergency Planning Duty Officer (If appropriate) | 02380 833675 (24 hours) | <input type="checkbox"/> |
| Natural England | 0300 060 1200 (24 hours) | <input type="checkbox"/> |
| Hamble Harbour Master (if Hamble River likely to be affected) | 01489 576387 (office hours) Patrol Officer: 07718 146380 / 1 Out of hours - See Section 9 for Harbour Master's contact numbers | <input type="checkbox"/> |

3.3.2 Tier 2 Incident

| Organisation | Telephone No. | |
|---|--|--------------------------|
| HM Coastguard - NMOC | 02392 552100 | <input type="checkbox"/> |
| Environment Agency | 0800 807060 (24 hours) | <input type="checkbox"/> |
| Adler and Allan | 0800 592 827 | <input type="checkbox"/> |
| Hampshire County Council (who will advise District / Borough Councils) | Pager: 07623 960259 Confirm to epdutyofficer@hants.gov.uk | <input type="checkbox"/> |
| Southampton City Council Emergency Planning Duty Officer (If appropriate) | 02380 833675 (24 hours) | <input type="checkbox"/> |
| New Forest District Council (if appropriate) | 02380 285000 (office hours) 08444 152211 (out of hours) | <input type="checkbox"/> |
| Natural England | 0300 0601200 (24 hours) | <input type="checkbox"/> |
| Oil Terminals Esso Fawley | 02380 896500 | <input type="checkbox"/> |
| BP Oil Hamble | 02380 745715 | <input type="checkbox"/> |
| Perenco UK Ltd | 01929 480476 | <input type="checkbox"/> |
| SMC Marchwood (if appropriate) | 02380 664563/664370 (office hrs) 07828 812374 (out of hours) | <input type="checkbox"/> |
| MMO Marine Pollution Incidents line (including dispersant approvals) | 0300 2002024 (Office Hours) 07770 977825 (Out of hours) or 0345 0518486 | <input type="checkbox"/> |
| All other times or if numbers out of order | 0845 0518486 | |
| MMO Poole Office (office hours) | 01202 677539 | |
| Hamble Harbour Master (if Hamble River likely to be affected) | 01489 576387 (office hours) Patrol Officer: 07718 146380 / 1 Out of hours - See Section 9 for Harbour Master's contact numbers | <input type="checkbox"/> |

NOTE 1: On notification of a Tier 2 incident the VTS Watch Manager will confirm that an Oil Spill Management Team (OMT) will be established at Southampton VTS Marine Response Centre (or an alternative location if appropriate) and that, having been notified, attendance at the OMT is required.

NOTE 2: For all Tier 1 and Tier 2 incidents, the Contact Check List at Section 4 Appendix 2 is to be used to record the notification time for each authority informed.

3.3.3 Tier 3 Incidents

| Organisation | Telephone No. | |
|---|--|--------------------------|
| HM Coastguard - NMOC | 02392 552100 | <input type="checkbox"/> |
| Environment Agency | 0800 807060 (24 hours) | <input type="checkbox"/> |
| Adler and Allan | 0800 592 827 | <input type="checkbox"/> |
| Hampshire County Council (who will advise District / Borough Councils) | Pager: 07623 960259 Confirm to epdutyofficer@hants.gov.uk | <input type="checkbox"/> |
| Southampton City Council Emergency Planning Duty Officer (If appropriate) | 02380 833675 (24 hours) | <input type="checkbox"/> |
| New Forest District Council | 02380 285000 (office hours) 08444 152211 (out of hours) | <input type="checkbox"/> |
| Natural England | 0300 060 1200 (24 hours) | <input type="checkbox"/> |
| Oil Terminals | Esso Fawley 02380 896500 | <input type="checkbox"/> |
| | BP Oil Hamble 02380 745715 | <input type="checkbox"/> |
| | Perenco 01929 480476 | <input type="checkbox"/> |
| SMC Marchwood (if appropriate) | 02380 664563/664370 (office hrs) 07828 812374 (out of hours) | <input type="checkbox"/> |
| MMO Marine Pollution Incidents line (including dispersant approvals) | 0300 2002024 (Office Hours) 07770 977825 (Out of hours) or 0345 0518486 | <input type="checkbox"/> |
| All other times or if numbers out of order | 0845 0518486 | |
| MMO Poole Office (office hours) | 01202 677539 | |
| Southern IFCA | Tel/Fax : 01202 721373 | <input type="checkbox"/> |
| Police | 0845 0454545 | <input type="checkbox"/> |
| Hampshire Fire & Rescue Service | 01329 221228 | <input type="checkbox"/> |
| QHM Portsmouth (if appropriate) | 02392 723694 | <input type="checkbox"/> |
| Isle of Wight Council (if appropriate) | 01983 821105 (24 hours) (Request Emergency Management Duty Officer paged) | <input type="checkbox"/> |
| Cowes Harbour Master (if appropriate) | 01983 293952 (office hours) HM 07855 405560/ DHM 07855 405561 | <input type="checkbox"/> |
| Beaulieu Harbour Master (if appropriate) | 01590 616200 (office hours) 01590 616 211 (FAX) | <input type="checkbox"/> |

Hampshire County Council will additionally alert the following for Tier 2 and 3 Incidents:

British Telecom (Emergency Installation)
County Departments as necessary
West Sussex County Council

Dorset County Council
Waste Disposal Contractors

NOTE 1: On notification of a Tier 3 incident the VTS Watch Manager will confirm that an Oil Spill Management Team (OMT) will be established at Southampton VTS Marine Response Centre (or an alternative location if appropriate) and that, having been notified, attendance at the OMT is required.

NOTE 2: For all incidents, the Contact Check List at Section 4 Appendix 2 is to be used to record the notification time for each authority informed.

Appendix 1

Extract from Statutory Instrument 1998 No. 1056 Regulation 4 Paragraph 6

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.

- and as amended by SI 2015 No 386 Regulation 6 Paragraph 12.

(9) Every responsible person must—

- (a) maintain equipment and expertise relevant to the oil pollution emergency plan which is approved in respect of matters for which the person is responsible;
- (b) ensure that such equipment and expertise is available for use at all times;
- (c) make such equipment and expertise available to the authorities responsible for the execution of the National Contingency Plan;
- (d) undertake exercises to maintain relevant expertise for the implementation of the plan, including interaction with the National Contingency Plan;
- (e) retain evidence of those exercises; and
- (f) provide such evidence to the Secretary of State, if so required by the Secretary of State by written notice.

Appendix 2: POLREP CG77

INSTRUCTIONS FOR COMPLETING FORM CG77 (POLREP)

(On completion please email to zone17@hmcg.gov.uk)

PART 1 - INFORMATION WHICH SHOULD BE PROVIDED IN AN INITIAL REPORT

CG77 POLREP

- A. CLASSIFICATION of report - (i) Doubtful, (ii) Probable , (iii) Confirmed.
- B. DATE/TIME/OBSERVER - 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: Speed / direction, WIND: Speed and direction.
- E. Weather: Conditions and Sea State.
- F. CHARACTERISTICS of pollution: give type of pollution eg. oil (crude or otherwise), packaged or bulk chemicals, or garbage. For chemicals give proper name or United Nations Number if known. For all, give also appearance, e.g. liquid, floating, solid, liquid oil, semi-liquid sludge, tarry lumps, weathered oil, discoloration 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.
- H. Details of VESSELS IN THE AREA: to be given if polluter cannot be identified and the spill is considered to be of recent origin.
- I. NOT USED
- J. Whether PHOTOGRAPHS have been taken and/or SAMPLES for analysis.
- K. REMEDIAL ACTION taken or intended to deal with the spillage
- L. FORECAST of likely pollution (e.g. arrival on beach), with estimated timing.
- M. 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, extent of pollution on land or near water).

PART II - SUPPLEMENTARY INFORMATION TO BE PROVIDED LATER

(This section may be disregarded when POLREPs are for UK internal distribution only)

- O. RESULT of SAMPLE analysis
- P. 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. 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) 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, MCA-HM Coastguard to inform COPOs/LOPOs in the counties immediately adjacent to counties at risk , that they may be at risk.
5. Care should be taken to avoid undue escalation of UNCONFIRMED pollution incidents with consequent misleading publicity.

Appendix 3 Oil Spill Progress Report

| OIL SPILL PROGRESS REPORT | | | | | |
|---|--|--|---|--|--|
| Incident Name: | | | | | |
| Updated by: | | | | | |
| Date: | | | Time (local): | | |
| Summary of Incident Response Operations: | | | | | |
| | | | | | |
| Summary of Incident Response Resource Utilisation: | | | | | |
| Number of Aircraft: | | | Number of Vessels: | | |
| Dispersant Used litres | | | Length of Booms in Use: m | | |
| Number of Recovery Devices: | | | Number of Storage Devices: | | |
| Sorbent Used: kg | | | Bioremediation Used kg | | |
| Number of Personnel: | | | Number of Vehicles: | | |
| Specialist Equipment: | | | | | |
| | | | | | |
| Oil Spill Balance Sheet: | | | | | |
| Total amount of oil spilled: | | | tonnes | | |
| Total amount of oil recovered: | | | tonnes | | |
| Outstanding amount of spilled oil: | | | tonnes | | |
| Mass balance: | | | | | |
| Estimated Natural Weathering: | | | tonnes | | |
| Mechanically agitated: | | | tonnes | | |
| Chemically dispersed | | | tonnes | | |
| Skimmer recovered | | | tonnes | | |
| Sorbent recovered: | | | tonnes | | |
| Manually recovered: | | | tonnes | | |
| Bioremediated | | | tonnes | | |
| Other..... | | | tonnes | | |

Appendix 4

Guidelines to Information Required by MMO in Considering Request for Dispersant Spraying Approval

As much of the following information as possible should be provided when requesting approval.

- Name of authority or organisation requiring approval.
- Name of contact and telephone and fax number used.
- Locality of spill preferably in degrees (but could be grid reference or description such as “Western end of King George Dock” or “Length of river between power station and oil refinery”).
- Oil type or description of appearance if not known. If crude – what type?
- Quantity of oil spilled – preferably in tonnes.
- Source of spill.
- Potential for further spill.
- Description of slick – including dimensions and colour.
- Volume and name of dispersant for which approval is requested.
- Other methods of response being applied or considered and assistance being sought (e.g. MFA, Environment Agency).
- Local fisheries considerations (such as seasonal fisheries, advice given to fishermen).
- Local wildlife considerations (e.g. whether migrant birds are present).
- Tide – type and speed, and time of HW/LW particularly.
- Wind and weather (such as “Moderate breeze NW” “Overcast drizzle”).
- Sea state.

Appendix 5

Sample of a Report of Use of an Oil Treatment Product which could be sent to MMO

Port of Southampton

| | |
|--|--|
| Incident No _____ | Date _____ |
| Volume and type of oil _____ | |
| Location _____ | |
| Remedial action taken _____ | |
| Name and type of oil treatment product _____ | |
| Date of manufacture _____ | Efficacy last tested on _____ (if applicable) |
| Comments on effectiveness _____ | |
| Report made to MMO by _____ | |
| Other remarks _____ | |

4. Action Sheets

The following section contains action sheets and checklists for various members of the Oil Spill Response and Management Teams.

The action sheets follow a methodical checklist style, in order to guide the post holders through the actions that they will be expected to take and the sheets also list the post holders' responsibilities.

Action sheets are included for the following positions:

- 4.1 Duty VTS Watch Manager
- 4.2 Duty Marine Officer (Harbour Patrol)
- 4.3 Duty Harbour Master
- 4.4 Oil Terminal Representative (Oil Terminal Spill)

| 4.1 | Duty VTS Watch Manager | |
|-------------------------|--|--|
| Responsibilities | <ul style="list-style-type: none"> • Receive information / report of oil spill incident • If spill not associated with oil installation, initiate first response measures • If spill is associated with oil installation, ensure oil terminal initiates appropriate response • Notify relevant external organisations • Maintain communication with all vessels in vicinity • Complete report form CG 77 POLREP | |
| Step | Actions | Additional Information |
| Alert | <input type="checkbox"/> Duty Marine Officer (Harbour Patrol) <input type="checkbox"/> Duty Harbour Master (on-call) <input type="checkbox"/> Other Port departmental organisations <input type="checkbox"/> Harbour vessel operators <input type="checkbox"/> Adler and Allan to be activated as necessary | <i>Phone Adler and Allan immediately and subsequently fax/email as required. See Appendix 1.</i> |
| Initial Actions | <input type="checkbox"/> Verify incident details <input type="checkbox"/> Assign initial incident category <input type="checkbox"/> Notify external organisations according to oil spill classification (as per contact checklist) <input type="checkbox"/> Initiate personal log <input type="checkbox"/> Issue general warning to all vessels in vicinity <input type="checkbox"/> Transfer information to SITREP boards <input type="checkbox"/> Monitor oil spill channel <input type="checkbox"/> Request POLREP CG77 information <input type="checkbox"/> Complete POLREP CG77 | <i>See notification matrices, Section 3 Checklist Appendix 2</i> <i>VHF Channel 10 or 103</i> |
| Further Actions | <input type="checkbox"/> Brief Duty Harbour Master <input type="checkbox"/> Maintain liaison with oil company or other industry representative | |
| Final Actions | <input type="checkbox"/> Submit personal log to the Harbour Master <input type="checkbox"/> Attend debrief | |

| 4.2 | Duty Marine Officer (Harbour Patrol) | |
|-------------------------|--|--|
| Responsibilities | <ul style="list-style-type: none"> Initially assess situation Verify classification Provide accurate situation reports to Duty VTS Watch Manager Collect evidence and / or statements Liaise with oil company or industry representative Liaise with incident vessel regarding status of oil spill (if applicable) | |
| Step | Actions | Additional Information |
| Alert | <input type="checkbox"/> VTS | |
| Initial Actions | <input type="checkbox"/> Proceed to incident location <input type="checkbox"/> Investigate cause / source of spill <input type="checkbox"/> Communicate all information to Duty VTS Watch Manager <input type="checkbox"/> Complete Assessment Form <input type="checkbox"/> Take samples of spilled oil <input type="checkbox"/> Initiate personal log <input type="checkbox"/> Take photographic evidence <input type="checkbox"/> Collect evidence and take statements | <i>Stopped or ongoing</i> <i>Refer to Section 3</i> |
| Further Actions | <input type="checkbox"/> Track the leading edge of slick <input type="checkbox"/> Provide co-ordination of the at-sea response <input type="checkbox"/> Direct any dispersant spraying operations <input type="checkbox"/> Provide detailed situation reports to the Duty VTS Officer <input type="checkbox"/> Survey the shoreline <input type="checkbox"/> Liaise with oil company or industry representative | <i>VHF Channel 103</i> |
| Final Actions | <input type="checkbox"/> Submit personal log to the Harbour Master <input type="checkbox"/> Attend debrief | |

| 4.3 | (Duty) Harbour Master | |
|-------------------------|--|--|
| Responsibilities | <ul style="list-style-type: none"> • Confirm / amend initial classification • Manage the Port of Southampton response • Authorise expenditure • Brief ABP Management Board • Liaise with Government / oil company / industry representatives as appropriate • Approve press statements for release | |
| Step | Actions | Additional Information |
| Alert | <input type="checkbox"/> Adler and Allan | |
| Initial Actions | <input type="checkbox"/> Verify / amend spill classification <input type="checkbox"/> Confirm Duty VTS Watch Manager has alerted appropriate external organisations <input type="checkbox"/> Confirm POLREP CG77 has been issued <input type="checkbox"/> Appoint senior HM representative to attend Oil Spill Management Team (oil installation spill) <input type="checkbox"/> Convene Oil Spill Management Team <input type="checkbox"/> Authorise mobilisation of Tier 2 contractor | <i>Refer Section 1</i> <i>Refer Section 3</i> |
| Further Actions | <input type="checkbox"/> Chair the Oil Spill Management Team meetings <input type="checkbox"/> Constantly review the strategy being employed and advise of changes where necessary <input type="checkbox"/> Approve all expenditure commitments <input type="checkbox"/> Attend all press conferences as required <input type="checkbox"/> Brief ABP Management Board | |
| Final Actions | <input type="checkbox"/> Terminate the clean-up <input type="checkbox"/> Collate personal logs. <input type="checkbox"/> Prepare the incident report. <input type="checkbox"/> Hold full debrief involving all members. <input type="checkbox"/> Amend contingency plan(s) as required. | |

| 4.4 | Oil Terminal / Installation Representative (Oil Terminal / SMC Marchwood Spill) | |
|------------------------|--|------------------------------------|
| Responsibilities | <ul style="list-style-type: none"> • Safety • Reporting • Implementation of the terminal oil spill contingency plan • Incident management of Tier 1 spills • Call out of response service contractor(s) for Tier 2 and 3 spills | |
| Step | Actions | Additional Information |
| Alert | <input type="checkbox"/> Company response teams. <input type="checkbox"/> Tier 2 contractor | |
| Initial Actions | <input type="checkbox"/> Report spill to Duty VTS Watch Manager <input type="checkbox"/> Initiate Incident Log <input type="checkbox"/> Assess the situation <input type="checkbox"/> Mobilise Tier 1 / 2 resources <input type="checkbox"/> Establish Incident Control Room <input type="checkbox"/> Refer to the Port of Southampton Oil Spill Contingency Plan <input type="checkbox"/> Complete a work plan to mitigate the effects <input type="checkbox"/> Provide Duty HM with press procedure and claims procedure <input type="checkbox"/> Co-operate with the Senior HM Representative | <i>Include a safety assessment</i> |
| Further Actions | <input type="checkbox"/> Update Duty VTS Watch Manager with outstanding information required for CG77 POLREP <input type="checkbox"/> Maintain liaison with the Senior HM Rep. <input type="checkbox"/> Source temporary storage <input type="checkbox"/> Activate waste disposal contractor(s) <input type="checkbox"/> Issue progress reports <input type="checkbox"/> Prepare for hand over if required <input type="checkbox"/> Record all resources used | |
| Final Actions | <input type="checkbox"/> Submit incident log to the Harbour Master <input type="checkbox"/> Return all hired equipment <input type="checkbox"/> Attend the debrief <input type="checkbox"/> Implement recommendations from the Harbour Master incident report. | |

| | | |
|--|--|--|
| | <input type="checkbox"/> Revise oil spill contingency plan | |
|--|--|--|

4.5 Oil Spill Incident Checklists.

The following checklists are intended to promote consistency of approach by all personnel involved in the incident response.

- **Oil Spill Assessment Checklist (C1).**

This checklist ensures that the initial assessment of the oil spill is accurate and all aspects likely to affect the classification such as quantity, oil type and likely fate of the spilled oil, are investigated thoroughly.

- **Incident Briefing Checklist (C2).**

This checklist ensures that all personnel involved in the management of the incident are given a thorough briefing, and are then able to give a consistent and effective briefing to personnel under their control during the incident.

- **Personal Log Checklist (C3).**

This checklist ensures that all personnel involved in the incident response record correct and relevant information throughout the operation; consistent logs and records can then be submitted to the Harbour Master for his use in subsequent reports and actions.

- **Oil Spill Sampling Checklist (C4).**

This checklist outlines the sampling procedure to be followed by ABP Marine Officers attending an oil spill. It also summarises the guidance given in MCA STOp Notice 4/2001, "...Collection and Handling of Oil Samples". Following the guidance ensures that samples of sufficient quantity will be taken, sealed, labelled and handled correctly.

4.5.1 Oil Spill Assessment Checklist.

| C1 | Oil Spill Assessment Checklist |
|--|--|
| <p>This checklist is designed to assist those personnel who are responsible for the initial and subsequent assessments of the oil spill incident. These personnel are likely to be:</p> <ul style="list-style-type: none"> • Marine Officers (Patrol) • Marine Officers (Berthing) | |
| STEP | GUIDANCE |
| <input type="checkbox"/> Assess safety hazards | <p>Until otherwise established, assume oil spill is giving off potentially dangerous hydrocarbon vapours.</p> <p>ELIMINATE IGNITION SOURCES!</p> <p>Approach oil spill from upwind to reduce effects of vapours.</p> <p>APPROACH ONLY IF CONSIDERED SAFE TO DO SO!</p> |
| <input type="checkbox"/> Determine oil spill source | <p>If source unknown, investigate with care. Instigate actions to stop spillage at source IF SAFE TO DO SO!</p> |
| <input type="checkbox"/> Estimate quantity of oil released if exact amount unknown | <p>Determine</p> <ul style="list-style-type: none"> • can oil be contained |
| <input type="checkbox"/> Assess prevailing weather conditions. | <p>Determine:</p> <ul style="list-style-type: none"> • wind speed and direction • state of tide and current speed • sea state |
| <input type="checkbox"/> Assess adjacent areas of Environmental importance | <p>Determine:</p> <p>Environmental sensitivities and priorities</p> |
| <input type="checkbox"/> Predict oil fate; determine direction and speed of oil movement in addition to weathering characteristics | <p>Take forecast weather into account</p> |

4.5.2 Incident Briefing Checklist.

| | | |
|---|---------------------------|--|
| C2 | Briefing Checklist | |
| This checklist is designed to facilitate an effective response team briefing and should be used by supervisory personnel and, if appropriate, the Oil Spill Management Team | | |
| STEP | NOTES | |
| <input type="checkbox"/> Specify Safety Hazards | | |
| <input type="checkbox"/> Extent of Problem <i>Size of spillage, type of oil, source</i> | | |
| <input type="checkbox"/> Slick trajectory <i>Tide and Wind conditions</i> | | |
| <input type="checkbox"/> Environmental sensitivities <i>Priorities for protection</i> | | |
| <input type="checkbox"/> Response actions <i>Strategies to utilise</i> | | |
| <input type="checkbox"/> Resource mobilisation <i>Equipment and personnel</i> | | |
| <input type="checkbox"/> Planning Cycle <i>Meetings schedule</i> | | |
| <input type="checkbox"/> Additional Information <i>Communications, Waste Disposal, Weather Forecast</i> | | |

4.5.3 Personal Log Checklist.

| | | |
|--|---|--|
| C3 | Personal Log Checklist | |
| This checklist is designed to facilitate and aid consistency in the response teams' log keeping. | | |
| ITEM | GUIDANCE | |
| <input type="checkbox"/> Safety Hazards | <p>Note potentially unsafe response activities and measures taken to mitigate the hazard.</p> <p>Record all accidents / near miss incidents regardless of how minor they may be.</p> | |
| <input type="checkbox"/> Initial Notification | Record time of notification of oil spill incident and the name of the person informing you. | |
| <input type="checkbox"/> Daily Activities | <p>Keep a daily record of all response activities undertaken, including time and location.</p> <p>Also include:</p> <ul style="list-style-type: none"> • Meetings attended • Instructions received / given • Site visits and movements • Contacts with outside agencies | |
| <input type="checkbox"/> Personal Contacts | Generate a list of relevant contacts made, including contact details. | |
| <input type="checkbox"/> Photographic / Video records | Note time and location of any photographs / video taken. | |
| <input type="checkbox"/> Oil Distribution | Make sketches of oiled areas with notes. | |
| <input type="checkbox"/> Site Supervision | Keep a record of all staff under supervision, including hours of work etc. List all equipment utilised. | |
| <input type="checkbox"/> Expenditure Incurred | Record all expenditure and keep receipts. | |

4.5.4 Oil Sampling Checklist

| C4 | Oil Spill Sampling Checklist | |
|---|--|----------|
| This checklist gives guidance to ABP Marine Officers on the procedure for taking samples of spilled oil. Following the guidance will ensure that sufficient oil has been collected, packaged and labelled correctly and has been handled in such a way that the samples may be used to support claims or prosecution proceedings. MCA STOP Notice 4/2001 (or its updated version), a copy of which is held by the Harbour Master, gives more specific guidance on sampling from the sea and shoreline. | | |
| ITEM | | GUIDANCE |
| <input type="checkbox"/> Number of samples required | The Duty Marine Officer (Patrol) will normally obtain and record 4 numbered samples. 2 will be obtained from the water and 2 where possible will be obtained from the source of the spilled oil. ie. the ship's fuel/cargo tank, scupper, save-all, deck, bilge etc. The ship's Master will be asked to select and retain one of the numbered samples from the water and one from the suspected source. This will be recorded. | |
| <input type="checkbox"/> Sampling Frequency | Where an incident is ongoing, at least one sample of oil pollution on water should be taken per day. Where shoreline impact has occurred, one sample per every 1km of polluted shoreline should be taken per day. | |
| <input type="checkbox"/> Sample Size | A minimum of 500ml of liquid is required or, in the case of polluted shorelines, at least 50gms of pollutant. | |
| <input type="checkbox"/> Method of Sampling | Where the oil is free floating, it is essential that the oil is skimmed from the water surface using the appropriate ladle and that any free water drawn with the sample is minimised. Where the oil has impacted the shoreline, oil should be scraped from rocks, boulders etc and placed in the sample container. | |
| <input type="checkbox"/> Sealing of Sample Containers | Samples should be placed in screw top bottles with the bottle top being sealed to ensure that the sample cannot be tampered with. Lead or wire seals or adhesive labels can be used. | |
| <input type="checkbox"/> Labelling of Samples | Sample bottles should be labelled with the initials of the sampler, the sample number and in accordance with the relevant MCA STOP Notice instructions. | |
| <input type="checkbox"/> Storage | Samples to be stored in a locked cabinet at the VTS Centre pending possible prosecution by the Harbour Master or other empowered organisations. | |

Appendix 1: Adler and Allan Activation and Notification Procedure**Adler & Allan ACTIVATION PROCEDURE****CONTACT NUMBERS**

In order to access Adler & Allan services in the event of an oil spill incident please call:-

Adler & Allan - Tel: + 44 (0)800 592827

If calling from outside of the United Kingdom ensure that your country code precedes the telephone number.

These telephones will be manned on a 24-hour basis. The caller will be asked to provide:-

- 1) Name of Caller
- 2) Name of Company
- 3) Location of Caller
- 4) Telephone Number including prefixes
- 5) Brief details of the incident

The Duty Manager will then be contacted and make contact with the requesting party. Once contact has been made further details will be collected to enable a response strategy to be determined.

AN EMAIL / FAX AUTHORISING THE RESPONSE WILL BE REQUIRED FROM ONE OF THE NOMINATED REPRESENTATIVES OF THE COMPANY.

Adler & Allan Fax: + 44 (0) 208 5193090

Duty Manager Email: dutymanagers@adlerandallan.co.uk

NOTIFICATION FORM (page 1 of 2)

WARNING! Ensure telephone contact has been established with the Duty Manager before using e-mail or fax communications. **Telephone: 0800 592827**

| | | | |
|------------------------------|----------------------------------|-----------------------|--|
| To: | Duty Manager | Name of Duty Manager: | |
| Email of Duty Manager | dutymanagers@adlerandallan.co.uk | Date: | |
| Adler & Allan Emergency Fax: | 0208 5193090 | | |
| From: | | Position: | |
| Company: | | Contact Number: | |
| Subject: | | Incident Name: | |

OBLIGATORY INFORMATION REQUIRED – PLEASE COMPLETE ALL DETAILS IF POSSIBLE

| | |
|---|---|
| Name of person in charge | |
| Position | |
| Company | |
| Contact telephone number | |
| Contact fax number | |
| E-mail address | |
| Spill details | |
| Location of spill | |
| Description of slick (size, direction, appearance) | |
| Latitude / longitude | |
| Situation (cross box) | <input type="checkbox"/> Land <input type="checkbox"/> River <input type="checkbox"/> Estuary <input type="checkbox"/> Coastal <input type="checkbox"/> Offshore <input type="checkbox"/> Port |
| Date & time of spill | |
| Source of spill | |
| Quantity (if known) | <input type="checkbox"/> Cross box if estimate |
| Spill status (cross box) | <input type="checkbox"/> On-going <input type="checkbox"/> Controlled <input type="checkbox"/> Unknown |
| Action taken so far | |
| Oil type characteristics | |
| Product name | |
| Viscosity | |
| API / SG | |
| Pour point | |
| Asphaltene | |
| Weather | |
| Wind speed & direction | |
| Sea state | |
| Sea temperature | |
| Tides | |
| Forecast | |

NOTIFICATION FORM (page 2 of 2)

| ADDITIONAL INFORMATION REQUIRED – PLEASE COMPLETE DETAILS IF KNOWN | |
|--|--|
| Resources at risk | |
| | |
| | |
| Clean-up resources on-site / ordered | |
| | |
| Vessel availability | |
| Equipment deployed | |
| | |
| | |
| Recovered oil storage | |
| | |
| | |
| Equipment logistics | |
| Transport | |
| Secure storage | |
| Location of command centre | |
| Other designated contacts | |
| Security | |
| Visa | |
| Others (specify) | |
| Climate Information | |
| | |
| | |
| Other Information | |
| | |
| | |
| | |

Appendix 2 Contact Check List

CONTACT CHECK LIST

Tier _____ Activated at _____ (Time) On _____ (Date)
 Reported by _____ Heading _____

| Notified ABP | ✓ | Time |
|-----------------------|---|------|
| Harbour Master | | |
| Deputy Harbour Master | | |
| Pilotage Manager | | |

| Alert List | Person Contacted | Time | Initiate Tier | | | D'grade Tier | | Cancelled |
|-----------------------------------|------------------|------|---------------|---|---|--------------|---|-----------|
| | | | 1 | 2 | 3 | 2 | 1 | |
| QHM Portsmouth | | | | | | | | |
| HMCG | | | | | | | | |
| ABP Comms Manager | | | | | | | | |
| Hampshire County * | | | | | | | | |
| IoW County Council * | | | | | | | | |
| Adler and Allan | | | | | | | | |
| Southampton City Council | | | | | | | | |
| New Forest District | | | | | | | | |
| Eastleigh Borough * | | | | | | | | |
| Fareham Borough * | | | | | | | | |
| Hamble HM * | | | | | | | | |
| Cowes HM * | | | | | | | | |
| Beaulieu HM * | | | | | | | | |
| MMO | | | | | | | | |
| Environment Agency | | | | | | | | |
| Natural England | | | | | | | | |
| Southern IFCA | | | | | | | | |
| Esso Marine Terminal | | | | | | | | |
| BP Oil Hamble | | | | | | | | |
| Perenco | | | | | | | | |
| Hants Police | | | | | | | | |
| Sea Mounting Centre, Marchwood | | | | | | | | |
| Hants Fire and Rescue | | | | | | | | |
| Marchwood Power Station | | | | | | | | |

* Alert as Geographically appropriate

Note:

1. VTSWM please ensure that at Tier 2, all authorities notified are informed that their presence is required at the OMT in VTS Centre MRC.

5. Response Guidelines

This section provides strategy guidelines for three oil types:

| No. | Oil Type | Strategy Guideline | Specific Gravity | Genre | Characteristics | Examples |
|-----|-------------|--------------------|------------------|------------|-------------------------------|--|
| 1 | Light oils | 5.1 | < 0.8 | White oils | Non-persistent, Volatile | Diesel Gas oil Aviation fuel, Kerosene, Motor spirit |
| 3 | Medium oils | 5.2 | 0.8 – 0.95 | Black oils | Persistent, Fluid | Crude oils |
| 2 | Heavy oils | 5.3 | > 0.95 | Black oils | Persistent, Viscous, Emulsion | Fuel oils Bunker oils bitumens |

By selecting the appropriate Strategy Guideline, the user can derive an indicative strategy path to mitigate the effects of an oil spill, consistent with safe practice and net environmental benefit.

Additional environmental advice, including Environmental Sensitivity Maps and Priority Protection Areas, is given in Section 12.

Although the guidelines offer the option of a dispersant response, the Port of Southampton does not maintain stocks of chemical dispersant and does not hold a Standing Approval for the application of dispersant within the port area. (See section 13.4)

Esso / Fawley Marine Terminal has a derogation to spray up to 150 gallons of Type 3 approved dispersant in an area extending from the marker buoys at the deep water intake of the now closed Fawley Power Station to a line across Southampton Water from Hythe Ferry to Weston Hard. This standing approval from MMO HQ exists for certain types of oil under certain conditions only.

5.1 Natural England Recommendations on Response Guidelines

A general principle of any clean-up operation is not to cause further damage than leaving the oil in situ. Therefore, Natural England recommends:

- For shorelines that are comprised of loose material, boulders, cobbles etc. the recommended technique is for low pressure, high volume washing to be used in combination with booms and sorbent material.
- Caution should be used when using heavy plant machinery on mud or sand habitats even those that are thought to be hard packed to avoid entraining oil deeper into the mud / sand.

Natural England also recommends that authority to use dispersants should not be assumed (as suggested at recommendations 5 & 6 of Table 12.5) especially as not all types of heavy or crude oil are responsive to dispersant use. Natural England cautions against these blanket assumptions and advises that incident specific advice should always be sought from the local Environment Group / Natural England before deciding any incident specific clean up strategy. Natural England also recommends that the collection of any loose material, where possible, should always be undertaken to minimise the potential spread of the oil.

Table 5.1 below details Sites of Special Scientific Interest within the port area, which require particular consideration in devising a response strategy.

5.2 Oil sampling

On all feasible occasions, the Southampton Patrol launch (call sign 'SP') will be deployed to the scene of a spill to gather information on the nature and extent of the spill and, if possible, to obtain samples of the oil spilled. Sampling kits are held in both patrol launches for this purpose, with spare bottles being available in store at 22 Berth.

Instructions on how to collect and handle oil samples are at STOp Notice No 4/2001 – at Appendix 1 to this section.

Table 5.1 Sites of Special Scientific Interest (SSSIs) within Harbour Area

| Sensitivity Map Page No | Name |
|------------------------------------|---|
| Sect 12 Page 20 | Lower Test Valley |
| Sect 12 Page 20 | Eling and Bury Marshes |
| Sect 12 Page 20/21 | Lee on Solent to Itchen Estuary |
| Sect 12 Page 20/21 | Hythe to Calshot Marshes |
| Sect 12 Page 21 | Titchfield Haven |
| Sect 12 Page 21 | North Solent (Beaulieu River and Lepe to Calshot) |

Note: Refer to Sensitivity Maps in Section 12 for locations of SSSIs, Special Protection Areas (SPA's) and Special Area's of Conservation (SAC's)

Figure 5.1 Light Oil Response Strategy Guideline

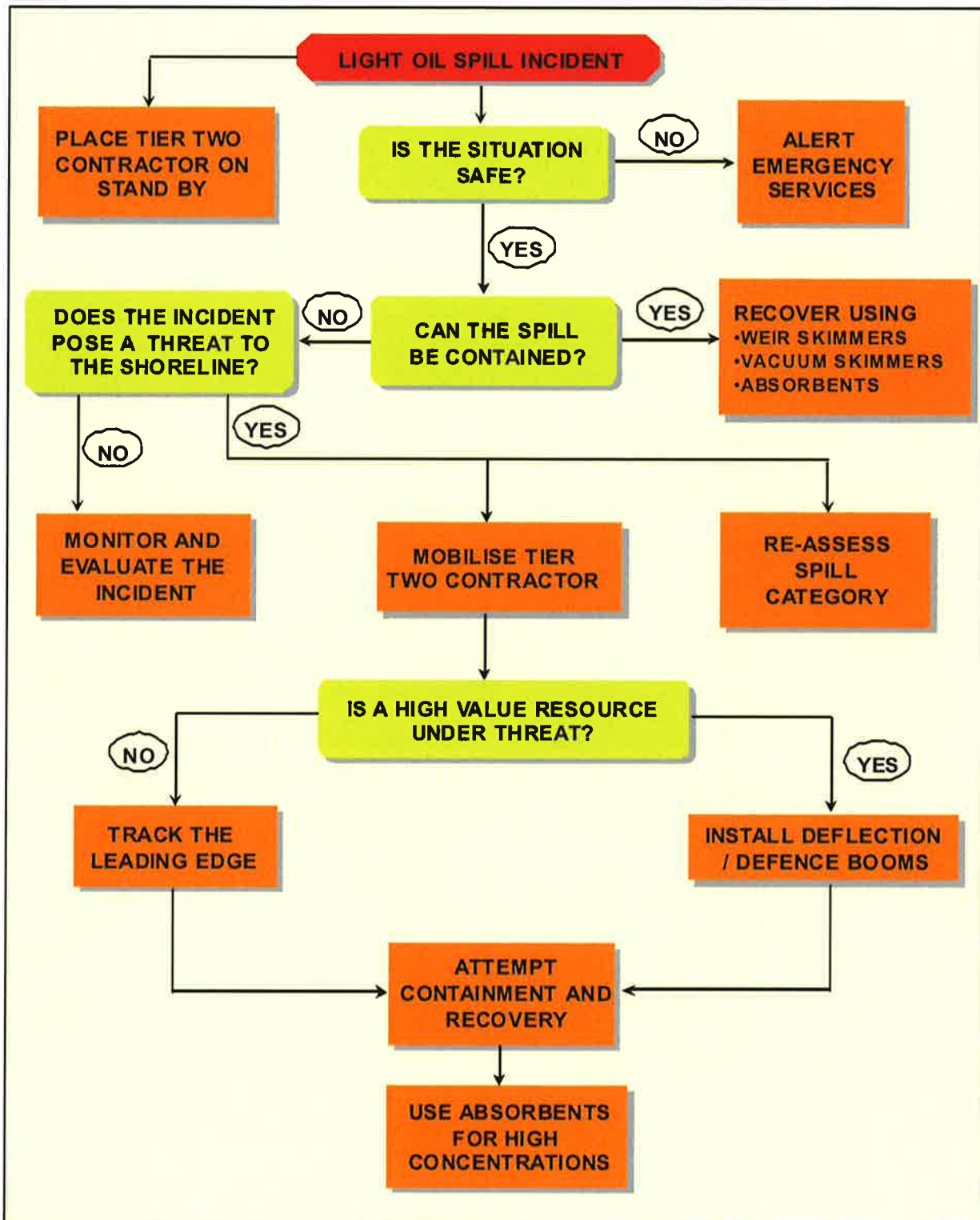


Figure 5.2 Medium Oil Response Strategy Guideline

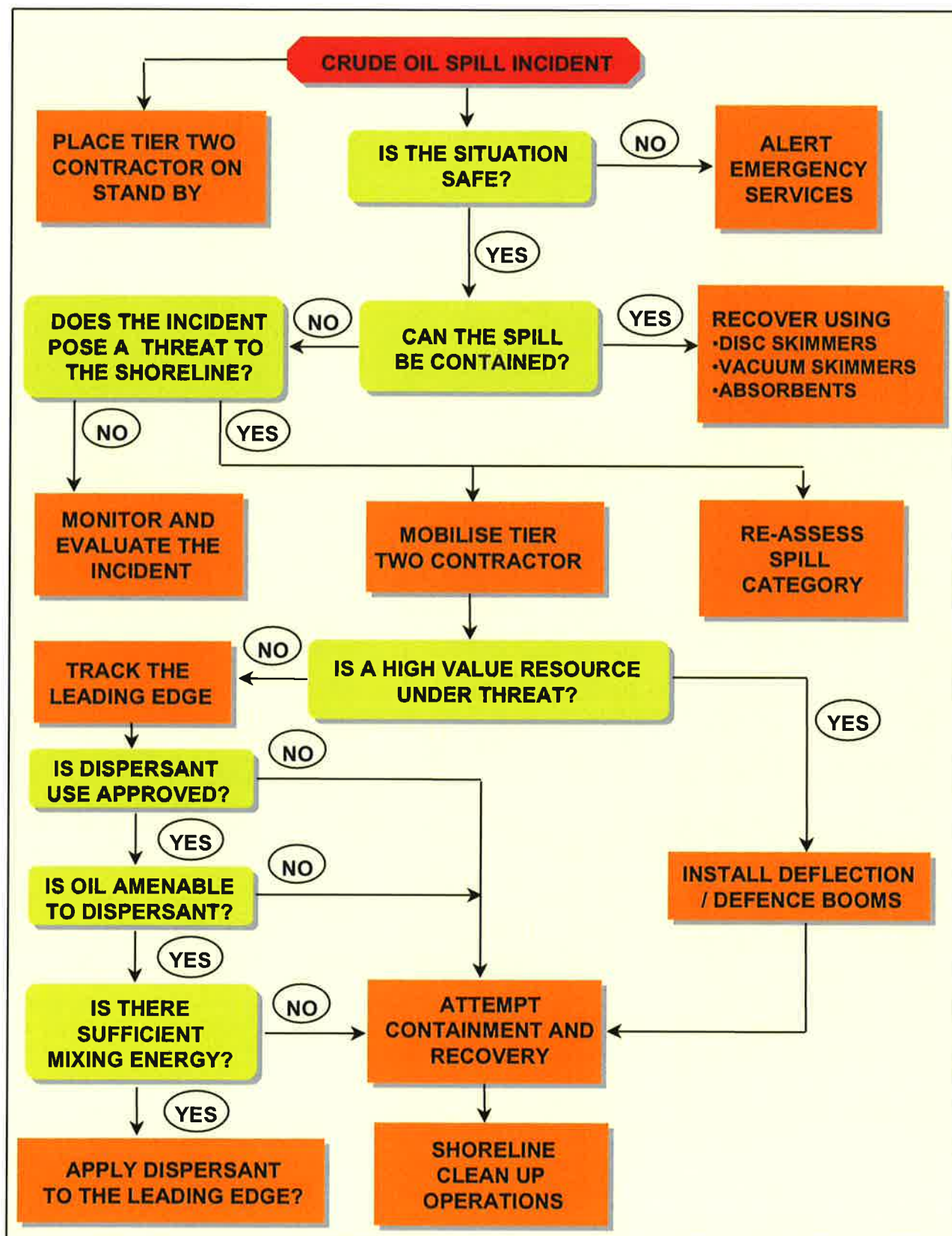
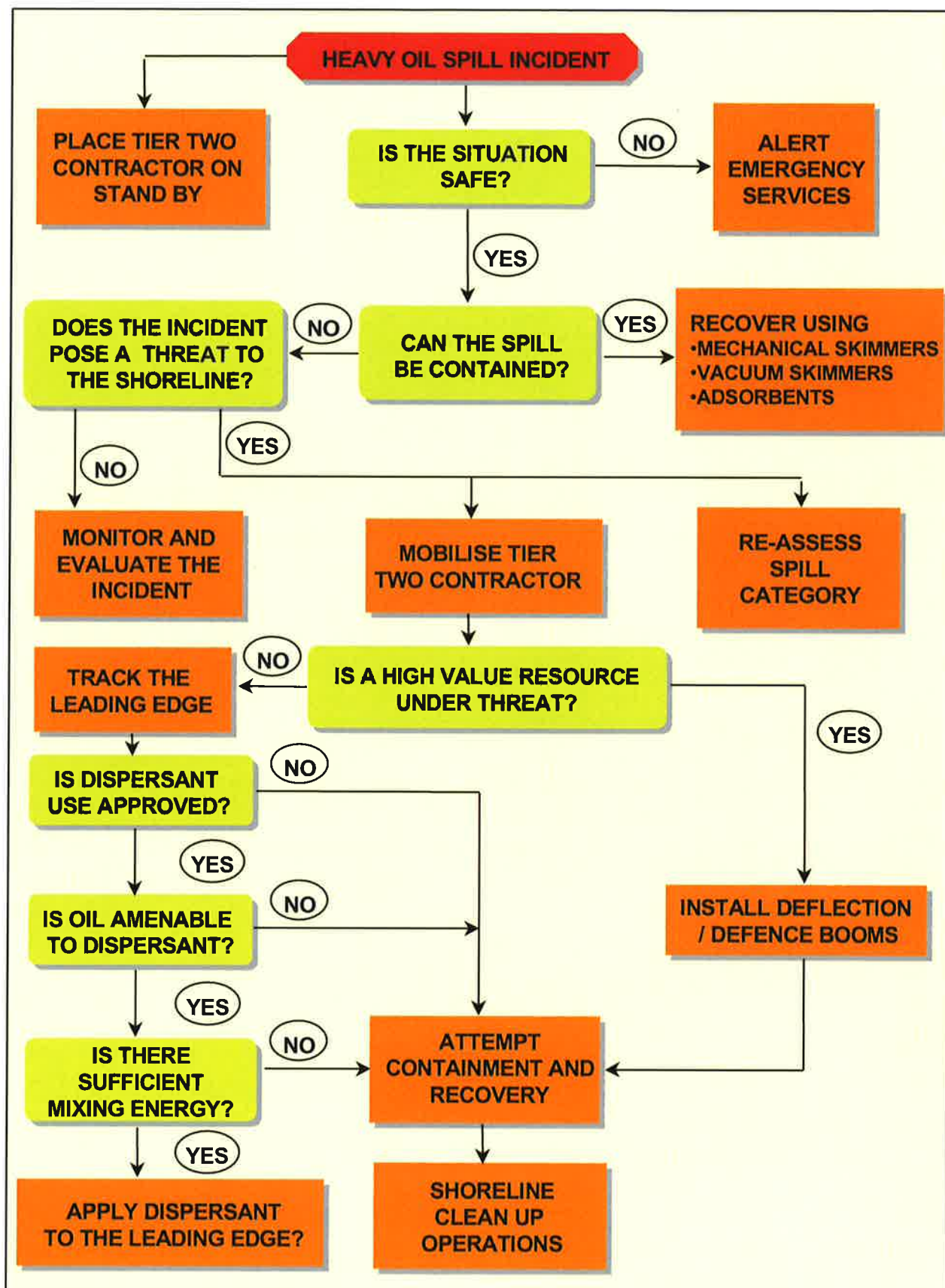


Figure 5.3 Heavy Oil Response Strategy Guideline



Appendix 1

SCIENTIFIC, TECHNICAL AND OPERATIONAL ADVICE NOTE -

STOp Notice 4/2001 Advice to Local Authorities on the Collection and Handling of Oil Samples.

www.gov.uk/government/publications/scientific-technical-and-operational-advice-notes-stop-notes

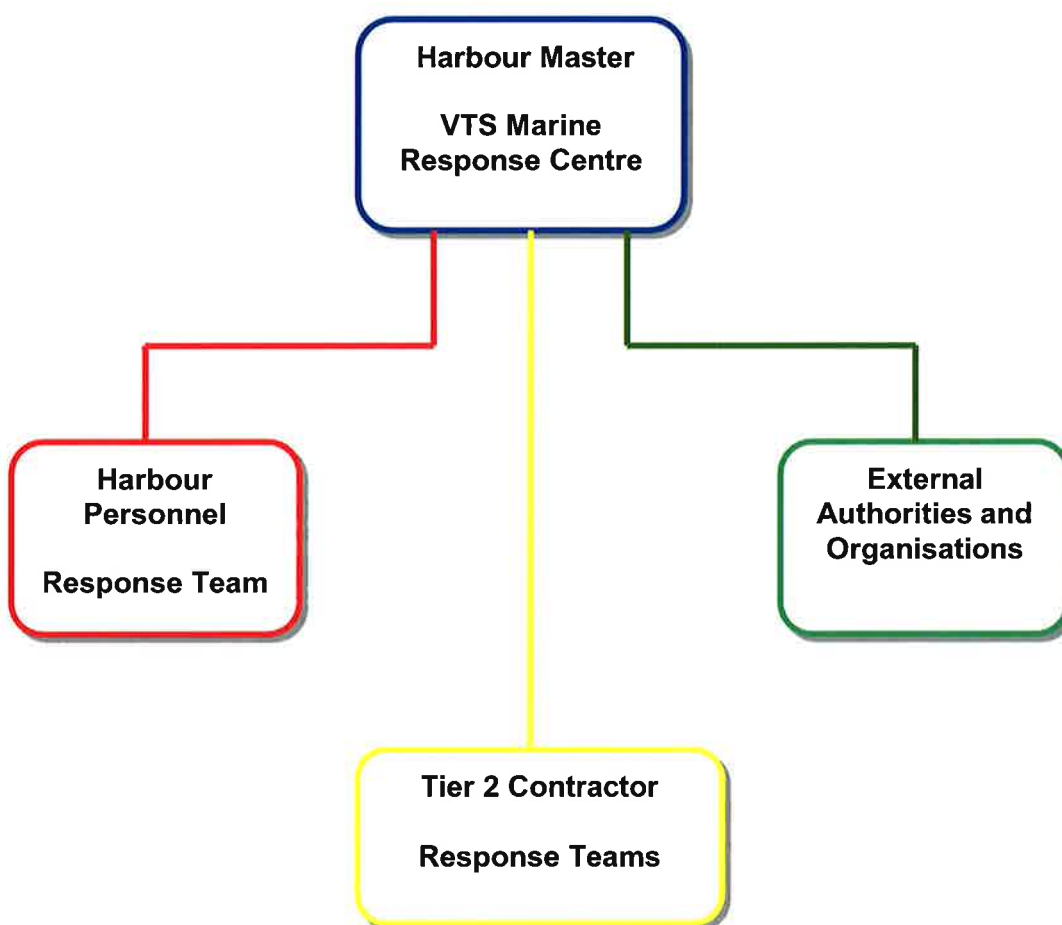
6 Communications / Public Relations Plan

6.1 Communications Plan

Communications between the Harbour Master, the VTS Marine Response Centre (if activated), harbour craft and personnel engaged in the response to a Tier 1 incident will be primarily by private channel marine VHF radio, channel 103A. This channel will be supported by the use of more secure digital mobile phones and marine VHF channel 10.

In Tier 2 incidents, additional private channel UHF and VHF communications facilities will be provided by the Tier 2 Contractor.

Communications between the Harbour Master, the VTS Marine Response Centre and external authorities and organisations will be undertaken by telephone and facsimile.



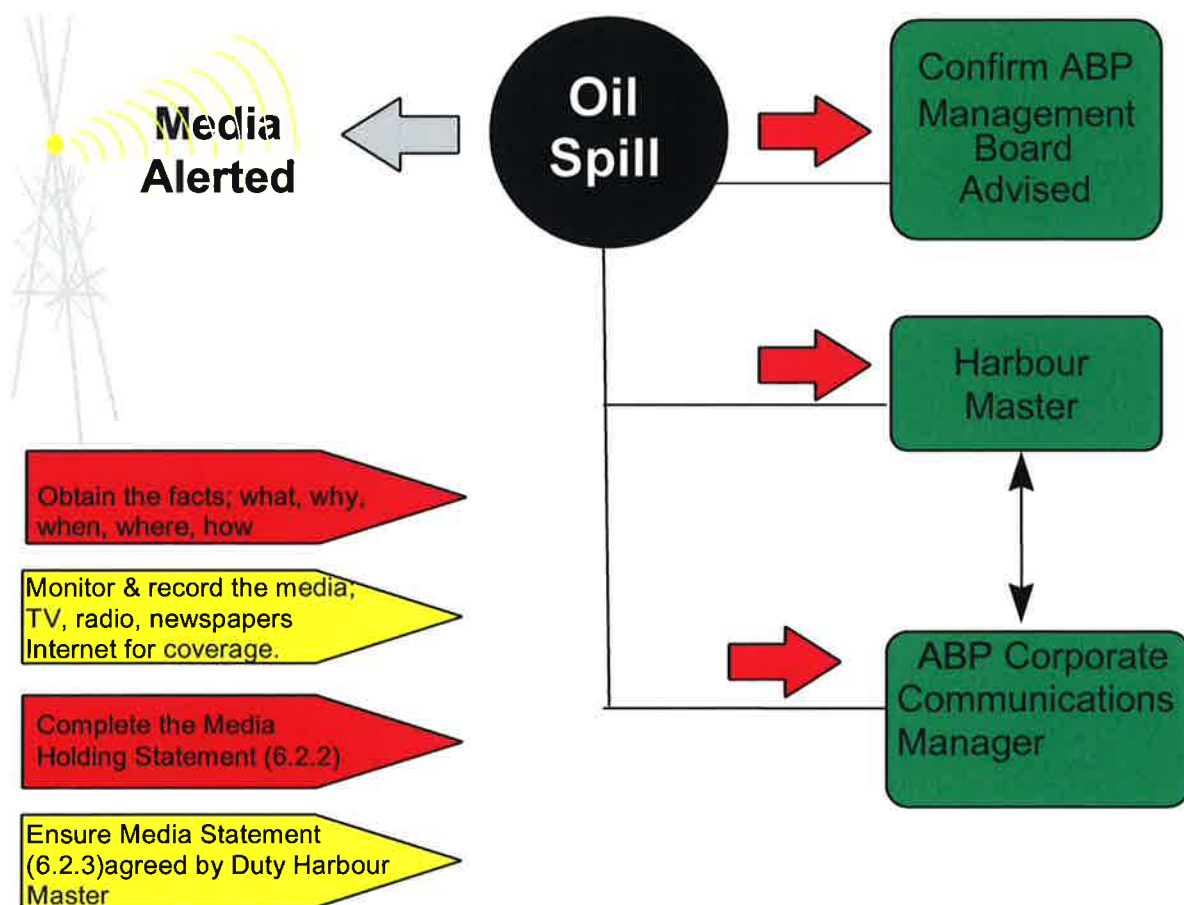
Key: Private Channel VHF Radio Telephone/Facsimile Private Channel UHF/VHF Radio

NOTE: The Hampshire and Isle of Wight Local Resilience Forum Warning and Informing Plan will be used for communications with and between external authorities and organisations.

6.2

Public Relations Plan

6.2.1 Media Release Procedure



6.2.2 Media Holding Statement

Timed at:hrsday Date

At hrs on day 201...,

An oil spill occurred at (location).....

The estimated quantity of oil (state type) spilled islitres / tonnes, or

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

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

NEXT PRESS STATEMENT AT HRS

ALL PRESS ENQUIRIES TO "INCIDENT PRESS OFFICE"

TEL:.....

6.2.3 Media Statement

Incident Name : _____

Date Prepared : _____

Time Prepared : _____

Operational Period : _____

Start : _____

Finish : _____

Message

Contact for Further Information : _____

Approved by : _____

Date : _____

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 7.2) lists site characteristics, site hazards and personal protective equipment and site facility needs. This plan is intended to act as an aide-mémoire to ensure that all applicable health and safety requirements are considered and appropriate actions are taken.

Sections 7.3 and 7.4 summarise legislative requirements and give guidance on specific oil spill clean-up tasks and hazards. In Tier 2 and Tier 3 incidents, the Harbour Master will be supported in the control and management of the health and safety function by an ABP Safety Manager.

7.2 Site Specific Health and Safety Plan Assessment Form

| Site Specific Health and Safety Plan Assessment Form | | | | | | | | | |
|---|--------------------------------------|--|--|--|---|--|------------------|--------------------------|-------|
| 1. APPLIES TO SITE : | | | | | | | | | |
| 2. DATE : | | 3. TIME : | | 4. INCIDENT : | | | | | |
| 5. PRODUCT(S) : | | | | | | | | (Attach MSDS) | |
| 6. Site Characterisation | | | | | | | | | |
| 6a. Area | <input type="checkbox"/> Open water | <input type="checkbox"/> Inshore water | <input type="checkbox"/> River | <input type="checkbox"/> Saltmarsh | <input type="checkbox"/> Mudflats | | | | |
| | <input type="checkbox"/> Shoreline | <input type="checkbox"/> Sand | <input type="checkbox"/> Shingle | <input type="checkbox"/> Docks | | | | | |
| 6b. Use | <input type="checkbox"/> Commercial | <input type="checkbox"/> Industrial | <input type="checkbox"/> Public | <input type="checkbox"/> Government | <input type="checkbox"/> Recreational | | | | |
| | <input type="checkbox"/> Residential | <input type="checkbox"/> Other | | | | | | | |
| 7. Site Hazards | | | | | | | | | |
| <input type="checkbox"/> | Boat safety | | <input type="checkbox"/> Fire, explosion, in-situ burn | | <input type="checkbox"/> Slips, trips and falls | | | | |
| <input type="checkbox"/> | Chemical hazards | | <input type="checkbox"/> Heat stress | | <input type="checkbox"/> Steam and hot water | | | | |
| <input type="checkbox"/> | Cold stress | | <input type="checkbox"/> Helicopter operations | | <input type="checkbox"/> Tides | | | | |
| <input type="checkbox"/> | Drum handling | | <input type="checkbox"/> Lifting | | <input type="checkbox"/> Trenches, excavations | | | | |
| <input type="checkbox"/> | Equipment operations | | <input type="checkbox"/> Motor vehicles | | <input type="checkbox"/> Visibility | | | | |
| <input type="checkbox"/> | Electrical hazards | | <input type="checkbox"/> Noise | | <input type="checkbox"/> Weather | | | | |
| <input type="checkbox"/> | Fatigue | | <input type="checkbox"/> Overhead/buried utilities | | <input type="checkbox"/> Work near water | | | | |
| <input type="checkbox"/> | Others | | <input type="checkbox"/> Pumps and hoses | | <input type="checkbox"/> Confined spaces | | | | |
| 8. Air Monitoring (Oil company incident) | | | | | | | | | |
| <input type="checkbox"/> | O ₂ | <input type="checkbox"/> | LEL | <input type="checkbox"/> | Benzene | <input type="checkbox"/> | H ₂ S | <input type="checkbox"/> | Other |
| 9. Personal Protective Equipment | | | | | | | | | |
| <input type="checkbox"/> | Foot Protection | | | <input type="checkbox"/> Coveralls | | | | | |
| <input type="checkbox"/> | Head Protection | | | <input type="checkbox"/> Impervious suits | | | | | |
| <input type="checkbox"/> | Eye Protection | | | <input type="checkbox"/> Personal Floatation | | | | | |
| <input type="checkbox"/> | Ear Protection | | | <input type="checkbox"/> Respirators | | | | | |
| <input type="checkbox"/> | Hand Protection | | | <input type="checkbox"/> Other | | | | | |
| 10. Site Facilities | | | | | | | | | |
| <input type="checkbox"/> Sanitation | | | <input type="checkbox"/> First Aid | | | <input type="checkbox"/> Decontamination | | | |
| 11. Contact details : | | | | | | | | | |
| <input type="checkbox"/> Doctor | | | | Phone | | | | | |
| <input type="checkbox"/> Hospital | | | | Phone | | | | | |
| <input type="checkbox"/> Fire | | | | Phone | | | | | |
| <input type="checkbox"/> Police | | | | Phone | | | | | |
| <input type="checkbox"/> Other | | | | Phone | | | | | |
| 12. Date Plan Completed | | | | | | | | | |
| 13. Plan Completed by | | | | | | | | | |

7.3 Legislative Requirements

7.3.1 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 who may be affected by their business activities whilst at work.

The Management of Health and Safety at Work Regulations 1992 impose specific duties on employers to:

- carry out risk assessments 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 and training 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.

7.3.2 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 1992, 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.

7.4 Site Hazards

7.4.1 Bird Handling

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

Handling of oiled birds is usually best left to experts, or to volunteers who have received some training. Chasing and man handling birds puts them under additional stress. If oiled birds are found, the Beach Master should be notified and he/she will seek advice on what action to take. If a decision is made 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 the head, as it may try to peck at 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 capture if it can be done quickly and efficiently.
- Hold the bird with both hands to hold 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 too stressed.
- Take the bird to a cleaning station as soon as possible. Let cleaning station staff know where and when the bird was caught.
- Keep a note of all birds caught and sent to the cleaning station. Make a note of species if possible.

7.4.2 Boat Safety

- Boat operators must familiarise themselves and their passengers with safety features and equipment on their boats.
- Boats must be operated by qualified individuals.
- Lifejackets must be worn by all personnel on boats.
- 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 poses minimal risk, areas of operation should be carefully prescribed and individual boat operators should maintain a communication schedule with a shore base. Each boat should be fully equipped with appropriate navigation lights.
- Distress signals should be carried on all vessels.
- Boat operators must keep their supervisors informed of their area of operation, especially when they change their work area (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.

7.4.3 Chemical Hazards

Attach appropriate Material Safety Data and COSHH Sheets for all hazardous substances likely to be used at a spill site.

7.4.4 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, chilblain and hypothermia. The single most important aspect of life-threatening hypothermia is the 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 will wear immersion suits if the water

temperature is below 15° Celsius, or the combined water and air temperature is less than 48° Celsius.

Figure 7.1

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

Little danger to properly dressed personnel

¹*Danger of freezing exposed flesh*

²**Greatest Danger**

7.4.5 Drum Handling / Manual Handling

Drum handling at a spill site will primarily involve drums of waste and contaminated clothing. Several types of drums and containers may be used ranging 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 moving 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 capability. 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 has to be set down. Ensure that the load does not block visibility when carrying it.
- Look out for any splinters, projecting nails or sharp edges or wire.
- Stand close to the object and with feet 20 to 30 cm apart, place one foot in advance of the other, pointing in the direction it is intended to move.
- Put the chin in - avoid moving the head backwards or forwards.
- Bend the knees to a crouch position, keeping 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 as close to the body as possible.
- Lift with the thigh muscles by looking up and straightening the legs.

- Apply the above principles, to any movement such as pushing, pulling, digging, shovelling etc.
- Use the reverse procedure when setting down the load.

7.4.6 Equipment Operations

Heavy Equipment

Operators of heavy equipment, such as front end loaders, graders, bulldozers etc 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 trucks in use. 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.

7.4.7 Electrical Hazards

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

7.4.8 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, 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.

7.4.9 Fire, Explosion and In-Situ Burning

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.

In-situ burning presents health and safety hazards not only to the workers engaged in the burning activities, but also to individuals downwind of the burn site. Health and safety hazards include:

- Physical hazards : explosions, heat, loss of control of burning oil

- Inhalation of airborne burn products: These may include toxic and irritating substances such as smoke particles, carbon monoxide, carbon dioxide, sulphur oxides, nitrogen dioxide, polycyclic aromatic hydrocarbons, acid aerosols, aldehydes, acrolein, polynucleic aromatic hydrocarbons, volatile organic hydrocarbons.

Safety factors include the status of the spill; weather and sea conditions; distance of intended burn location to the spill source; type and condition of oil; proximity of ignitable vegetation, docks and other facilities; and control measures.

A detailed Burn Plan should be prepared. This should include a summary of safety and control measures. Care must be taken to protect all personnel from any harmful exposure to heat and or combustion products.

7.4.10 Heat Stress

Heat stress can result as responders perform heavy labour work in protective and/or impermeable clothing that 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 (see figure below for guidance).

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.

Figure 7.2

| HEAT INDEX | | | | | | | | | | |
|---|-----|-----|-----|-----|------|-------|-------|-------|-------|-------|
| AIR TEMPERATURE CELSIUS | | | | | | | | | | |
| Relative Humidity | 21° | 24° | 26° | 30° | 32° | 35° | 38° | 40° | 44° | 46° |
| 20% | 19° | 22° | 25° | 28° | 31° | 34° | 37° | *41° | *45° | *49° |
| 40% | 20° | 24° | 26° | 30° | 34° | 39° | *44° | *51° | **58° | **66° |
| 60% | 21° | 25° | 28° | 32° | 38° | *46° | **56° | **65° | | |
| 80% | 22° | 26° | 30° | 36° | *45° | **58° | | | | |
| <p>* Heat cramps or exhaustion likely. Heat-stroke possible.</p> <p>** Heat-stroke highly likely.</p> | | | | | | | | | | |

7.4.11 Helicopter Operations

Helicopters may be used 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 draught, 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 not inflate personal flotation devices until outside of the helicopter.
-

7.4.12 Crane Operations

Cranes must be operated in accordance with the manufacturers' instructions. 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.

7.4.13 Motor Vehicles

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

7.4.14 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.

7.4.15 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.

7.4.16 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.

7.4.17 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 realise the conditions and begin to take precautionary measures. 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 better to clear an access/egress route than to walk through oiled areas.

8. Waste Management Plan

Note: Oiled waste is classed as hazardous waste and the transfer and disposal of such material is governed by The Hazardous Waste (England and Wales) Regulations 2005 as amended.

8.1 General

8.1.1 Responsibility for Clean Up

Ship owners, operators of oil handling facilities and the harbour masters of ports/harbours bear the primary responsibility for operating in a manner that avoids marine pollution. They are equally responsible for ensuring that they have the means at their disposal to respond to pollution incidents within the limits of their stipulated area of jurisdiction. The table below gives guidance on who would assume the lead for ensuring responsibility for clean up:

| Location of pollution | Responsibility for ensuring clean up |
|--|--------------------------------------|
| On the water, jetties, wharves, structures, beach or shoreline owned by the harbour authority within the port/harbour area | Harbour Authority |
| Shoreline (including land exposed by falling tide) | Local Authority |
| Jetties, wharves, structures, beach or shoreline which is privately owned | Owner of the property/land |
| All other areas at sea (inside the EEZ/UK Pollution Control Zone and the UK Continental Shelf) | MCA |

8.1.2 Waste Management Strategy

Waste minimisation, recycling, recovery and treatment to reduce the hazardous nature of the waste will be the principles that inform the development of the strategy for clean up. It is paramount that the disposal strategy is integrated with the response overall, from the outset, and is not developed in isolation. The strategy should include bulk waste removal and decontamination.

Guidance for contingency planning and operation of a waste management sub-group in a major incident may be found at Scientific, Technical and Operational Advice Note STOp 1/2009, at Appendix 1.

8.1.3 Duty of Care

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.

The responsibility for the arrangements to dispose of oil recovered from the Dock or Harbour waters, rests with the Statutory Harbour Authority and its Tier 2 Response Contractor (Adler and Allan).

Additionally, the arrangements for disposal of shoreline pollution wastes will be agreed between the Statutory Harbour Authority, Southampton City Council, Hampshire County Council and the Environment Agency.

When dealing with an incident, The Environment Agency recognises that even where there is likelihood of serious environmental damage the situation should be controlled first. However, this action does not preclude any subsequent enforcement response. Whether any acts that would normally require permits, carried out in an emergency, would result in enforcement action would be considered in light of their enforcement policy. There is a defence for actions taken in an emergency under Regulation 40 of the Environmental Permitting (England and Wales) Regulations 2007. The Environment Agency would not normally take enforcement action in case of such emergency. An emergency only applies if it is proven that the acts were carried out in order to avoid danger to public health and:

- steps were taken to minimise pollution, and
- The Environment Agency is notified of the acts as soon as reasonably practicable.

8.1.4 Duty of Care – Hazardous Waste

All movements of hazardous waste will be required to comply with the Control of Pollution (Amendment) Act 1989 and the Statutory Harbour Authority and waste carrier (Local Licensed Waste Disposal Contractors) have a duty of care under the Environmental Protection Act 1990 and the Environmental Protection (Duty of Care) Regulations 1991.

In terms of the Hazardous Waste (England and Wales) Regulations 2005 as amended, there is a defence for actions taken in an emergency or where there is a risk of grave danger, as defined in the Regulations:

“...a present or threatened situation arising from a substance or object which is, or which there are reasonable grounds to believe is, hazardous waste and the situation constitutes a threat to the population or the environment in any place...”.

The Environment Agency will not normally take enforcement action in these circumstances but it must be recognised that under Section 62 of the Hazardous Waste Regulations 2005, holders of hazardous waste must take steps to avert an emergency or danger.

8.1.5 Waste arising

By no means an exclusive list, the types of waste described below are amongst those that may arise from any spillage.

These are listed with relevant European Waste Catalogue (EWC) Codes. The EWC may be accessed at:

<https://www.gov.uk/how-to-classify-different-types-of-waste/overview>

- | | | | |
|---|-----------|-----------|-----------|
| • recovered oil (not heavily contaminated) | 05 01 05* | 13 05 07* | 16 10 01* |
| • water in oil emulsion – untreated | 13 08 02* | 13 04 03* | 13 05 07* |
| • water in oil emulsion - treated with dispersant | 13 08 02* | | |

- | | | |
|--|-----------|-----------|
| • thick weathered oil – lumps | 13 07 01* | 17 03 01* |
| • semi-solid bunker oil | 13 07 01* | |
| • oil and sand mixtures | 13 08 99* | |
| • dry waste | 13 08 99* | 15 02 02* |
| • oiled shingle | 13 08 99* | |
| • heavily oiled seaweed and other debris | 13 08 99* | 05 01 99 |

(Note: * indicates this is hazardous waste by definition).

8.1.6 Records

Notwithstanding the above defences, movements of all hazardous waste should be appropriately recorded and Consignment Notes completed, signed and retained for future audit.

8.2 Temporary Storage

8.2.1 Oiled waste

Clean-up activities may produce quantities of oil and oily debris at a faster rate than they can be properly disposed of and temporary storage will frequently be necessary. ABP Southampton may be able to make limited hard standing available for temporary storage purposes; such areas will require to be temporarily bunded or provided with portable tanks and will require the agreement of The Environment Agency on an incident by incident basis.

Areas which could possibly be made available, on an incident by incident basis, are:

- Berth 37 Quay Apron
1 x 20m x 20m area on east side of quay
- Berth 40 block paved storage area
1 x 100m x 6m area along southern face of quay
1 x 20m x 20m area on southern end of quay
- Berth 43 block paved storage area
1 x 50m x 20m area on southern end of quay

See Figure 8.1, Page 5.

The following table summarises the temporary storage methods that can be used:

| Type of Oil/Waste | Storage Facility | Comments |
|-------------------------|------------------------------|---|
| Liquid | Barges | Suitable for initial storage |
| | Road Tankers | Ideal for routing to final disposal site |
| | Tanks | Portable such as 'Fastank' or similar |
| | Bunds | Cheaper than pits. Liners required |
| Liquid/solid 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. |
| Solids | Lorries | Restricted to solid debris. Access problems. |
| | Skips | Restricted to solid debris. Access problems. |
| Dead birds and wildlife | Heavy Duty Plastic Bags | Dead birds should be separated from other waste and retained for collection and further analysis. |
| | Cardboard boxes / wire cages | For live birds and wildlife awaiting treatment or collection. |

8.2.2 Oiled Birds and Wildlife

38 Berth Shed (southern end) will be available for use as a bird-washing facility for live oiled birds and as a storage area for all dead birds and other wildlife. Dead birds, whether showing visible evidence of oiling or not, will need to be separated into the geographical areas in which they were found (as per Sections 12.4.1 – 12.4.12). They should be retained for collection at a later date and for subsequent analysis.

Figure 6.1

Map of Eastern Docks showing temporary storage areas for oil and oily waste. The map includes a scale bar (0-500 metres), a compass rose, and various numbered berths with dimensions. Three specific areas are highlighted in red:

- 43 Berth** 50 x 20m
- 40 Berth** 150 x 6m and 20 x 20m
- 37 Berth** 20 x 20m

The QEII Cruise Terminal is also labeled on the map.

8.3 Waste Oil Recovery and Disposal

8.3.1 Minimising Waste

The arrangements for disposal of pollution wastes, whether removed from Dock or Harbour waters or from the shoreline, will be agreed between the Statutory Harbour Authority, Southampton City Council, Hampshire County Council and The Environment Agency.

Minimisation techniques should be employed to reduce the amount of waste entering the waste stream. This can reduce the amount of waste for final disposal and also limit environmental and economic impact. Efficient methods should be employed for oil spill clean up to ensure that the minimum material is used and/or contaminated during the process. A number of methods can be used:

- recovery equipment should be cleaned and reused rather than discarded.
- reusable personal protective equipment (PPE) should be utilised where appropriate, for example, products such as rubber boots that can be cleaned and reused.
- sorbents should be used sparingly and effectively.
- production of a marketable product from waste eg taking waste oil to a power generating station for use as a fuel.

Adding to the waste stream is the least desirable option. If none of the above methods can be carried out, for whatever reason, the waste must be disposed of effectively following guidance from The Environment Agency.

8.3.2 Local Licensed Waste Disposal Contractors

The Waste Contractors listed below are approved to operate in the Port of Southampton by virtue of their Waste Management Licence/Environmental Permit issued in accordance with Section 35 of the Environmental Protection Act 1990 (as amended) or Disposal Licence issued under Section 5 of the Control of Pollution (Amendment) Act 1989.

By law, a Waste Transfer Note or Consignment Note must be generated by the Waste Contractor when waste is collected from the port and a copy left with the organisation employing the contractor (ie. Harbour Master, Tier 2 Contractor, Local Authority etc). The details in the Note will constitute the record of the quantity of waste transferred from the port during the incident.

| Contractor | Contact Numbers |
|-----------------------------------|-----------------|
| Veolia Environmental Services Ltd | 023 8042 7100 |
| Biffa Waste Services Ltd | 023 8066 7140 |
| Cleansing Service Group Ltd | 01489 782232 |
| Oil and Water Ltd | 01747 858561 |

8.4 Recovery and Disposal Methods

8.4.1 Minimisation and Pre-treatment

As previously stated, waste minimisation is a key principle within the Port's waste management strategy.

ABP Southampton's Port Waste Management Plan may be accessed at:

www.southamptonvts.co.uk

8.4.2 Recovery to Oil Processing Installations

Reprocessing is the preferred option. In general only pure oil and possibly oil/water mixtures will be acceptable. A number of Local Licensed Waste Disposal Contractors (listed at 8.3.2 above) can accept recovered oil for recycling or reprocessing.

8.4.3 Stabilisation

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

8.4.4 Land Farming

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

8.4.5 Combustion

Uncontrolled combustion is unsatisfactory because of the air pollution it causes. Commercial waste incinerators can dispose of only limited quantities of oily waste.

8.5 Disposal to Landfill

This is no longer the principle disposal method and can only be used in limited circumstances.

The Landfill (England and Wales) Regulations 2002, The Landfill (England and Wales) (Amendment) Regulations 2004 and The Landfill (England and Wales) (Amendment) Regulations 2005 require waste to be pre-treated prior to disposal at landfill. Waste is considered to have been pre-treated if it has undergone a physical, thermal or biological process, including sorting, that:

- i) changes the characteristics of the waste; and
- ii) does so in order to reduce its mass, or reduce its hazardous nature or facilitate its handling or enhance its recovery.

In practice, this requirement will be implemented by ABP Southampton's Tier 2 Contractor and appointed waste contractors. Some of the pre-treatment may be undertaken at an off-site facility.

Waste disposal criteria and guidance for disposal of waste to landfill can be found at:

www.environment-agency.gov.uk

Wastes banned from landfill include:

- any liquid waste
- any waste that does not meet the waste acceptance criteria for that class of landfill.

Information on the landfilling of hazardous waste can be found at;

www.environment-agency.gov.uk

Additionally, details on the Landfill Sites in the UK which can accept hazardous waste are available at:

www.environment-agency.gov.uk

8.6 Considerations with Regard to Waste Management Issues

- Make initial contact with Local Licensed Waste Disposal Contractors to make arrangements for the ultimate disposal of waste materials.
- Ensure that all Contractors' vehicles are carrying valid Registered Carriers Registration Certificates before they arrive on site.
- Obtain data on likely quantities of liquid oily wastes that are being collected by any recovery operations.
- Estimate quantities of non-liquid oiled wastes created primarily on shorelines. Initiate appropriate Duty of Care and Hazardous Waste documentation to cover all waste transportation used and ensure drivers are clearly briefed on their destination.
- Ensure that transport of oily waste is of a frequency sufficient to prevent the temporary storage from being overwhelmed.
- Confirm with all waste disposal facilities used that they have received all documentation required.
- Plans for handling and temporary storage of wastes arising during the oil spill response must be discussed with The Environment Agency at the earliest opportunity.
- The disposal site for the waste must have a licence to receive that type of waste.
- The Harbour Authority and Tier 2 Contractor must ensure that all relevant regulations have been complied with.

Appendix 1

SCIENTIFIC, TECHNICAL AND OPERATIONAL ADVICE NOTE - STOP Notice 1/2009
 Guidance for Contingency Planning and Operation of the Technical Team Waste Management
 Sub-Group within a National Contingency Plan Shoreline Response Centre in England and Wales

www.gov.uk/government/publications/scientific-technical-and-operational-advice-notes-stop-notes

10. Training and Exercise Policy

10.1 Training

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 matrices below.

Members of the Duty Harbour Master's Roster (4 - Harbour Master, Deputy Harbour Master, Pilotage Manager and Harbour Control Manager) are trained, in date, to MCA 5p level. All staff likely to be directly involved in a spill response (VTS Watch Managers (5), Berthing Officers (5), Moorings Officer (1), Marine Chargehand (1) and Patrol Launch crew (10)) are all trained, to date, to MCA 2p level.

The training courses are accredited by the Nautical Institute for the Maritime and Coastguard Agency; the syllabus of the courses matches the requirements of UK oil spill training standards.

10.2 Exercises

A series of annual exercises already take place within the Port and this practice will continue. Harbour personnel also participate in oil company exercises and an oil pollution element is regularly included in the major exercises of the Marine Emergency Plan (SOLFIRE) which are held each year.

In-house exercises will also be conducted at the approximate frequency noted in the exercise matrix.

Other organisations will be invited to participate in these exercises as appropriate and lessons learnt will be shared.

10.3 Post Incident and Post Exercise Evaluation Reports

Statutory Instrument 1998 No 1056 Regulation 4, as amended by Statutory Instrument 2015 No 386 Regulation 6 (12) (extracts at Section 3 Appendix 1), requires that details of all incidents and of all exercises conducted by the port authority are to be reported to the MCA, on behalf of the Secretary of State.

Thus, the circumstances of all incidents should be appropriately investigated and the details recorded in the MarNIS Incident Database. Investigation reports should be forwarded to the MCA as required.

All exercises conducted by the port authority are to have an aim and appropriate objective. Post exercise reporting should comment on whether the aim and objectives were met or not.

All lessons learned should be incorporated in this Plan at the earliest opportunity.

Training Policy

| Course | Duration | Duty Harbour Master's Roster (HM, DHM, PM, HCM) | VTS Watch Managers | Marine Officers (Patrol) Berthing Officers Marine staff | Frequency |
|--|----------|---|--------------------|---|---|
| Oil Spill Response (Ports) Induction 1P | 1-2 days | | | | Initial Induction Once every 5 years |
| Oil Spill Operator 2P | 2-3 days | | • | • | Initial Induction Once every 3 years |
| Oil Spill Operations Commander (Ports) 5P | 4-5 days | • | | | Once every 3 years |

Exercise Policy

| Exercise | Duration | Management | Supervisors | Operators | Frequency | Notes |
|------------------------------|------------|------------|-------------|-----------|---------------|---|
| Notification Exercise | 1-2 hours | • | • | | 6 Monthly | Test communication systems, check availability of personnel, evaluate travel options and the speed at which travel arrangements can be made. |
| Table Top Exercise | 2-8 hours | • | • | | Annual | Consist of interactive discussions of a simulated scenario among members of a response team and may involve the mobilisation of personnel or equipment. |
| Incident Management Exercise | 8-10 hours | • | • | • | Every 3 years | Demonstrate spill response management capabilities, integration of roles of different parties, focus on overall incident management aspects. |

11. Risk Assessment

11.1 Introduction

The Port of Southampton is a large multi-user port. During 2015 it handled over 63,600 commercial vessel movements, including:

| | |
|--------|--|
| 46,196 | Ferries – Isle of Wight/Southampton and Hythe/Southampton routes |
| 4,237 | Oil tankers |
| 2,529 | Ro-Ro vessels |
| 1,797 | Large container vessels |
| 1,345 | Bulk carriers |
| 848 | Cruise liners |

Local ferry traffic is extensive with services operating between Southampton and the Isle of Wight and Southampton and Hythe for up to 20 hours per day. Both dedicated passenger and Ro-Ro services operate to and from Cowes.

The BP Hamble and Esso Fawley oil terminals lie within the port area and are serviced by tankers of up to VLCC size - at up to 330 metres LOA, 60 metres beam and +15 metres draught - for the import and export of crude oil; both terminals also handle a wide range of products.

The level of deep sea Ro-Ro traffic using the port is increasing year on year and services operate both within the European area and world wide. These vessels are on average 200 metres LOA and 32 metres beam but changes in design have seen an increase in size in recent years, with 240 metres LOA or 36 metres beam no longer being unusual. Southampton is, arguably, the busiest Ro-Ro port in the UK with upwards of 1 million units being moved through the Docks annually.

Dubai Ports World (Southampton) Terminal lies in the River Test and can accept the largest container ships in the world, currently at up to 399 metres LOA, 59 metres beam and +15.5 metres draught. Many of the vessels are on loop routes from the Far East and call regularly at the port every 8 – 10 weeks.

Bulk cargo vessels are regular visitors to the bulks terminals in the Western Docks and to King George V Dock, for the delivery of salt, animal feeds or woodchip and loading of scrap. Again, these can be significant vessels at up to 200 metres LOA and 32 metres beam.

Southampton is the 'home port' for the Carnival UK stable of cruise ships, as well as Royal Caribbean, Fred Olsen and Saga Cruise Lines and, in general, is a turnaround port – being the start and end point for many cruises. The cruise season is largely between March and October but, more and more, cruise visits are occurring all year round. Again, these are generally very sizeable vessels, at up to 360 metres LOA, 47 metres beam and up to 10 metres draught.

With the exception of vessels berthed at the Fawley jetties, the majority of bunkering operations within the port are undertaken by bunker barge.

Recreational use of the harbour waters is extensive. Activities and events are co-ordinated through the Southampton Port Marine Users Group (SPMUG) chaired by the Harbour Master. Numerous sailing clubs and marinas are located within, or adjacent to, the harbour limits.

Much of the shoreline is designated as Sites of Special Scientific Interest. Additionally there are a number of other environmental designations including Ramsar sites, SPAs and SACs.

Southampton Water is subject to the unusual phenomenon of a 'Double High Water' tidal effect. A full tidal cycle lasts approximately 13 hours with the flood tide lasting about 7 hours, a 2-hour stand at High Water and an ebb tide of about 3 hours. The short duration of the ebb makes for a greater velocity of flow. Maximum tidal rates of up to 3.8 knots are experienced in the Central Solent and 1.8 knots in Southampton Water during a spring ebb tide. Neap and flood tidal rates are considerably less.

11.2 Port Operations

11.2.1 Pilotage

Pilotage is compulsory for all vessels over 61 metres in length and for vessels over 20 metres in length carrying more than 12 passengers, other than those which trade regularly to the port and whose masters have been granted pilotage exemption certificates. Certain categories of vessel including Naval and MOD vessels are exempt from compulsory pilotage but may take pilots on a voluntary basis.

11.2.2 Vessel Traffic Service (VTS)

The Port operates a modern Vessel Traffic Services control centre equipped with radar surveillance, communications and vessel traffic management systems. All vessels of 20 metres or more in length entering, leaving or manoeuvring within the port fall under the direction, co-ordination and management of Southampton VTS.

In particular, pilots of large and/or deep draught vessels maintain a close liaison with the Duty VTS Watch Manager who closely monitors their passage while underway. While risk cannot be wholly eliminated from any transport operation, the provision of a traffic management service considerably reduces the likelihood of collision between vessels underway within the port.

11.2.3 Thorn Channel

There are a number of traffic rules governing the movement of vessels through the Thorn Channel entrance to Southampton Water. Vessels constrained by their draught are afforded sole occupancy status of the main shipping channel when entering or leaving the port. Additionally, all large tankers carrying crude oil cargoes are under active tug escort while transiting the Thorn Channel.

No two vessels, each having a length of 180 metres or more, shall pass or overtake each other within the Thorn Channel. All vessels greater than 150 metres in length are assigned a Moving Prohibited Zone (MPZ) extending 1000 metres ahead and 100 metres either side of the vessel from which sailing craft and small vessels are excluded. The majority of large vessel movements through the Thorn Channel are assigned a harbour patrol escort launch.

In the 27-year period 1988 to 2015 there have been no collisions between commercial vessels in the Thorn Channel. In the same period there have been 10 minor grounding incidents. None of these incidents resulted in structural damage or in the release of cargo oil or bunker fuel.

Recent dredging has increased the available depth in the Thorn channel to 13.6 metres.

11.2.4 Main Channel

The risk of grounding in Southampton Water is considerably lower than that which applies to transiting the Thorn Channel. The main channel is straight with the channel margins clearly marked and large loaded and partly-loaded tankers are under active tug escort while proceeding to and from the berths at Fawley and Hamble. Recent dredging has increased the available depths in the main channel to 13.2 metres.

While the risk of grounding is low, it cannot be wholly eliminated; the most probable risk is steering or propulsion system failure where resultant damage to the mid-body plating of tankers is unlikely, but tankers, container vessels and passenger ships could sustain damage to bunker tanks in the fore part of the vessel leading to small releases of fuel oil.

Loaded tankers do not navigate north of the berths at Fawley and Hamble and, if exceptionally required to do so, are required to be gas-free.

11.2.5 Collision between Vessels Underway

During 2015, over 63,600 ship movements took place within port limits; these movements involved conventional oil tankers many of which were not entitled to sole occupancy of the Thorn Channel. Smaller tankers, including bunkering vessels and others carrying persistent oils, also operate north of the Fawley Reach. The potential for a spillage of fuel or other persistent oil as a direct result of a ship collision must be acknowledged.

Large container ships and passenger vessels can also carry substantial quantities of fuel oil; collision impact could result in hull damage in way of bunker tanks with a consequent risk of spillage.

Given the controls which are imposed on ship movements within the port and the fact that there have been no collisions between vessels underway in the past 21 years, that has involved the release of cargo oil or fuel oil, the risk of oil spillage as a direct result of ship collisions must be regarded as low.

11.2.6 Berthing Incident

Oil spills can occur as a result of hull contact with the knuckle end of quay walls or breasting dolphins during ship berthing or unberthing manoeuvres. Such incidents are generally due to failure of a vessel's main propulsion or steering systems, loss of control onboard an attendant tug or pilot error or misjudgement. The potential spill quantities involved depend on the vessel type and the location and the extent of the impact damage; hull damage to a large crude oil tanker in way of a mid-body wing tank, for example, could give rise to a release of some 5,000 tonnes. The potential spill quantity should hull plating be ruptured in way of an aft wing fuel oil bunker tank can, historically, be in excess of 1,000 tonnes.

11.2.7 Tug Impact

There are well-documented incidents where cargo or bunker oil has been released as a result of hull impact damage by tugs. This can occur when tugs are approaching a vessel underway prior to berthing, or when coming alongside a moored vessel prior to unberthing.

The potential spill quantities again depend on the location and extent of the impact damage but can be over 500 tonnes for bunker oil and 2,000 tonnes for cargo oil.

During the 27-year period 1988 to 2015, there have been 7 recorded incidents of tugs landing heavily during their final approach alongside vessels. Only one incident resulted in hull plating damage to a tanker but it did not result in the release of cargo oil. In the same period there has been 1 recorded capsizing and sinking of a tug whilst engaged in towage operations. Whilst a limited quantity of the tug's own fuel leaked from her tanks, the quantity was not significant and the tanker being towed was not damaged or affected by the incident.

Spills from this cause are considered to be of low likelihood but the risk is acknowledged.

11.3 Oil Transfer Operations

The BP Hamble and Esso Fawley installations handle crude oil at flow rates of up to 10,000 m³/hr; additionally, fuel oil is exported and imported at the Fawley Marine Terminal. Both installations also handle a range of refined products.

This section summarises the potential sources of oil spills during cargo handling operations; the summary is based on information published in the Fawley Marine Terminal Oil Spill Contingency Plan, oil industry data and ITOPF statistics. It should be noted that the ITOPF statistics demonstrate that most oil spill incidents occur during routine cargo handling operations and that some 91% of these incidents resulted in spillages of less than 7 tonnes.

| Cause | Assessed Risk | Credible Spill Quantity (Tonnes) |
|--------------------------------|---------------|----------------------------------|
| Cargo tank overflow | Low | 100 |
| Slop tank overflow | Low | 25 |
| Loading arms | Moderate | <50 |
| Ballast water discharge | Low | <50 |
| Sea/overboard discharge valves | Moderate | <25 |
| Vessel breakout | Low | >100 |
| Hull failure | Low | >700 |

11.4 Pipelines

The pipe bundle trenched in the pipeline crossing of Southampton Water includes pipelines which transport both non-persistent and persistent oils. The Esso Fawley Refinery supplies fuel oil and refined products via pipelines which connect with the UK pipeline network. Crude oil production from the Wytch Farm oilfield is transferred to the BP Hamble Terminal via the Perenco Purbeck–Southampton Pipeline (PSP). The pipeline crossing is clearly indicated on navigational charts as a Prohibited Anchorage Area and is also delineated by shore marks. The likelihood of third party impact damage to any of the pipelines must be considered remote but is, nonetheless, acknowledged as a risk.

The worst case scenario is failure of the crude oil pipeline as a result of third party impact damage; this could lead to a release of some 600 tonnes of crude oil. Similar damage to the black oil pipeline could give rise to a release of some 200 tonnes of fuel oil.

11.5 Bunkering (Refuelling) and Bulk Liquids Transfer Operations

With the exception of those vessels which refuel at the Esso Refinery berths, all other ships are bunkered ex-barge while alongside their berths or while at anchor. It should be noted that the designated anchorage areas lie outwith the port limits. Heavy, intermediate and light fuel oils together with marine gas oil are supplied. Transfer rates of up to 500 tph can be achieved. Although flexible hoses are tested at six monthly intervals and all bunkering craft are equipped with emergency shut down facilities, the possibility of hose failure or a bunker tank overflow onboard the receiving vessel must be recognised. In estimating the potential spill quantities, the facts that Check Lists are completed prior to each operation and that a continuous deck watch is maintained on board bunkering craft have been taken into account.

Occasionally, road tanker deliveries of gas oil and transfer of bulk liquids, in general, takes place at alongside berths and procedures are in place to ensure that permission is gained prior to delivery/collection. The fact that a comprehensive Check List is completed before bunkering commences, and the Duty VTS Watch Manager is informed prior to commencement and on completion of the evolution, minimises the potential for a significant spill. A copy of the Bulk Liquids Transfer Request Form is at Appendix 1, Page 6.

| Cause | Assessed Risk | Potential Spill Quantity (Tonnes) |
|---------------|---------------|-----------------------------------|
| Hose failure | Low | <5 |
| Tank overflow | Moderate | <2 |

11.6 Ship to Ship Transfers (STS)

Ship to ship transfer operations are very occasionally undertaken at the small ships' anchorage; the products involved are normally slop material or recovered fuel oil. Transfer rates are of the order of 250 tph. Such operations are conducted in strict compliance with the conditions stipulated by the Harbour Master and are subject to constant monitoring. Spill risks are related to failure of the transfer hose(s) and cargo tank overflow on board the receiving vessel.

| Cause | Assessed Risk | Potential Spill Quantity (Tonnes) |
|-----------------------|---------------|-----------------------------------|
| Transfer hose failure | Low | <5 |
| Tank overflow | Low | <2 |

11.7 Effluent Discharges to Harbour Waters

Treated effluent from a number of industrial sites, including the two oil terminals, is discharged into harbour waters. The discharge consent levels are set and monitored by the Environment Agency and the site operators regularly test for effluent quality.

Instrumentation malfunction, failure of in-line samplers or operator error can result in the entrainment of oil in the final discharge to harbour waters. Most spillages of this nature are not substantial and, based on port records and industry experience elsewhere, are unlikely to exceed 25m³ in volume.

11.8 Miscellaneous Spill Sources

Given the level and range of activity within the port, there are a number of other potential sources of oil or chemical spills. Examples include the refuelling of leisure craft from marina forecourt type pumps, leakage from dockside storage tanks, discharges of engine compartment bilge water and spills arising during the transfer of cargo, for example, from the puncturing of flexitanks within containers during crange operations.

Additionally, the Port has a surface water drainage infrastructure which flows directly into the River Test. Several storm water outfalls carrying storm water from the City of Southampton flow directly into the River Test and these are not, in general, equipped with shut-off valves or penstocks (See Appendix 2). Heavy rain following a dry spell of weather may result in a sheen developing locally in the outfall locations from road oil and tyre dust.

Port records indicate that the maximum spill quantity over a 5 year period from such miscellaneous sources was 0.5 tonnes. The risk of small spillages of this nature is assessed as moderate.

11.9 Place of Refuge

A 'Place of Refuge' means a place where a ship in need of assistance can take action to enable it to stabilise its condition, reduce the hazard it presents to navigation, protect human life and protect the environment.

The process of identifying an appropriate place of refuge is driven by the circumstances of the incident, including such event-specific data as the weather, the geographical whereabouts of the incident and the type of threat posed by the ship and its cargo. The MCA Counter Pollution and Salvage Branch will identify and, in consultation with the Solent Environment Group and the Port when necessary and as far as is practicable, carefully consider Southampton as a place of refuge. They will conduct a risk assessment of this location prior to submission to SOSREP, who will make the final decision to assign the port as a 'Place of Refuge'. The extent of the risk assessment and measures put in place to prepare for the casualty's arrival will very much depend on the nature of the incident, level of damage to the casualty and time available before arrival.

The wider Solent and the Port of Southampton have been used as a place of refuge on a number of occasions in the past and thus this can be expected to occur in the future. The Solent can offer a deep water approach channel and sheltered anchorages with easy access to towage assets. Additionally, the port can offer berths capable of accepting

vessels up to 400 meters in length overall, with draughts in excess of 11.5 metres, with ready and close access by the emergency services and MCA headquarters.

Depending on the nature of the ship casualty, the Port's Oil Spill Contingency Plan would be placed at notice and would be fully supported by SOSREP and the MCA, were a spill to occur, or in the event of a risk of significant pollution.

Appendix 1:



Bulk Liquids Transfer Request

Request No: _____

(January 2016)

Part A

REQUEST TO CARRY OUT THE TRANSFER OF BULK LIQUIDS FROM ROAD TANKERS TO OR FROM SHIPS ON BERTHS IN THE PORT OF SOUTHAMPTON

| | | | |
|---|-------|-------------------------|-------|
| Berth No | _____ | Vessel | _____ |
| Agent / Owner | _____ | Master | _____ |
| Address | _____ | Date & Time of delivery | _____ |
| Tel No (On Site) | _____ | Fax No (Sender's Fax) | _____ |
| Name of Company carrying out the Transfer | _____ | | |
| Type and Quantity of liquid to be transferred | _____ | | |
| Uquid Hazmat Code | _____ | | |
| Delivery vehicle registration | _____ | | |

Forward to: Harbour Master, Associated British Ports, VTS Centre, 37 Berth, Eastern Docks, Southampton SO14 3GG

Telephone: 023 8060 6208 (Southampton VTS - 24 hours) Fax: 023 8023 2991

Permission
Granted/Refused

(ABP Authorised Person)

Date _____ Time _____

FOR INTERNAL USE: Request received

Date _____ Time _____

Reason for refusal _____

Part B

SAFETY CHECK LIST TO BE COMPLETED IMMEDIATELY BEFORE TRANSFER COMMENCEMENT

| | | YES | NO |
|---|---|-----|----|
| 1 | Is the vessel securely moored? | | |
| 2 | Will Flag "B" be exhibited? | | |
| 3 | Will there be suitable fire fighting appliances readily available? | | |
| 4 | Will there be a ready supply of counter pollution equipment nearby? | | |
| 5 | Will there be drip trays in position? | | |
| 6 | Will all scuppers and drains be effectively blocked? | | |
| 7 | Has VTS been informed before commencing transfer? | | |

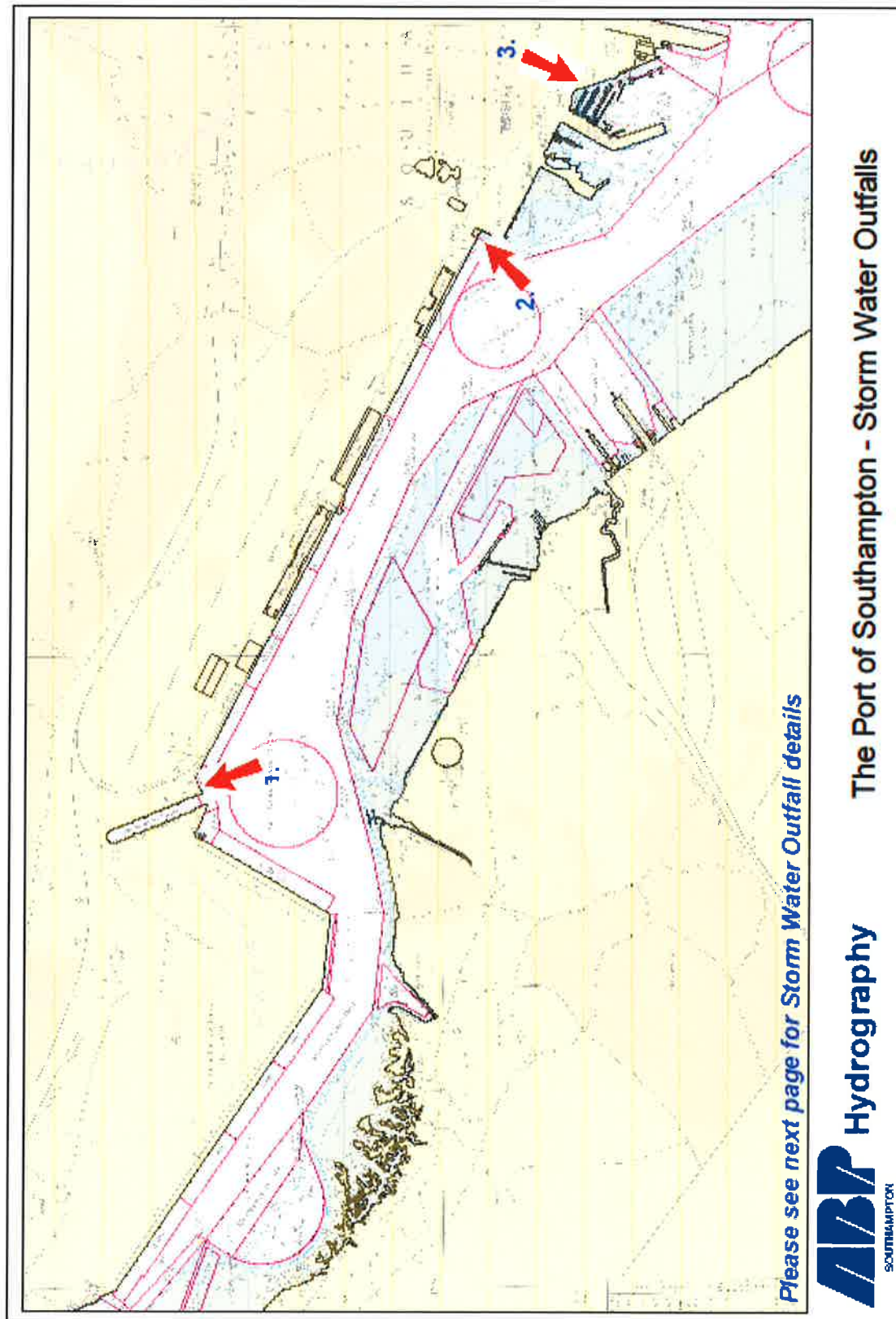
Signed by Master/Person in charge _____

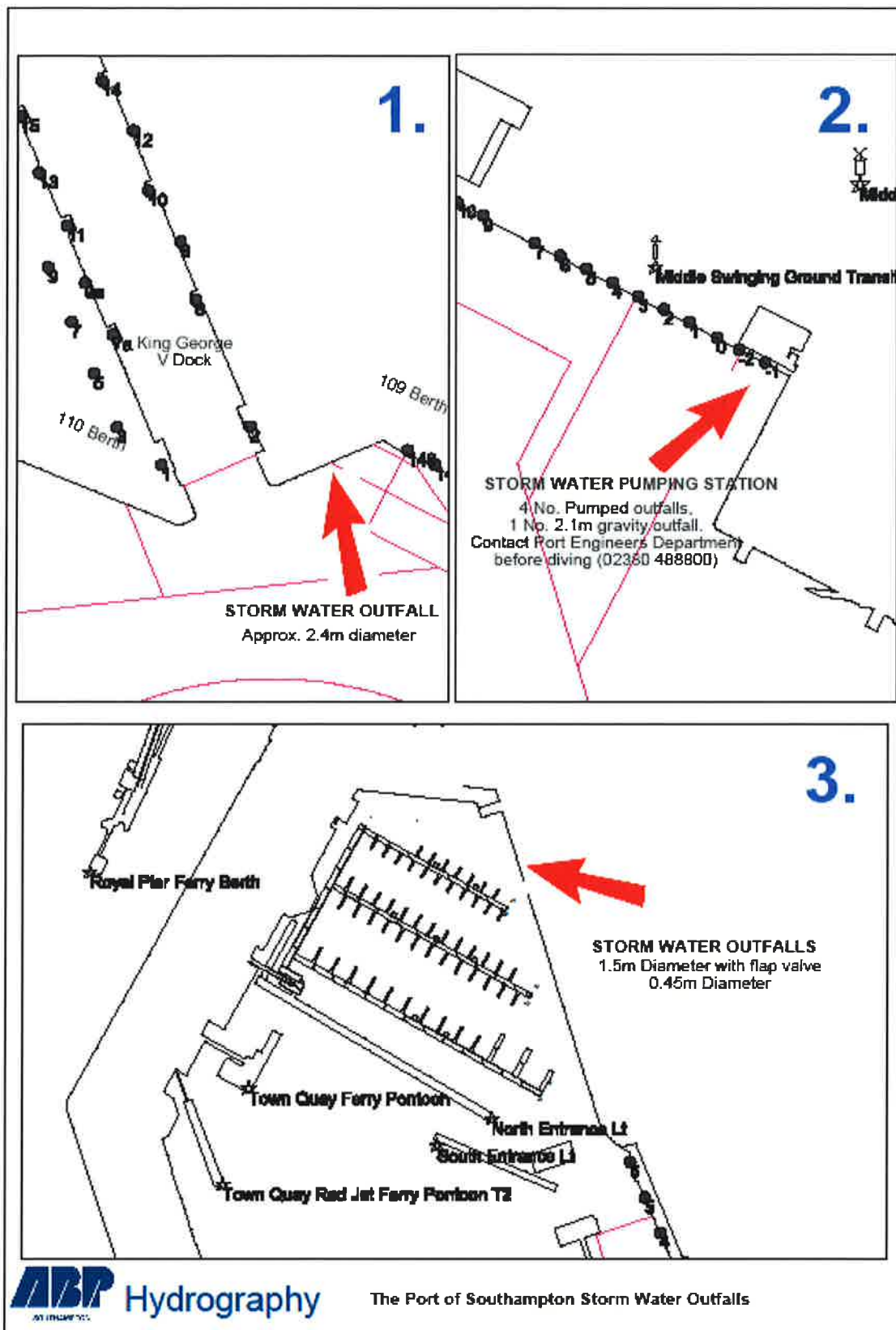
VTS IS TO BE INFORMED PRIOR TO COMMENCING & UPON COMPLETION OF TRANSFER

IMPORTANT NOTE:

IN THE EVENT OF OIL OR ANY OTHER POLLUTANT SPILLING INTO THE WATER, SOUTHAMPTON VTS IS TO BE CONTACTED IMMEDIATELY. FAILURE TO DO SO MAY RESULT IN PROSECUTION UNDER THE MERCHANT SHIPPING ACT 1995 SECTION 136(1).

Appendix 2:





12 Sensitivity Maps and Environmental Information

12.1 Use of Section

This section contains Environmental Sensitivity Maps depicting the Sites of Special Scientific Interest, Special Protection Areas and Special Areas of Conservation which lie within, or immediately adjacent to, the statutory harbour area. Priority protection areas have been identified as it is recognised that not all sensitive areas may be capable of protection in a large oil spill incident. The information given in this section should be used in conjunction with Response Guidelines included in Section 5.

12.2 Priority Sensitive Areas

12.2.1 Definition

The priority sensitive areas for Southampton Water, River Test, River Itchen and River Hamble have been divided into two groups:

Group A - identified as sensitive because of the habitat types or species found at each site. These designated areas should receive priority protection. "A" priority habitats are saltmarshes, sheltered tidal flats and sheltered rock coasts. Although all "A" habitats require priority protection, it may be necessary to have a further breakdown of "A" sites in case all such areas cannot be protected and choices have to be made. "A" sites have therefore been divided into A1, A2 and A3 categories; division into these 3 categories has been made on the basis of the presence of nationally or locally important sites for bird concentrations, botanical species, important sites for mariculture and major water intakes.

Table 12.1 "A" Priority Sensitive Areas

| A 1 | A 2 | A 3 |
|---|---|--|
| <ul style="list-style-type: none"> saltmarshes, sheltered tidal flats & eelgrass beds of international and national importance saltmarshes, sheltered tidal flats of international, national or local importance for bird populations | <ul style="list-style-type: none"> sites for commercial mariculture water intakes sheltered rocky shore of national biological conservation importance | <ul style="list-style-type: none"> areas of saltmarsh of local conservation importance sheltered tidal flats |

Group B – these areas are generally less sensitive to oil pollution effects, have a shorter recovery time and greater successful clean-up potential than Group A sites or are sites that have been ranked as such because it is not possible to protect them with the downstream booming sites.

"B" Priority Protection Areas are listed in Table 12.2. Certain ecological sites, primarily on the Rivers Itchen and Test, have been included in the B priority areas.

Table 12.2 “B” Priority Sensitive Areas

| B 1 | B 2 | B 3 |
|---|---|---|
| <ul style="list-style-type: none"> • areas of local marine biological importance | <ul style="list-style-type: none"> • areas of intensive use by pleasure boats / leisure crafts / marinas | <ul style="list-style-type: none"> • amenity beaches of high tourist use |

12.2.2 Site Specific Priority Sensitive Areas

Priority sensitive sites are given on the accompanying sensitivity maps. Details of the key sensitive features of each priority area, including any seasonal variations, are given in the following table.

Table 12.3 Southampton Water and Estuaries: Priority Protection Areas

| A - High Priority Areas | | |
|------------------------------|---|--|
| Area | Key Sensitive Features & Importance | Main Period of Sensitivity |
| A1 Areas | | |
| Upper Hamble Estuary & Woods | <ul style="list-style-type: none"> • Large populations of invertebrates in the intertidal flats • Rich feeding ground for waders, ducks & grey heron • Country Park at Upper Hamble | All year Sept – March All year |
| Lower Test Valley | <ul style="list-style-type: none"> • Extremely rich in flowering plant species (> 450), including the rare bulbous foxtail in the saltmarsh • Important for wetland breeding birds • Feeding & roosting ground for ducks & waders • Large breeding populations of reed & sedge warblers • Autumn roost & pre-migratory sites for passerine birds • Wildlife Trust Resrve at Lower Test | All year Aug – March Sept – March Aug – March Sept – March All year |
| Eling & Bury Marshes | <ul style="list-style-type: none"> • Vital feeding / roosting areas for autumn & winter populations of waders, ducks & grey heron • Nationally & regionally important species composition • Only <i>Puccinellia</i> saltmarsh on the central south coast | Sept – March All year All year |
| Hythe & Calshot Marshes | <ul style="list-style-type: none"> • Nationally important migratory / overwintering site for waders • Breeding colony of black-headed gulls at Fawley Power Station | Sept – March April – July |

| | | |
|------------------------------------|--|--|
| Hythe & Calshot Marshes | <ul style="list-style-type: none"> • Important feeding & roosting area for wildfowl • Spartina saltmarsh of scientific importance • Wildlife Trust Reserve at Hythe • Local Nature Reserve at Calshot Marshes • Two nationally rare species of shingle plant at Calshot Castle | Sept – March All year All year All year All year |
| Lincegrove & Hackett's Marshes | <ul style="list-style-type: none"> • Saltmarsh and mudflats of international importance | All year |
| Hamble River | <ul style="list-style-type: none"> • Majority of saltmarsh and mudflat is of international importance for waterfowl and as a habitat in its own right | All year All year |
| Chessell Bay on River Itchen | <ul style="list-style-type: none"> • Sheltered mudflat of international importance for waterfowl | Sept – March |
| Titchfield Haven Reedbeds | <ul style="list-style-type: none"> • Large reedbed connected to Southampton Water by sluice, of international importance for waterfowl | All year but particularly Sept – March |
| A2 Areas | | |
| Marchwood | <ul style="list-style-type: none"> • Water intake at the Power Station | All year |
| Fawley | <ul style="list-style-type: none"> • Water intake at Fawley Power Station | All year |
| A3 Areas | | |
| South Netley | <ul style="list-style-type: none"> • Royal Victoria Country Park | All year |
| Hamble River | Local Nature Reserve at Mercury Marshes National Trust Site at Curbridge | All year All year |
| B – Moderate Priority Areas | | |
| B1 Areas | | |
| Hamble River | <ul style="list-style-type: none"> • Local Nature Reserve at Hook with Warsash | All year |
| Southampton Water | <ul style="list-style-type: none"> • Inshore fisheries of native oysters and hard shelled clams for harvesting • Bass nursery grounds • Nationally rare benthic sponge <i>Suberites massa</i> occur in Southampton Water • Lagoon cockle, <i>Cerastoderma glaucum</i> found in Southampton Water | All year May - Nov All year All year |
| B2 Areas | | |
| Hill Head | <ul style="list-style-type: none"> • Approx. 75 moorings & 2 sailing clubs | All year |
| Titchfield Haven | <ul style="list-style-type: none"> • Small harbour & sailing club | All year |
| River Hamble | <ul style="list-style-type: none"> • Four marinas : Port Hamble Hamble Point Mercury Yacht Club Swanwick • Eight public slipways | All year (peak periods April to September) |

| | | |
|--------------------------|--|--|
| Hamble Quay | <ul style="list-style-type: none"> • Four sailing clubs • Three canoe clubs • Total capacity 3200 (>1100 waiting list): 1867 moorings 1273 marina berths 470 boats ashore 30 visitor berths/moorings | All year (peak periods April to September) |
| Woolston to Hamble Point | <ul style="list-style-type: none"> • Three sailing clubs • Angling club • Public slipways at: Weston Point Weston Shore Netley Royal Victoria Country Park | All year (peak periods April to September) |
| River Itchen | <ul style="list-style-type: none"> • Five marinas : Ocean Village Shamrock Quay Kemps Quay Itchen Town Quay • Eight public slipways • Two sailing clubs • Six rowing clubs • Angling club • Southampton Waterborne Activities Centre | All year (peak periods April to September) |
| Totton - Calshot | <ul style="list-style-type: none"> • Hythe marina village • Hythe pier • Nine sailing clubs • Solent canoe club • Five public slipways | All year (peak periods April to September) |
| B3 - Areas | | |
| Hill Head | <ul style="list-style-type: none"> • Bathing beach | Peak periods April to September |
| Calshot | <ul style="list-style-type: none"> • Bathing beach | Peak periods April to September |

12.3 Priority Protection Areas

Establishing priorities for protection of areas of the coastal zone of Southampton Water, River Itchen, River Hamble and Test River has been based on the principle of greatest net environmental benefit by assessing, in combination, the following key parameters: environmental sensitivity; areas where oil concentration is likely to have the longest term effects; and areas where clean up options are most restricted meaning that prevention, and therefore priority protection, will be the primary means to minimise pollution effects. In Table 12.4 sensitivity has been assessed using as a basis the widely accepted index of shores developed by Gundlach and Hayes (1979).

The length of recovery time from pollution effects and susceptibility to adverse impact from clean-up operations are bound up with two key variables: the energy level of the shoreline (essentially degree of exposure to wave energy) and the substratum type. On exposed rocky shores effects on shore life tend to minimal and recovery rates rapid because oil does not stick easily to such shores and if it does it tends to be quickly cleaned off by vigorous wave action. With increasing shelter the likelihood of persistence increases as does the biomass to trap the oil. The most sheltered shores tend to be the sedimentary mud flats and saltmarshes. Such areas have a high biological productivity, are also the worst oil traps and are amongst the most susceptible to damage by beach clean-up methods. In estuarine areas, oil pollution damage will thus be most pronounced in the sheltered estuarine bays, inlets and creeks.

Combining energy levels, substratum types and sensitivity it is possible to derive shoreline protection and clean-up methods ordered according to sensitivity and requirement for protection as a priority over clean-up. This has been done and the results reproduced in Table 12.5 which presents a sequence from exposed rocky headlands where active shoreline protection and beach clean-up are likely to be needed though to sheltered tidal flats and saltmarshes where the priority is for protection and avoidance of clean-up.

Table 12.4 Vulnerability of Shoreline Habitats and their General Physical and Biological Characteristics

| | |
|---|--|
| 1. Exposed rocky headlands | Rocky headlands provide a hard high angle, substrate colonised by communities that are horizontally zoned according to the times that each area is exposed during the tidal cycle. Rocky headlands are amongst the highest energy coastal habitats. |
| 2. Eroding wave-cut platforms / intertidal and subtidal rocky shores | These are horizontal hard substrate environments, usually exposed to vigorous wave and tidal action. Characteristic communities can be found in bands according to exposure to tidal fluctuations. |
| 3. Fine-grained sand beaches | Fine grained sandy beaches usually have a flat profile and are hardpacked. Sandy shores may support few flora and fauna. |
| 4. Coarse-grained sand beaches | These beaches have a steeper profile than fine grained beaches and are present in a variety of coastal environments, varying from low to higher energy. Biological productivity is generally low. |
| 5. Exposed compacted tidal flats | These are compacted, fine-grained mud or sand flats that are relatively exposed to winds, waves and currents. |
| 6. Mixed sand and gravel beaches | These beaches are usually located in moderate to high energy environments. The biological community is usually limited due to the instability of the environment. |
| 7. Gravel beaches | These are beaches comprising cobble sized sediments (>2mm). Biological activity is usually limited to the sublittoral zone but can be extensive and diverse. |
| 8. Sheltered rocky coasts | These are protected coves and embayments with typically rough surfaces and tidal pools. The resident biological community is extensive, varied and vulnerable to oil spill damage. |
| 9. Sheltered tidal flats | Areas of great biological activity and low wave energy. A number of interpretations of 'biological activity' are possible. In this case, it is taken to mean a combination of high productivity, biomass and possibly bioturbation. |
| 10. Salt marshes | High productive aquatic environments. Low energy muddy shores that are not completely submerged at high tide and drained by an intricate creek system. Support a rich plant as well as animal and bird life. |

Table 12.5 Shoreline Protection and Clean-up Methods for Habitats of Increasing Vulnerability

| | |
|--|--|
| 1. Exposed rocky headlands | Wave reflection keeps most oil offshore; active shoreline protection and beach clean-up unnecessary |
| 2. Eroding wave cut platforms / intertidal and sub-tidal rocky shores | Shoreline protection is unlikely to be necessary. Most oil removed by natural processes within weeks. |
| 3. Fine-grained sand beaches | Oil does not penetrate into the sediment, facilitating mechanical removal if necessary. Otherwise oil persist several months. |
| 4. Coarse-grained sand beaches | Oil may sink and/or be buried rapidly, making clean-up difficult. Under moderate to high energy conditions, oil will be removed naturally. |
| 5. Exposed compacted tidal flats | Recovery of sand / mud flats may be facilitated by nearshore releases of dispersants. Most oil will not adhere to, nor penetrate into, the compacted tidal flat. Clean-up is usually unnecessary. |
| 6. Mixed sand and gravel beaches | Dispersant in nearshore areas may be an effective protection mechanism. Manual removal if heavily oiled. |
| 7. Gravel beaches | Natural clean-up or physical collection are probably the best options. |
| 8. Sheltered rocky coasts | Protection / diversionary booming. Areas of reduced wave action. Oil may persist for many years. Clean-up is not recommended unless oil concentrations are very heavy. |
| 9. Sheltered tidal flats | Protection / diversionary booming. Clean-up is not recommended unless oil accumulation is very heavy; bioremediation techniques could be considered. |
| 10. Salt marshes | Protection options: Protection / diversionary booming. Avoid dispersants. If oil enters marshes: containment and recovery in creeks; absorbents. |

12.4 Port of Southampton - Coastline Details

12.4.1 Lepe to Calshot

Length of shoreline

4 miles

Description of Coastline

Mud, sand and shingle beach, backed by Lepe Country Park; some MoD land, woodland and grassland; some groynes at Lepe.

Adjacent Sea Areas

Major oyster beds particularly at Stanswood Bay and Calshot, and at Bramble Bank and Thorn Knoll in mid channel.

Ecological Sensitivity

An SSSI, part of The Solent and Southampton Water SPA, part of the Solent Maritime SAC and, in large part, a National Nature Reserve. The SSSI supports the largest British colony of black headed gulls and is a nationally important ternary. The inter-tidal area at Calshot Spit has *Zostera marina* eelgrass beds. The whole site is an important wild fowl refuge and is of national importance as a coastal ecosystem. The coastline also forms part of the New Forest National Park. There is an inshore nature sanctuary at Calshot.

Main Uses

Shoreline – recreation

Water – sailing, water sports, bathing, fisheries, sea angling.

Access to Shoreline

Access points at Lepe and Calshot but movement of mechanical equipment along the beach is inhibited in places by groynes and fencing.

Waste Collection Points

Car parking areas behind the beach and at Calshot Activities Centre. Also above high water mark.

Clean-up Plan

Physical removal of contaminated shingle.

Dispersants must not be used.

Set up bird scarers (if necessary).

12.4.2 Calshot Spit to Ashlett Creek

Length of Shoreline

1 mile

Description of Coastline

Some shingle but mainly mudflats and saltmarsh backed by grassland and Fawley Power Station.

Adjacent Sea Area

Oyster cleansing area off Calshot Spit.
Water intake for Fawley Power Station (no longer functioning)

Ecological Sensitivity

Designated an SSSI, an SPA and a SAC. A Local Nature Reserve in part and the coastline also forms part of the New Forest National Park.

Main Uses

Shoreline - recreation, in particular at Calshot.
Water - sailing with boat moorings at Calshot and Ashlett Creek. Water sports, bathing at Calshot, fisheries, sea angling.

Access to Shoreline

Access points at Calshot Activities Centre and Ashlett Creek.

Waste Collection Points

Ashlett Creek and Calshot Activities Centre.

Clean-up Plan

Leave to nature and natural cleaning processes.
Shingle shorelines may be cleaned manually.
No dispersant use, particularly on saltmarsh or mudflats, or near Calshot.
Do not put men or heavy equipment on saltmarsh.
Deploy absorbent booms at saltmarsh creeks and at Ashlett Creek if accessible and if necessary.
Set up bird scarers (if necessary).

12.4.3 Ashlett Creek to Esso Outfall 1

Length of Shoreline

1.2 miles

Description of Coastline

Mudflats and saltmarsh backed by Esso Refinery landscaping area.

Adjacent Sea Area

Water intakes for Fawley Refinery.

Ecological Sensitivity

Whole area designated an SSSI an SPA and a SAC.

Main Uses

Shoreline – none.

Water – sailing.

Access to Shoreline

At Ashlett Creek and via Ashlett Club; elsewhere, across seawall at Esso. Not suitable for mechanical equipment.

Waste Collection Points

Esso Refinery Zone 2.

Clean-up Plan

Leave to nature and natural cleaning processes.

Manually clean oil from Solent View area if practical

No dispersant use, particularly on saltmarsh.

Do not put men or heavy equipment on saltmarsh.

Deploy absorbent booms at saltmarsh creeks if accessible and if necessary.

Set up bird scarers (if necessary).

12.4.4 Esso Outfall 1 to Hythe Marine ParkLength of Shoreline

2.2 miles.

Description of Coastline

Extensive saltmarsh backed mainly by industrial land and beech wood.

Adjacent Sea Areas

Clam fisheries in the whole area.

Nearby yacht marina.

Ecological Sensitivity

An SSSI, an SPA and a SAC. A Nature Reserve at the Hythe end. A major wildfowl refuge for winter migrants. Marshes dominated by *Spartina*. Also flats dominated at times by green algae supporting large percentages of national populations of ringed plover, grey plover, curlew and dunlin. Feeding grounds for teal, shelduck and brent geese.

Main Uses

Shoreline – none.

Water – sailing.

Access to Shoreline

Numerous access points but not suitable for mechanical equipment. Access via Esso Zone 2 or Frost Lane, Hythe (more difficult).

Waste Collection Points

Esso Refinery Zone 2, Block 51.
Small car parking area at Frost Lane.

Clean-up Plan

Leave to Nature.
No dispersant use, particularly on saltmarsh.
Do not put men or heavy equipment on saltmarsh.
Deploy absorbent booms at saltmarsh creeks if accessible and if necessary.
Set up bird scarers (if necessary).

12.4.5 Hythe Marine Park to Sea Mounting Centre, MarchwoodLength of Shoreline

2.0 miles

Description of Coastline

Mainly shingle and boulder shoreline, with intertidal mudflat, backed by Hythe Marine and rough grassland.

Adjacent Sea Areas

Clam fisheries in the whole area.
Major marine usage at Hythe.
Yacht anchorage offshore.

Ecological Sensitivity

Whole area designated an SSSI and an SPA. Valuable as a feeding resource for birds.

Main Uses

Shoreline – none.
Water – sailing, some angling near Hythe.

Access to Shoreline

Via marina or minor footpaths from Hythe area. Vehicle access to the Dibden Bay foreshore is possible via West Cliff Hall.

Waste Collection Points

Hythe Marine car park.

Clean-up Plan

Physical removal where possible.

Dispersant could be used to aid removal but only with the agreement of MMO and Natural England.

Set up bird scarers (if necessary).

12.4.6 Sea Mounting Centre, Marchwood to Bury Creek

Length of Shoreline

1.3 miles

Description of Coastline

Part mud and shingle beach with open pile quayline backed by urban and industrial development. Husbands ship yard, Marchwood aggregate wharf with sailing clubs at Cracknore and Marchwood and Marchwood Power Station.

Adjacent Sea Areas

Small craft mooring areas and shellfish beds.

Water intake for Marchwood Power Station.

Ecological Sensitivity

Although not designated, the mudflats are used by SPA and SSSI birds as a feeding resource and are, therefore, important to the function of nearby designated sites. The mudflats, however, are locally designated as a Site Important for Nature Conservation (SINC).

Main Uses

Shoreline – predominantly industrial.

Water – sailing, commercial vessel movements, some angling.

Access to Shoreline

Slipways at Cracknore and Marchwood.

Waste Collection Points

Car parks at Cracknore and Marchwood hards.

Clean-up Plan

Physical removal.

Treat shingle with dispersant before advancing tide as final polishing subject to the agreement of MMO and Natural England.

Set up bird scarers (if necessary).

12.4.7 Bury Creek to Eling and Redbridge Causeway

Length of Shoreline

3.0 miles

Description of Coastline

Some shingle but mainly mudflats and saltmarsh backed by woodland, grassland and industrial development.

Adjacent Sea Areas

Small craft moorings in Eling Creek. Jet ski / PWC and water ski area in Redbridge Channel.

Ecological Sensitivity

Whole coastline designated an SSSI, an SPA and a SAC.

Main Uses

Shoreline – recreation at Goatee beach, Eling channel.
Water – sailing, water skiing, jet-skiing and some angling.

Access to Shoreline

Via slipway at Eling creek or footpaths to Goatee beach and Bury marshes.

Waste Collection Points

Car park at Eling creek slipway.

Clean-up Plan

Leave to nature and to natural cleaning processes.
No dispersant use, particularly on saltmarsh.
Do not put men or heavy equipment on saltmarsh.
Deploy absorbent booms at saltmarsh creeks if accessible and if necessary.
Physical removal or cleaning of contaminated shingle at Goatee beach.
Set up bird scarers (if necessary).

12.4.8 Southampton Docks Berth SCT1 to 30 Berth

Length of Water Frontage

4.5 miles

Description of Coastline

Industrial commercial dock complex with public access to civic Mayflower Park and recreational/office development at Town Quay backed by urban and industrial development.

Adjacent Sea Areas

Marina at Town Quay.

Ecological sensitivity

None.

Main Uses

Commercial ship and dock operations. Some sailing (Town Quay) .

Access to waterfront

Western Docks via Dock Gates 20, 10 and 8. Note that Gate 8 is subject to restricted access (generally late August to end September for Boat Show). All other gates are 24 hour access. Eastern Docks via Dock Gate 4. Slipways at Mayflower Park and Town Quay.

Waste Collection points

Vehicular access to all of Docks and Mayflower Park. Temporary waste storage points at 109, 43, 40 and 37 Berths.

Clean-up Plan

Physical removal where possible.

Some dispersant could be used to aid removal but only with the agreement of MMO and Natural England.

12.4.9 River Itchen, 30 Berth to Woodmill

Length of Shoreline

6.5 miles

Description of Coastline

Mainly mud and some shingle backed by urban and industrial development. Numerous private commercial wharves in lower reaches below Northam Bridge and marinas at Ocean Village, Shamrock Quay and Kemps. Numerous small boat yards above Northam Bridge with a sewage treatment plant at Portswold. Woods and parkland above Cobden Bridge

Adjacent Water Areas

Shellfish beds.

Numerous small craft moorings below Riverside Park.

Ecological Sensitivity

Local nature reserve at Chessel Bay and some reed beds above Riverside Park. East bank an SPA between Spitfire Quay and Hawkeswood Road.

Main Uses

Shoreline – light industrial, urban and recreation.
Water – sailing, rowing, canoeing and angling. Commercial ship operations below Northam Bridge.

Access to Shoreline

Public slipways at Crosshouse Hard, Itchen Ferry Hard, Belvidere Hard, Millbank Hard, Priory Road Hard and Riverside Park.

Waste Collection Points

Car parks at Crosshouse Hard and Itchen Ferry Hard.

Clean-up Plan

Physical removal. Absorbent booms around reed beds where accessible.
No dispersant use.
Set up bird scarers (if necessary).

12.4.10 Mouth of River Itchen, Woolston to River Hamble (West Bank)

Length of Shoreline

4.2 miles

Description of Coastline

Mudflats backed with shingle beach, in turn backed by urban and industrial development and the Royal Victoria Country Park.

Adjacent Water Areas

Oyster fisheries in the whole area.
Yacht anchorage near mouth of River Itchen.

Ecological Sensitivity

Whole coastline designated an SSSI and an SPA.

Main Uses

Shoreline - recreation.
Water – sailing, water sports, fisheries, sea angling.

Access to Shoreline

Via Copse Lane, Hamble.
Via gate to west of BP Hamble Terminal.
Access to small beach at Netley Sailing Club.
At Weston, extensive access.

Waste Collection Points

Above high water mark. Car parks at Netley and Hamble.
Hard standing areas within BP Hamble Terminal.
Behind beach at Weston including car park.

Clean-up Plan

Physical removal.
Shingle may be treated with dispersant before advancing tide as final polishing but subject to the agreement of MMO and Natural England.
Set up bird scarers (if necessary).

12.4.11 River Hamble (West Bank) to Hillhead

Length of Shoreline

3.9 miles

Description of Coastline

Mudflats backed by shingle beach and coastal roughland. Groynes at Hillhead. Some rocks on beach. River Meon (fast flowing) mouth.

Adjacent Sea Areas

Oyster beds in the whole area, particularly off Chilling.

Ecological Sensitivity

Titchfield Haven is largely a National Nature Reserve, with a small section outside this being a Local Nature Reserve. It is protected by a tidal flap and is an important wildfowl refuge. There is also a Local Nature Reserve near Warsash. Whole coastline designated an SSSI and an SPA. In addition the mouth of the River Hamble is designated as a SAC.

Main Uses

Shoreline – recreation beach at Hillhead end. Water – sailing, fisheries.

Access to Shoreline

Access for mechanical equipment at Warsash, Solent Breezes Caravan Park, and Hillhead. Access at Warsash (near College of Nautical Studies) is via a locked gate (key held by Environment Agency).

Movement along beach at Hillhead is impeded by groynes.

There are locked gates around river mouth, access via Harbour Master (Coates Lane).

Hillhead Sailing Club access between groynes to beach, also via hard slipway.

There is additional gated access at Chilling Substation (key held by National Power, Nursling, tel: 01703 732125).

Waste Collection Points

Above high water mark.

Car parks at Warsash, Hillhead and Hillhead Sailing Club.

Clean-up Plan

Close tidal flaps, sluice gates.

Boom Hamble River entrance.

Boom Titchfield Haven Nature Reserve tidal flap (about 30 metres).

Physical removal.

Treat shingle with dispersant before advancing tide as final polishing subject to the agreement of MMO and Natural England.

Set up bird scarers (if necessary).

12.4.12 Hillhead to Lee-on-Solent

Length of Shoreline

1.9 miles

Description of Coastline

Mudflats and shingle backed by urban areas and MoD land.

Adjacent Sea Areas

Oyster beds in the whole area.

Ecological Sensitivity

Coastline designated an SSSI and an SPA.

Main Uses

Shoreline – recreation.

Water – sailing, water sports, fisheries, sea angling.

Access to Shoreline

Good access for mechanical equipment via large slipway at Lee-on-Solent and other minor slipways. Movement along beach impeded by groynes. Good access along whole beach for manual clean-up.

Waste Collection Points

Above high water mark and behind beach.

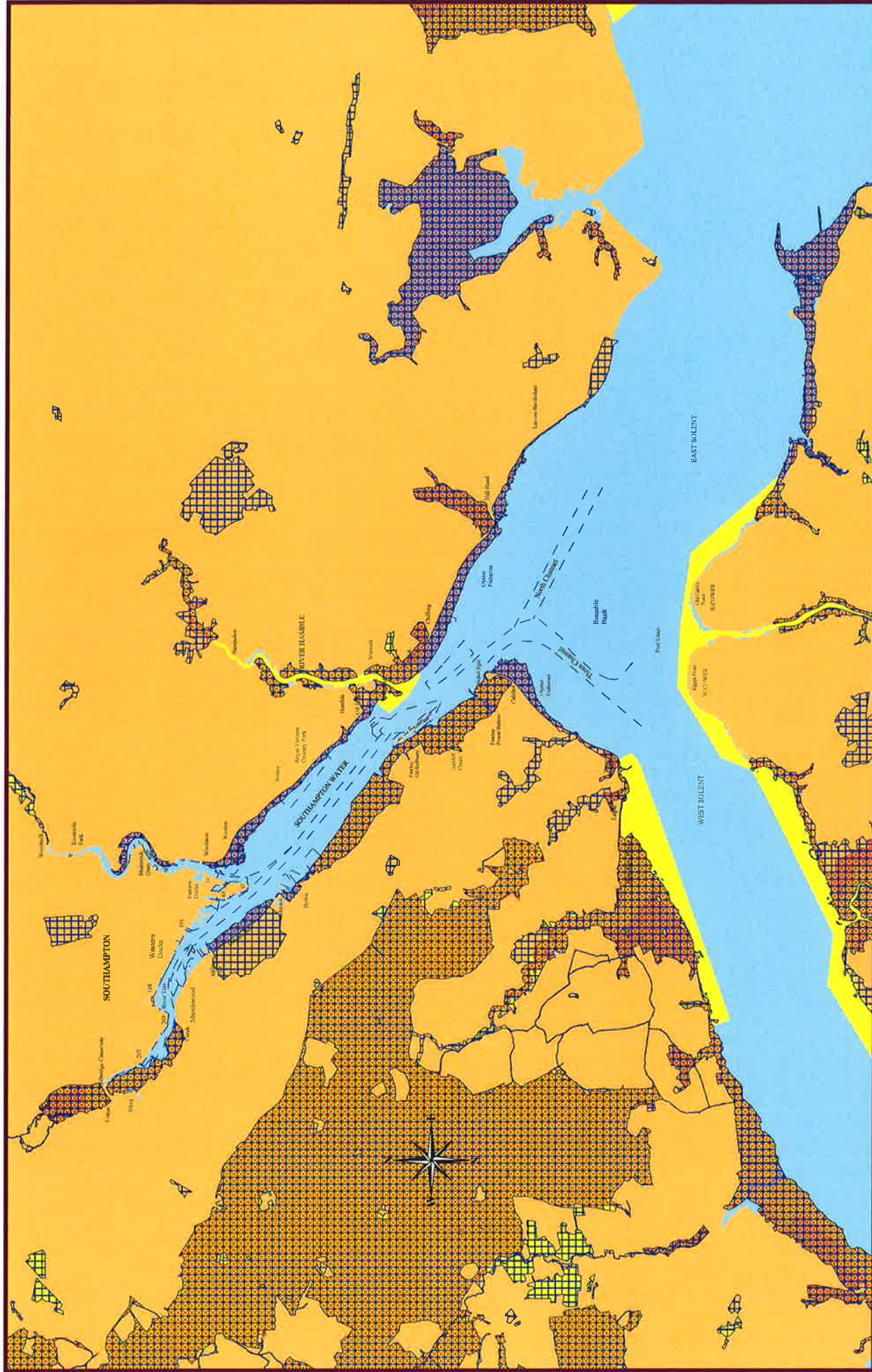
Car parks behind beaches.

Clean-up Plan

Physical removal.

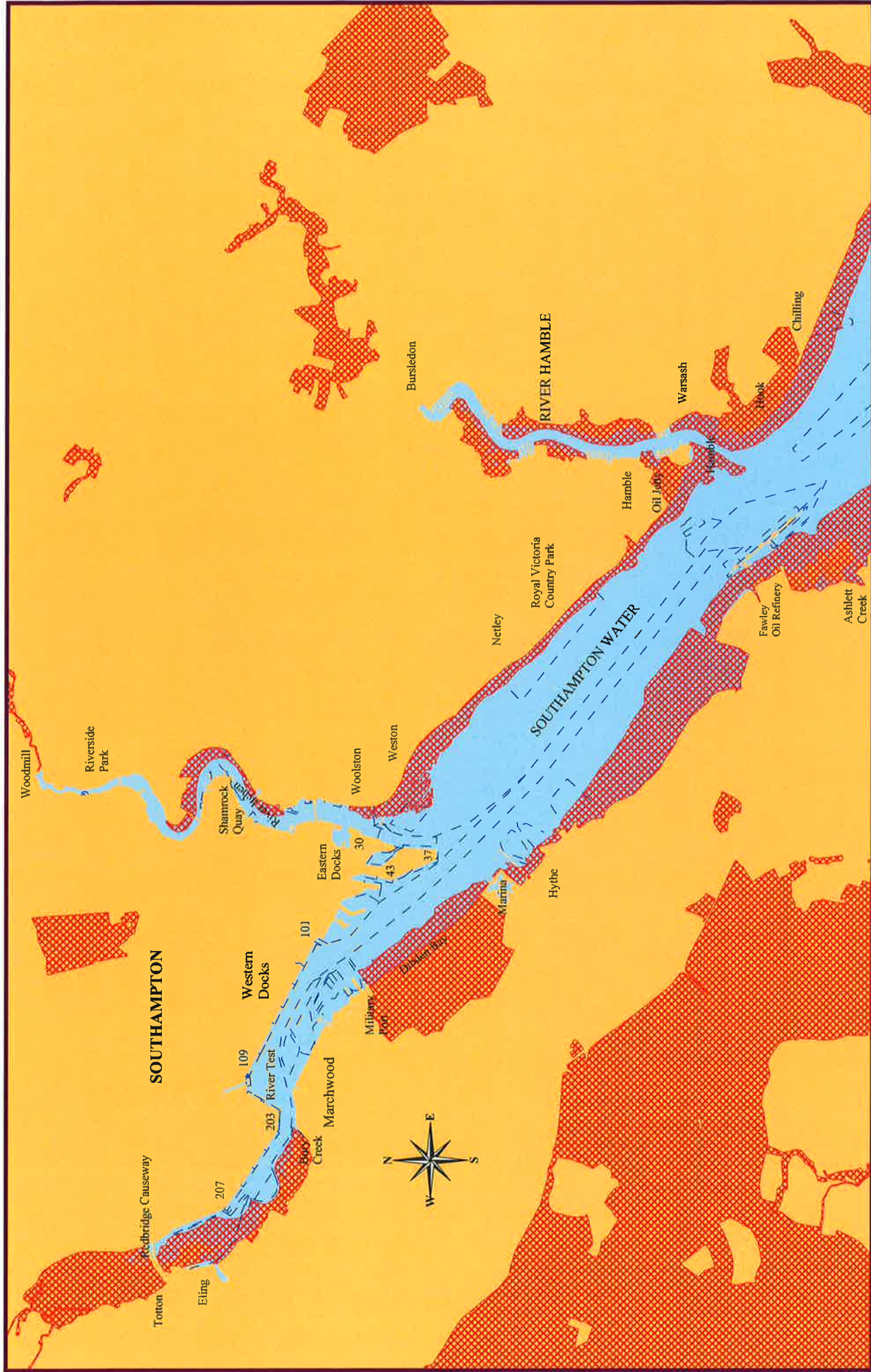
Treat shingle with dispersant before advancing tide as final polishing subject to the agreement of MMO and Natural England.

Set up bird scarers (if necessary).



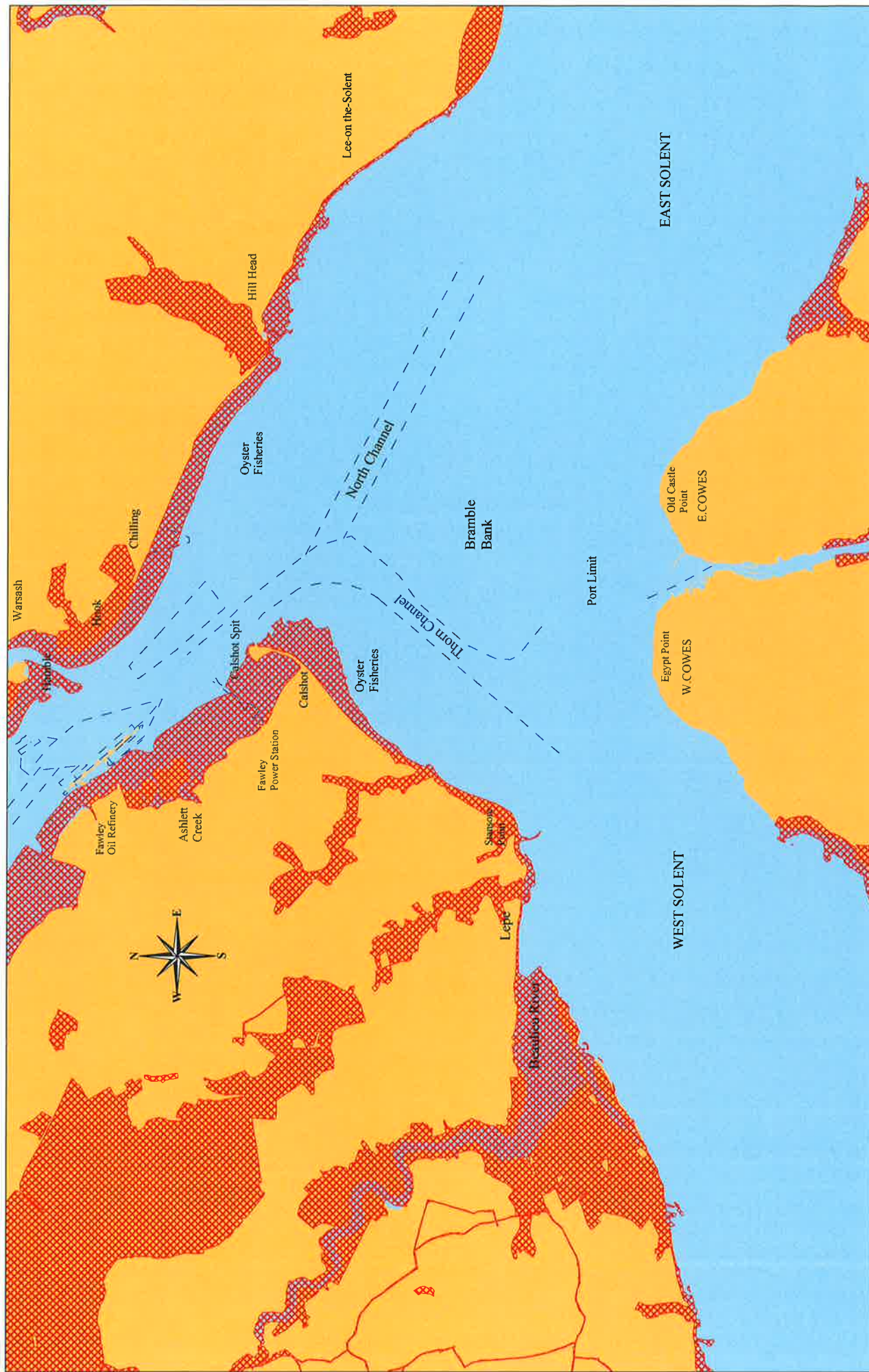
OIL SPILL CONTINGENCY PLAN

Southampton Water - Designated Sites
Overview. See detailed maps on following pages



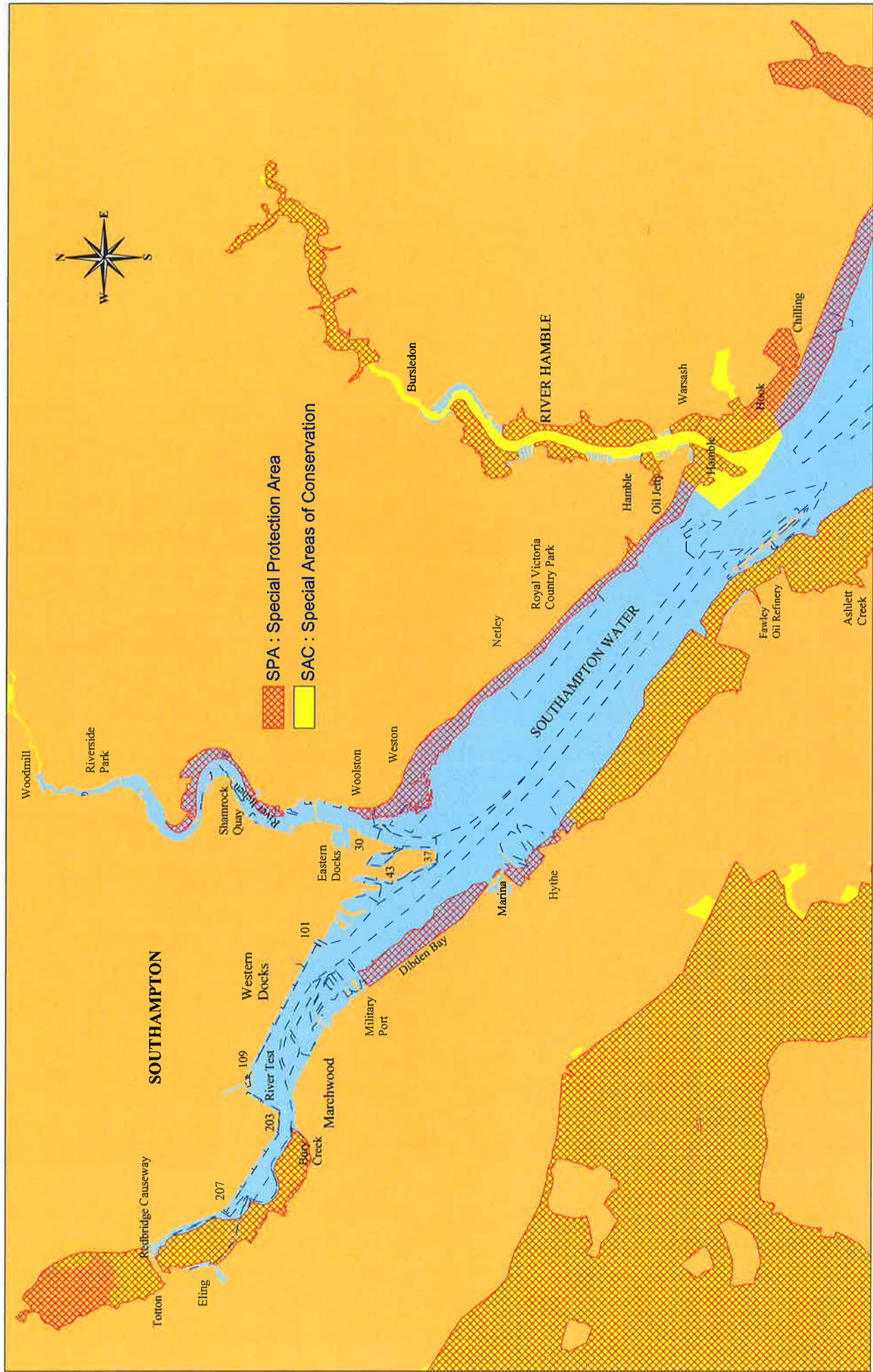
OIL SPILL CONTINGENCY PLAN

Sites of Special Scientific Interest
Northern Sheet



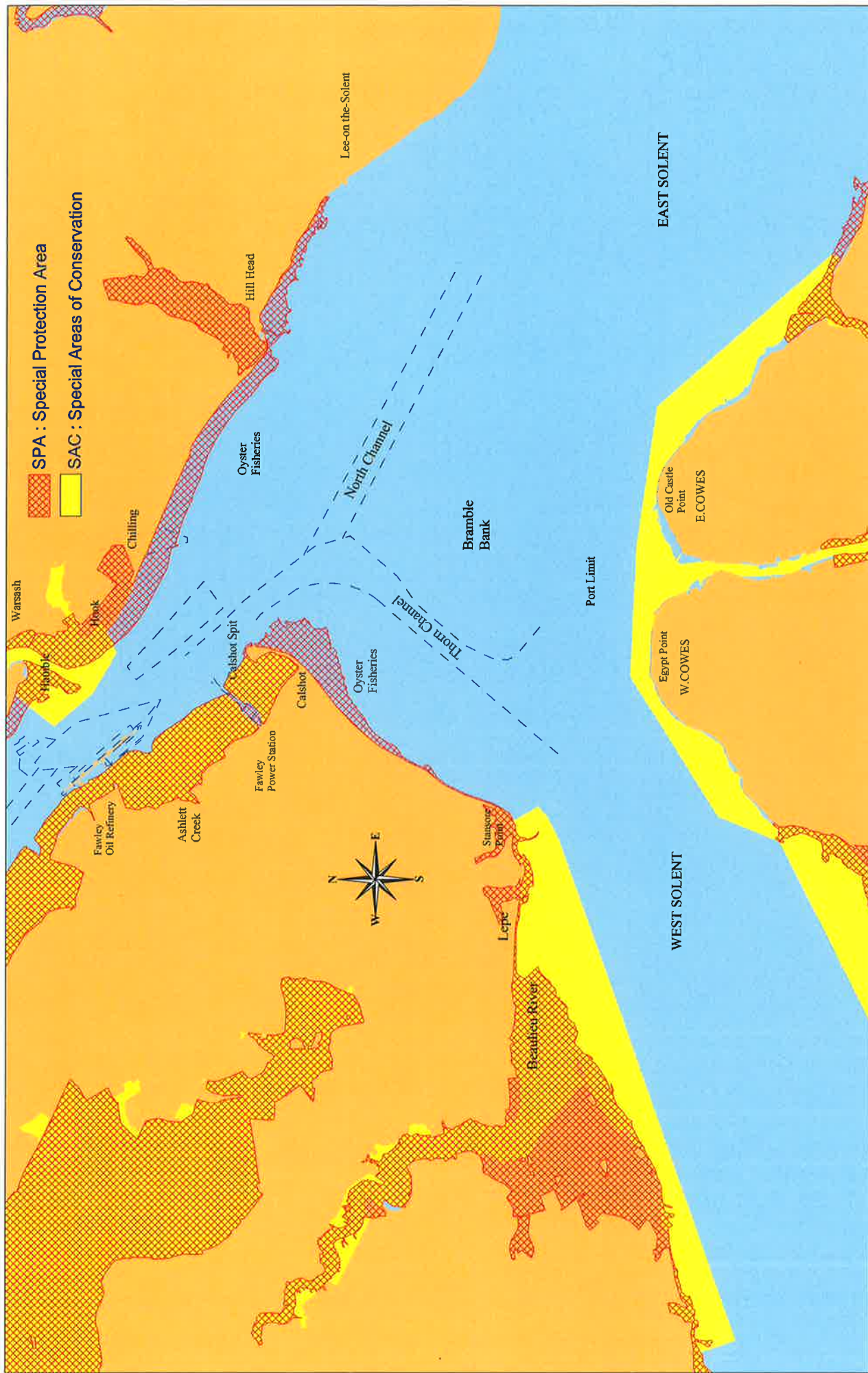
OIL SPILL CONTINGENCY PLAN

Sites of Special Scientific Interest
Southern Sheet



OIL SPILL CONTINGENCY PLAN

European Designated Conservation Areas
Northern Sheet



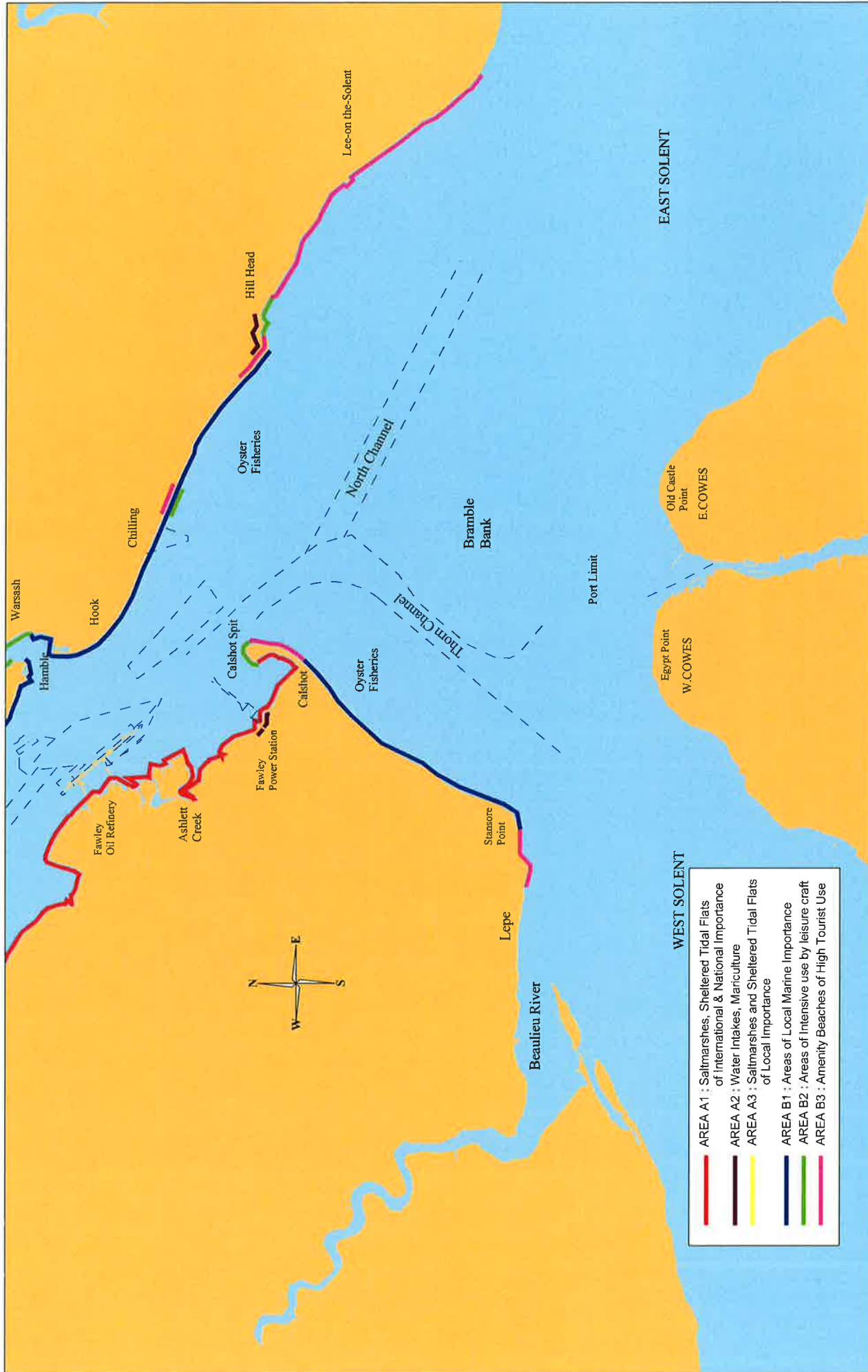
OIL SPILL CONTINGENCY PLAN

European Designated Conservation Areas
Southern Sheet



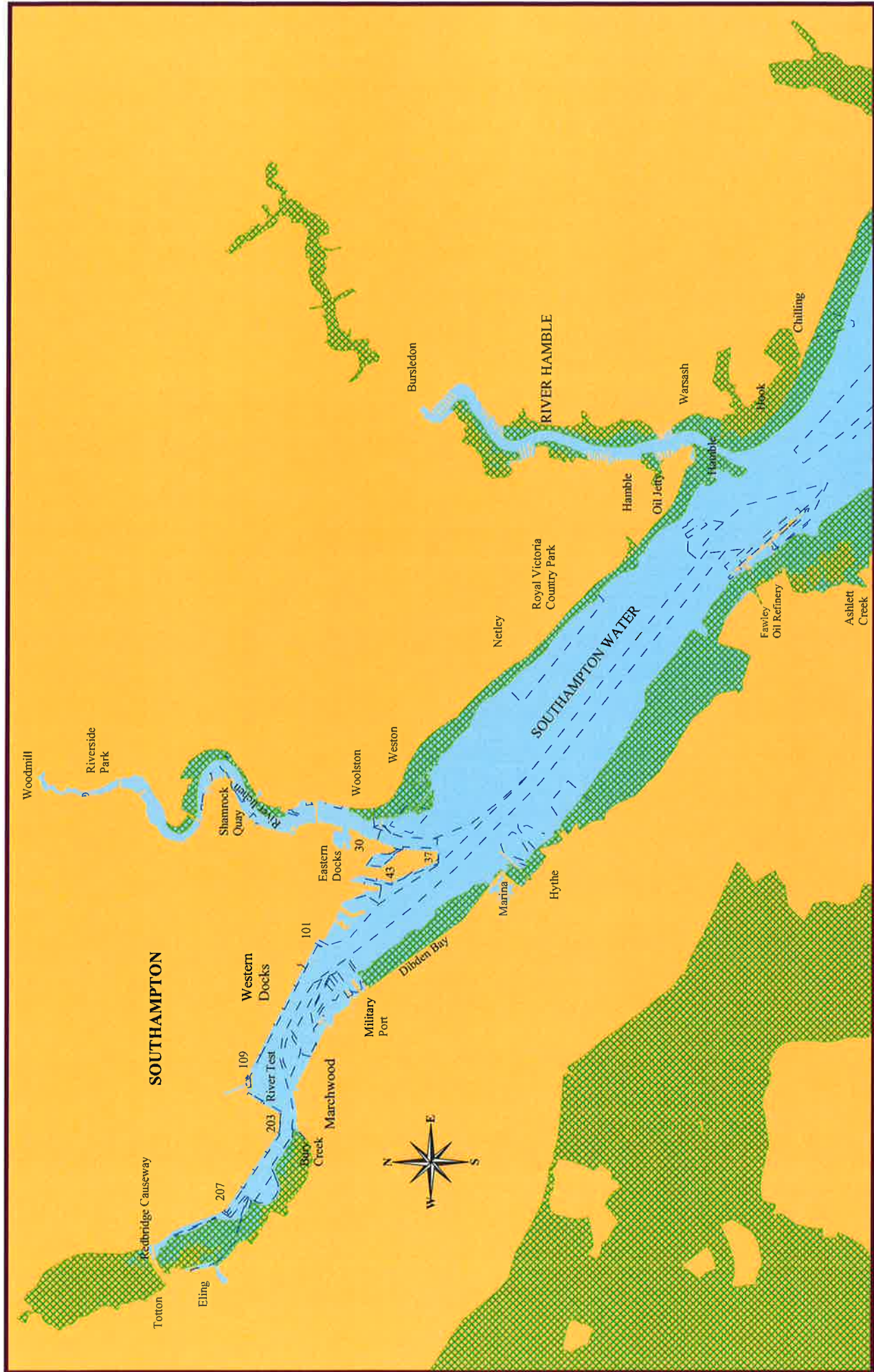
OIL SPILL CONTINGENCY PLAN

Priority Sensitive Areas
Northern Sheet



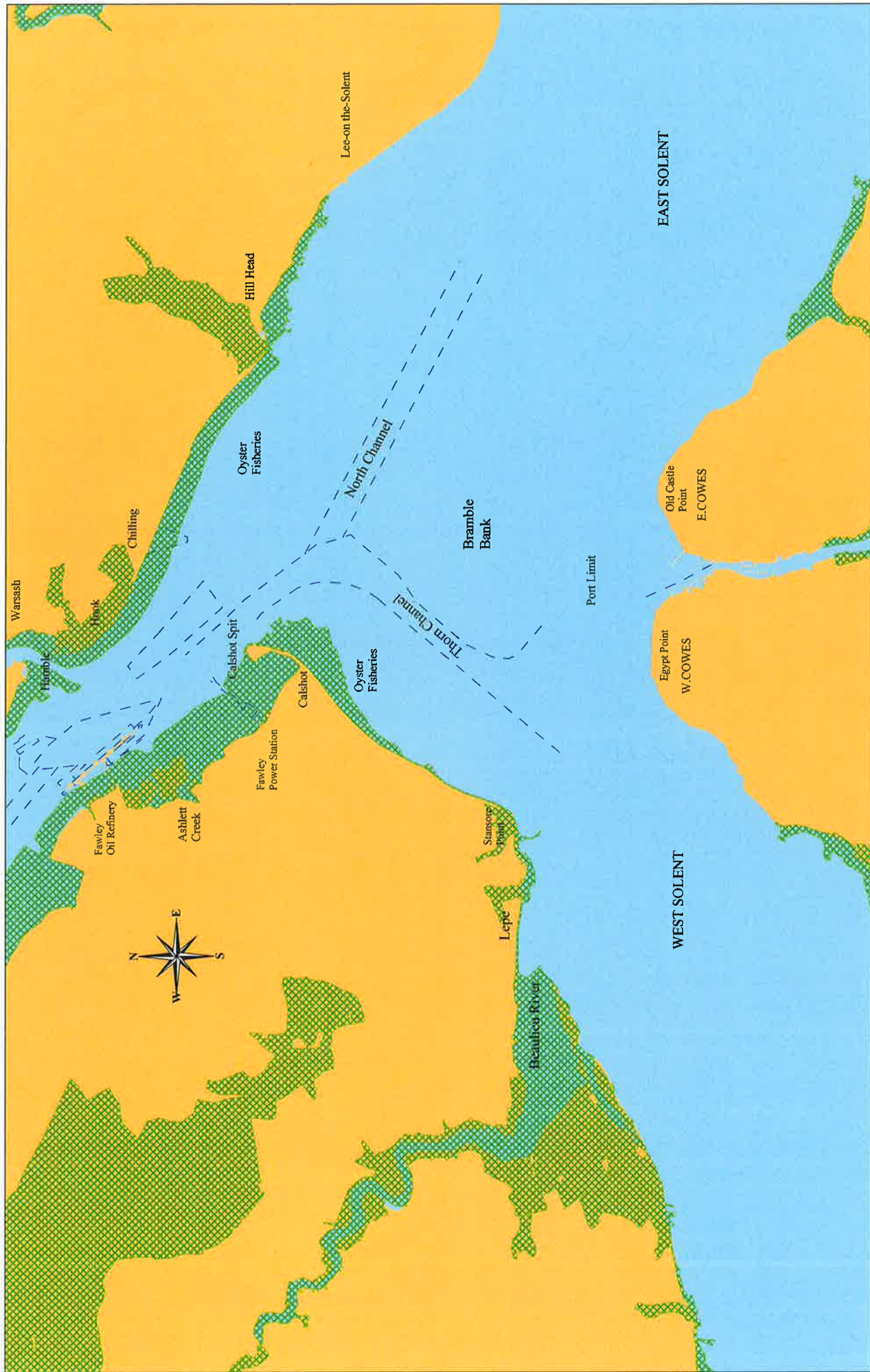
OIL SPILL CONTINGENCY PLAN

Priority Sensitive Areas
Southern Sheet



OIL SPILL CONTINGENCY PLAN

Ramsar Sites
Northern Sheet



OIL SPILL CONTINGENCY PLAN

Ramsar Sites
Southern Sheet

13. Roles and Responsibilities

13.1 Harbour Authority

The Harbour Authority is responsible for the conservancy of its area together with the safety of navigation, pilotage and movement of all vessels. Its powers are derived from Principal and Local Harbour Acts and are exercised through Bye-laws and Harbour Master's Directions.

It has a responsibility for responding to Oil Pollution within its area under the Merchant Shipping (Oil Pollution Preparedness, Response and Co-operation Convention) Regulations 1998 which 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) to the Maritime & Coastguard Agency for approval. In preparing an oil pollution emergency plan a harbour authority 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.

13.2 Local Authorities

13.2.1 District Councils & Borough Councils

The District and Borough Councils, of which there are three in the plan area, 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.

13.2.2 County Council and Unitary Authorities

Southampton City Council is a Unitary Authority and in common with other local authorities will be responsible for dealing with oiled shorelines in the City area. Hampshire County Council assumes responsibility for co-ordinating the local authority action in the event of widespread pollution affecting more than one district. The County Council may be able to provide support to Districts for clean-up activities. District Councils remain responsible for physical clearance in their respective areas of jurisdiction.

13.3 Maritime and Coastguard Agency

The Maritime & Coastguard Agency, an executive agency of the Department for Transport (DfT) 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 Maritime & Coastguard Agency will take control of at-sea counter pollution measures exercising this from a Marine Response Centre (MRC) at MCA HQ Southampton or from the NMOC at Fareham, as appropriate. The Port's oil spill response resources and facilities will be made available to the MCA.

A Strategic Co-ordinating Group (SCG) and Tactical Co-ordinating Group (TCG) will be established and will exercise overall co-ordination of the shoreline clean-up in accordance with the procedures and guidance in the NCP (See Para 13.10 below).

13.4 Marine Management Organisation (MMO)

The 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 MMO is the statutory authority for approving deposits in the sea.

Under the terms of the Marine and Coastal Access Act 2009 and The Marine Licensing (Exempted Activities) 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 the MMO.

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.

MMO's representation in the EG will be from local MMO office - the role of local MMO staff is to give advice on fisheries, shellfisheries, marine conservation zones, marine licensing and dispersant use, but not dispersant approval which is an HQ function.

In addition, other local MMO staff may be called upon to act as an environmental liaison officer (ELO) in the EG.

13.5 Natural England

Natural England is the organisation responsible for advising Government on nature conservation policies in England. At the time of an incident, Natural England provides advice to Local Authorities, the Counter Pollution Branch of the MCA and other relevant bodies on the likely environmental impacts and on the best methods of treating oil to minimise damage to wildlife. This advice would normally be provided through their representative on the established Solent Environment Group (SEG) as referred to in Section 13.11.

Natural England will provide advice on:

- Location and features of designated sites
- Sensitivity of those features to marine pollution
- Priorities for protection from any pollutants
- Suitability of various clean up techniques

13.6 Environment Agency

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 coastal waters to 3nm offshore.

The Environment Agency has powers to both control and remedy pollution. It has powers to prosecute for pollution offences under Section 85 of the Water Resources Act, 1991 and under section 161 may take action to prevent polluting matter entering controlled waters. Under section 161 the EA may also remove and dispose of polluting matter, which has entered, controlled waters, remedy or mitigate its presence and restore the water to its previous condition.

With regard to marine/estuarine pollution, the Environment Agency may take the lead for land based pollution sources, or where there is no other harbour or Local Authority plan already in place (e.g. harbour plans.)

During a marine incident, the Environment Agency will:

- advise on environmental sensitivity, impact and action required to mitigate;
- regulate and provide advice on any waste management activities;
- advise on necessary remedial actions;
- investigate offences.

13.7 Oil Companies and Installations (including SMC Marchwood)

Oil Companies and Installations (including SMC Marchwood) will initiate first response actions in the event of oil spills at their installations. The company/installation involved will either complete the clean-up or, in the case of larger spills, will deploy their resources as agreed by the Port's Oil Spill Management Team (OMT).

Where the incident response requires additional resources, the Oil Companies/Installations can access equipment from their own Tier 2 Contractors and from Adler and Allan. In the event of actual or potential releases of oil as a result of marine incidents, in which companies have an interest, technical and expert assistance will be made available by the company concerned so that they can work in close co-operation with Port, Local and National Authorities.

Response equipment held locally by Oil Companies (See Section 14) may be made available, on request by the Harbour Master, for spill incidents occurring elsewhere in the Port, subject to the company's operational needs.

13.8 Oil Spill Management Team

Oil Spill Management Team (OMT) is the nomenclature used to describe the command and control team established for a spill incident within the Port of Southampton, with representatives of organisations attending in accordance with the category of oil spill response established, as described in section 2.2.

The OMT will, generally, convene at the Southampton VTS Marine Response Centre, under the chairmanship of the Harbour Master, and will consist of a Core Management Team and an Environment Group providing environmental and local authority advice as noted in section 2.2.

13.9 Marine Response Centre

The Marine Response Centre (MRC) for the Port of Southampton (not to be confused with an MCA MRC) is a dedicated facility on the 2nd floor of the Southampton VTS Centre with communications, IT and radar links to the port operations room and is where the Oil Spill Management Team (OMT) will convene.

13.10 Tactical Co-ordinating Group (TCG) and Strategic Co-ordinating Group (SCG)

The implementation of the National Contingency Plan will involve establishment of a Tactical Co-ordinating Group (TCG) and a Strategic Co-ordinating Group (SCG) under the chairmanship of a senior police officer or senior local authority officer, if there is no immediate threat to life. These Groups will cover many of the functions previously carried out by the Shoreline Response Centre when pollution threatens the coastline. The SCG's primary function is to co-ordinate the overall strategic shoreline response and clean-up activity. For an incident within ABP Southampton's statutory area, it is highly likely that the SCG will be established at Hampshire County Council's Offices in Winchester and appropriate members of the OMT (as indicated at Section 2.5) will re-deploy as requested by the MCA and Hampshire County Council. The OMT / TCG will retain responsibility for tactical marine response to the incident.

13.11 Solent Environment Group (SEG)

The Environment Group provides a single advisory line on public health and environmental issues at sea to all response cells. Where the incident poses a significant threat to health or the environment on land, the SCG may establish a Scientific and Technical Advice Cell (STAC) and this may be integrated with the Environment Group.

At the outset of an incident, at sea, the MCA triggers the formation of an Environment Group to provide advice requiring a local, regional or national response. The local Standing Environment Group, the Solent Environment Group (SEG), covers The Solent area and the MCA co-ordinates its contact details and call out arrangements. The SEG comprises the statutory environmental regulators, fisheries departments, nature conservation bodies and public health bodies plus a range of specialist public sector and non-government organisations. The SEG enables a co-ordinated and timely environmental input to more localised or specialised incidents.

The SEG may be stood up as a precautionary approach when there is potential for incident escalation. In more minor incidents, the SEG remains a 'virtual' group responding with advice when requested. The SEG's remit is advisory and it has no powers of direction or enforcement. The regulatory functions of individual members of the SEG will be exercised outside the Group structure and function.

14. Resource Directory

14.1 Port of Southampton

- 100 metres floating boom
- 100 metres absorbent boom
- Various absorbent materials (of a non granular or chemical nature)
- 3 in service (24 hour manned) harbour / pilot launches
- 5 additional work boats/harbour launches available at notice.
- 5 marine staff on duty 24 hours a day
- Communications, Radar and CCTV equipped VTS Centre
- Dedicated and equipped Marine Response Centre
- Contracted Tier 2 Responder Adler and Allan Limited

14.2 Adler and Allan (Tier Two Contractor)

Extensive stockpile of booms, pumps, skimmers and other equipment capable of dealing with Tier 1, 2 and 3 spillages including:

- Crude oil
- Fuel oils
- Diesel and marine gas oils
- Shoreline clean-up equipment
- Landside HNS spillages

Full details of the Adler and Allan equipment inventory is held by the Harbour Master.

14.3 BP Oil UK Limited

- 1 x Semi-rigid inflatable boat
- 100 metres Shore Guardian Boom
- 300 metres Bay Boom
- 250 metres Permanent Buoyancy Boom
- 300 metres Frogmat
- 2 x Fastanks (2000 gal)
- 1 x Spate Pump
- Miscellaneous items:
 - Water pumps
 - Air blowers
 - Anchors
 - Absorbent booms and materials
 - Boom reels

14.4 Perenco (Hamble Terminal)

- Road trailer Anti-pollution (oil recovery, boom deployment)
- 100 metres Vikoma Shore Guardian (5 x 20m)
- 30 metres Vikoma Shore Guardian (3 x 10m)
- Miscellaneous items:

Water pumps
Air blowers
Anchors
Absorbent booms and materials

Note: Additionally, road trailers from Sway and Well sites X, D or F, with similar resources, would respond to any incident involving the Purbeck-Southampton Pipeline.

14.5 Esso Petroleum Company Limited

- Vortex - Anti-pollution workboat (oil recovery, boom deployment)
- 200 metres Sea Sentinel boom – available on jetty
- 600 metres high freeboard boom (200 metres each on tugs Apex, Tenax and Phenix)
- 600 metres Troil Quick Deployment Boom (200 metres north end, 200 metres south end)
- Miscellaneous items:
 - Water pumps
 - Air blowers
 - Anchors
 - Inflatable boats
 - Absorbent booms and materials

14.6 Sea Mounting Centre, Marchwood

- 2 Trailer mounted mobile Response Kits
- 6 static containers with pollution control kit within the site

14.7 Itchen Marine Limited

- 9 Assorted workboats, tugs and barges

14.8 Williams Shipping Limited

- 2 Launches
- 1 Tug
- 1 Storage barge (300 tonnes)

14.9 Solent Towage limited

- Tugs 'Lomax', 'Phenix' and 'Apex' each fitted with 200 metres of Nordlence 450 S inflatable boom on reels and 146 cu.mt oil recovery tanks.
- 'Phenix' and 'Apex' each fitted with 'Desmi' weir skimmer (120 cu.m/hr), 2000lts of 'Correxit 9500' dispersant and 120 cu.mt oil recovery tank.
- 'Thrax' (when stationed at Fawley) fitted with 200m x Nofi Highseas inflatable boom on reel and 120 cu m oil recovery tanks.

15. Product Information

- 15.1 The information held on Material Safety Data Sheets for particular oils and products handled within the Port changes too frequently to maintain the sheets up to date. Therefore, on informing Southampton VTS of an incident, Esso, BP, Perenco etc will also provide detailed and up to date MSDS information.
- 15.2 Additionally, Southampton VTS has access to 'Hazcheck-on-line' and staff will conduct a search for the particular product.
- 15.3 Products handled within the Port include:
- Crude oil
 - Fuel oil
 - Gas oil
 - Derv
 - Kerosene
 - Jet A-1
 - Unleaded petrol
 - Ethanol
 - Kerosene marker