





### SOLENT ENVIRONMENT GROUP

# MARINE POLLUTION CONTINGENCY PLAN

**Version 6** 

Plan reviewed: May 2012

Photographs
Compton Bay, Isle of Wight
Alum Bay, Isle of Wight
Cargo ship near the Isle of Wight

#### CONTENTS

1.0	INTRODUCTION	4
2.0	PURPOSE, SCOPE AND KEY TASKS OF THE ENVIRONMENT GRO	UP
	(EG)	4
3.0	AREA OF OPERATION	6
4.0	ESTABLISHING THE SOLENT ENVIRONMENT GROUP	7
5.0	THE SOLENT ENVIRONMENT GROUP AND THE RELATIONSHIP	
	WITH THE SHORELINE RESPONSE CENTRE (SRC)	8
6.0	CATEGORISATION OF THE INCIDENT	9
7.0	NOTIFICATION MATRIX	10
8.0	LOCATION OF CENTRES FOR THE ENVIRONMENT GROUP	10
9.0	MEMBERS OF THE ENVIRONMENT GROUP	11
10.0	ROLES AND RESPONSIBILITIES OF THE ENVIRONMENT GROUP	14
11.0	KEY SOLENT ENVIRONMENT GROUP PERSONNEL AND THEIR	
	ROLES IN GENERAL	15
12.0	STRUCTURE OF THE SOLENT ENVIRONMENT GROUP	18
13.0	KEY TASKS OF THE SOLENT ENVIRONMENT GROUP	19
14.0	PROCEDURES WITH OTHER AGENCIES	21
15.0	EXERCISES	21
16.0	PLAN REVISION	22
17.0	COMMUNICATIONS	22
18.0	MEDIA	25

**ANNEXES** 

Annex 1	List of Emergency Plans covering the Solent Area
Annex 2	Environmental Risks
Annex 3	Natural Conservation Designations
Annex 4	Marine Pollution
Annex 5	Record Keeping
Annex 6	Environmental Sensitivities
Annex 7	Data and Information
Annex 8	Impact Assessment
Annex 9	Contact Directory
Annex 10	Incident Form/Check List
Annex 11	Reporting Pollution – Format of CG77 POLREP
Annex 12	Solent Environment Group – Generic first meeting agenda for maritime pollution incidents
Annex 13	Solent Environment Group – Checklist of essential information to be obtained during initial alert for maritime pollution incidents
Annex 14	Media Holding Statement - deleted
Annex 15	Media Statement - deleted
Annex 16	Health and Safety Regulations which are likely to apply to major clean-up operations.

#### 1.0 INTRODUCTION

The Solent Environment Group (SEG) plan is intended to complement the Marine and Coastguards National Contingency Plan and STOp Notice 2/2009. The measures are intended to satisfy the UK obligations under the UN Convention Law of the Sea (UNCLOS) to protect and preserve the marine environment.

The plan details the Solent Environment Groups contingency arrangements for responding to actual or threatened oil pollution incidents within the Solent area.

This stretch of coastline covers all incidents in, or likely to affect areas from, Christchurch Harbour in Dorset to Selsey in West Sussex. The area includes the whole of the coastline of the Isle of Wight.

The response strategy for these areas has been developed taking into account the possible sources of spillage associated with port operations including movements around the Solent, all shipping and any facility with the potential to cause major oil pollution.

The Solent represents some of the busiest shipping lanes and ports in the country. The Vessel Traffic System (VTS) Southampton regulates the Solent on behalf of the Queen Harbour Master (QHM) Portsmouth. The QHM Portsmouth retains control of Portsmouth Harbour directly.

The scope of the Solent Environment Group activities will be directly proportional to the scale and nature of the incident, its geographical location, extent, severity, pollutant involved, potential hazard to human health and environmental sensitivities. The scale of the incident and response and their constituent phases are likely to evolve over time and the functions of the Solent Environment Group will need to be graduated to meet changing requirements, escalating or diminishing in the input to each phase over time.

The definition of marine and coastal environment in the Solent Environment Group's context includes public health, the natural environment, water quality, wildlife including fish, cultural, landscape, coastal and marine habitats and socioeconomic factors linked to human health, e.g. through food chains.

### 2.0 PURPOSE, SCOPE AND KEY TASKS OF THE ENVIRONMENT GROUP (EG)

MCA STOp Notice 2/2009 specifies the purpose, scope and key tasks of the EG, as below.

#### **PURPOSE**

The purpose of the EG is:

- To provide public health and environmental advice and guidance to all response units involved in response to an oil and or chemical marine pollution incident and subsequent clean up operations.
- To advise response units so as to minimise the impact of the incident on the environment in the widest sense, taking account of risks to public health and the natural environmental, and potential impacts arising from any response operations, whether salvage or clean up operations, at sea and on the shoreline.
- To monitor, assess and document the public health and environmental (including wildlife) impact of a maritime pollution incident with respect to oil and/or chemicals and the impact of all measures implemented in response to the incident.
- To facilitate welfare, rehabilitation or humane disposal of wildlife casualties by recognised animal welfare organisations.

#### **SCOPE**

The scope of EG functions includes:

- provision of public health and environmental advice to all cells set up to respond to a maritime incident, and may include:
  - Secretary of State's Representative (SOSREP) and the Salvage
  - o Control Unit SCU)
  - o Marine Response Centre (MRC)
  - Shoreline Response Centre (SRC)
  - Command and Control Centre for incident response in ports and harbours.
- liaison with and obtaining any relevant information the EG requires to fulfil its functions from all response units established to deal with the pollution.
- proactive management of information on all health and environmental issues between the units.
- seeking to minimise the impact of an oil and or chemical pollution incident on human health.
- seeking to minimise the impact of an oil and or chemical pollution incident on the environment, by determining optimal environmental end points, beyond which the response will not provide environmental benefit, or may actually produce a disbenefit. This process is undertaken through 'Net Environmental Benefit Analysis'.
- the prompt planning, implementation and management of data gathering to enable an integrated evaluation of acute and chronic health and environmental impacts of the pollution incident across the widest appropriate range of issues
- ensuring that proper consideration is given to all the health and safety requirements for personnel working for the EG.

#### **KEY TASKS**

NB: The following tasks are not in order of priority or exhaustive, and not all may be necessary in individual incidents. Tasks and priorities will be incident specific.

#### Provision of health advice

 Provide advice on potential and real impact on public health with respect to oil and chemicals.

• Advise on requirements for the monitoring of threat to public health.

#### Provision of operational advice

- Assess environmental priorities at risk from pollutant and from clean-up activity.
- Establish EG priorities for resource protection and pollution clean-up.
- Prepare an incident-specific EG view on at-sea and on-shore dispersant and chemical treatment product use.
- Provide advice and guidance on health and environmental sensitivities, and risks, preferred options and health and environmental implications of proposed salvage and clean-up response strategies with respect to achieving a net environmental benefit.
- Ensure that the above advice is timely and accurately reflects the dynamics of health and environmental resources at risk.
- Ensure thorough and timely documentation of all advice provided to the response units. Where a response unit does not follow such advice, the reasons for not doing so should be recorded. Copies of all records of advice provided and feedback from response units should be circulated within the EG
- Facilitate effective communication on health and environmental matters between the response units and the EG via appointed Environmental Liaison Officers.
- Ensure that appropriate coordinated and timely arrangements for incident specific assessment of the effects on public health and environment are initiated and subsequently managed
- Monitor and keep under review public health and environmental implications of ongoing salvage and at-sea clean up operations.

#### Contribution to the SRC

- Ensure representation in the SRC Management Team via the appointed Environmental Liaison Officer.
- Monitor on-shore clean up operations, particularly in sensitive areas to ensure that clean-up operations match the strategy agreed in the SRC.
- Advise, contribute to and provide members for the SRC-controlled multidisciplinary Shoreline Clean-Up Assessment Teams [SCAT], as required

#### Health and safety

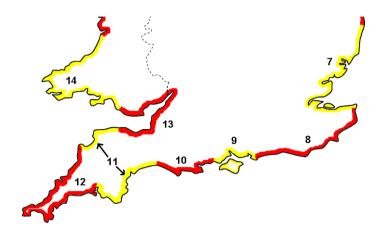
 Ensure the full implementation of health and safety measures for personnel working in the field on behalf of the EG [for example, through risk assessments, COSHH, Personal Protective Equipment, and health tracking].

#### 3.0 AREA OF OPERATION

The Solent Environment Group covers the coastline and marine environment for:

- the land to the west of Christchurch Harbour in Dorset to
- · east of Selsey Bill in West Sussex.
- the area includes the whole of the coastline of the Isle of Wight

See area "9" below.



#### 4.0 ESTABLISHING THE SOLENT STANDING ENVIRONMENT GROUP

#### Stage 1:

The Maritime and Coastguard Agency will be responsible during a major incident which has the potential to cause significant pollution of the sea and shoreline for establishing the Solent Standing Environment Group, via activating the chair of the Group.

The core members of the Solent environment Group consist of representatives from Natural England (NE), Department of Environment, Food and Rural Affairs (DEFRA), Environment Agency (EA), Marine and Coast Guard Agency (MCA), County and Unitary Maritime Authorities and Health Protection Unit for the relevant area

The designated competent officers of the core membership of the Solent Environment Group will meet at: Hampshire County Council Emergency Centre, Emergency Planning Unit, The Castle, Winchester, Hampshire SO23 8UG. Tel. 01962 846841 or other designated sites as decided by the MCA in conjunction with other interested partners. (See Annex 11).

#### Stage 2:

The core members of the Solent Environment Group will nominate a chairperson as quickly as possible taking into account the nature of the incident which is likely to influence the choice of the chair.

The chairperson and core members decide whether to expand the Group's membership to include representatives of other organisations. The chair and core

members also decide when it is necessary to convene the Solent Environment Group close to the scene of the incident. The chair ensures that the Group is colocated with the SRC, when established. Local and regional contingency plans need to identify suitable accommodation and support facilities for the Solent Environment Group.

#### **Standing down the Solent Environment Group**

The role of the Solent Environment Group will evolve over the period of any incident. The requirement for certain key Solent Environment Group functions and members will cease as the relevant response units complete their tasks and stand down.

Provision of operational advice to a Shoreline Response Centre (SRC) is likely to extend far beyond provision of advice on acute health issues, salvage or at-sea response. Operational advice may continue to be required by a local authority shore clean-up control centre after an SRC stands down, and impact assessment is likely to be a protracted task.

Redeployment of staff from acute operational response advisory roles to, *inter alia*, advising on long-term clean up response on difficult shores or impact assessment tasks may be appropriate and necessary.

The decision to stand down will be taken by the Solent Environment Group. Whilst standing down the advisory function of the Solent Environment Group will be largely guided by the response units, the decision to stand down any impact assessment operations will be driven by scientific criteria.

### 5.0 THE SOLENT ENVIRONMENT GROUP AND THE RELATIONSHIP WITH THE SHORELINE RESPONSE CENTRE (SRC)

It is important to co-locate the Solent Environment Group and the SRC, where established. This enables the Solent Environment Group to provide timely, appropriate advice to the SRC. To facilitate effective liaison between the Solent Environment Group and all other teams within the SRC, the Solent Environment Group's chairperson appoints an Environmental Liaison Officer (ELO) to sit on the SRC Management Team.

The principal responsibilities of the Solent Environment Group in advising the SRC are:

To evaluate the relative importance of nature conservation and other environmental features at risk during an incident. This includes their vulnerability to oil or hazardous substances and clean up;

- To establish agreed priorities for protection and clean up;
- To advise and assist the SEG controlled teams as required:
- To advise on the suitability of pre-identified sites for the natural degradation of oil:

- To advise on whether proposed clean up techniques are likely to cause more damage than leaving the oil to degrade naturally. This may involve the preparation of an incident specific dispersant use protocol;
- To monitor clean up operations in sensitive areas to ensure that clean up operations match the strategy agreed in the SRC;
- To ensure the thorough documentation of all decisions and actions taken by, or on behalf of, the Solent Environment Group;
- To ensure the provision of appropriate advice for the health and of those acting in the field on behalf of the Solent Environment Group.

#### 6.0 CATEGORISATION OF THE INCIDENT

The identified likely spills should be categorised to assist with determining the correct level of response. The level of response will be dependent on a number of factors. These include the quantity and type of oil spilled, its location and proximity to available response resources. However, in reality oil spills do not fall into convenient categories and there will be grey areas of overlap between the class boundaries. Accurate quantification of oil spills is difficult.

The internationally recognised oil spill classification system is as follows:

Tier One:	Small operational spills. A spill that can be dealt with immediately utilising local resources without assistance from other areas (usually less than 25 tonnes).
Tier Two:	Medium sized spills. A spill that requires outside assistance from other bodies (usually less than 250 tonnes).
Tier Three:	Major spills that require a rapid large scale response. Beyond the capability of local and regional resources. A spill that requires national assistance through implementation of the NCP (usually result from a loss of containment event >250 tonnes or ongoing).

Source: ABP - Humber clean © Environmental Constancy Services Ltd.

All ports and harbours must be able to respond immediately and have the ability to cope with a tier one operational spill using its own resources.

#### 7.0 NOTIFICATION MATRIX

Organisation Oil Spill Tier					
Organisation	1	2	3	Method	Remarks
HM Coastguard				Telephone	Coastguard requires information on all oil spills from or into the marine environment. They in turn will contact MCA.
ABP / Vessel Traffic Services (VTS)		<b>~</b>		Emergenc y direct telephone line	Contact immediately in the event of a spill inside ABP's Solent limits.
Local Authorities				Telephone, Fax	Contact the duty Solent Emergency Planning Officer if oil is likely to contaminate the shoreline.
Power Stations	<b>*</b>	<b>*</b>	<b>*</b>	Telephone	Contact the Shift Manager immediately if oil is likely to reach the power station seawater intakes.
Local Refineries				Telephone	Contact duty manager if oil is likely to impact facility. May offer assistance.
District Councils Health Protection Agency		<b>**</b>		Telephone	Will be contacted through the MCA callout procedure Is further information required
Environment Agency	<b>~</b>	<b>*</b>	<b>~</b>	Telephone, Pager, Fax	EA requires information on all oil spills. Confirm the POLREP.
Natural England	Î	<b>~</b>	<b>~</b>	Telephone, Pager, Fax	Fax all spills. Contact if spill exceeds one tonne.
DEFRA / SOSREP	<b>~</b>		<b>~</b>	Telephone, Fax	Contact DEFRA to seek permission to use dispersants (except MCA). Secretary of States representative to be informed for major incidents.

#### 8.0 LOCATION OF CENTRES FOR THE ENVIRONMENT GROUP

Location	Address	Telephone
HMCG Training Centre	Old Station Road	01983 853853
	Ventnor	
	PO38 1DX	
Ryde Fire Training Centre	Nicholson Road	01983 817028 (or)
	Ryde	01983 817029
	PO33 1BE	

Hampshire CC Emergency Planning Centre	Emergency Planning Unit, The Castle, Winchester, Hampshire	Tel. 01962 846841
Emergency Planning Office	SO23 8UG	Tel. 01962 846846
Marine and Coastguard Agency	44a. Marine Parade West, Lee on Solent, P013 3LT	Tel 023 9255 2100 ( 24 hours) Fax 023 9255 1763

#### 9.0 MEMBERS OF THE ENVIRONMENT GROUP

#### See also Annex 9 - Contacts. This is a separate document.

The purpose of this section is to identify the core members of the Solent Environment Group that will be involved during an oil spill marine pollution incident within the plan area.

The core members of the Solent Environment Group are:

#### **Solent Environment Group Core Members:**

- Environment Agency (EA)
- Department for Environment, Food & Rural Affairs (DEFRA)
- Natural England (NE)
- Maritime and Coastguard Agency (MCA)
- Health Protection Agency
- Emergency Planning Unit, Hampshire County Council
- > Portsmouth and Southampton City Councils

In addition, the Solent Environment Group may draw members from Sea Fisheries Committees, National Park Authorities with coastlines, and bodies listed below:

Health Services - Directors of public Health from Primary Health Care NHS Trusts that may be affected

Other Bodies - Depending on how the incident develops, the members may recommend that further environmental organisations become involved. Representatives from of Non-Governmental Organisations (NGOs) eg The Royal Society for the Protection of Birds may also have relevant expertise to offer the Solent Environment Group.

#### **Solent Environment Group Core Members**

#### Department for Environment, Food & Rural Affairs (DEFRA)

DEFRA is the UK Department of State primarily concerned with the food chain, including the viability and profitability of farming, food and drink, and fisheries industries. It is also concerned with the related issues of public and animal health, and a range of other issues, most notably the protection of the marine environment. DEFRA plays a role in the protection of the marine environment and

in ensuring the safety of the aquatic food chain in England, including the safety of consumers of fish and shellfish.

DEFRA test and approves any oil treatment products manufactured for use in UK waters on behalf of all UK fisheries departments. For England, DEFRA approves any use of dispersants in shallow and coastal waters and advises on use of dispersant in deeper water.

DEFRA representation at the Solent Environment Group meeting close to the scene of the incident is most likely to be from CEFAS or the SFI.

#### **Environment Agency (EA)**

The EA has the responsibility for protecting the environment as a whole (air, land and water) within "controlled waters" (territorial waters within three nautical miles of the territorial sea baselines). The EA regulate:

- Discharges to controlled waters (they are the lead agency for land based pollution sources);
- > The disposal and management of waste;
- Some coastal and estuary flood defences;
- Salmonid and other migratory fisheries and in some cases, sea fisheries.

The EA also manage, monitor, and control the water quality of all controlled waters. They have responsibilities for waste regulation and can provide advice on the following:

- Waste minimisation to reduce the amount requiring disposal;
- > The location and form of temporary storage and treatment areas;
- The disposal options for wastes.

Primary concern will be to locate the source of pollution and ensure the discharge is stopped as soon as possible. Following this the Agency shall establish the extent of pollution and severity of the incident and take appropriate remedial action, taking into account the views of other environmental bodies. The EA will also notify parties who may be effected by the pollution and will provide information to the public and media.

The Agency has the responsibility of setting up incident and control arrangements and will act as the co-ordinators in commissioning resources both from itself and other organisations. In the case of major incidents, the MCA may be asked to assist with remedial operations and/ or supply of specialist equipment (subject to availability) on a repayment basis.

#### **Natural England (NE)**

Natural England, advises Government on nature conservation in England. It promotes, directly and through others, the conservation of England's wildlife and natural features within the wider setting of the United Kingdom, and its international responsibilities. It selects, establishes and manages National Nature Reserves and identifies and notifies Sites of Special Scientific Interest.

As part of the response to a marine pollution incident, Natural England through the Solent Environment Group, will:

Provide advice on the environmental impacts of the spill to the MCA's Counter Pollution Branch, local authorities (Shoreline Response Centre), etc;

Co-ordinate the collation and provision of the best available information on wildlife interests and threats to them (including beached bird surveys, seabird colony and individual bird counts, collection of dead oiled birds, reporting of live casualties, and the collection of samples).

Provide nature conservation advice and information to local authorities, MCA Counter Pollution Branch, DEFRA, EA etc; and

Co-ordinate the response of Non-Governmental Organisations including the Royal Society for the Protection of Birds and the relevant Wildlife Trusts.

#### Health Protection and Health Services

• The local Health Protection Unit ( HPU) provides health protection services on behalf of the local NHS organisations ( Primary Care Trusts). The local HPU is the first point of contact in an incident and there is an out-of -hours rota in operation at all times. The HPU will assess the situation from a health protection /public health perspective, access specialist advice as necessary and provide that advice to members of the SEG. They will also liase as required with local NHS organisations and health services.

Health cover is on call 24 hours a day to cover communicable diseases and human health issues.

#### Maritime and Coastguard Agency (MCA)

The MCA is responsible for:

- ➤ Taking the lead when responding to major oil and chemical spills from ships where these threaten pollution in UK waters or the UK's shoreline;
- Responding to maritime emergencies 24 hours a day;
- Minimising loss of life amongst seafarers and coastal users;

- ➤ Will call upon its own resources, or commission extra from with the UK, the European Union or from the International Maritime Organisation (IMO);
- Will control at sea operations associated with the incident from the Marine Response Centre (MRC). Advice on environmental matters, as they relate to the proposed operational response, will be sought from the relevant statutory agencies; and
- ➤ The MCA Chief Scientist, or his representative, triggers the process for the establishment of the Environment Group during an incident.

The MCA will not only direct offshore operations but may also, when agreed, set up a shoreline Response Centre (SRC) with one or more of the local authorities effected and provide beach cleaning equipment and other resources. MCA staff, are located all around the UK, from the Coastguard Rescue Centre in Stornaway to Marine Offices in Plymouth and Great Yarmouth and the Registry of Shipping and Seamen in Cardiff.

#### 10.0 ROLES AND RESPONSIBILITIES OF THE ENVIRONMENT GROUP

#### The Role of the Solent Environment Group

The response to any maritime incident in the UK requiring a national or regional response, of whatever scale, may involve the establishment of an Environment Group. All those involved in operations at sea (including salvage) and shoreline clean up need environmental advice and information. The Solent Environment Group advises on environmental aspects and impacts of these operations. The Group is a common facility providing comprehensive environmental advice to all response units.

The remit of the Solent Environment Group is purely advisory. The Group has no powers of direction and the nature and the chair of the Group will depend upon the scale and type of the incident.

Regulatory functions of individual members of the Solent Environment Group are exercised outside the Group structure and function.

Any response unit established to deal with a maritime incident, including an incident within a harbour area, must contain a representative of the Solent Environment Group: the Environment Liaison Officer (ELO).

Response units should make all reasonable efforts to consult the Solent Environment Group, or its Chairperson, about any proposed action that is likely to have lasting impact on the environment. If time does not permit the response unit to consult before acting, it must circulate a full written report to the Solent Environment Group and all other response units as soon as possible after the event. This report must detail the actions taken, the reasons for them, and their anticipated outcome.

The Solent Environment Group should record its advice in writing and circulate it to the response units as soon as possible. Where a response unit does not follow such advice, it should record the reasons for not doing so as soon as possible.

If a marine pollution incident is expected to have a significant long-term impact on the marine environment and/or the shoreline, arrangements will be made to monitor and assess that impact. The Solent Environment Group will be central to these arrangements.

### 11.0 KEY SOLENT ENVIRONMENT GROUP PERSONNEL AND THEIR ROLES IN GENERAL

Each of the key roles should be filled by the individuals most suited to the job and purpose, independent of their parent organisation or position within that organisation. They must be able to command respect and authority of personnel within the Solent Environment Group and the incident response units. Each should have one or more clearly identified deputies.

a) Solent Environment Group Chairperson

Management of the Solent Environment Group

Ensuring strategic objectives are met

Co-ordination of all group functions and activities

Development and maintenance of the most appropriate structure.

In the simplest incidents, act as a conduit of advice (usually by telephone to SOSREP, MCA or any response unit or local authority response co-ordination centre).

The chair also nominates an Environment Liaison Officer (ELO) for each of the established response units. He/she establishes lines of communication to allow the provision of timely advice to these response units.

b) Environment Liaison Officer (ELO)

The role of the ELOs is to provide:

- A channel for Public health and environmental advice from the SEG to the response units
- Providing efficient and effective timely ,prioritised and focussed environmental advice to the individual response centres.
- Providing an efficient and effective two-way communication link, with respect to public health and environmental issues, between the response centre and the Solent Environment Group.
- Assimilating a sound and timely overview of the operational response centres information needs.

Ensuring feedback to the Solent Environment Group of all relevant environmental information for the response centres on progress of the incident.

It is particularly important that ELO's understand their role and links between the Solent Environment Group and the individual incident response centres. Communications protocol between ELO's and the Solent Environment Group are critical and should be pre-planned for optimum operational effectiveness. ELO's are responsible for the management and passing of information within the Solent Environment Group remit only.

Only one ELO should be appointed to each response unit to ensure a clear focus of Solent Environment Group representation. However, depending on the scale of the incident, ELOs must have back up in the form of one or more deputies because health and environmental advice to the response units may be required 24hrs / day, 7 days / week.

The Shoreline Response Centre ELO will be required to be a member of the SRC Management Team and must also have appropriate administrative and technical support and assistance. It is the response centre managers to identify and commit liaison officers responsible for information sharing on operational matters. Each Response Centre should be supported by a liaison officer with responsibility for highlighting operational issues which may impact on the environment (in its widest sense) and provide that information to the ELO as soon as practicable.

#### c) Other key roles in the Solent Environment Group

In addition to the representatives of the core member bodies, depending on the scale, location and complexity of any marine pollution incident and associated response, there may be a need for a wide range of other key roles within a core Solent Environment Group. These are likely to include, but not be limited to the following:

- Impact assessment manager / co-ordinator
- > Specialists according to nature of incident, e.g., specialist health protection advisers, chemists, marine ecologists, ornithologists, water quality, geologists.
- > Administrative and secretarial management and support.
- Information and data managers (strong cross links to impact assessment manager & main link to data collection support groups).
- Media liaison representative.

#### d) Additional roles

The core operational Solent Environment Group may also require support from:

Deputies for all key roles, particularly Chair and ELO's.

- > Data collectors, loggers and analysts.
- Specialist observers to obtain environmental overviews of incident, particularly from any available aerial platforms
- > Specialist 'monitors' at sensitive sites / complex responses.

The Solent Environment Group may also be required to provide environmental staff for SRC Shoreline Clean-up Assessment Teams<sup>1</sup>.

The purpose and role of Solent Environment Group (SEG) is described in the SRC STOp note (STOp 1/2009). The key purposes of SCAT are to:

- assess the nature and extent of shoreline pollution;
- evaluate the actual and potential impact of shoreline pollution;
- Identify and advise the SRC or other local authority response coordination centre on appropriate shoreline clean-up measures required to mitigate any adverse impacts of shoreline pollution.

#### 12.0 STRUCTURE OF THE SOLENT ENVIRONMENT GROUP

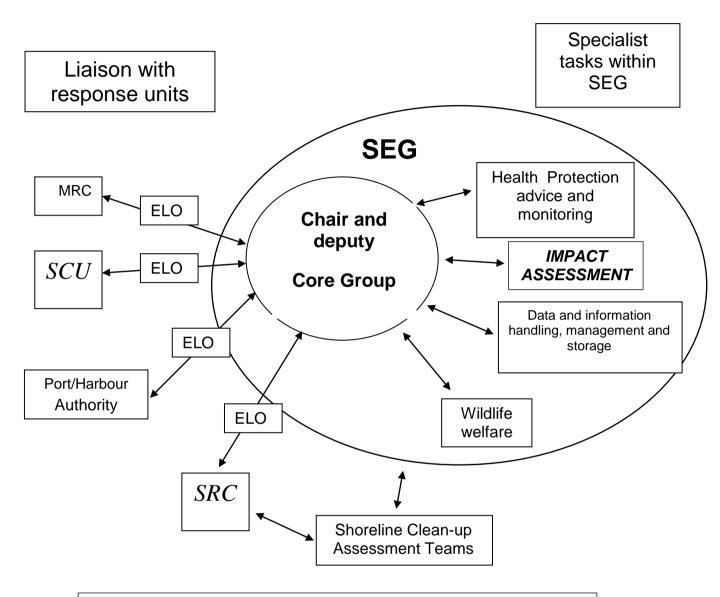


Fig. 1 Structure of SEG in a major incident

#### 13.0 KEY TASKS OF THE SOLENT ENVIRONMENT GROUP

The Solent Environment Group has a vital role in the response to any maritime incident, particularly where there might be a threat of sea or air pollution involving oil and/or hazardous substances. The purpose of advice from the Group is to minimise the impact of the incident on the environment in the widest sense.

The Solent Environment Group helps to steer the overall incident response to minimise environmental harm and to ensure that response units consider all appropriate measures for environmental evaluation and act upon them. For these purposes, the "environment" includes human health interests, water quality, ecology, waste disposal and wildlife.

The main function of the Group is to provide advice and guidance to the Secretary of State's Representative (SOSREP), the Salvage Control Unit (SCU), the Marine Response Centre (MRC), the Shoreline Response Centre (SRC) and the command and control centre for response in a harbour [when established] on all environmental aspects of a pollution incident. This includes the assessment of environmental risks and potential impacts arising from an incident, as well as the implications of any clean up or salvage operations.

#### The key tasks of the Solent Environment Group are:

NB: The following tasks are not in order of priority or exhaustive and not all may be necessary in individual incidents. Tasks and priorities will be incident specific.

#### **Provision of Public Health advice**

- Provide advice on potential and real impact on public health with respect to oil and chemicals.
- Advise on requirements for the monitoring of threat to public health.

#### Provision of operational advice on Environmental Risk

- Assess environmental priorities at risk from pollutant and from clean-up activity.
- ➤ Establish Solent Environment Group priorities for resource protection and pollution clean-up.
- Prepare an incident-specific Solent Environment Group view on at-sea and on-shore dispersant and chemical treatment product use.
- Provide advice and guidance on public health and environmental sensitivities, preferred options and public health and environmental implications of proposed salvage and clean-up response strategies with respect to achieving a net environmental benefit.

- Ensure that the above advice is timely and accurately reflects the dynamics of health and environmental resources at risk.
- ➤ Ensure thorough and timely documentation of all advice provided to the response units. Where a response unit does not follow such advice, the reasons for not doing so should be recorded. Copies of all records of advice provided and feedback from response units should be circulated within the Solent Environment Group (see Annex 6 Record Keeping).
- Facilitate effective communication on health and environmental matters between the response units and the Solent Environment Group via appointed Environmental Liaison Officers.
- ➤ Ensure that appropriate co-ordinated and timely arrangements for incident specific assessment of the effects on public health and environment are initiated and subsequently managed (see Annex 10 Impact Assessment )
- Monitor and keep under review public health and environmental implications of ongoing salvage and at-sea clean up operations.

#### Contribution to the SRC

- Ensure representation in the SRC Management Team via the appointed Environmental Liaison Officer.
- Monitor on-shore clean up operations, particularly in sensitive areas to ensure that clean-up operations match the strategy agreed in the SRC.
- Advise, contribute to and provide members for the SRC-controlled multidisciplinary Shoreline Clean-Up Assessment Teams [SCAT], as required.

#### Health and Safety.

Advise on health and safety measures for personnel working in the field on behalf of the Solent Environment Group [for example, through risk assessments, COSHH, and health tracking].

#### **Monitoring effectiveness and Reviewing Actions**

➤ To ensure that the measures being taken are effective and are minimising the impact of the spillage on the environment.

#### Requirements of the Solent Environment Group in order to fulfil functions

➤ A wide range of expertise in the impact of oil and chemicals on public health, marine and coastal ecology, wildlife, water quality, fisheries and animal welfare.

Sufficient experienced personnel with appropriate local knowledge to carry out the many and varied key and essential tasks. A major incident will require a significant number of personnel, potentially 24 hours a day, seven days a week. The number of people and level of expertise required must not be underestimated.

Comprehensive information and data: pre-incident environmental baseline data and all incident related data. See Annex 8

A prepared organisational framework.

#### 14.0 PROCEDURES WITH OTHER AGENCIES

The Solent Environment Group (SEG) may draw on specialist expertise according to the nature of the incident and which will dictate specific requirements for information and advice. In a major incident the Solent Environment Group will likely be expected to field significant numbers of personnel both in the core Solent Environment Group and in the field. Incident response circumstances may require the setting up of sub groups to cater for specialist activities. Where a clear threat to public health exists, additional health protection/public health specialists will be asked to join the group.

#### **Extended membership may include:**

#### **Health**

- Local authority Environmental Health department
- Occupational Health Advisor
- Directors of Public Health from the affected Primary Care Health NHS Trusts
- Specialists from the Chemical Hazards and Poisons Division of the Health protection Agency
- Representatives from the Strategic Health Authority, Regional Health Protection Unit, and the Regional Director of Public Health or his representative.

#### 15.0 EXERCISES

The Solent Environment Group's Marine Pollution Contingency Plan requires regular testing, to ensure all aspects of communication within the Group, as well as the more operational aspects of the plan such as boom deployment run smoothly. The holders of the plan should explore the possibilities of joint exercises wherever possible. The Solent Environment Group members will (resources permitting) endeavour to participate in any such exercises. It may be possible to join into exercises that have been planned as part of wider responsibilities under the Civil Contingency Act

#### **Directory of Spill Response Training Exercises**

Information is compiled on an annual basis (April to March) by the British Oil Spill control Association (BOSCA) under contract to MCA. This contains details of exercises and training planned by local authorities, ports, harbours, oil companies and Government Departments / Agencies. Copies are available from BOSCA, 4<sup>th</sup> floor, 30 Great Guildford Street, London SE1 0HS. Telephone 0171 928 9199, Fax 0171 928 6599.

#### 16.0 PLAN REVISION

Proposals by any member to revise the plan shall be forwarded to the Solent Environment Group Chair;

Mike O'neill,
Operations Manager
Environment Agency
Canal Walk
Romsey
Hampshire
SO51 7LP

michael.oneill@environment-agency.gov.uk

- Revisions will take account of experience gained from exercises and/or actual spill incidents, changes in risk or port operations or revision of legislation.
- Approval from the relevant competent member(s) of the Solent Environment Group will be obtained prior to the revision.
- ➤ The Solent Environment Group Plan Co-ordinator as stated above will issue amendment to all holders of the Solent Environment Group Plan
- ➤ The plan should be reviewed on a regular basis. After multi-agency maritime exercises, or in light of the lessons learnt through response to actual maritime incidents.

#### 17.0 COMMUNICATIONS

The Solent Environment Group contingency plan will include planning for good communications. Communication systems must be rapidly put into place and activated, in order to facilitate the efficient flow of information on all aspects of the incident that concern the Solent Environment Group, from the very beginning. Caution should be exercised, to avoid the appointment of too many individuals with liaison-only functions: direct links between key players will increase efficiency and understanding within the Solent Environment Group and between the group and response centres, parent organisations and others.

In a marine pollution incident, the main communications links are likely to be:

- between the Solent Environment Group members and between "components" of the Group (e.g. core Environment Group; wider Environment Group; Impact Assessment Group; support group) and response units (SCU, MRC, SRC, port or harbour Command and Control Centre) via ELO's
- ➤ between Solent Environment Group members and their parent organisations (to ensure that there is common understanding and consensus between the group and "parent" organisations)
- ▶ between the Solent Environment Group and field workers, including SCAT members, consultants and contractors working to or on behalf of the group (debriefing/briefing; collation of field data; project management)
- ▶ between the Solent Environment Group, the media centre and (where appropriate) other media links.

#### The Solent Environment Group contingency plan will:

- clearly identify communications roles and responsibilities, and identify direct communications links between, the Chair and deputy Chair and the ELO's/deputy ELO's.
- ➤ clearly identify members (in addition to the Chair, ELO's and their deputies) who would have a key role to play in communications within and beyond the Environment Group. Their roles, tasks and who they should communicate with and report to should be made clear..
- include alert procedures and identify who will be responsible for alerting members of the group. Contact lists (to include office and out-of-hours contact details) should be compiled and kept up-to-date.
- identify which members of the Solent Environment Group will act as media spokespersons. It may be appropriate to include provision for the appointment of a media spokesperson, should this be required by the scale of the incident. The media plan incorporated in the National Contingency Plan and currently used by the MCGA will be adopted for use by the SEG if deemed appropriate by the SEG.
- ➤ include an agreed protocol for record-keeping throughout the incident: all communications made within the group, and between the group and response units and other external individuals and organisations should be recorded. It is vital that logs are kept of the following:
- all telephone calls made and received;
- > all faxes sent and received:
- all e-mails sent and received.

- ➤ Identify the facilities required for effective communication. The scale of technical and administrative resources needed in a major incident should not be underestimated. Consideration should be given to the following:
  - assessment of existing telephone and fax lines in rooms identified for use by the Solent Environment Group. Plans for installing additional telephone and fax lines should be drawn up if the existing facilities are considered to be inadequate. (Note: where possible, land lines should be used for calls so that logging systems are not by-passed).
  - dedicated, unlisted lines should be made available for ELO's in response units and the Chair/deputy Chair of the group.
  - provision of (or access to) teleconferencing facilities;
  - provision of internet and e-mail facilities;
  - provision of administrative support, including access to photocopying facilities.
- ➤ Identify areas where reception on mobile phones is poor and investigate alternative means of communication e.g. VHF radio links, to ensure efficient communications between the group and people working in the field on its behalf.

#### 18.0 **MEDIA**

Refer to: Appendix L, National Contingency Plan for Marine Pollution from Shipping and Offshore Installations (Maritime and Coastguard Agency)

### **Annexes**

Annexes

Annex 1 List of Emergency Plans covering the Solent Area Annex 2 **Environmental Risks Natural Conservation Designations** Annex 3 **Marine Pollution** Annex 4 Annex 5 **Record Keeping** Annex 6 **Environmental Sensitivities Data and Information** Annex 7 Impact Assessment Annex 8 **Contact Directory** Annex 9 Incident Form/Check List Annex 10 Reporting Pollution – Format of CG77 POLREP Annex 11 Solent Environment Group – Generic first meeting agenda Annex 12 for maritime pollution incidents Solent Environment Group – Checklist of essential Annex 13 information to be obtained during initial alert for maritime pollution incidents Media Holding Statement - deleted Annex 14 Media Statement - deleted Annex 15 Health and Safety Regulations which are likely to apply to Annex 16

major clean-up operations.

#### **ANNEX 1**

#### LIST OF EMERGENCY PLANS COVERING THE SOLENT AREA

#### Introduction

The Solent Environment Group's Marine Pollution Plan interfaces with similar contingency plans that have been drawn up to deal with the UK Government's responsibility for saving life at sea, for search and rescue and caring for survivors brought ashore, and for protecting the environment. Such plans have been prepared by local authorities, harbour authorities and operators of offshore installations which all underlie the national plan. The following list presents other contingency plans covering the Solent Estuary. This is not the definitive list for emergency plans; however, it does cover the major players:

#### **Interfacing Emergency Plans and Status**

Plan	Plan Status	Plan	Plan Status
HCC Coastal Oil & Chemical Pollution Plan	Under review	River Hamble Harbour Authority OPRC	Approved by MCA
The Dockyard Port of Portsmouth & Commercial Port OPRC	Consistency checks by MCA	Eling Terminal (ABP) OPRC	Approved by MCA
Southampton Port OPRC	Approved by MCA	Langstone Harbour OPRC	Approved by MCA
Newport Harbour (IOW) OPRC	Reclassified as a category c/d port. Plan not required at the moment.	Yarmouth (IOW) OPRC	Approved by MCA
Fawley Terminal OPRC	Approved by MCA	Lymington (IOW) OPRC	Approved by MCA
Hamble Terminal OPRC	Approved by MCA	Cowes (IOW) OPRC	Approved by MCA
National Contingency Plan		Chichester Harbour OPRC	Approved by MCA
West Sussex County Council Coastal Pollution Plan	July 2005	IOW Oil Spill Contingency Plan Volumes 1 and 2.	Approved by MCA
Chichester Harbour Protection Plan	Tested in 2000	IOChemical/Biologic al Incident Plan.	Approved by MCA

**ANNEX 2** 

#### **Environmental Risks**

The Solent is one of Britain's most important estuaries. Economic development, ecological diversity and geographical features combine to form an area of both financial and environmental concern. The ports located at Southampton and Portsmouth are of great commercial significance within the Solent and are a major contributor to the regional and national economy. Annual total goods exported through Southampton in 1995 amounted to 31,422,700 tones (of which 23,377,900 tones were oil), with 634,574 tones passing through Portsmouth. The ports provide services within a competitive market of International trade.

#### Recreation

There are an estimated 25,000 yachts moored within the Solent. The number of marina yacht berths in the Solent has doubled in the last 25 years. Over 20 different types of recreation take place in the Solent. Recreation is vital to the Solent - and the quality of the Solent is vital for recreation. In terms of the numbers of people involved and its extent, recreation can be counted as the Solent's most significant activity. It is certainly the most diverse, with at least twenty different activities taking place, each with its own characteristic distribution and pattern of use.

Land-based informal recreation and walking have by far the greatest number of participants. They are provided for by country parks, public open spaces, beaches, the rights of way network and a range of visitor attractions and facilities. However it is water sports which have the highest profile, and the Solent has an international reputation for sailing. A number of other waterspouts are also significant, and a statement on the range of activities is provided in the box below.

#### **Nature Conservation**

The Solent is internationally important for nature conservation, because it is a unique sheltered body of water lying between the mainland and the Isle of Wight. In addition the Solent encompasses a complex of estuaries, open inshore waters, coastal and marine habitats. Due to its location at a transition between different biological realms many species within the Solent are at their limits of the natural ranges.

Physical features of the system, which are important include Coastal, intertidal and marine habitats, which include grazing marsh, sea grass, vegetated shingle, sea cliffs, saltmashes, sand flats, rocky shores, lagoons and a variety of types of sea-bed. The Solent has a particularly important role in sustaining bird-life. This includes the presence of nesting colonies of terns, gulls and other shorebirds, and the provision of feeding and roosting sites for migrating and overwintering wading birds and wildfowl, supporting a winter peak of c. 150,000 birds. There are also a number of other rare and important plant and animal species present;

#### <u>Fisheries</u>

Fisheries including naturally sustaining populations of native oysters and

threatened migratory salmon and sea trout populations. The Solent is an important nursery for sea bass, and a range of other seafish.

ANNEX 3

#### **Natural conservation designations**

The Solent Maritime European marine site (Solent EMS) is a complex cluster of designated sites encompassing a major estuarine system on the south coast of England. It has the largest number of small estuaries in the tightest cluster anywhere in Great Britain and is located in one of the only few major sheltered channels in Europe, lying between the Isle of Wight and mainland. The Solent and its inlets are unique in Britain and Europe for their complex tidal regime, with long periods of tidal stand at high and low water, and for the complexity and particularly dynamic nature of the marine and estuarine habitats present within the area.

There is a wide variety of marine sediment habitats influenced by a range of salinities, wave shelter and intensity of tidal streams, resulting in a uniquely complex site. Sediment habitats within the estuaries include extensive areas of estuarine flats, with inter-tidal areas often supporting sea grass and green algae, salt marsh, and natural shoreline transitions, such as drift line vegetation. Many of the inter-tidal areas within the Solent EMS are important for a number of nesting, roosting and feeding birds.

The Solent Estuary, is an area of great ecological importance, at risk from the activities of modern society. The combination of the oil and chemical industries and one of the busiest shipping lanes in Europe, has the potential to bring ecological disaster, to a particularly sensitive and difficult to protect location. For the purpose of this plan, the entire estuary has been divided into cells. For each of these units, a full list of environmental sensitivities, designations, potential booming sites and listings for high-risk sites is available.

**ANNEX 4** 

#### Marine Pollution.

The main sources of oil pollution that have occurred within UK harbours, nearshore waters and ports, including the number of spills and main hydrocarbons spilt, are listed below:

#### **Sources of Pollution**

No. of Spills	Sources of Pollution as a % of Total No of Reports	Types of Oil Spilt	
Unknown sources	165 / 44%	Fuel oils, hydraulic oils and refined oils	
Other vessels	140 / 37%	Fuel oils, bunker oils (including diesel)	
Industrial premises, outfalls, other sources	40 / 11%	Fuel oils, hydraulic oils, refined petroleum products	
Coastal tankers, VLCC or ULCC	16 / 4%	Crude oils; fuel oils, refined petroleum products	
Land terminals and jetties	11 / 3%	Crude oils; fuel oils, hydraulic oil; refined petroleum products	
Disturbance of wrecks	5/1%	Fuel oils	

Source: ABP - Solent clean © Environmental Consultancy Services Ltd.

As the above data demonstrates, the number of spills occurs more frequently from the recognised group, other vessels. The oil pollution from these incidents is limited to the amount of oil that can potentially be spilt, and are limited to fuel oils. The coastal tankers, VLCC and ULCC's group consists of a small percentage of spill sources, however, this source of pollution has the potential risk of very large spills. The spillage risk from oil handling facilities make up a small percentage of oil pollution sources.

Minor oil spills do occur in the course of normal ship operations, such as bunkering etc, and most terminals have well defined plans to deal with such spills. However, the effects of a major spill and the subsequent clean-up resource implications would be significant and many factors would affect the fate of a major spill.

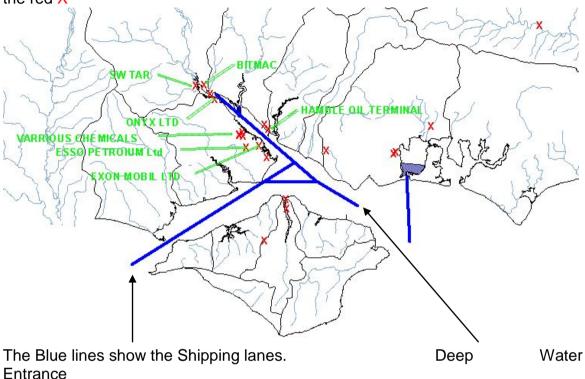
One of the primary considerations relates to the oil type. Table 3.0 gives a summary of oil types present in the Solent and adjacent area (ABP,1998)

Table 3. Types of Oil present in the Solent and adjacent area (ABP,1998).

FIELD DETERMINED OIL TYPE	DESIGNATION	REPRESENTATIVE OILS	DIAGNOSTIC PROPERTIES	PHYSICAL/ CHEMICAL PROPERTIES
A	Light Volatile Oils	Distillate fuel and most light crude oils	Highly fluid, usually transparent but can be opaque, strong odour, rapid spreading, can be rinsed from plant sample by simple agitation	May be flammable, high rate of evaporative loss of volatile components, assumed to be highly toxic to marine or aquatic biota when fresh, tends to form unstable emulsion may penetrate substrate.
В	Non-sticky Oils	Medium to heavy paraffin-base refined and crude oils	Moderate to high viscosity, waxy or oily feel, can be rinsed from surfaces by low pressure water flushing	Generally removable from surfaces, penetration of substrate variable, toxicity variable, includes water in oil emulsions
С	Heavy Sticky Oils	Residual fuel oils; medium to heavy asphaltic and mixed- base crude oils	Typically opaque brown or black, sticky or tarry, viscous, cannot be rinsed from plant by simple agitation	High viscosity, hard to remove from surfaces, tend to form stable emulsions, high specific gravity and potential for sinking after weathering, low substrate
D	Non-fluid (at ambient temperature) oils	Residual and heavy crude oils	Tarry or waxy lumps	Non spreading, cannot be recovered from water surfaces using most cleanup equipment, cannot be pumped without pre-heating or slurrying, initially relatively non-toxic, may melt and flow when stranded in sun

The Solent Estuary.

The Solent Area with Shipping Lanes and Oil and Chemical Sites illustrated via the red X



The main sources of potential oil pollution for the Solent Estuary are illustrated above:

### Marine Environment High Risk Area (MEHRA's

This approach was used for the creation of Marine Environmental High Risk Areas ("MEHRAs"), created by Safetec UK Ltd. The report was commissioned by the Department of the Environment Transport and the Regions, which has since been replaced by the Department for Environment, Food and Rural Affairs ("DEFRA"), to identify potential marine environment high risk areas around the UK following the recommendations made by Lord Donaldson after the BRAER incident (Donaldson, 1994).

### Risk Assessment for the Solent Area.

Pollution Spills - (from sea to shore, tonnes per annum) 2 -10 tonnes	
Coastal Pollution Risk Results - Medium – Very High	
Environmental Sensitivity - Low – High	
Environmental Sensitivity - Low – High	
Pollution Risk and Environmental Sensitivity - Medium – Very High	

Under this classification, the South East Coast of England including the East and South coast of the Isle of Wight were ranked within the top MEHRAs for the UK.

**ANNEX 5** 

#### RECORD KEEPING

It is essential that during any counter pollution operation all those involved keep records of what was done, when and why, to provide an audit trail. There will inevitably be pressure, frequently severe, to deal with new issues and problems and to relegate record keeping to a lesser priority. However, the importance of contemporary records cannot be over-emphasised. It is simply not realistic to rely on memory to reconstruct events in a fast moving and possibly lengthy incident. Responders must therefore arrange to keep adequate contemporary records which can be used to re-construct the incident at a later date when it may be necessary to fully justify advice provided by the Solent Environment Group or to recover costs.

#### Records

The precise form of records will vary according to circumstances. There are two principal points to keep in mind:

- records may have to serve a variety of purposes and are the source material from which much information will be drawn
- since responders can not predict every purpose that records will serve in advance, record keeping should err on the side of too much rather than too little detail.

As a minimum, records should clearly show the information received, orders given, and any action taken as well as date and time details.

The Solent Environment Group should keep records of the following during the course of a maritime pollution incident:

- incoming and outgoing telephone calls
- > faxes received and sent
- email messages received and sent
- text messages received and sent
- > radio messages received and sent
- > telex messages received and sent
- Dictaphone tapes
- photographs/ video taken or received
- copies of all HMCG pollution reports received
- minutes of meetings of the Solent Environment Group and its component subgroups
- records of decisions taken by the Solent Environment Group
- > records of advice provided to response units and action taken in response to the advice provided
- records of all costs incurred by the Solent Environment Group
- > copies of all relevant press releases
- media reports (including video-recordings of TV news coverage)

## **Incident Log**

The Solent Environment Group should maintain an incident log which should include timely reports on the condition of the casualty, nature of pollution and rate of discharge, location and behaviour of pollutant, action by response units etc, since this information will be a major factor in determining the advice provided to response cells and in impact assessment planning. Charts should be maintained to record the extent of pollution and any response activity and copies should be taken at regular intervals to ensure there is a visual record of how the incident progressed. Accurate recording of information will aid in improved decision making and therefore effectiveness. In addition accurate information will aid in claim procedure's, when ITOPF asses the claim levels.

## Recording decisions taken by the Solent Environment Group

- The Solent Environment Group should maintain a record of decisions made by the Group including:
- > the views of individual Solent Environment Group members
- resolution of conflicting views
- accurate minutes of all Solent Environment Group meetings
- options/strategies considered
- Environmental advice provided to response units
- The development and agreement of the Solent Environment Group views should be concisely and accurately recorded in writing. Records of how Solent Environment Group advice was received and acted upon by response units must be maintained.
- ➤ In the case of a request for dispersant use, DEFRA will provide a written reply to the response unit, copied to the Solent Environment Group, either authorising or declining the request to use dispersants. Written approval may include conditions associated with that approval, and where the request has been declined, the reasons why it is considered that dispersants should not be used.

### ELO's should keep specific records of:

- advice provided to response units and how that advice was received and acted upon,
- requests for information made by response units, how the information was provided and when
- requests for information made to the core Solent Environment Group on behalf of response units.

\_\_\_\_\_

### **Financial Records**

➤ Although the Solent Environment Group will not itself incur expenditure, its membership will do so and any collaborative Solent Environment Group activities likely to incur expense must be recorded. Records will be used to corroborate claims for reasonable expenditure.

## Detailed financial records must be kept of:

- > manpower (staff grades, rates of pay, time worked, location, work activity)
- resource costs (equipment, charge out rates, IT costs, communications)
- expenses incurred by Solent Environment Group members
- externally placed contract costs (specialist surveys, secretariat)

### For the purpose of:

- cost recovery
- financial audit trail
- support of archive records
- official reports on spending by the public and private sector.

Comprehensive documentation and record keeping will assist the prompt preparation and payment of claims for compensation for expenditure incurred by Solent Environment Group members. As with any operation involving the expenditure of large sums of money, the usual rules of proprietary, accountability and the need for an audit trail apply.

### Record collation and archiving/ storage/ disposal

 All Solent Environment Group records must be properly collated archived and stored. Procedures, responsibilities and archive location should be identified during planning of the standing Solent Environment Group.

ANNEX 6

### **ENVIRONMENTAL SENSITIVITIES**

In order for the Solent Environment Group to provide operational, monitoring and environmental data advice to all response units when dealing with a maritime incident, it has been imperative that a comprehensive database is available so that it can be accessed immediately.

To identify environmental sensitivities and priorities for protection, the plan area has been divided into 45 individual marine cells which follow the coastline from Christchurch harbour to Selsey Harbour including the environs of the north and south coasts of the IoW.

### **Environmental Sensitivities**

Each marine cell within the Solent area contains the following information:

- Cell number
- The coastal area
- Prioritisation criteria
- Habitat Type
- Comments
- Authority the cell is located in
- Priority in both summer and Winter
- Protection possibilities

Table 1. Cell Number & Location

Cell	Location
1	Foreland point to Culver Down (low)
2	Culver Down to Yaverland
3	Yaverland to Dunnose
4	Dunnose to Woody Bay St Lawrence
5	Woody Bay St Lawrence to St Catherine's Point
6	St Catherine's Point to Atherfield Point
<u>7</u>	Atherfield Point to Hanover Point
8	Hanover Point to The Needles
9	Hengistbury Head to Mudeford
10	Christchurch Harbour
11	Mudeford to Chewton Bunny
12	Chewton Bunny to Milford on Sea
13	Milford on Sea to Hurst Beach
14	Hurst Spit & Cliff End (IoW)
15	The Needles to Warden Point
16	Hurst Castle to Normandy, Lymington, Including Keyhaven, Avon Water and
	Sturt Pond
17	Mouth of Lymington and Cliff End to Yarmouth Pier (IoW)

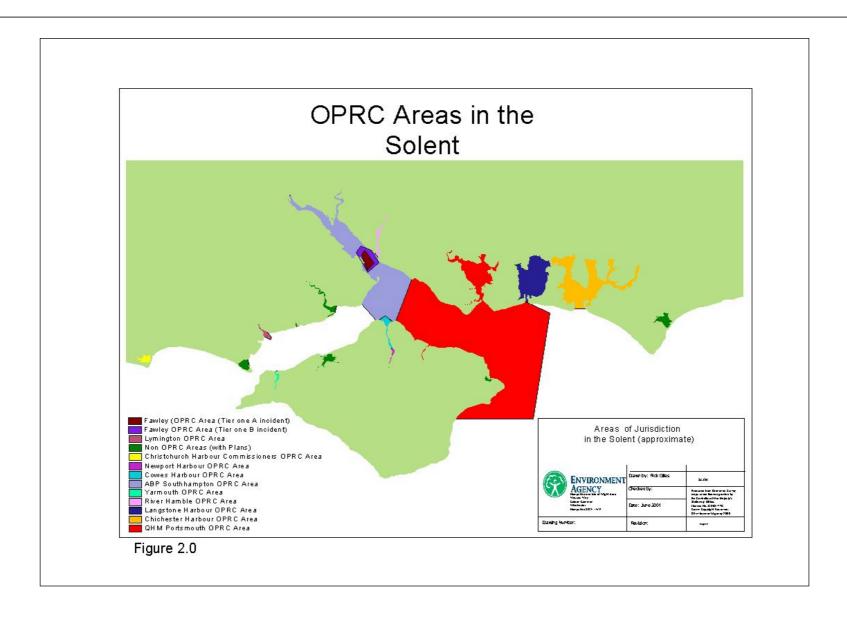
18	Lymington River
19	River Yar
20	Pylewell Point to Thorns Beach & Yarmouth Pier to Newtown entrance
21	Thorns Beach to Needs Ore Point & Newtown entrance to Gurnard Ledge
22	Newtown Harbour
23	Beaulieu River
24	Needs Ore Point to Stansore Point & Gurnard Ledge to Egypt Point
25	Stansore Point to Calshot Castle to Titchfield Haven & Egypt Point to Old Castle Point
26	Entrance to Southampton Water
27	Cadland Creek to Hythe Marina to Netley Point to Hook Park
28	Hamble Estuary and River
29	Dock Head to Netley, Southampton Water.
30	Itchen Estuary
31	Marchwood Yacht Club to Bury Swinging Ground, Test Estuary
32	Upstream of Bury Swinging Ground to tidal limit at Redbridge, Test Estuary
33	River Medina
34	Old Castle Point to Woodside to Lee on Solent to Titchfield Haven, including Kings Quay
35	Woodside to Ryde to Gilkicker Point to Lee on Solent, including Wootton Creek
36	Ryde to Nettlestone Point to Portsmouth to Gilkicker Point
37	Portsmouth Harbour
38	Nettlestone Point to Node's Point to Portsmouth to West Winner Point
39	Nodes Point to Foreland Point(excluding Bembridge Harbour)
40	Bembridge Harbour
41	Hayling Island Sea front
42	Langstone & Chichester Harbour
43	Chichester Harbour entrance (east) to Selsey Bill
44	Selsey Bill to Pagham Harbour entrance (east)
45	Pagham Harbour

Figures 2, 3 and 4 illustrate the areas and zones:

Figure 2. OPRC areas in the Solent

Figure 3. Summer Protection Priorities

Figure 4. Winter Protection Priorities



Areas Prioritised for Protection During the Summer

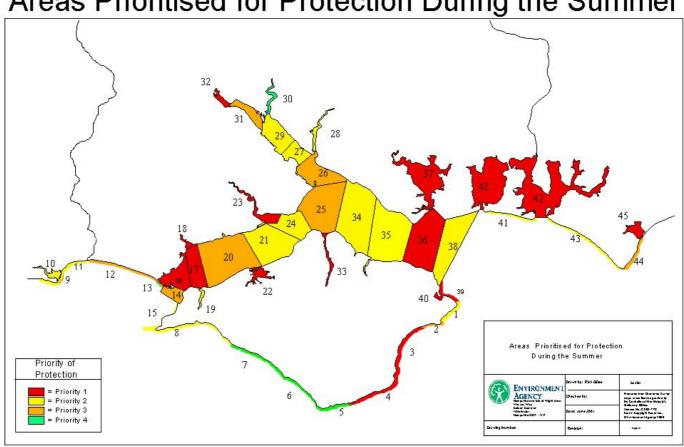


Figure 3.0

Areas Prioritised for Protection During the Winter

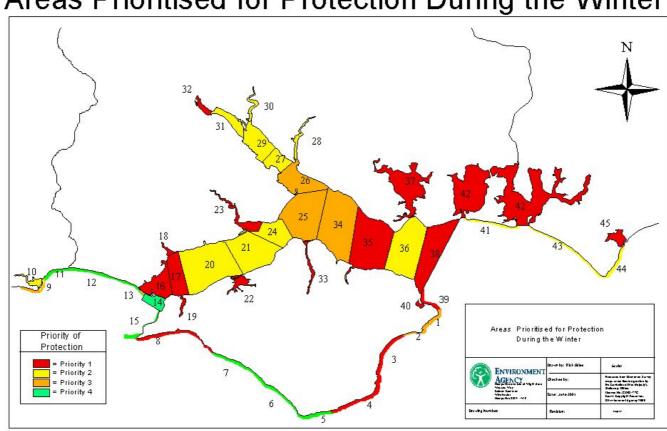


Figure 4.0

## Table 2 PRIORITY OF AREAS FOR PROTECTION DURING THE SUMMER AND WINTER

Cell	Coastal Area	Prioritisation Criteria	Habitat Type (Ref Appendix	Comments	Authority the cell is located in		Priority 1 = highest 4 = lowest		Protection Possible ?
			1)		Council/ Local Authority	Port/ Harbour Authority	Sum -mer	Win- ter	
1	Foreland Point to Culver Down (IoW)	Tourism Marine conservation site	Low 1A//3A	Rocky shore is too exposed Access very difficult	IoWC	QHM Portsmou th	2	3	NO
2	Culver Down to Yaverland	Recreation Environmentally sensitive marine conservation site.	Low, Medium 1A, 2A, 3A, 5	Too exposed and difficult to access	IoWC	QHM Portsmou th	3	3	NO
3	Yaverland to Dunnose	Recreation Tourism	Medium 4/5	Open coast, unsuitable for booming	IoWC		1	1	NO
4	Dunnose to Woody Bay St Lawrence	Recreation Tourism	Medium 5	Shore too exposed for booming Access very difficult	IoWC		1	1	NO
5	Woody Bay St Lawrence to St Catherine's Point	Recreation Tourism	Medium 5	Shore too exposed for booming. Access very difficult (cliffs)	IoWC		4	4	NO

Cell	Coastal Area	Prioritisation Criteria	Habitat Type (Ref Appendix	Comments	Authority the cell is located in		1 <b>≓</b> hi	ority ghest owest	Protection Possible ?
			1)		Council/ Local Authority	Port/ Harbour Authority	Sum -mer	Win- ter	
6	St Catherine's Point to Atherfield Point	Recreation, Tourism	Medium 6A	Access too difficult and shoreline very exposed	IoWC		4	4	NO
7	Atherfield Point to Hanover Point	Recreation Tourism	Medium	Shore too exposed for booming Access very difficult (cliffs)	IoWC		4	4	NO
8	Hanover Point to The Needles	Recreation Tourism Sea birds nesting	Low 1A	Shoreline too exposed access very difficult	IoWC		2	1	NO
9	Hengistbury Head to Mudeford	Tourism Recreation	Low- Medium 3A, 4, 5	Coastline too exposed for booming	Dorset CC, Christchur ch BC		2	3	NO
10	Christchurch Harbour	Environmentally sensitive due to mudflats. Major boating location Commercial interests	High 9A	Contingency plan in place	Dorset CC, Christchur ch BC	Christchu rch Harbour Commissi oner	2	2	YES

Cell	Coastal Area	Prioritisation Criteria	Habitat Type (Ref Appendix	Comments	Authority the cell is located in		Priority 1 = highest 4 = lowest		Protection Possible ?
			1)		Council/ Local Authority	Port/ Harbour Authority	Sum -mer	Win- ter	
11	Mudeford to Chewton Bunny	Recreation Tourism	Medium 5	Shore too exposed for booming Access very difficult in places	Dorset CC Bournemo uth BC		2	4	NO
12	Chewton Bunny to Milford on Sea	Recreation Tourism	Medium 6A	Shore too exposed for booming Access very difficult (cliffs)	Hampshire CC, New Forest DC		3	4	NO
13	Milford on Sea to Hurst Beach	Recreation Tourism Environmentally Sensitive	Medium 4, 5, 6A	Open coast, unsuitable for booming	HCC, New Forest DC		3	4	NO
14	Hurst Spit & Cliff End (IoW)	Maritime Archaeology Tourism Environmentally sensitive due to bird roosting	Low - Medium 1B, 3A, 6A	Access very difficult Shore too exposed for booming	HCC, NFDC IoWC		3	4	NO
15	The Needles to Warden Point	Recreation Tourism Seabirds	Low 1A/2A	Shore too exposed for booming Access very difficult (cliffs)	IoWC		2	4	NO

Cell	Coastal Area	Prioritisation Criteria	Habitat Type (Ref Appendix	Type (Ref	Authority locat	Priority 1 = highest 4 = lowest		Protection Possible ?	
			1)		Council/ Local Authority	Port/ Harbour Authority	Sum -mer	Win- ter	
16	Hurst Castle to Normandy, Lymington, Including Keyhaven, Avon Water and Sturt Pond	Environmentally sensitive due to mudflats and saltmarsh Recreation, Tourism Commercial Fishing, waders, wildfowl and other seabirds.	High 10A	Access difficult in some parts	NFDC, HCC	EA Prioritise d Area	1	1	YES
17	Mouth of Lymington and Cliff End to Yarmouth Pier (IoW)	Environmentally sensitive due to mudflats and saltmarsh Recreation, Tourism Commercial Fishing Commercial Interests, waders, wildfowl and other seabirds.	High 10A	Harbours covered in 18 and 19	HCC, NFDC	Yarmouth Harbour Com's, Lymingto n Harbour Master	1	1	YES

Cell	Coastal Area	Prioritisation Criteria	Habitat Type (Ref Appendix	Comments	Authority the cell is located in		Priority 1 = highest 4 = lowest		Protection Possible ?
			')		Council/ Local Authority	Port/ Harbour Authority	Sum -mer	Win- ter	
18	Lymington River	Recreation Tourism Commercial Fishing Environmentally Sensitive due to mudflats and saltmarsh. Waders wildfowl and other seabirds	High 7, 8B, 9A	Booming possible, although plans not validated	HCC, NFDC	Lymingto n Harbour Board	1	1	YES
19	River Yar	Recreation, Tourism Commercial Fishing Commercial Interests Env Sensitive	High 10A	Booming Plan approved by the MCA. Validated in 1999	loWC	Yarmouth Harbour Commissi oner	2	1	YES
20	Pylewell Point to Thorns Beach & Yarmouth Pier to Newtown entrance	Environmentally sensitive due to mudflats and saltmarsh Recreation, Tourism Commercial Fishing, waders , wildfowl and other seabirds.	High 10A/9A	Access difficult in some parts, Exposed shoreline	NFDC IoWC HCC		4	2	NO

Cell	Coastal Area	Prioritisation Criteria	Habitat Type (Ref Appendix	Comments	Authority the cell is located in		Priority 1 = highest 4 = lowest		Protection Possible ?
			1)		Council/ Local Authority	Port/ Harbour Authority	Sum -mer	Win- ter	
21	Thorns Beach to Needs Ore Point & Newtown entrance to Gurnard Ledge	Marine conservation site. Waders and wildfowl Environmentally sensitive due to Mudflats, Recreation, Tourism Commercial Fishing. Waders wildfowl & other seabirds	High Medium 9A/5	Open coast, unsuitable for booming	IoWC NFDC HCC		2	2	NO
22	Newtown Harbour	Environmentally sensitive due to mudflats and saltmarsh. Boating, tourism and commercial interests. Waders and other sea birds	High 9A/10A	Booming plan for Harbour, validated 1999 by EA & MCA.	IoWC	National Trust, EA	1	1	YES
23	Beaulieu River	Tourism Recreation – Boating Environmentally sensitive due to mudflts and salt marshes. Wildfowl and waders site.	High 9A, 10A	Booming Plans for Gins Farm and Bucklers Hard Validation Nov 1998	NFDC, HCC	Beaulieu Estate	1	1	YES

Cell	Coastal Area	Prioritisation Criteria	Habitat Type (Ref Appendix	Comments	Authority the cell is located in		Priority 1 = highest 4 = lowest		Protection Possible ?
			1)		Council/ Local Authority	Port/ Harbour Authority	Sum -mer	Win- ter	
24	Needs Ore Point to Stansore Point & Gurnard Ledge to Egypt Point	Environmentally sensitive due to mudflats and saltmarsh Boating, tourism and commercial interests, Waders wildfowl and other seabirds	Medium/ High 10A/9A/5	Open coast, unsuitable for booming	IoWC, HCC, NFDC		2	2	NO
25	Stansore Point to Calshot Castle to Titchfield Haven & Egypt Point to Old Castle Point	Recreation, Tourism Commercial Fishing Commercial interests Waders and wildfowl and other seabirds.	Medium 5	Open coast, unsuitable for booming	NFDC IoWC, HCC	ABP Southam pton	3	3	NO
26	Entrance to Southampton Water	Recreation – Boating, Windsurfing Commercial – Boating Tourism Environmentally Sensitive gravel beaches	Low, Medium, High 3A, 4, 5, 6A, 7	Open coast, unsuitable for booming	HCC, NFDC, Fareham DC,	ABP Southam pton	3	3	NO

Cell	Coastal Area	Prioritisation Criteria	Habitat Type (Ref Appendix	Comments	Authority the cell is located in		Priority 1 = highest 4 = lowest		Protection Possible ?
			')		Council/ Local Authority	Port/ Harbour Authority	Sum -mer	Win- ter	
27	Cadland Creek to Hythe Marina to Netley Point to Hook Park	Recreation, Commercial Fishing, Commercial Interests, Environmentally Sensitive due to mudflats, saltmarsh, wildfowl and waders.	High 8B 9A 9B	Booming Plan approved by the MCA. Validated in 1999	NFDC, Eastleigh DC, HCC	ABP Southam pton, Fawley OPRC Area	2	2	YES
28	Hamble Estuary and River	Tourism Recreation – Boating Environmentally sensitive due to mudflts. Wildfowl and waders site.	High 9A, 10A	Booming Plan approved by MCA	Winchester DC, Fareham DC, Eastleigh DC, HCC	Hamble Harbour Master	2	2	YES

Cell	Coastal Area	Prioritisation Criteria	Habitat Type (Ref Appendix	Comments	Authority the cell is located in		Priority 1 = highest 4 = lowest		Protection Possible ?
			"		Council/ Local Authority	Port/ Harbour Authority	Sum -mer	Win- ter	
29	Dock Head to Netley, Southampton Water.	Environmentally sensitive due to mudflats, saltmarsh, waders and wildfowl. Boating, tourism and commercial interests, waders and wildfowl.	High 10A/9A/8 B	Booming plan for Test upstream of Redbridge Validation Nov 1998 Booming plan for Eling Creek & Great Marsh Validation Nov 1999	NFDC, Southampt on City Council, HCC	ABP Southam pton (Upstrea m of Redbridg e, Eling Wharf – EA for booming. )	2	2	YES
30	Itchen Estuary	Environmentally sensitive due to mudflats, site for waders and wildfowl Commercial Interests	High 9A	Booming Plan validated 1999 by MCA	Southampt on CC, HCC	ABP Southam pton	4	2	YES
31	Marchwood Yacht Club to Bury Swinging Ground, Test Estuary	Environmentally sensitive due to mudflats, saltmarsh, waders and wildfowl. Commercial Interests	High 10A	Contingency Plan – validated 1999 by MCA	Southampt on CC, NFDC, HCC	ABP Southam pton	3	2	YES

Cell	Coastal Area	Prioritisation Criteria	Habitat Type (Ref Appendix	Comments	Authority the cell is located in		Priority 1 = highest 4 = lowest		Protection Possible ?
			"		Council/ Local Authority	Port/ Harbour Authority	Sum -mer	Win- ter	
32	Upstream of Bury Swinging Ground to tidal limit at Redbridge, Test Estuary	Environmentally sensitive due to mudflats and saltmarsh Boating, tourism and commercial interests	High 10A/9A/8 B	Booming plan for Test upstream of Redbridge Validation Nov 1998 Booming plan for Eling Creek & Great Marsh Validation Nov 1999	NFDC, Test Valley DC, Southampt on CC, HCC	ABP Southam pton	1	1	NO
33	River Medina	Environmentally sensitive due to mudflats and waterfowl. Boating, tourism and commercial interests.	High 9A	Draft plan in place awaiting approval from the MCA	IoWC	Cowes Harbour Commissi on, Newport HC	1	1	YES
34	Old Castle Point to Woodside to Lee on Solent to Titchfield Haven, including Kings Quay	Recreation, Tourism Commercial Fishing Environmentally Sensitive due to saltmarsh.	High Medium 10A/5	Beaches too exposed for booming except for Kings Quay	IoWC, Gosport DC, Fareham DC, HCC	QHM Portsmou th	2	თ	NO (Yes in parts)

Cell	Coastal Area	Prioritisation Criteria	Habitat Type (Ref Appendix	Comments	Authority the cell is located in		Priority 1 = highest 4 = lowest		Protection Possible ?
			1)		Council/ Local Authority	Port/ Harbour Authority	Sum -mer	Win- ter	
35	Woodside to Ryde to Gilkicker Point to Lee on Solent, including Wootton Creek	Recreation Commercial Fishing Environmentally Sensitive due to mudflats and saltmarsh and waterfowl in parts.	High Medium 5/10A	Beaches too exposed for booming apart from Wootton Creek	IoWC HCC, Gosport DC	QHM Portsmou th	2	1	NO (Yes in parts)
36	Ryde to Nettlestone Point to Portsmouth to Gilkicker Point	Recreation, Tourism Commercial Fishing Commercial interests Saline Lagoon	Medium 5	Open coast, unsuitable for booming but protection of Gilkicker Lagoon possible via activation of sluice	IoWC, HCC, Gosport DC, Portsmout h CC	QHM Portsmou th	1	2	NO (Yes in parts)
37	Portsmouth Harbour	Environmentally sensitive due to mudflats waders and other sea birds Boating location Commercial interests	High 9A/8B	Note only certain areas Harbour can be protected as tidal currents are too strong to boom the entrance. Harbour inter- connected with Langstone Harbour.	Gosport DC, Fareham DC, Portsmout h CC, Hampshire CC	QHM Portsmou th	1	1	YES

Cell	Coastal Area	Prioritisation Criteria	Habitat Type (Ref Appendix	Comments	Authority the cell is located in		Priority 1 = highest 4 = lowest		Protection Possible ?
			1)		Council/ Local Authority	Port/ Harbour Authority	Sum -mer	Win- ter	
38	Nettlestone Point to Node's Point to Portsmouth to West Winner Point	Recreation, Commercial Fishing Environmentally Sensitive Marine conservation site waders & wildfowl	Low Medium 1A/3A/5	Open coast, unsuitable for booming	Portsmout h CC, HCC	QHM Portsmou th	2	1	NO
39	Nodes Point to Foreland Point(excluding Bembridge Harbour)	Tourism Recreation Marine conservation	Low 1A, 2A, 3A	Rocky shore too exposed. Access very difficult	loWC	QHM Portsmou th	1	1	NO
40	Bembridge Harbour	Recreation, Tourism Commercial Fishing Commercial interests	High 9A	Not included in QHM Portsmouth's jurisdiction	IoWC		1	1	YES
41	Hayling Island Sea front	Recreation Tourism Vegetated shingle and dune communities	Low- Medium IB, 6A	Open coast, unsuitable for booming	Havant DC, HCC	QHM Portsmou th	2	2	NO

Cell	Coastal Area	Prioritisation Criteria	Habitat Type (Ref Appendix	Comments	Authority the cell is located in		Priority 1 = highest 4 = lowest		Protection Possible ?
			1)		Council/ Local Authority	Port/ Harbour Authority	Sum -mer	Win- ter	
42	Langstone & Chichester Harbour	Environmentally sensitive due to mudflats waders and other sea birds. Marine mammals Boating location Commercial interests	High 9A	Chichester Harbour plan due to be tested in Sept 2000. Note, only certain areas of both Harbours can be protected as tidal currents are too strong to boom the entrance. Sub prioritisation required. Harbours are inter- connected.	Portsmout h CC, Havant DC, Chichester DC, HCC, West Sussex CC	Chichest er Harbour Conserva ncy Langston e Harbour Board	1	1	YES
43	Chichester Harbour entrance (east) to Selsey Bill	Recreation Tourism	Medium 5	Open coast, unsuitable for booming	Chichester DC, West Sussex CC		2	2	NO
44	Selsey Bill to Pagham Harbour entrance (east)	Recreation, Tourism	Medium 5	Open coast unsuitable for booming	Chichester DC, West Sussex CC		3	2	NO

Cell	Coastal Area	Prioritisation Criteria	Habitat Type (Ref Appendix	Comments	Authority the cell is located in		Priority 1 = highest 4 = lowest		Protection Possible ?
			1)		Council/ Local Authority	Port/ Harbour Authority	Sum -mer	Win- ter	
45	Pagham Harbour	Environmentally Sensitive due to mudflats and saltmarsh, waders and other seabirds site Recreation	9A, 10A		Chichester DC, West Sussex CC	Pagham Harbour Board	1	1	YES

#### ANNEX 7

### **DATA AND INFORMATION**

Any incident that results in pollutant or chemical pollution at sea will generate an immediate requirement for a range of reliable data collected before, during and after the incident.

Data will be required by the Solent Environment Group to:

- enable risk assessment of implications for human health and environmental damage likely to result from pollution and / or response and clean-up operations, to be carried out to inform advice on response strategies
- enable the best possible advice to be provided to the response units, and hence obtain maximum environmental benefit from the response operations
- ♦ enable individual statutory agencies within the Solent Environment Group to fulfil their obligations in relation to the incident
- provide accurate, real-time information on any public health and environmental impacts of an incident to politicians, the media and the general public
- enable any short, medium and long-term impacts of a pollution incident to be described, quantified and evaluated

### **DATA REQUIREMENTS**

### **TYPES OF DATA**

Data requirements are likely to fall into the following broad categories:

- pre-incident baseline data
- data required for operational purposes (including: fate and behaviour of pollutant, risk assessment, provision of environmental advice, monitoring progress of the incident and of response / clean-up operations)
- ♦ data on the effects of the incident. Although primarily required for impact assessment in the short, medium and long-term (human health and natural environment), these data also provides vital feedback to operational advice

### **EVOLUTION OF DATA REQUIREMENTS**

Data requirements during and after an incident resulting in marine pollution are likely to evolve from the early to later stages of the incident, depending on the scale of the incident, the nature of the pollutant, the response operations and scale of impact assessment.

The immediate and urgent tasks at the start of an incident are, in order of priority:

determination of human population at risk

- ◆ real-time 'stock assessments' of environment and wildlife threatened by contamination
- ♦ (re)establishment of data baselines to inform later impact assessment (requirements should be identified in planning stage)
- collection of data on immediate acute impacts on health and wildlife

The work of field data collectors will evolve as the incident progresses and may rapidly become impact assessment only. Collection of data in support of impact assessment of the chronic health effects, subtidal and water column, and intertidal sediment and biota must be anticipated as lasting for a significantly longer period than the at-sea and shoreline operational responses respectively.

### **Pre-Incident Baseline Data**

Consideration should be given to the collation of the following physical, biological and environmental health information:

### **Human health**

- ➤ Population distribution See (x13.00 Population Information for the Solent area) and potential exposure to pollutant (including aerosols)
- epidemiology

Will require advice from a health specialist.

## **Physical environment**

- > tides, currents, inshore bathymetry
- geomorphology and topography of shorelines, coastal hinterland and nearshore seabed.

## **Conservation designations**

- ➤ international and national nature conservation designations (including: SAC, SPA, Ramsar, Biosphere reserve, MCZ, NNR, SSSI, ASSI, GCR etc)
- National Parks, Regional Parks
- Scheduled Ancient Monuments
- local conservation and other designations (AONB, RIGs, LNR, Heritage Coast,)
- other sites of nature conservation or cultural importance / sensitivity

## **Geological features**

- ➤ Geological Conservation Review (GCR) sites boundaries, priority areas and any associated images and data.
- Regionally Important Geological Sites (RIGS) boundaries, priority areas and any associated images and data.
- Contact data for involving appropriate geological expertise
- All available shore profile data

### **Biological information:**

Distribution, size and seasonal variations in populations of:

- marine mammals (cetaceans, seals) & otters
- birds (seabirds, seaduck, wetland birds (wildfowl and waders))
- herptiles (marine turtles)
- > fish
- > shellfish and other marine invertebrates
- flora (eelgrass, algae, saltmarsh plants)
- > potentially vulnerable terrestrial flora (including lichens) and fauna

### Human and ecological food chains:

- livestock distrubution & potential exposure to pollutant (including aerosols)
- fisheries

#### **Habitats**

- ➤ Distribution of major intertidal and nearshore subtidal rock & sediment habitats (N.B.: inaccessible shores as well as beaches).
- ➤ Distribution of major coastal and terrestrial habitats on backshore and in coastal hinterland (e.g. dunes, saltmarsh, cliffs)

### **Archaeology**

Coastal, intertidal and subtidal structures of national and local archaeological and historical importance (e.g. wrecks, sunken forests, harbour / quay walls, lime kilns, iron age forts, burial chambers)

### **Cultural features**

Historic landscapes, listed buildings

#### Pollutant benchmarks

Background data on contaminant levels and variation in sediment, water, air, soil, biota (fish, shellfish, avian, mammal, terrestrial vegetation)

### **Background information**

In addition to specific datasets, a range of background information will be of potential value to the Solent Environment Group.

### generic technical information

- potential effects of different pollutants
- response techniques and their physical and chemical effects
- oil and chemical hazard data sheets

### > sensitivity of environmental features

 synthesised site specific assessments and predicted effects of pollutants and response / clean-up techniques on environmental features based on generic information and previous local & / or other relevant experience to support NFBA

## > response contingency planning

- access, booming, temporary waste holding etc
- legal information
- legal requirements and obligations (e.g. FEPA, fisheries closure orders, consultation requirements for dispersant use within marine SACs, MCZs)

### **OPERATIONAL DATA REQUIREMENTS**

### Prevailing physical conditions

- weather and sea conditions:
- > specific tidal flow information.

## Fate & behaviour of pollutant

The following data are essential to the determination of operational advice and impact assessment by the Solent Environment Group:

- the type & properties, position, extent, amount, condition and behaviour of pollutant at sea in real time
- actual and predicted future track of pollutant at sea over time
- areas of shoreline polluted and predicted as likely to become polluted and the predicted timings
- actual and predicted distribution and concentration of airborne pollutant and aerosols
- position, extent, amount, condition, behaviour and evolution of pollutant on shore

#### Wildlife resource

Compilation of baseline data should identify most resources. However, part of that resource may be mobile or seasonal. Also baseline data may be sparse or not recent. Therefore, real-time 'stock' and risk assessments of wildlife and environmental features potentially at risk of impact may be necessary to support the provision of operational advice. Where necessary and when time permits, establishment of additional baseline data for locations threatened by pollution may be valuable to support later impact assessment.

Depending on local circumstances, the highest priorities for real time wildlife stock assessments are likely to include marine mammals, seabirds, seaduck at sea, and waders and wildfowl in estuaries and on the open coast.

### Response to salvage and pollution

Timely information on salvage and response options and plans, and their predicted outcome, from the SCU, MRC and / or SRC as appropriate is vital to enable the best possible advice to be provided to the response units by the Solent Environment Group / ELO's.

Prompt feedback on the efficacy and outcome of response actions taken is also vital. Although these data should be provided to the Solent Environment Group by the appropriate response unit, additional information on outcome of shoreline response from an environmental perspective should be collected by Solent Environment Group field workers.

### DATA ON THE EFFECTS OF POLLUTION INCIDENT

### Wildlife casualties

After human health, the greatest public and political demand for information will be the immediate, acute, effects of the incident on wildlife, especially bird and mammal casualties. The same information will also be vital for impact assessment.

### Fish, shellfish and other human foodstuffs

Data will be urgently required to ensure the safety any species used as human food which may be liable to contamination by the pollutant. In addition to the clearly obvious fish and shellfish, this may include species of seaweed or other intertidal plants, and agricultural livestock in the proximity of contaminated shorelines or downwind of and exposed to pollutant aerosols.

### Biological and habitat contamination and effects / impacts / mortalities

Data on the contamination of subtidal, intertidal and terrestrial habitats and their associated animals and plants will be required to enable:

- pre-planned identification of environmental priorities for response or cleaning
- pre-planned identification of environmental features requiring safeguard from inappropriate response and cleaning
- quantification and assessment of ecological impacts of incident, including human and non-human food chain effects

Although feedback from response units will provide a broad description of the contamination, it should be anticipated that, depending on local circumstances, specific data will also be required from an environmental perspective. The requirement for this data to inform impact assessment will almost certainly have a longer time scale than the response.

Although the specific purpose of SCAT is to provide shoreline clean-up assessments to an SRC, the information they generate will also be required for impact assessment.

## 'Secondary' effects on wildlife and habitats arising from operational response

Data on the effects of response and cleaning actions on subtidal, intertidal and terrestrial habitats and their associated animals and plants will be required to enable:

- reassessment and refinement of Solent Environment Group advice
- determination of when agreed end points for clean-up response have been met
- quantification and assessment of human health and ecological impacts of the response (including effects on human and non-human food chains)

The requirement for these data to inform impact assessment will almost certainly have a longer time scale than the response

## Effects of pollutant and subsequent response on geology, geomorphology, archeology and cultural artifacts

Data on the contamination, effects of contamination and the effects of response and cleaning actions will be required to enable:

- identification of environmental priorities for response and advice on appropriate response
- identification of features requiring safeguard from inappropriate response and cleaning;
- quantification and assessment of impacts of an incident

### Specific data to support impact assessment

Assessment of the impact of a pollution incident will depend on the comprehensiveness and quality of the data listed above. Assessment will also depend on medium to long term monitoring of:

- pollutant contamination of water column, subtidal & intertidal sediment and biota, including species in human and marine food chains
- lethal and sublethal effects on species of ecological importance
- specific data reflecting local circumstances may be necessary; as far as possible, the scope of these data requirements should be identified in local EG contingency plans

### **MANAGEMENT OF DATA**

### **Operational Data Sources**

Operational data acquired by the Solent Environment Group will fall into three broad categories:

data supplied by the MCA and response units;

- data collected by the Solent Environment Group, either directly or indirectly through support organisations or contractors;
- unsolicited data and information from the general public.

## Management of Data Collection by the Solent Environment Group

It is essential that the collection of data be carefully integrated within and between statutory agencies to minimise overlap, duplication of field effort and missing events and information. This integration is a vital part of contingency planning at both local and national scales. Data collection is likely to be managed both directly by the Solent Environment Group and indirectly by the individual EG members. Solent Environment Group staff dedicated to the management of field workers, the data collected and the data supplied by members of the Solent Environment Group and others will be essential.

Specific tasks of the Solent Environment Group may include:

- management of field workers, including briefing and debriefing, health and safety
- management of directly collected data may include quality control, data entry, collation, interpretation and presentation;
- integration, collation, interpretation and presentation of data collected from sources external to the Solent Environment Group.

## Data Quality Control, Standardisation of Sampling and Analytical Protocols

Accurate, reliable data are vital, both for operational and impact assessment purposes, as are the use of the most appropriate techniques for analysis of samples. Standardisation of survey, monitoring and analysis through nationally agreed protocols and quality control throughout an incident and subsequent impact assessment will be a crucial element in ensuring that the data collected are entirely credible.

National agreements between the competent authorities / agencies should be reached on the following:

- protocols on the sampling and analysis of water, sediment and biological samples for the levels of contamination by pollutant. (Protocols should include sampling methodology and sample storage as well as analytical techniques);
- protocols on the collection, identification and recording of dead mammals, birds, invertebrates and other wildlife.

**ANNEX 8** 

### **Impact Assessment**

Reference - Draft MCA Scientific, Technical and Operational Advice Note – STOp 1/2001 entitled Maritime Pollution Response in the UK The Environment Group.

The description, quantification and evaluation of effects of maritime pollution incidents

### INTRODUCTION

Any incident resulting in marine pollution may have a public health or an environmental impact. There will inevitably be both public and political expectations of those involved in the incident and its aftermath to be able to quantify and describe how public health and the environment were affected by it.

Contingency planning is necessary to prepare for the assessment of the actual effects of significant pollution incidents, to enable assessment action to be taken proactively rather than reactively, and to match the scale of impact assessment action to scale of incident. Strategic planning at the time of an incident is also necessary to meet the assessment requirements of the specific incident.

Assessment should be based upon objective, accurate information and data rather than assumption and perceived wisdom.

There are clear differences between the objectives of impact assessment and providing operational advice to response units; there are also differences in outputs, timing, decision making, resourcing and political framework. There are both common and different data requirements. The geographical scope of impact assessment and operational response planning also differ.

These differences necessitate clear demarcation between the planning and implementation of the two Solent Environment Group roles. In a significant pollution incident it will almost certainly be necessary for the impact assessment function to be the task of a separate sub-group. However, there must be close integration and liaison between the sub-group and the rest of the Solent Environment Group; not least to meet the common data requirements.

An IA sub-group will reduce the need for government to form an official scientific committee, such as SEEEC or ESGOSS, to co-ordinate long term assessment work. However, in the event of a large scale incident where such a committee may be established, the early work carried out by the IA sub-group will be vital to an authoritative impact assessment and the sub-group should be prepared for an effective hand-over of responsibility and information if necessary.

**ANNEX 9** 

## **CONTACT DIRECTORY**

**Meeting Locations, Core Group and Associate Members** 

Refer to Annex 9 kept separately.

# **Incident Form / Check List**

Incident	Date

On receipt of confirmed alert of incident requiring establishment of the Solent Environment Group (SEG):			
ACTI	ON	Date / time completed	
1	Establish & keep a log		
2	Obtain comprehensive briefing from MCA  – see ESSENTIAL INFORMATION CHECKLIST		
3	Determine scale of incident: does SEG need to be convened?		
	YES – go to A NO – go to B		
Α	INCIDENT REQUIRES EG TO BE CONVENED		
<b>A</b> 1	Establish contact with core SEG members - brief / receive briefing		
	- agree initial advice to MCA / response units		
	<ul><li>agree nominations for ELO's</li><li>agree location of SEG</li></ul>		
	- agree time to convene		
A2	Alert, brief and mobilise ELO's - SCU		
	- MRC		
	- SRC		
A3	Provide initial advice to MCA / response units		
<b>A4</b>	Ensure alert of all relevant bodies and individuals is initiated – see <i>NOTIFICATION CHECKLIST</i>		
A5	Mobilise basic admin support		
<b>A6</b>	Relocate to SEG location at agreed time		
<b>A7</b>	Obtain updated briefing from MCA or other key source of information		
A8	Establish & maintain direct communications with ELO's		
<b>A9</b>	Convene meeting of core SEG  – see GENERIC FIRST MEETING AGENDA		
A10	Provide comprehensive briefing, via ELO's, on health and environmental priorities and advice to response units.		
A11	Ensure all other identified & agreed tasks are actioned.		
A12	Ensure all essential SEG information requirements		

A13	i.	
Δ12	are identified.	
$ \sim$ $1$ $\sim$	Ensure all essential information and data	
	acquisition to inform operational advice is actioned.	
A14		
	to the scale and potential effect of the incident is	
	inititated.	
A15	Ensure further alert and mobilisation of additional	
	staff and resources continue as required.	
A16		
7110	substitutes for SEG key & support roles are notified	
	and alerted in good time.	
A17	Ensure establishment and mobilisation of	
	necessary health and scientific personnel	
A18		
A19	Give regular briefings to SEG and room-briefs to	
7110	support staff	
A20	Maintain close liaison with Impact Assessment	
7120	Coordinator.	
A21	Ensure Health & Safety procedures for fieldworkers	
/ 12 !	are implemented and managed	
	are impremented and managed	
В	INCIDENT DOES NOT DECLUDE ES TO DE CO	NIVENIED
	INCIDENT DOES NOT REQUIRE EG TO BE CO	JINVEINED
B1		
1	Establish contact with core SEG members and	
	other key organisations relevant to incident.	
	other key organisations relevant to incident brief / receive briefing	
	other key organisations relevant to incident brief / receive briefing use ESSENTIAL INFORMATION CHECKLIST	
	other key organisations relevant to incident.  - brief / receive briefing     use ESSENTIAL INFORMATION CHECKLIST  - agree initial advice to MCA / response units	
	other key organisations relevant to incident.  - brief / receive briefing	
	other key organisations relevant to incident.  - brief / receive briefing	
B2	other key organisations relevant to incident.  - brief / receive briefing	
B2 B3	other key organisations relevant to incident.  - brief / receive briefing	
	other key organisations relevant to incident.  - brief / receive briefing	
	other key organisations relevant to incident.  - brief / receive briefing	
В3	other key organisations relevant to incident.  - brief / receive briefing	
В3	other key organisations relevant to incident.  - brief / receive briefing	
В3	other key organisations relevant to incident.  - brief / receive briefing         use ESSENTIAL INFORMATION CHECKLIST  - agree initial advice to MCA / response units  - agree procedure in the event that incident escalates.  Provide initial advice to MCA / response units.  Ensure alert of all relevant bodies and individuals is initiated – see NOTIFICATION CHECKLIST.  Establish and maintain routine exchange of information with MCA or appropriate response unit(s).	
B3	other key organisations relevant to incident.  - brief / receive briefing	
B3	other key organisations relevant to incident.  - brief / receive briefing         use ESSENTIAL INFORMATION CHECKLIST  - agree initial advice to MCA / response units  - agree procedure in the event that incident escalates.  Provide initial advice to MCA / response units.  Ensure alert of all relevant bodies and individuals is initiated – see NOTIFICATION CHECKLIST.  Establish and maintain routine exchange of information with MCA or appropriate response unit(s).  Consider transferring Chair to more relevant lead body if appropriate	
B3 B4 B5	other key organisations relevant to incident.  - brief / receive briefing	
B3 B4 B5	other key organisations relevant to incident.  - brief / receive briefing         use ESSENTIAL INFORMATION CHECKLIST  - agree initial advice to MCA / response units  - agree procedure in the event that incident escalates.  Provide initial advice to MCA / response units.  Ensure alert of all relevant bodies and individuals is initiated – see NOTIFICATION CHECKLIST.  Establish and maintain routine exchange of information with MCA or appropriate response unit(s).  Consider transferring Chair to more relevant lead body if appropriate	
B3 B4 B5	other key organisations relevant to incident.  - brief / receive briefing     use ESSENTIAL INFORMATION CHECKLIST  - agree initial advice to MCA / response units  - agree procedure in the event that incident escalates.  Provide initial advice to MCA / response units.  Ensure alert of all relevant bodies and individuals is initiated – see NOTIFICATION CHECKLIST.  Establish and maintain routine exchange of information with MCA or appropriate response unit(s).  Consider transferring Chair to more relevant lead body if appropriate  Establish and maintain routine exchange of information with key SEG members relevant to incident.	
B3 B4 B5 B6	other key organisations relevant to incident.  - brief / receive briefing     use ESSENTIAL INFORMATION CHECKLIST  - agree initial advice to MCA / response units  - agree procedure in the event that incident escalates.  Provide initial advice to MCA / response units.  Ensure alert of all relevant bodies and individuals is initiated – see NOTIFICATION CHECKLIST.  Establish and maintain routine exchange of information with MCA or appropriate response unit(s).  Consider transferring Chair to more relevant lead body if appropriate  Establish and maintain routine exchange of information with key SEG members relevant to incident.  Provide comprehensive briefing on health and	
B3 B4 B5 B6	other key organisations relevant to incident.  - brief / receive briefing     use ESSENTIAL INFORMATION CHECKLIST  - agree initial advice to MCA / response units  - agree procedure in the event that incident escalates.  Provide initial advice to MCA / response units.  Ensure alert of all relevant bodies and individuals is initiated – see NOTIFICATION CHECKLIST.  Establish and maintain routine exchange of information with MCA or appropriate response unit(s).  Consider transferring Chair to more relevant lead body if appropriate  Establish and maintain routine exchange of information with key SEG members relevant to incident.  Provide comprehensive briefing on health and environmental priorities and advice to response	
B3 B4 B5 B6	other key organisations relevant to incident.  - brief / receive briefing	
B3 B4 B5 B6	other key organisations relevant to incident.  - brief / receive briefing	
B3 B4 B5 B6	other key organisations relevant to incident.  - brief / receive briefing	

personnel in the event that incident escalates.

#### REPORTING POLLUTION: FORMAT OF CG77 POLREP

Part 1 Information, which should be provided, in an Initial Pollution Report

A Classification of Report: (i) Doubtful

(ii) Probable, or

(iii) Confirmed

- B Date and time pollution was observed/reported. Plus the identify of the observer/ reporter.
- C Position and extent of pollution. by latitude/longitude. Also if possible, state range and bearing from some prominent landmark or Decca position and estimated quantity of oil, e.g. size of polluted area, number of tonnes of spilled or containers/drums etc lost.
- D Tide and wind speed and direction.
- E Weather conditions and sea state.
- F Characteristics of pollution, giving type, e.g. crude oil, packaged or bulk chemicals, rubbish etc. For chemicals, the proper name should be given, plus the United Nations number if known. The appearance, e.g. liquid, floating solid, liquid oil, sludge, tarry lumps, weathered oil, discoloration of sea, visible vapour etc should also be noted.
- G Source and cause of pollution e.g. is the discharge from a vessel, pipeline etc. If from a vessel, is it as a result of a deliberate discharge or a casualty? Give a brief description, including the name, type, size, nationality and Port of Registry of the vessel. If proceeding on its way give course, speed and destination, if known.
- H Details of all vessels in the area is to be given if the polluter cannot be identified and the spill is considered to be of recent origin.
- J Details of photographs taken, plus any samples collected for analysis.
- K Remedial action taken, or intended, to deal with spillage.
- L Prediction of likely effects of pollution. e.g. estimated time of arrival on beach.
- M Names of those informed.
- N Any other relevant information. e.g. names of other witnesses, references to other instances of pollution pointing to a possible source.

#### Part 2 Supplementary Information to be provided later.

#### **NOTES**

- 1. POLREPS should be used for oil, chemical or dangerous substance spillage's and for illegal discharges of garbage.
- 2. All messages should be pre-fixed by the code word POLREP followed by a serial number issued by the operator. 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.
- Grounding, collisions or breakdowns of oil tankers or other vessels carrying potential pollutants, including bunkers, should be treated as serious incidents with a classification of "PROBABLE" until proved otherwise. The first report is assumed to be sitrep 1 with subsequent reports being numbered sequentially.
- 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, HM Coastguard to inform COPOs/LOPOs in the counties immediately adjacent to risk.
- 5. Although Chief Surveyors of Marine Regions are not directly involved with C/P operations, it is necessary to include them as addressees to give them notice of possible involvement with salvage, surveying a casualty or possible prosecutions under current regulations.
- 6. Care should be taken to avoid undue escalation of UNCONFIRMED pollution incidents with consequent misleading publicity.

# SOLENT ENVIRONMENT GROUP (SEG) GENERIC FIRST MEETING AGENDA FOR MARITIME POLLUTION INCIDENTS

- 1. Introductions
  - 1.1. Personnel
  - 1.2. SEG accommodation fire precautions / H&S issues
- 2. Incident briefing use ESSENTIAL INFORMATION CHECKLIST
- 3. Key roles
  - 3.1. Allocation of key roles & confirmation of roleholders
  - 3.2. Briefing to SEG on identities and locations of ELO's
- 4. Identification & analysis of immediate risks and threats
  - 4.1. Identification of public health risks
  - 4.2. Identification of immediate environmental threats
  - 4.3. Identification of immediate information requirements
    - fate & behaviour of pollutant
    - immediate operational advice requirements
    - immediate impact assessment requirements
  - 4.4. Identification of health and environmental priorities and initial advice to response units.
  - 4.5. Identification of immediate tasks & allocation of tasks
  - 4.6. Identification of further personnel and resources required
- 5. Establish timetable for Group briefings / meetings and standing agenda items
- 6. Establish communications protocol
- 7. Establish working procedure

INCIDENT:

**ANNEX 13** 

#### SOLENT ENVIRONMENT GROUP CHECKLIST OF ESSENTIAL INFORMATION TO BE OBTAINED DURING INITIAL ALERT FOR MARITIME **POLLUTION INCIDENTS**

INCIDENT:	DATE:			
Questions to MCA or notifying organisation:				
What is the nature of the incident?				
What is the pollutant?				
specific name				
• composition				
What is the scale of pollution?				
What is the exact location of the incident?				
What time did the incident occur?				
What is the current extent of the pollution?				
• aerial				
at sea				
• on shore				
Is there a known risk to human health?				
What is the risk of further pollution?				
What is the risk of the casualty / source of pollution moving elsewhere?				
What response action has been taken?				
What response action is planned?				
Who has been notified?				
- record on NOTIFICATION CHECKLIST				
Request copies of chemical / hazard data sheets for pollutant and all other potential pollutants which may be released following incident.				

**ANNEX 14 – Media Holding Statement** 

**Deleted May 2012** 

**ANNEX 15 – Media Statement** 

**Deleted May 2012** 

# HEALTH AND SAFETY REGULATIONS WHICH ARE LIKELY TO APPLY TO MAJOR CLEAN-UP OPERATIONS

The Health & Safety (First Aid) Regulations 1981

Noise at Work Regulations 1989

Management of Health and Safety at Work Regulations 1999

Manual Handling Operations Regulations 1992

Personal Protective Equipment at Work Regulations 1992

The Provision and Use of Work Equipment Regulations 1998

Personal Protective Equipment (Amendment) Regulations 1994

The Control of Substances Hazardous to Health Regulations 1999

Construction (Design and Management) Regulations 1994

Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995

Construction (Health, Safety and Welfare) Regulations 1996

(NB Each set of Regulations listed has a companion Approved Code of Practice or Guidance on Regulations).

SEG Mark2 - ANNEXES concentratedver3-dec03/incidents/dec03