INTERSPILL 2000

28th /30th November 2000

The Roles of Port and Local Government Authorities, and their Attitudes to Central Government's Responsibilities and Requirements

By

Captain M. C. Andrews
Harbourmaster
Milford Haven Port Authority

Introduction

Ports and Harbours vary from massive complexes covering miles of waterside frontage and employing large numbers of people down to single terminal operations in the middle of nowhere employing just a few. Irrespective of their size they have one common aim and that is to allow their use by ships for the purpose of loading/discharging cargos. It is also a fact that the passage into or out of a Port or Harbour, within congested, relatively shallow, waters perhaps surrounded by shoals and sometimes with complex tidal regimes, represents one of the most hazardous stages of any vessels voyage. Indeed, it is a well known fact that the majority of incidents involving shipping occurs within pilotage waters. However, placed in context against the numbers of traffic movements and cargo handled the incident record of ports is generally very good. In addition, Ports are striving to improve on shipping safety and the development within the U.K. of the Port Marine Safety Code is a excellent example of this. Nevertheless, as long as shipping needs to use a Port incidents can and will continue to occur. The majority will, like now, be relatively minor and require little or no outside assistance to resolve them. Occasionally however, there will be a major incident that will require expert assistance to be called in. Provisionally the services of professional salvors.

Oil Pollution Planning

The requirement to prepare a contingency plan for oil pollution is set out in the Merchant Shipping (Oil Pollution Preparedness, Response and Cooperation Convention) Regulations 1998.

This states:-

"Application

3.--(1) In their application to harbours and oil handling facilities these Regulations apply to:

(a) any harbour for which there is a statutory harbour authority having an annual turnover, as defined in the Schedule hereto, of more than fl million:

(b) any other harbour, and any oil handling facility, offering berths alongside. on buoys or at anchor, to ships of over 400 GT or oil tankers of over 150 GT

(c) any other harbour, and any oil handling facility, in respect of which the Secretary of State has served the harbour authority or operator (as the case may be) with a notice stating that he is of the opinion that maritime activities are undertaken at that harbour or facility which involve a significant risk of discharge of over 10 tonnes of oil; and

(d) any other harbour or oil handling facility in respect of which the Secretary of State has served the harbour authority or operator (as the case may be) a notice stating that he is of the opinion that it is located in an area of significant environmental sensitivity, or in an area where a discharge of oil or other substances could cause significant economic damage.

(2) in their application to offshore installations, these Regulations apply to every offshore installation in United Kingdom waters and in any area designated under the Continental Shelf Act 1964(a)."

Oil pollution emergency plans

4.-(1) Every—

(a) harbour authority of a harbour to which these Regulations apply;

(b) operator of an oil handling facility to which these Regulations apply; and

(c) operator of an offshore installation to which these Regulations apply shall have an oil pollution emergency plan in accordance with this regulation.

(2) There shall be a separate plan for each harbour, oil handling facility and offshore installation except that:

(a) there may be joint plans between harbour authorities and operators of oil handling facilities, within an area;

(b) there may be joint plans in respect of offshore installations and oil handling facilities which are pipelines associated with that installation.

(3) (a) Subject to paragraphs (4) and (7) below, within 15 months of the coming into force of these Regulations every harbour authority and every operator shall submit an oil pollution emergency plan relating to its harbour or oil handling facility or offshore installation, as the case may be, to the MCA for approval.

(b) In preparing an oil pollution emergency plan a harbour authority or operator shall take into account any guidance issued by the tviCA.

(5) (a) Every harbour authority and every operator shall fully review its oil pollution emergency plan no later than 5 years after submission of the plan in accordance with paragraph (3) or (4) above, as the case may be, and re-submit a plan within that period.

(b) Where any major change occurs which affects or could affect the validity or effectiveness of a plan to a material extent then the harbour authority of operator in question shall submit a new plan, or amendments to the existing plan, within 3 months of such change becoming known, to that authority or operator.

(6) Where the MCA consider that any plan or amendment submitted under paragraph (3), (4) or (5) above is:

(i) not compatible with the National Contingency Plan for the time being in force;

(ii) not appropriate for dealing with oil pollution incidents which may occur in the area in which the harbour authority or operator has jurisdiction or exercises responsibility,

the MCA may, after consultation with the harbour authority or operator, direct that the plan shall be altered accordingly. It shall be the duty of the harbour authority or operator to alter the plan in accordance with any such direction.

(8) It shall be the duty of every operator and every harbour authority to implement its oil pollution emergency plan approved or altered under this regulation in the event of an oil pollution incident.

Reporting of incidents: harbour authorities and oil handling facilities

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

Offences

7.-(1) Any harbour authority or any operator of an offshore installation or of an oil handling facility who without reasonable cause:

(a) fails to submit or re-submit an oil pollution emergency plan in accordance with regulation 4(3), (4) or (5);

(b) does not maintain an oil pollution emergency plan, as approved (with alterations directed by the MCA or the Secretary of State, as the case may be, if so directed) under regulation 4(5) to (7); or

(c) fails to implement its oil pollution emergency plan in contravention of regulation 4(8),

shall be guilty of an offence punishable on summary conviction by a fine not exceeding the statutory maximum or on conviction on indictment by a fine.

(2) Any person required to make a report under regulation 5 or 6, as the case may be who, without reasonable cause, fails to comply with that requirement in all respects shall be guilty of an offence punishable on summary conviction by a fine not exceeding the statutory maximum or on conviction on indictment by a fine."

Port Authorities Views

In the best of all possible worlds there is no reason why oil pollution should ever occur during loading or discharging a tanker, but unfortunately, the assumes the equipment on the terminal and aboard the ship is of a perfect design, has been properly maintained and operated and that the human beings involved are infallible and no mechanical failure of plant can ever occur. It must be accepted that this situation has never, and will never, exist and therefore some pollution in ports in inevitable. The amount of pollution can certainly be greatly decreased if loading and discharging procedures are carefully controlled and planning ensures that plant and labour are readily available to deal with the pollution. But the overriding requirement is open, voluntary cooperation and continuous effort and vigilance.

Types of Oil Pollutions

I think within most ports and certainly oil ports pollutions fall into four categories.

1. Minor pollutions involving a few litres caused by minor overflows of cargo tanks, tank cleaning operations, malfunction of valves and human error which may occur anywhere within the port area.

2. Infrequent pollutions up to 20 tonnes as a consequence of damage or mechanical failure.

3. Pollutions up to 200 tonnes caused by fire, explosion or grounding etc.

4. Catastrophic pollutions over 200 tonnes caused by collision, grounding or explosion.

Most ports and indeed all major ports have had contingency plans to deal with oil pollutions in one form or another over the last 40 years. Generally speaking the response to pollutions has been swift and effective, however, the methods of combating spills has radically changed from dispersion, using chemicals, to mechanical recovery where possible.

OPRC Plans

The MCA guidance on the production of these plans covers

Introduction and Policies
Training and Exercise Policy
Incident Response Organisation (Command and Control)
Response Strategies
Action Sheets
Communications
Site Specific Response Information
Reports Forms and Checklists
Press and Public Information
Directories
Product Information Sheets
Report Forms and Checklists

Introduction

This section includes the purpose and scope fo the Plan, identification of authorities involved, risk assessment, environmental priorities, categories of incident and disposal of waste.

It would be helpful to consider one of the topics in a little bit more detail.

Risk Assessment

It would be fair to say that this topic is fundamental in ensuring that the contingency plan put into operation is effective. At Milford Haven consideration was given to pollution statistics from 1963 up until 1998.

This revealed:-

There have been xxxx number of spills amounting to xxxxx tonnes in total (72,000 tonnes from the "Sea Empress" in 1996),

During the same period 1.2 billion tonnes of oil has been transported into and out of the port in 118,000 vessels. There have been 12 spills over 50 tonnes.

The average number of spills from 1963 to 1998 was 34.5 per annum.

1990 to 1998 21.3 per annum
1994 to 1998 16.2 per annum

The average size of a spill is 61.07 tonnes (3.06 tonnes excluding "Sea Empress")

The average size of spills under 50 tonnes (0.346 tonnes)

Average size spill under 2 tonnes (0.067 tonnes)

Based on these figures it was decided that the risk assessment should be as follows:-

1.6.1 Risk assessment summary.

Description of incident	Likely size of Spill	Level of Risk
Oil leaking from drains into Haven	< 1 ton	Moderate
Hydraulic leak from ships deck	< 1 ton	Low
Diesel / oil leak from small boat	< 1 ton	Moderate
Pleasure boat sinking fuel surfaces	< 2 tons	Low
Road tanker fuelling hose burst	< 2 tons	Low
Bunkering and fuel tank overflows	< 5 tons	Moderate
Bunker barge fuelling hose burst	< 10 tons	Low
Slop tank over flow (oil water mix)	< 20 tons	Low
Collision involving workboat / trawler	< 25 tons	Low
Loading arm or flexible hose leak	< 60 tons	Moderate
Manifold or valve failure on deck	< 60 tons	Moderate
Discharge overboard via sea valve	< 100 tons	Low
Overflow of cargo tanks	< 100 tons	Low
Tug holing bunker tank	< 100 tons	Low
Tug holing loaded cargo tank *	< 500 tons	Low
Bunker barge sinking *	< 500 tons	Low

Underwater Haven pipeline rupture	< 1,000 tons	Low
Vessel holed / ruptured inside Haven *	< 15,000 tons	Low
Vessel stranded & ruptured outside *	< 100,000 tons	Low

As more double hulled vessels and tankers with wing ballast tanks are built and utilised then the sizes of possible spills and the risk of them happening will reduce.

Training and Exercise Policy

It is recognised that for an oil spill response to be safe and effective all personnel involved must have an understanding of their responsibilities. Response personnel also need to be competent to fulfil their roles as oil spill response. This is a specialist subject requiring specific training. The OPRC guidelines produced by the MCA require that all members of the response team should undertake training from an accredited training centre. An example of the training programme for Milford Have is set out below.

For any plan to be of value it must be familiar to those who are expected to use it. Regular exercising is therefore necessary to ensure that everyone remains familiar with the Plan and its contents.

A series of exercises will be carried out each focusing on certain aspects of response, e.g. communications, equipment deployment, notifications. To ensure each element can operate efficiently.

All elements of the response should be exercised and any lessons gleaned from debriefs incorporated in subsequent revisions of the Plan. This will include all call out procedures, dry run table top and real time full scale deployment exercises. Agencies and groups identified within the Plan must take part in exercises and for that an exercise matrix may be assistance.

An example is given below:-

Exercise Matrix

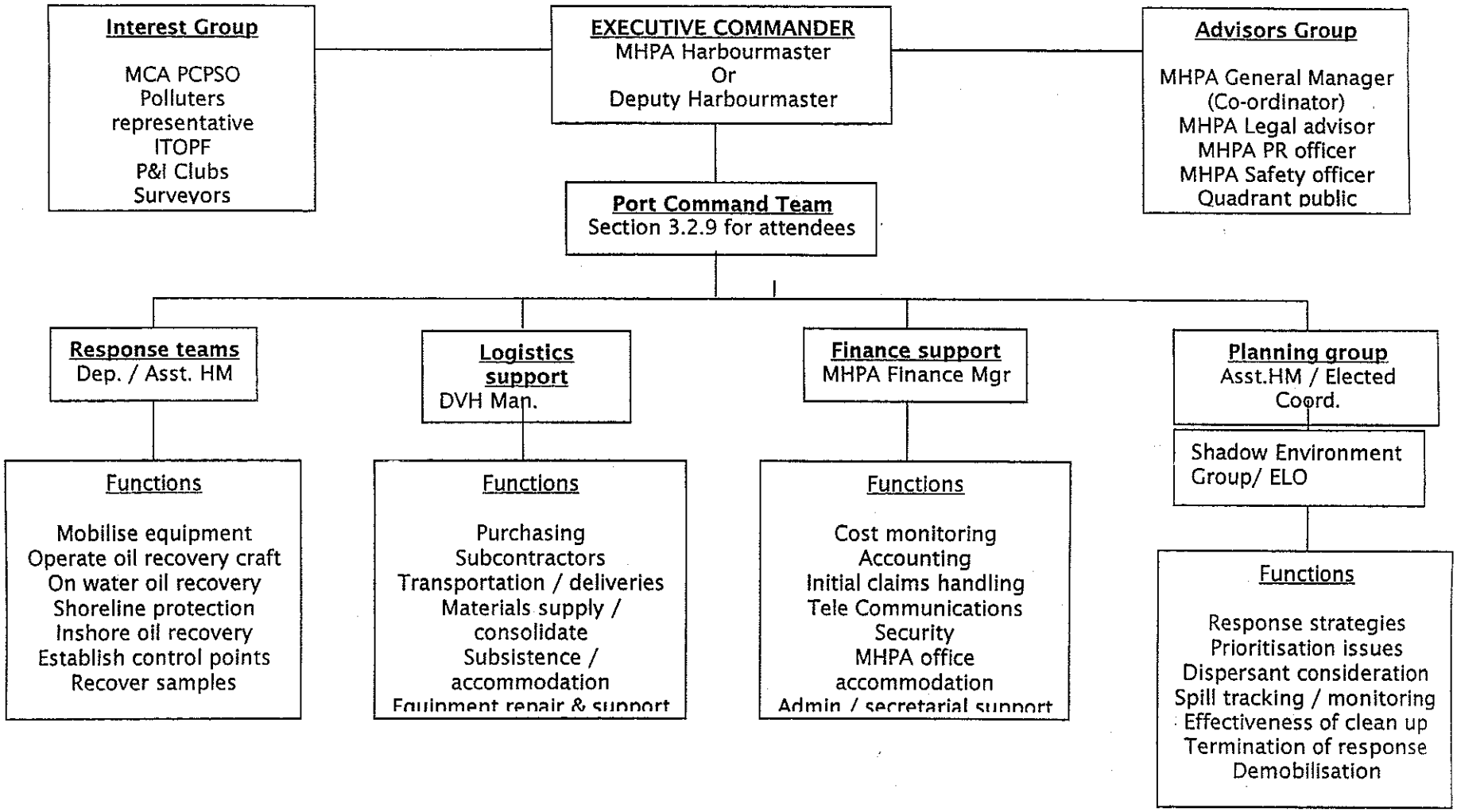
Exercise type	Personnel	Period	Objective
Operate recovery craft and deploy oil recovery equipment and booms afloat	MHPA HM rep, Rapid response teams with pilot & general boat crews	Monthly for 1 day	Rapid response personnel each train for 4 days / annum on equipment deployment, pilot boat crews 2 days / annum and general boat crews 1 day / annum

Deployment of shore sealing boom and inshore recovery equip	MHPA,EA, PCC supervisors with Oil Co's, Docks Co & PCC staff	Six Monthly for ½ day	Check validity of booming plans. Personnel familiarisation of equipment. Test capability to protect shoreline and of spilt oil recovery in shallow waters
Mobilisation test and Notification exercise	Management, Rapid response & tier 2 callout. All groups as in 6.1	Six Monthly for ¼ day	Check communications and notification procedures to others plus mobilisation of rapid response and tier 2 contractors as per notification procedures 5.1.2 and 5.1.3
Table top exercise	Management and members of Port command Team and Planning Group.	Six Monthly for ¾ day	Management response to simulated incident, tasked to give management an interactive discussion & review of plan
Full annual equipment deployment and management exercise	Management, rapid response teams, oil co's, tier 2 contractor, PCC, EA, MCA &other agencies	Annually for 1 day	Integration of management of spill and equipment deployment with outside agencies and other interested parties. Demonstrate spill response capability. Annual review with any plan revisions.

Incident Response Organisation (Command and Control)

It is vital that the command and control arrangements for any pollution, or potential pollution, incident will be well understood by all concerned. Tier 1 spills will probably be dealt with under the normal day to day operations but Tiers 2 and 3 require a robust structure.

An example is set out below.

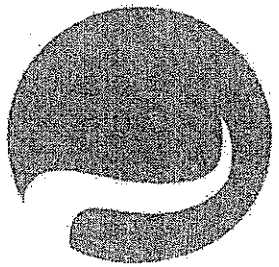


3.2.10 Organisation layout, reporting structure and group functions

The Roles of Port and Local Government Authorities, and their Attitudes to Central Government's Responsibilities and Requirements

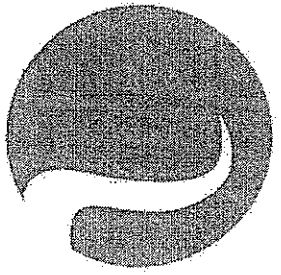
Captain Mark Andrews

Interspill 2000 Brighton 28th – 30th November 2000



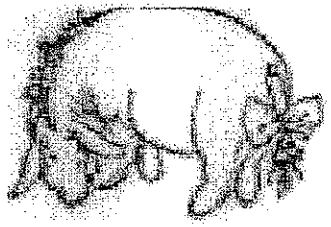
INTERSPILL 2000

- INTRODUCTION
- OPRC REGULATIONS
- MCA GUIDANCE
- MILFORD HAVEN
- LOCAL AUTHORITIES VIEWS
- CONCLUSION



"THEY'RE FUNNY THINGS ACCIDENTS. YOU NEVER HAVE THEM UNTIL YOU'RE HAVING THEM"

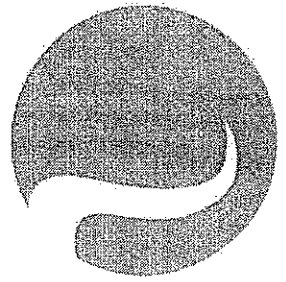
Eeyore - 'The House at Pooh Corner'



MERCHANT SHIPPING (OIL POLLUTION, RESPONSE AND CO-OPERATION CONVENTION) REGULATIONS 1988

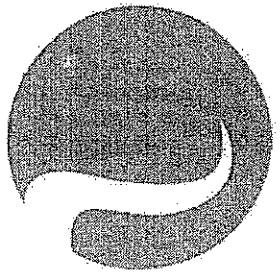
Application

- Harbour Turnover > £1 million
- Harbour or oil facility accommodating
  - vessels > 400 GT
  - tankers > 150 GT
- Harbour or oil facility at significant risk of discharge of oil > 10 tonnes.
- Harbour or oil facility located in significantly environmentally sensitive areas or when discharge of oil could cause significant economic damage.



Requirements

- Every harbour authority and oil handling facility needs an oil pollution plan.
- Compatible with NCP.
- The plans shall be separate except that joint arrangements may be made within an area.
- MCA approval.
- 5 year review.
- Implement in the event of oil pollution.



Categories of Spills

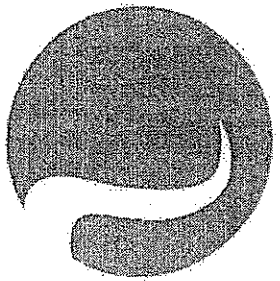
- Tier 1 – Small operational spill – local response
- Tier 2 – Medium sized spill – regional response
- Tier 3 – Large spill – national response

MCA GUIDANCE 16TH JULY 1999

PLACE	POLLUTION TO CLEAN-UP	RESPONSIBILITY LIES WITH
Outside Harbour Authority (within UK Pollution Zone)	On Water	MCA
	Shoreline (including land exposed by falling tide)	Local Authority/EHS
Within Harbour Authority	On water	Harbour Authority
	Jetties/Wharves/Structures	Harbour Authority
	Beach/Shoreline owned by H.A.	Harbour Authority
	Shoreline (including land exposed by falling tide)	Local Authority/EHS

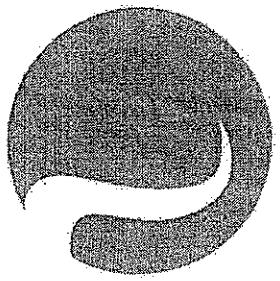
MCA Guidance

- Introduction and Policies
- Training and Exercise Policy
- Incident Response Organisation (Command and Control)
- Response Strategies
- Action Sheets
- Communications
- Site Specific Response Information
- Reports Forms and Checklists
- Press and Public Information
- Directories
- Product Information Sheets
- Report Forms and Checklists



MCA Guidance

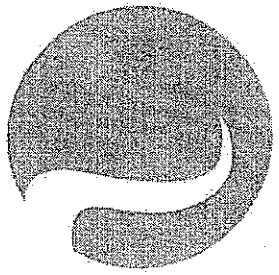
- Introduction and Policies
  - ➢Purpose – scope
  - ➢Authorities involved
  - ➢Risk Assessment
  - ➢Environmental Priorites
  - ➢Categories of Incident
  - ➢Disposal of Waste



MCA Guidance

Risk Assessment

- Milford Haven 1963 – 1998
- 1200 spills of 73284 tonnes (72,000 Sea Empress)
- 12 spills over 50 tonnes
- 1200,000,000 tonnes oil transported by 118,000 vessels
- 0.00006107 % oil spilled



MCA Guidance

- Risk Assessment
  - ➢Average No of spills:

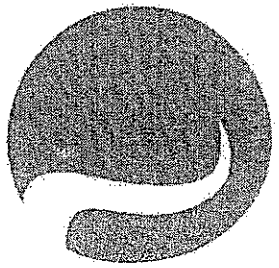
1963 – 1998	34.5/ annum
1990 – 1998	21.3/annum
1994 – 1998	16.2/annum

  - ➢Average Size of Spills:

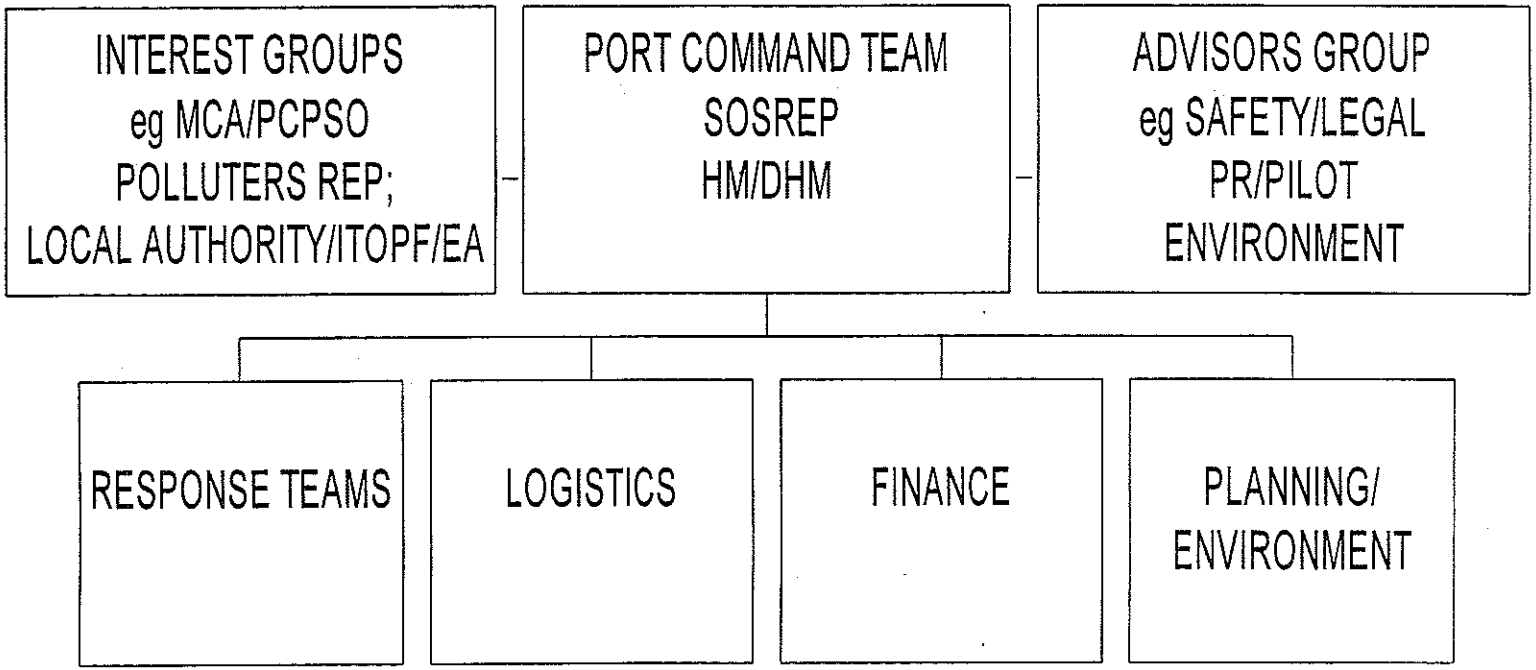
All – 61.07 tonnes (3.06 tonnes excl Sea Empress)

< 50 tonnes – 0.346 tonnes

< 2 tonnes - 0.067 tonnes



COMMAND AND CONTROL

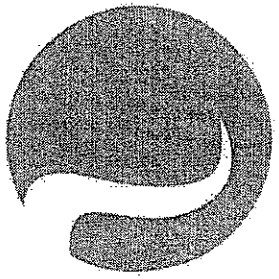


LOCAL AUTHORITIES VIEWS

- NCP responsibility to prepare, review and implement plans accepted.
- No appropriately funded statutory duty.
- Local Government Association – 1997.

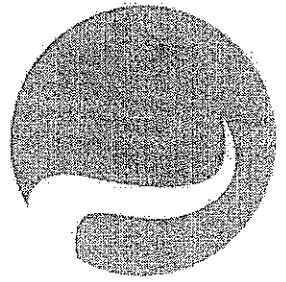
➢ Power under (S) 138 Local Government Act 1972

➢ "to incur expenditure to alleviate the effects of an emergency or disaster which threatens the environment".



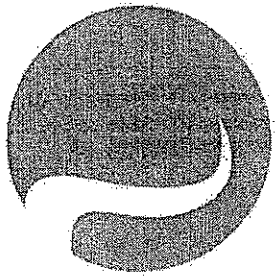
Extract from Risk Assessment Summary

Description of incident	Likely size of Spill	Level of Risk
Oil leaking from drains into Haven	< 1 ton	Moderate
Hydraulic leak from ships deck	< 1 ton	Low
Diesel / oil leak from small boat	< 1 ton	Moderate
Pleasure boat sinking fuel surfaces	< 2 tons	Low
Road tanker fuelling hose burst	< 2 tons	Low
Bunkering and fuel tank overflows	< 5 tons	Moderate



PEMBROKESHIRE COUNTY COUNCIL

- Complying with NCP requirements.
- Uncomfortable with non-statutory role.
- Funding pressure could impact adversely.
- Sea Empress experience – reasonableness of response.
- Reluctance by responsible officers to make financial decisions.



In Conclusion

- Harbour authorities comfortable with OPRC
  - Standardisation of plans.
  - Training and exercise requirements.
- Local Authorities not comfortable with OPRC.
  - Statutory duty required for shoreline cleanup.
- Potential for friction between harbour and local authorities over who should clean up oil from the shore.