ASSOCIATED BRITISH PORTS

The South Wales Ports of Newport, Cardiff, Barry, Swansea, Port Talbot and River Usk

Oil Spill Contingency Plan

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18	Marine Industries Advisor	Natural Resources Wales	Bangor
19	Rebecca Wright	Natural Resources Wales	West Region
20		MMO	
21	Intentionally Blank		
22	Emergency Planning Officer	Cardiff Council	
23	Emergency Planning Officer	Newport City Council	
24	Head of Service	Monmouthshire County Council	Cwmbran
25	Emergency Planning Officer	City & County of Swansea Neath Port Talbot County Borough Council	Swansea
26	Terminal Manager	Valero Limited	Cardiff
27	Terminal Manager	Prax	Cardiff
28		Valero Emergency Response	London

29	Harbour Master	Neath Harbour Commissioners	Neath
30	A Middleton	Environment Officer, Cardiff Harbour Authority	Cardiff
31	TBC	Counter Pollution Response and Salvage Officer	Southampton
28	HM Coastguard	Swansea MRCC	Swansea
29	John Harrison	Bristol Channel Standing Environment Group	Cardiff
30	Ged Davies	West Wales Public Health and Environment Group	Haverfordwest

Revision Procedure

The Harbour Master is responsible for the Maintenance and Review of the Plan

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

A formal review of the plan will be conducted at 5-year intervals by the Harbour Master and the plan re-submitted for approval.

Amendment Record

Amendment No.	Date	Amendment	Signature
One	4/12/13	Pages 2, 17, 72, 73, 79, 80, 91, 107, 108	T Bevan
Two	9/10/14	Page 97	T Bevan
Three	Contacts	Pages 90 – 98	T Bevan
Four	18/4/16	Pages 2,3,4,6,10,21,22,23,24,25,30	M Chidlow

1 Introduction

Note

Under an agreement, first made in 2005 and renewed in September 2010, between Newport Harbour Commissioners and ABP South Wales, ABP South Wales are contracted by NHC to respond to and manage the responses for oil spill and other emergencies with in the NHC Statutory area of Jurisdiction. So as to aid that response and management, the NHC and ABP regional OSCP's have been harmonised into one document. This document describes ABP's responses to Oil spills in its own SHA area of jurisdiction and in the NHC SHA area of Jurisdiction where ABP are contracted to respond.

1.1 Statutory Requirement

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

1.2 Purpose of the Plan

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

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

For the plan to be effective, it must be:

- Familiar to those with key response functions in the Port;
- Regularly exercised; and,
- Reviewed and updated on a regular basis.

This plan uses a tiered response to oil pollution incidents. The plan is designed to deal with Tier One and Tier Two incidents, and to provide guidance for the initial response to a Tier Three incident. Where a spillage is associated with a wider emergency such as a shipboard fire, then additional factors involving the safety of personnel will take precedence over the pollution response. In this case, reference

must be made to the Port Emergency Plan. The salvage and casualty management of any vessel, which poses a threat of pollution, are priority considerations.

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

- Site hazard information
- Adherence to permit procedures
- Spill site pre-entry briefing
- Boat safety
- COSHH Regulations and material safety data sheets
- Personal protective equipment needs
- Heat stress, cold stress and hypothermia
- Decontamination

1.3 Scope of the Plan

The relevant Harbour Master has statutory responsibility for the ports of Cardiff, Newport and Barry, or Swansea and Port Talbot; this plan therefore details the contingency arrangements for responding to actual or threatened oil pollution incidents in any of the South Wales ports. The statutory harbour areas are shown on the maps in the various appendixes.

The response strategy has been developed taking into account the spill risks and possible sources of spillage associated with the port operations, including those at the oil tanker jetties and other facilities within the docks. The plan consists of three elements:

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

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

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

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

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

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

1.4 Interfacing Oil Spill Contingency Plans

1.4.1 Oil Company Plans (Cardiff)

Valero operates a berth in Roath Dock for the import and storage of ground fuels, Jet Fuel, and Fuel Oils.

Oil Berth One in Queen Alexandra Dock is also available for import of Fuel oils.

The oil spill response obligations of this company is deemed to be covered within the scope of this plan and the Harbour Master, or his deputy, will direct any necessary spill response effort together with the assistance of terminal personnel.

1.4.2 Oil Company Plans (Barry)

Navigator Terminals Windmill Ltd operates a Petro-Chemical installation at the Windmill site with loading/discharge berths in Number Two Dock.

The oil spill response obligations of this company have been jointly formulated with ABP and are deemed to be covered within the scope of this plan and the Harbour Master, or his deputy, will direct any necessary spill response effort together with the assistance of terminal personnel.

The subsidiary oil spill contingency plans are:

No.	Owner	Title
1.	Valero at Roath dock and Inver Energy at Queen Alexandra Dock Cardiff	Company Oil Spill Contingency Plan
2.	Navigator Terminals Windmill Ltd at No 2 Dock Barry	Joint ABP/Company Oil Spill Contingency Plan

1.4.3 Local Authority Plans

In the event of actual or threatened shoreline impact, the Oil Spill Contingency Plan administered by the relevant local authority will be implemented. The level of activation will be dictated by the incident classification (refer Section 1.7).

The interfacing plans are:

No.	Owner	Title
1.	Cardiff Council	Cardiff Oil Spill Contingency Plan
2.	Newport City Council	Onshore Oil Pollution Plan.
3.	City and County of Swansea Neath Port Talbot County Borough Council	Hazardous Materials and Chemicals Washed Ashore Plan
4.	Cardiff Harbour Authority	Oil Spill Contingency Plan

1.4.4 Adjacent Harbour Authorities

Cardiff Harbour Authority

The entrance to Cardiff Bay is by locks leading off of the channel into Cardiff Docks. This channel falls within the port limits and is the responsibility of ABP. The entrance to the outer harbour, locks, and waters within the enclosed bay, are all the responsibility of Cardiff Harbour Authority. Any spill in one area could quickly migrate into the adjoining waters and therefore both parties, whilst each having their own plans, would work closely together in the event of a spill.

Neath Harbour

The eastern port limit of Swansea and the western port limit of Port Talbot adjoin the limits of Neath Harbour. Where the possibility exists that spilled oil may migrate to, or from, the Neath harbour area, close liaison will be maintained with the Neath Harbourmaster.

1.4.5 National Contingency Plan

In the event of an oil spill incident, which calls for a Tier Three response, the Maritime and Coastguard Agency may decide to implement the National Contingency Plan (NCP). In this event, MCA will take control of at-sea counter pollution measures from either the Port Marine Response Centre (MRC) or from their own MRC. Should there be a formal hand-over of responsibility to MCA for dealing with the incident, the Port's oil spill response resources and facilities will be made available to MCA.

In the event that the NCP is called into operation then the Secretary of State's representative, SOSREP, will assume full command of the operation. He has the decisive voice in the decision making process in a marine salvage operation that involves the threat of significant pollution. The Director / Deputy Director of Operations will act as a stand-in in the event of SOSREP being unavailable. The Director of Operations is responsible for search and rescue, counter pollution, survey and inspection, enforcement action, and clean up operations at sea. They are also responsible for maintaining the Government and MCA's stockpiles of equipment.

A Shoreline Response Centre (SRC) would be established and would exercise overall co-ordination of the shoreline clean up in accordance with the procedures and guidance given in the National Contingency Plan. The appropriate members of the Oil Spill Management Team will re-deploy to the SRC and/or the MCA MRC as required.

1.4.6 Places of Refuge

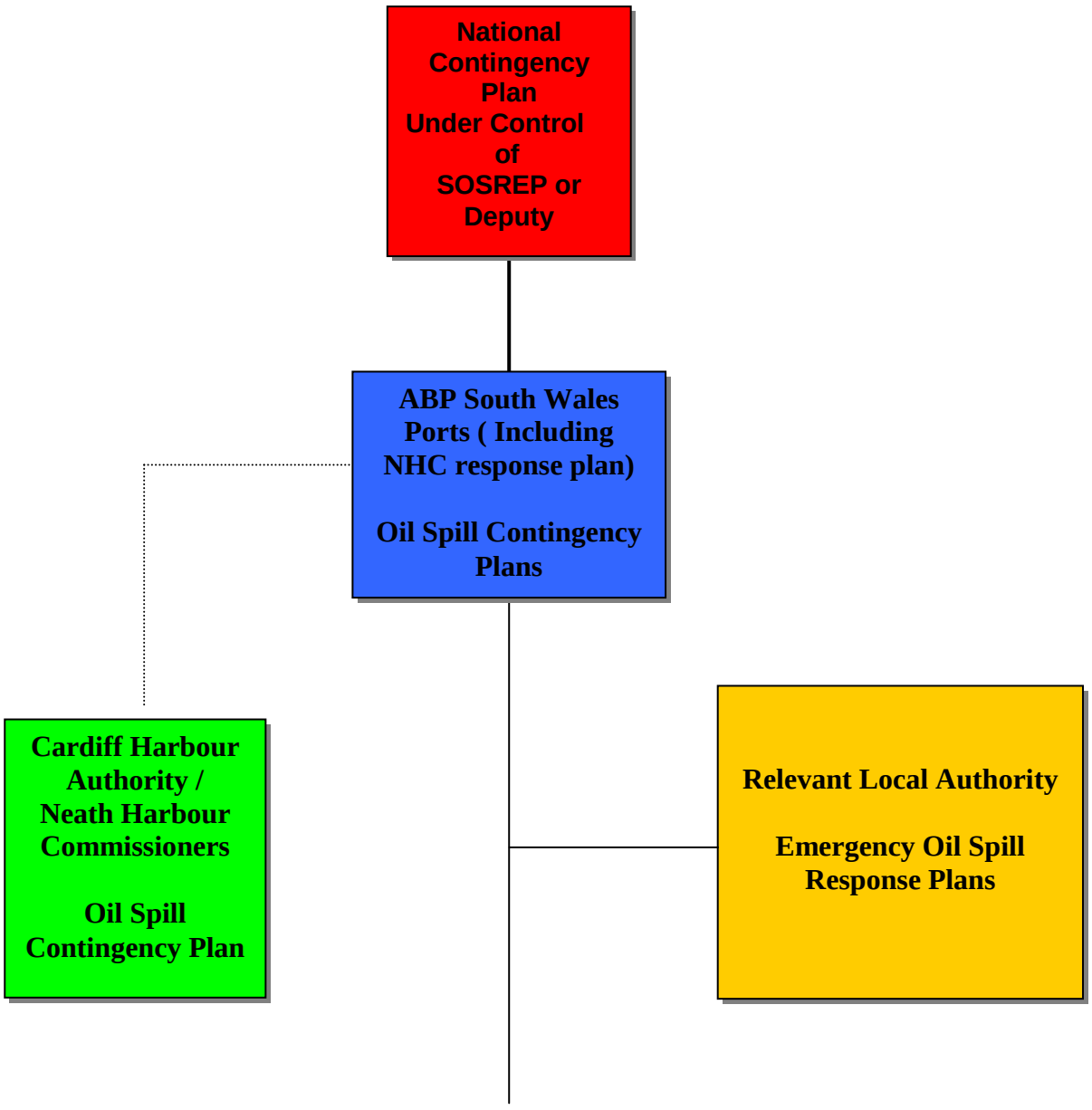
Places of refuge are places of safety to which a ship in need of assistance can be brought to stabilise it's condition e.g. to effect repairs or to transfer cargo, so that further damage to the ship, and consequential pollution damage to the seas and coasts, can be averted. SOSREP will determine whether a vessel requiring such assistance should be directed to proceed to a safe haven and where that place might be. He will take into account all the factors that relate to each specific incident such as the weather, the geographical location of the incident, and the type of threat posed by the vessel and it's cargo. He will, at all times, seek to minimise the adverse consequences of the incident. There is no definitive list of places of refuge around the coast of the UK, any suitable location can be used, and SOSREP, or his deputy, will decide at the time where the best location shall be.

1.5 Consultation

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

- Natural Resources Wales (NRW)
- Marine Management Organisation (MMO)
- Cardiff Council
- Cardiff Harbour Authority
- Vale of Glamorgan Council
- Newport City Council / Monmouthshire County Council
- Newport Harbour Commissioners
- City and County of Swansea
- Neath Port Talbot County Borough Council

Figure 1.3 Interfacing Plans



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

Cause	Assessed Risk	Worst Case Spillage Quantity (Tonnes)
Grounding in channel	Low	<50 fuel
Locking / berthing Incident	Low	<500 cargo, >200 fuel
Tug Impact	Remote	>250 cargo, <250 fuel
Oil Transfer Operations	Low/Moderate	<5 clean oil, <5 fuel oil
Bunkering Operations	Low/Moderate	<5 fuel / marine gas oil

Note: *the Worst Case Spillage quantities for tankers have been estimated for conventional, single hull vessels. The risk of spillage, and the quantities involved, as a result of grounding, collision, berthing incident or tug impact will diminish as more double hulled vessels and tankers with protectively located ballast tanks enter service.*

1.7 Classification of Oil Spills

Oil spills will be categorised in accordance with the internationally recognised three-tier classification system.

It is not the intention of ABP to specify the amount of oil spilled which would automatically lead to the response being at the next higher tier. Rather each incident will be assessed at the time and the officer on scene will instigate appropriate action. If in any doubt he will always call for assistance. Continuous reassessment may mean that a further response at a higher level is subsequently deemed necessary.

Tier 1
Small operational spills. A spill that can be dealt with immediately utilising local resources without assistance from other areas.
Tier 2
Medium sized spills. A spill that requires regional assistance from other areas. May involve assistance by local government.
Tier 3
Large spills. Beyond the capability of local and regional resources. A spill that requires national assistance through the implementation of the National Contingency Plan (NCP).

Irrespective of the spill classification, Form CG77 POLREP will be completed and submitted to MCA-HM Coastguard by the Harbour Master for doubtful, probable, and confirmed oil spills.

2. Incident Response Organisations

The South Wales Ports can call upon two marine managers who are trained to MCA level 4/5p.

2.1 Harbour Master

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

2.2 Oil Spill Management Team (OMT)

An Oil Spill Management Team (OMT) will be established, under the chairmanship of the Harbour Master, for Tier Two and Tier Three incidents. Depending on the circumstances of the incident, an OMT may be set up for a Tier One response. The OMT will convene at the designated (see individual port appendixes) building and will provide the command and control structure to co-ordinate and direct the incident response. The OMT will consist of representatives from the following organisations and authorities:

Management Team	Support Team
Harbour Master Oil Company (if appropriate) Vessel Owners / Agents P & I Club Salvor (if appointed) MCA (if appropriate) Tier Two Contractor Accounts Port Facilities & Security Manager Tata (if appropriate) Other Terminal Contractors (if appropriate)	Associated British Ports(and NHC if applicable) : Engineering Administration Public Relations Relevant Local Authority Response teams Natural Resources Wales Marine Management Organisation (MMO) Welsh Government Fisheries Division

MCA / SOSREP

In the event of a Tier Three incident and the implementation of the National Contingency Plan (NCP), overall control would pass to the Secretary of State's Representative, SOSREP, or his appointed deputy. The OMT will assist SOSREP and appropriate members of the OMT will re-deploy to the Shoreline Response Centre.

Activation of the NCP will result in the formation of an Environment Group (EG) to provide environmental advice to response units. Natural Resources Wales would be a core member of this group together with other environmental and public health agencies. Conventionally this would be located with the SRC but maybe located close to MRC or Ports Marine Response Centre if that is more appropriate.

The Port Marine Response Centre will remain active unless superseded by the MCA MRC. The Harbour Master will require the transfer of responsibility for managing the incident response to be formally documented prior to relinquishing overall control of at-sea counter pollution measures to MCA.

2.3 Tier 1 Incident

Cardiff LPS will initiate the appropriate response actions and will immediately advise the Harbour Master. In the event that the spill involves oil terminal operations, the oil company concerned will initiate the first response actions. Once the Harbour Master assumes control management of the response will be in line with the established day-to-day management structure of the Harbour Master's Department (see figure 2.1).

The Harbour Master will decide whether or not to set up an Oil Spill Management Team and, in the event of an oil company involvement, whether the OMT will operate from the Port Marine Response Centre or from the oil company's response centre. Depending on the circumstances of the incident, the OMT will include representatives from the following organisations and authorities:

1.	Harbour Authority	☐
2.	Relevant Local Authority Emergency Team	☐
3.	Oil Company (terminal spill or as required)	☐
4.	Natural Resources Wales (if spill likely to affect designated sites: SPA, SAC, Ramsar, SSSI)	☐

2.4 Tier Two Incident

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

1.	Harbour Authority	☐
2.	Relevant Local Authority Emergency Teams	☐
3.	Oil Company (terminal spill or as required)	☐
4.	Natural Resources Wales	☐
5.	Marine Management Organisation (MMO)	☐
6.	Tier Two Contractor (Adler and Allan)	☐
7.	Salvor (if appointed)	☐
8.	P & I Club / ITOPF	☐
9.	MCA (if appropriate)	☐
10.	Vessel Owners / Agents	☐
11.	Corus (if appropriate)	☐
12.	Other Terminal Contractors (if appropriate)	☐

2.5 Tier Three Incident

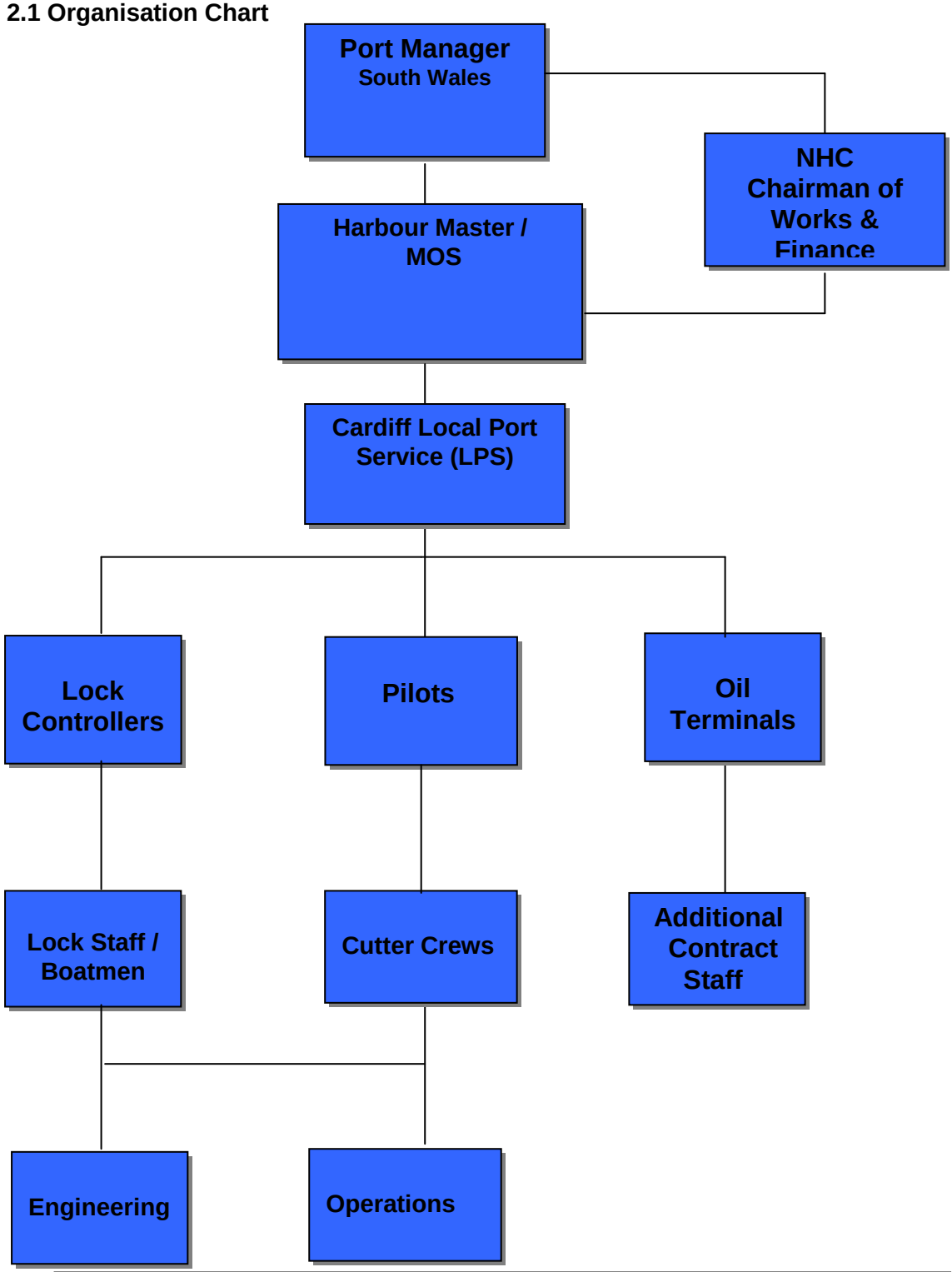
An Oil Spill Management Team, under the chairmanship of the Harbour Master, will be established at the Port Marine Response Centre and will include representatives from the following organisations and authorities:

1.	Harbour Authority	☐
2.	Relevant Local Authority Emergency Team	☐
3.	Oil Company (terminal spill or as required)	☐
4.	Natural Resources Wales (NRW)	☐
5.	Marine Management Organisation (MMO)	☐
6.	Tier Two Contractor (Adler and Allan)	☐
7.	ITOPF (International Tanker Owners Pollution Federation)	☐
8.	P & I Club	☐
9.	Salvor (if appointed)	☐
10.	Police	☐
11.	Fire and Rescue Services	☐
12.	British Telecom (Emergency Linking)	☐
13.	MCA-HM Coastguard	☐
14.	MCA – Principal Counter-Pollution and Salvage Officer	☐
15.	Vessel Owners	☐
16.	Corus (if appropriate)	☐
17.	Other Terminal Contractors (if appropriate)	☐

2.6 Shoreline Response Centre

The implementation of the National Contingency Plan may involve MCA agreement to the establishment of a Shoreline Response Centre (SRC), under the chairmanship of a senior local authority officer, to co-ordinate shoreline clean-up activities. ABP will offer the Port Marine Response Centre or adjacent facilities for use as an SRC but, should it be located elsewhere, appropriate members of the OMT will re-deploy to the SRC as requested by MCA and the local authorities.

Figure 2.1 Organisation Chart



Note: in Tier Two and Tier Three incidents, additional manpower can be made available from ABP Engineering and Operations personnel and from ABP contract labour workforce.

3. Reporting Procedures

3.1 Use of Section

This section sets out the reporting procedures that should be followed in the event that an oil spill occurs within the harbour area.
The extent of notification of external organisations and authorities will be determined by the initial classification of the incident. Responsibility for external notification and the completion of POLREP CG77 rests with the Harbour Master.

The statutory requirement, placed on the Harbour Master under Statutory Instrument 1998 No. 1056, to report all actual or probable discharges of oil to the sea to MCA-HM Coastguard is noted in the appendices to this section; the appendices also include POLREP CG77, Oil Spill Progress Report and Tier 2 Contractor Briefing Report.

3.2 Prevention of Oil Pollution Acts 1971 & 1986

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

3.3 Notification Matrices

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

4. Action Sheets

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

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

Action sheets are included for the following positions:

1. GPMO's / Lock gatemen / Lock Controllers
2. Harbour Master / Marine Operations Manager
3. Port Manager
4. Port Director
5. NHC Chairman

4.1	GPMO's / Lock gatemen
Responsibilities	• Assisting Harbour Master / Marine Operations Manager

Step	Actions	Additional Information
Alert	□ Harbour Master □ Marine Operations Manager □ Marine Operations Supervisor	
Initial Actions	□ Proceed to Incident Location □ Assume role of On Scene Co-ordinator until relieved by Harbour Master /MOM /Marine Operations Supervisor □ Communicate relevant information to ADM □ Initiate Personal Log	
Further Actions	□ Assist HM in conducting response □ Liaise with response craft / response team as directed	
Final Actions	□ Submit personal log to the Harbour Master □ Attend debrief	

4.2	Lock Controller
Responsibilities	• Initially assess situation • Assign incident classification • Collect evidence and / or statements • Liaise with incident vessel / oil company regarding status of oil spill •

Step	Actions	Additional Information
Alert	☐ Harbour Master / MOM / MOS ☐ Other Harbour Departments if appropriate	
Initial Actions	☐ Proceed to incident location ☐ Assume role of On Scene Co-ordinator ☐ Investigate cause / source of spill ☐ Communicate all information to the Harbour Master ☐ Ensure samples of spilled oil are taken ☐ Initiate personal log	
Further Actions	☐ Ensure resources being deployed as required ☐ Take photographic evidence as appropriate ☐ Collect evidence and take statements ☐ Liaise with oil company representative (if applicable) ☐ Liaise with emergency services, environmental and other organisations at the spill site	
Final Actions	☐ Submit personal log to the Harbour Master ☐ Attend debrief	

4.3	Harbour Master / Marine Operations Manager / MOS
Responsibilities	• Confirm / amend initial classification of incident • Manage the Port response to the incident • Authorise expenditure • Mobilise Tier Two Contractor • Review Press Statements prior to release • Liaise with external authorities and organisations • Deputise for Port Director as required

Step	Actions	Additional Information
Alert	☐ MCA-HM Coastguard ☐ Port Director ☐ Port Facilities & Security Manager ☐ External Organisations	*Via CG77 – POLREP* *Refer to section 3*
Initial Actions	☐ Verify / amend spill classification ☐ Convene Oil Spill Management Team ☐ Liaise with vessel agents / owners as appropriate ☐ Initiate personal log	*Refer to Section 1*
Further Actions	☐ Authorise mobilisation of Tier 2 contractor ☐ Authorise contract labour for shoreline clean up if appropriate ☐ Chair the Oil Spill Management Team meetings ☐ Constantly review the strategy being employed and advise of changes where necessary ☐ Agree all expenditure commitments ☐ Brief Port Director ☐ Review Press Statements with Port Director ☐ Attend Press Conferences as required ☐ Confirm formal samples have been taken ☐ Decide if Master or Polluter should be formally charged	

Final Actions	□ Terminate the clean-up □ Collate personal logs. □ Prepare the incident report. □ Hold full debrief involving all members. □ Amend contingency plan as required.	

4.4	Port Director or Deputy	
Responsibilities	• Overall responsibility for incident response • Approval and release of press statements • Brief ABP Management Board • Overall responsibility for expenditure and record keeping • Liaison with government / local government representatives as appropriate	
Step	**Actions**	**Additional Information**
Alert	☐ ABP Chief Executive (Tier 2/3 incidents only)	
Initial Actions	☐ Confirm spill classification with Harbour Master ☐ Confirm all appropriate external organisations have been alerted ☐ Review with Harbour Master initial response strategy being employed ☐ Liaise with vessel Agents / Owners as appropriate	*Refer to Section 1*
Further Actions	☐ Release press statements after agreement with Harbour Master ☐ Attend Oil Spill Management Team meetings ☐ Attend press conferences ☐ Brief ABP Management Board	*Maintain liaison with Corporate Public Relations Advisor*
Final Actions	☐ Submit personal log to the Harbour Master for inclusion in his report ☐ Attend debrief ☐ Review / implement recommendations from the Harbour Master's incident report	

4.5	Chairman, Works & Finance Committee (For NHC Responses)	
Responsibilities	• Overall responsibility for incident response • Approval and release of press statements • Brief Commissioners • Overall responsibility for expenditure and record keeping • Liaison with government / local government representatives as appropriate	
Step	**Actions**	**Additional Information**
Alert	□	
Initial Actions	□ Confirm spill classification with Harbour Master □ Confirm all appropriate external organisations have been alerted □ Review with Harbour Master initial response strategy being employed □ Liaise with vessel Agents / Owners as appropriate	*Refer to Section 1*
Further Actions	□ Release press statements after agreement with Harbour Master □ Attend Oil Spill Management Team meetings □ Attend press conferences □ Brief Commissioners	*Maintain liaison with Public Relations Advisor*
Final Actions	□ Submit personal log to the Harbour Master for inclusion in his report □ Attend debrief □ Review / implement recommendations from the Harbour Master's incident report	

4.5 Oil Spill Incident Checklists.

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

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

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

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

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

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

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

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

This checklist summarises the guidance given in MCA STOp Notice 4/2001, “Collection and Handling of Oil Samples”. Following the guidance ensures that samples of sufficient quantity will be taken, sealed, labelled and handled correctly.

4.5.1 Oil Spill Assessment Checklist.

C1	Oil Spill Assessment Checklist
This checklist is designed to assist those personnel who are responsible for the initial and subsequent assessments of the oil spill incident. These personnel are likely to be: • Lock Controllers / GPMO's • Harbour Master / MOM / MOS	
STEP	**GUIDANCE**
☐ **Assess safety hazards**	Until otherwise established, assume oil spill is giving off potentially dangerous hydrocarbon vapours. **ELIMINATE IGNITION SOURCES** Approach Oil Spill from upwind to reduce effects of vapours. **APPROACH ONLY IF CONSIDERED SAFE TO DO SO**
☐ Determine oil spill source	If source unknown, investigate with care. Instigate actions to stop spillage at source **IF SAFE TO DO SO**
☐ Estimate quantity of oil released if exact amount unknown	
☐ Assess prevailing weather conditions.	Determine: • Wind speed and direction • State of tide and current speed • Sea state
☐ Can spill be contained	
☐ Predict oil fate; determine direction and speed of oil movement in addition to weathering characteristics	Take forecast weather into account

4.5.2 Briefing Checklist.

C2	Briefing Checklist
This checklist is designed to facilitate an effective response team briefing and should be used by supervisory personnel and, if appropriate, the Oil Spill Management Team	
STEP	**NOTES**
☐ **Specify Safety Hazards**	
☐ **Extent of Problem** *Size of spillage, type of oil, source*	
☐ **Slick trajectory** *Tide and Wind conditions*	
☐ **Response actions** *Strategies to utilise*	
☐ **Resource mobilisation** *Equipment and personnel*	
☐ **Planning Cycle** *Meetings schedule*	
☐ **Additional Information** *Communications, Waste Disposal, Weather Forecast*	
☐ **Shipping List**	
☐ **Oil spill Trailer Equipment List**	

4.5.3 Personal Log Checklist.

C3	Personal Log Checklist
This checklist is designed to facilitate and aid consistency in the response teams' log keeping.	
ITEM	**GUIDANCE**
☐ **Safety Hazards**	Note potentially unsafe response activities and measures taken to mitigate the hazard. Record all accidents / near miss incidents regardless of how minor they may be.
☐ **Initial Notification**	Record time of notification of oil spill incident and the name of the person informing you.
☐ **Daily Activities**	Keep a daily record of all response activities undertaken, including time and location on the specified Form. Also include: • Meetings attended • Instructions received / given • Site visits and movements • Contacts with outside agencies
☐ **Personal Contacts**	Generate a list of relevant contacts made, including contact details.
☐ **Photographic / Video records**	Note time and location of any photographs / video taken.
☐ **Oil Distribution**	Make sketches of oiled areas with notes.
☐ **Site Supervision**	Keep a record of all staff under supervision, including hours of work etc. List all equipment utilised.
☐ **Expenditure Incurred**	Record all expenditure and keep receipts.

4.5.4 Oil Spill Sampling Checklist

C4	Oil Spill Sampling Checklist
This checklist gives guidance on taking samples of spilled oil. Following the guidance will ensure that sufficient oil has been collected, packaged and labelled correctly and has been handled in such a way that the samples may be used to support claims or prosecution proceedings. MCA STOp Notice 4/2001, a copy of which is held by the Harbour Master, gives more specific guidance on sampling from the sea and shoreline.	
ITEM	**GUIDANCE**
□ **Number of samples required**	By law, a single sample must be collected. However, it would be normal practice to take at least three samples at each sampling point.
□ **Sampling Frequency**	Where an incident is ongoing, at least one sample of oil pollution on water should be taken per day. Where shoreline impact has occurred, one sample per every 1km of polluted shoreline should be taken per day.
□ **Sample Size**	A minimum of 500ml of liquid is required or, in the case of polluted shorelines, at least 50 grammes of pollutant.
□ **Method of Sampling**	Where the oil is free floating, it is essential that the oil is skimmed from the water surface and that any free water drawn with the sample is minimised. Where the oil has impacted the shoreline, oil should be scraped from rocks, boulders etc and placed in the sample container.
□ **Sealing of Sample Containers**	Samples should be placed in screw top bottles with the bottle top being sealed to ensure that the sample cannot be tampered with. Lead or wire seals or adhesive labels can be used.
□ **Labelling of Samples**	Sample bottles should be labelled in accordance with the MCA STOp Notice instructions.
□ **Information**	Samples should be forwarded, as appropriate, to the address given in the STOp Notice and, additionally, MCA should be informed of the fact.

6. Response Guidelines

All discharges, or potential discharges, of polluting material onto land, into rivers, estuaries or the sea where the pollution is likely to affect water within three miles of the territorial baseline, should be reported to the Natural Resources Wales using the National Contact Number 0800 807060.

DISPERSANTS

Natural Resources Wales must be consulted on the proposed use of dispersant chemicals either

(i) above the mean water mark on foreshore

(ii) within an enclosed dock.

When determining whether the use of such dispersants is appropriate, the Body, would require that any proposed dispersant have been approved for use by the Welsh Government (or MMO in English Waters) and they are going to be applied in accordance with the manufactures guidelines.

Therefore, all plans should include the requirement to use only WG (or MMO) approved products in any response strategy and the requirement to consult NRW prior to any dispersant use above the mean water mark on a foreshore or within an enclosed dock."

This section provides strategy guidelines for two oil types:

No.	Oil Type	Strategy Figure	Specific Gravity	Genre	Characteristics	Examples
1	Light oils	5.1	< 0.8	White oils	Non-persistent, Volatile	Aviation fuel, Kerosene, Diesel, Motor spirit
2	Heavy oil	5.2	> 0.95	Black oils	Persistent, Viscous, Emulsion	Fuel oils

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

The movement of any oil spilled within the docks complex will be dictated by the wind speed and direction at the time of the incident; the predominant factor influencing the movement of spilled oil within the Port Limits and at Port Talbot Harbour is the tidal regime.

The primary response to Tier One incidents in either port will be the use of absorbent booms and materials. There are no pre-identified protective booming sites within the port limits.

In the event of any oil spill within the docks complex, the option of suspending shipping movements and of keeping the lock gates closed must be given serious consideration when the circumstances so warrant.

Natural Resources Wales should be alerted to any oil spill threat to controlled waters, shoreline impacts or any threat to protected sites and species including those that are offshore such as SACs.

The guidelines refer to the Environmental Sensitivity Maps, Priority Protection Areas including Fisheries and the environmental information given in Section 12.

Mussel beds are operated under a “Several Order” in the vicinity of Mumbles, and crustacean shellfish store pots are also stored in the same area. Any threatened impact to fisheries interests must be advised to the South Wales Sea Fisheries Committee.

Although the guidelines offer the option of a dispersant response, the application of any chemical dispersant to an oil spill within the dock complexes / harbour areas would be under exceptional circumstances only and subject to full regulatory approval of the MMO following consultation with NRW. The MMO guidelines to the information required by the MMO in considering any request for dispersant spraying approval are given in the Appendix to this section.

4.1 Light Oil Response Guidelines: See below

Heavy Oil Response Guidelines: See below

The following Marine band VHF channels will continue to be used for normal port radio traffic:

Port	Primary Channel	Secondary Channel
Barry	11	13
Cardiff	68	13, 9
Newport	71	74, 9

Swansea	14	71, 9
Port Talbot	12	

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

Communications between the Harbour Master, the Marine Response Centre and external authorities and organisations will be undertaken by telephone and facsimile. Communications between the Harbour Master, the Marine Response Centre (if activated) and harbour personnel engaged in the response to a Tier 1 incident will be primarily by private channel VHF radio. Cellular telephones may also be used.

5.2 Booming Plans

Due to the nature of the ports of Swansea, Port Talbot dock, Barry Dock and Newport dock, having at least 2 sets of lock gates to confine any spill from contaminating the wider environment and due to the fact that no oil products are handled at these ports it has risk assessed that any likely pollution incident will be a small bunkering operation type spill. Because of the above, no booming plans have been prepared for incidents inside these enclosed docks. However Plans have been provided to show positions to deploy booms if the need to isolate areas of the dock should arise.

ABP personnel would keep the lock gates closed while any small spill was cleared up using local personnel and absorbents held in stock. For any larger spill, the services of Adler & Allan are on retention to respond within the required 4 hrs with a defined inventory of equipment and personnel.

5.3 Sensitivity Mapping

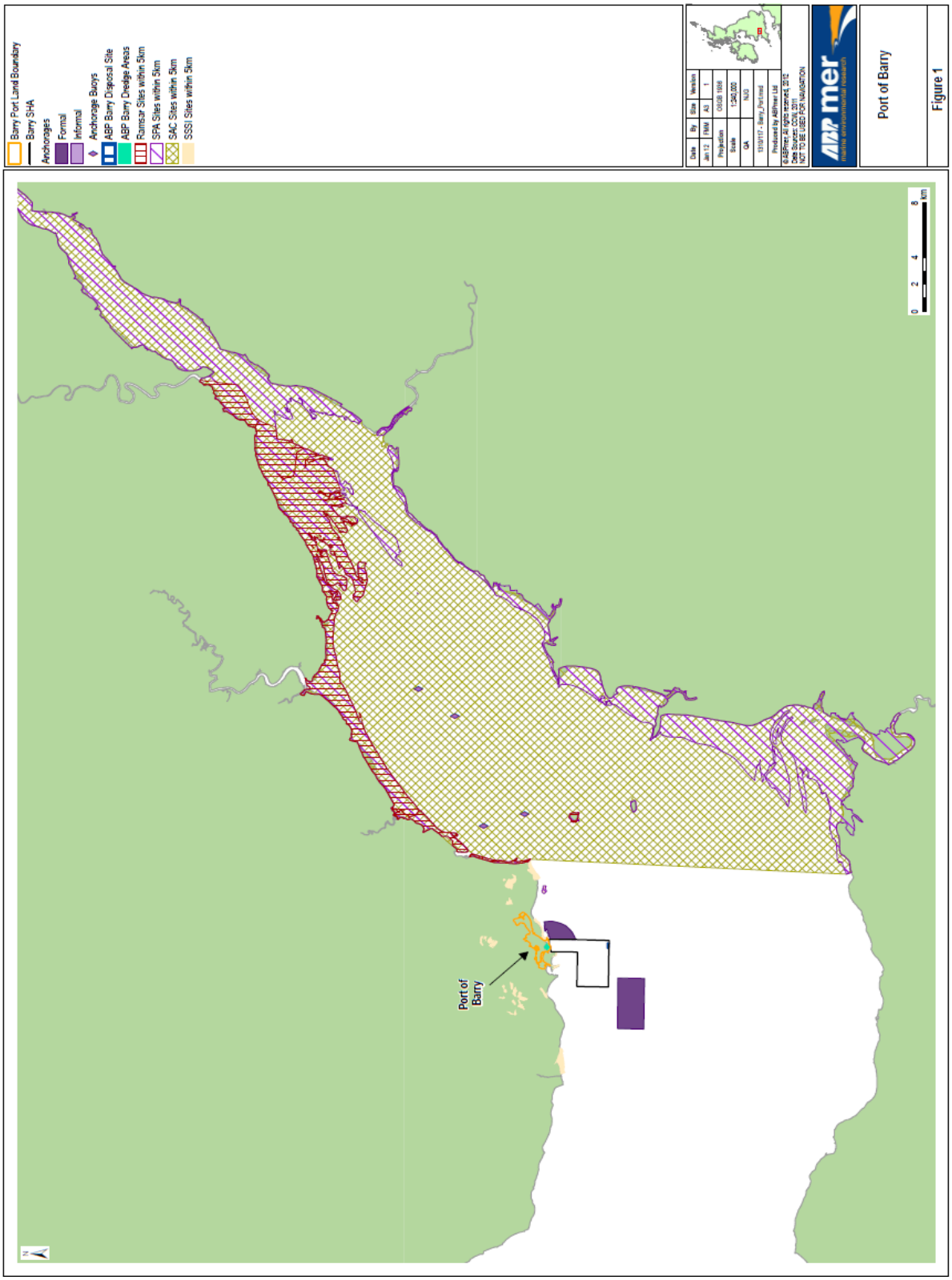
PORT OF BARRY

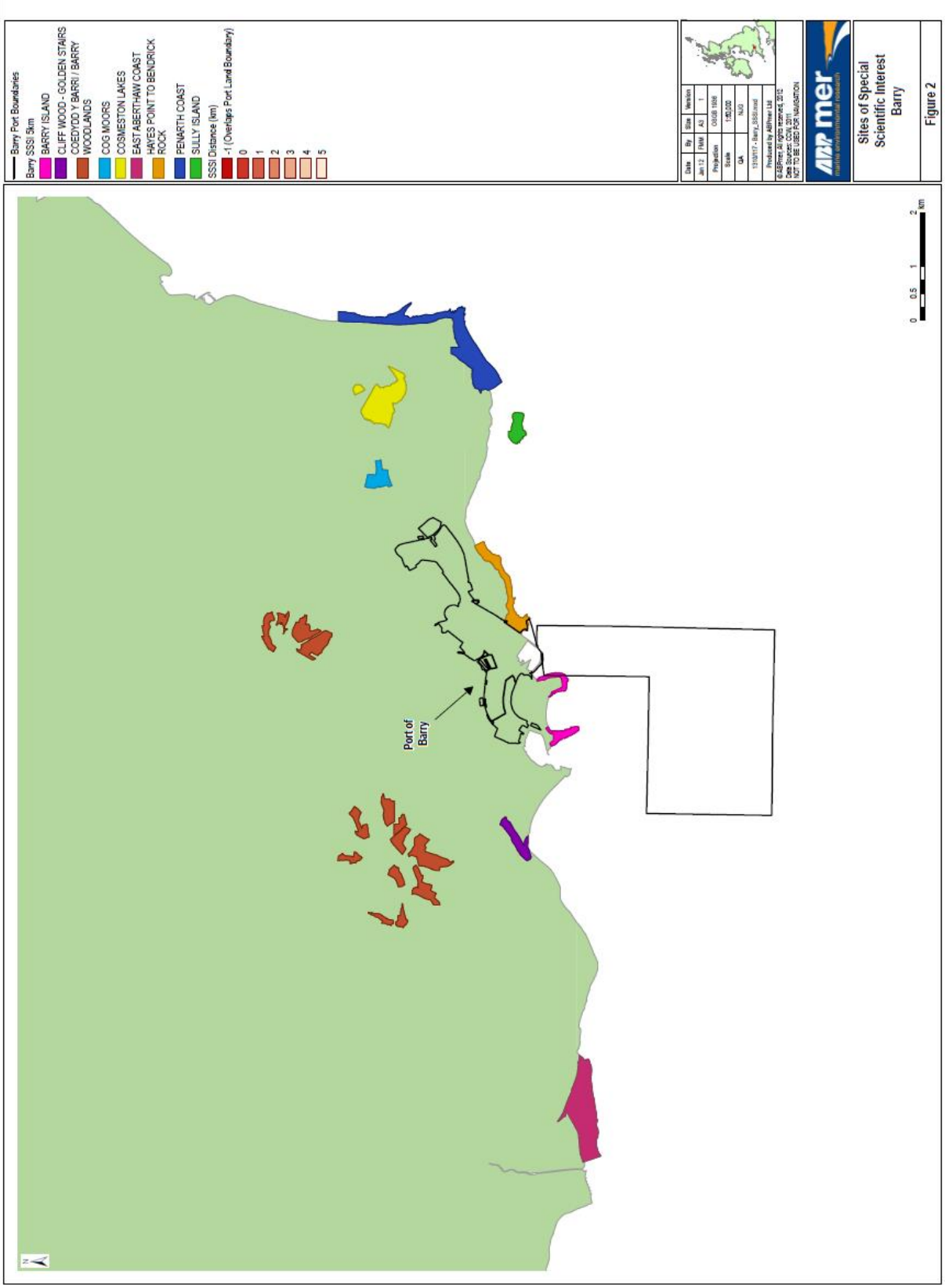
Maps provided as follows: -

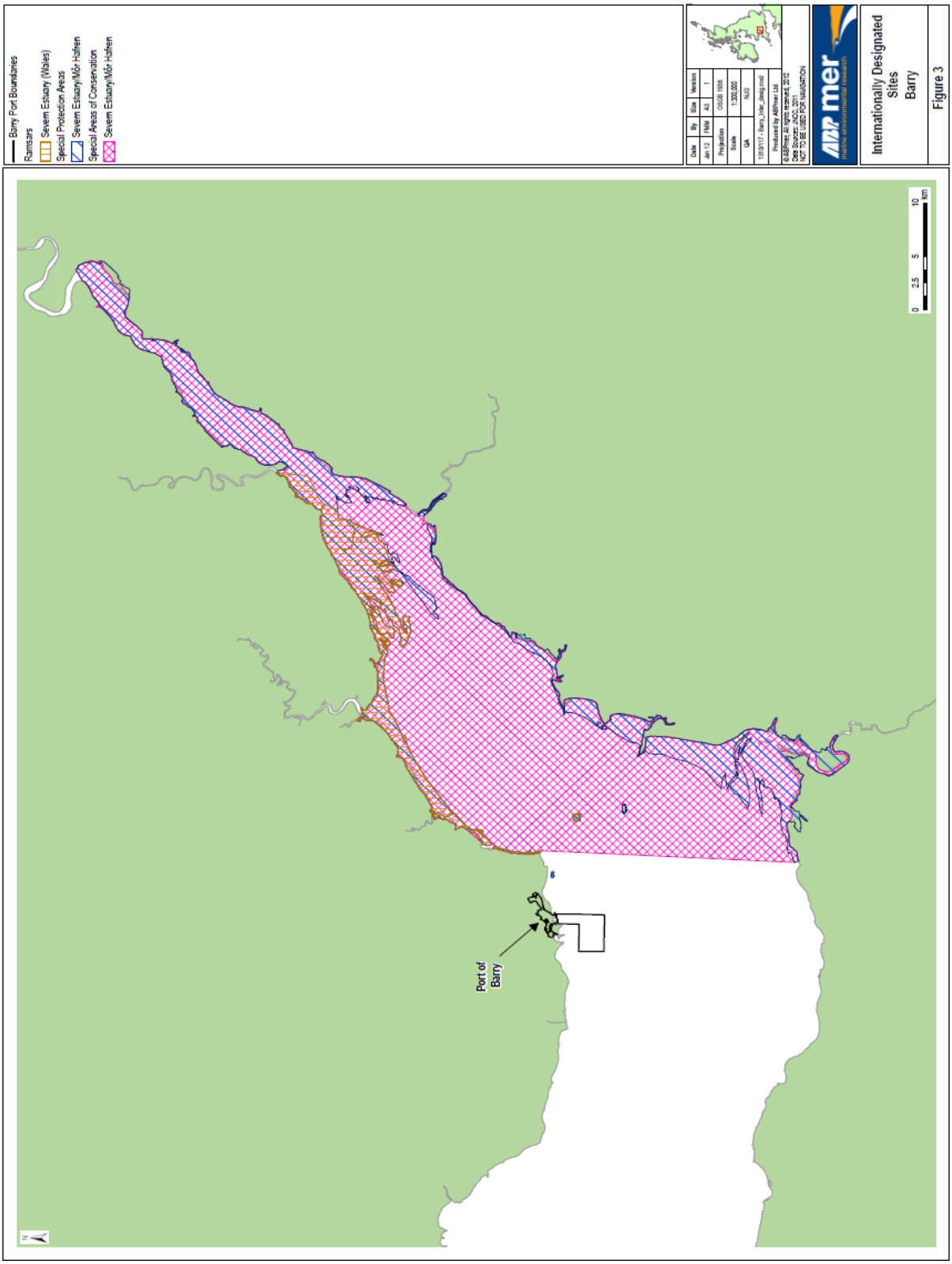
1st Barry Port Land Boundary and Barry Statutory Harbour Authority – Includes formal and informal anchorages, anchorage buoys, disposal sites, dredge areas and Wetlands of International Importance (Ramsar), Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Sites of Special Scientific Interest (SSSI) within 5 km.

2nd Barry Port Boundaries – 9 Sites of Special Scientific Interest (SSSI) – 5km

3rd Barry Port Boundaries with Wetlands of International Importance (Ramsar), Severn Estuary (Wales) Special Protection Areas, Severn Estuary/Mor Hafren Special Areas of Conservation and Severn Estuary/Mor Hafren marked.


Barry Port Land Boundary
Barry SHA
Anchorages
Formal
Informal
Anchorage Buoys
ABP Barry Disposal Site
ABP Barry Dredge Areas
Ramsar Sites within 5km
SPA Sites within 5km
SAC Sites within 5km
SSSI Sites within 5km
Port of Barry
Figure 1
Port of Barry


Barry Port Boundaries
Barry SSSI Skm
BARRY ISLAND
CLIFF WOOD - GOLDEN STAIRS
COEDYDD Y BARRI / BARRY WOODLANDS
COG MOORS
COSMESTON LAKES
EAST ABERTHAW COAST
HAYES POINT TO BENDRICK ROCK
PENARTH COAST
SULLY ISLAND
SSSI Distance (km)
-1 (Overlaps Port Land Boundary)
0
1
2
3
4
5
Sites of Special Scientific Interest Barry
Figure 2
Port of Barry
0 0.5 1 2 km

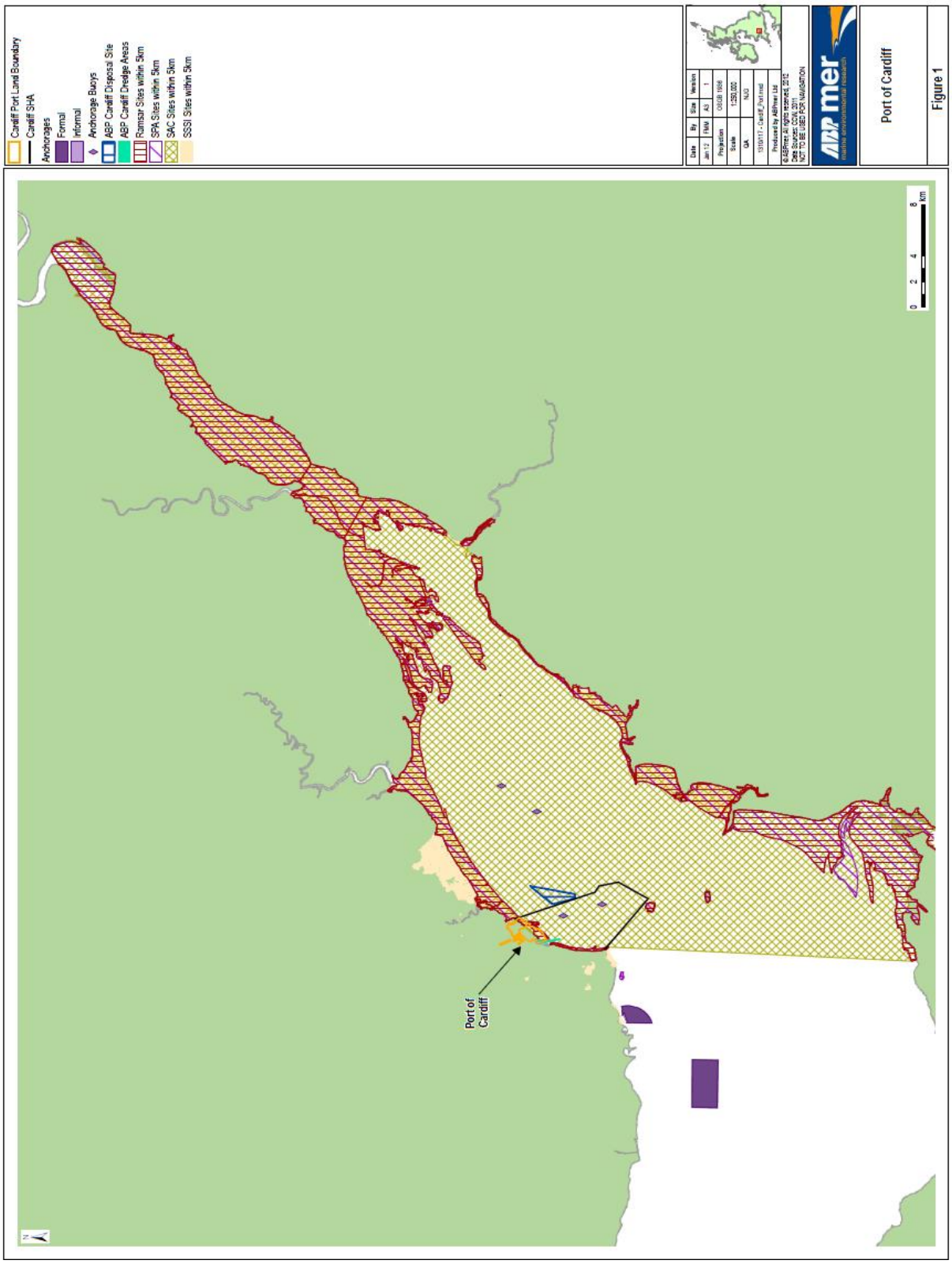

Barry Port Boundaries
Ramsars
Severn Estuary (Wales)
Special Protection Areas
Severn Estuary/Môr Hafren
Special Areas of Conservation
Severn Estuary/Môr Hafren
Internationally Designated Sites
Barry
Figure 3
Port of Barry
0
2.5
5
10
km

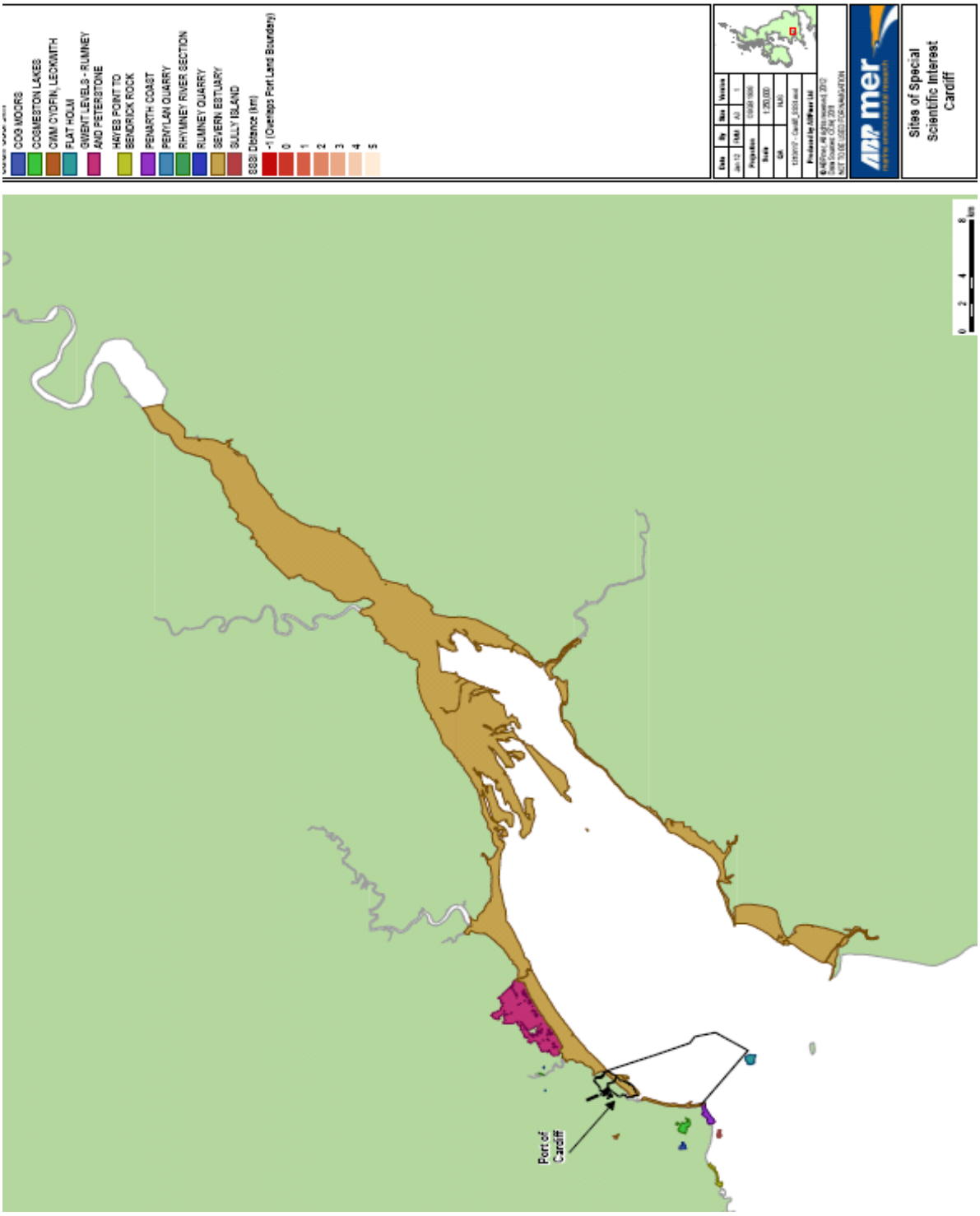
PORT OF CARDIFF

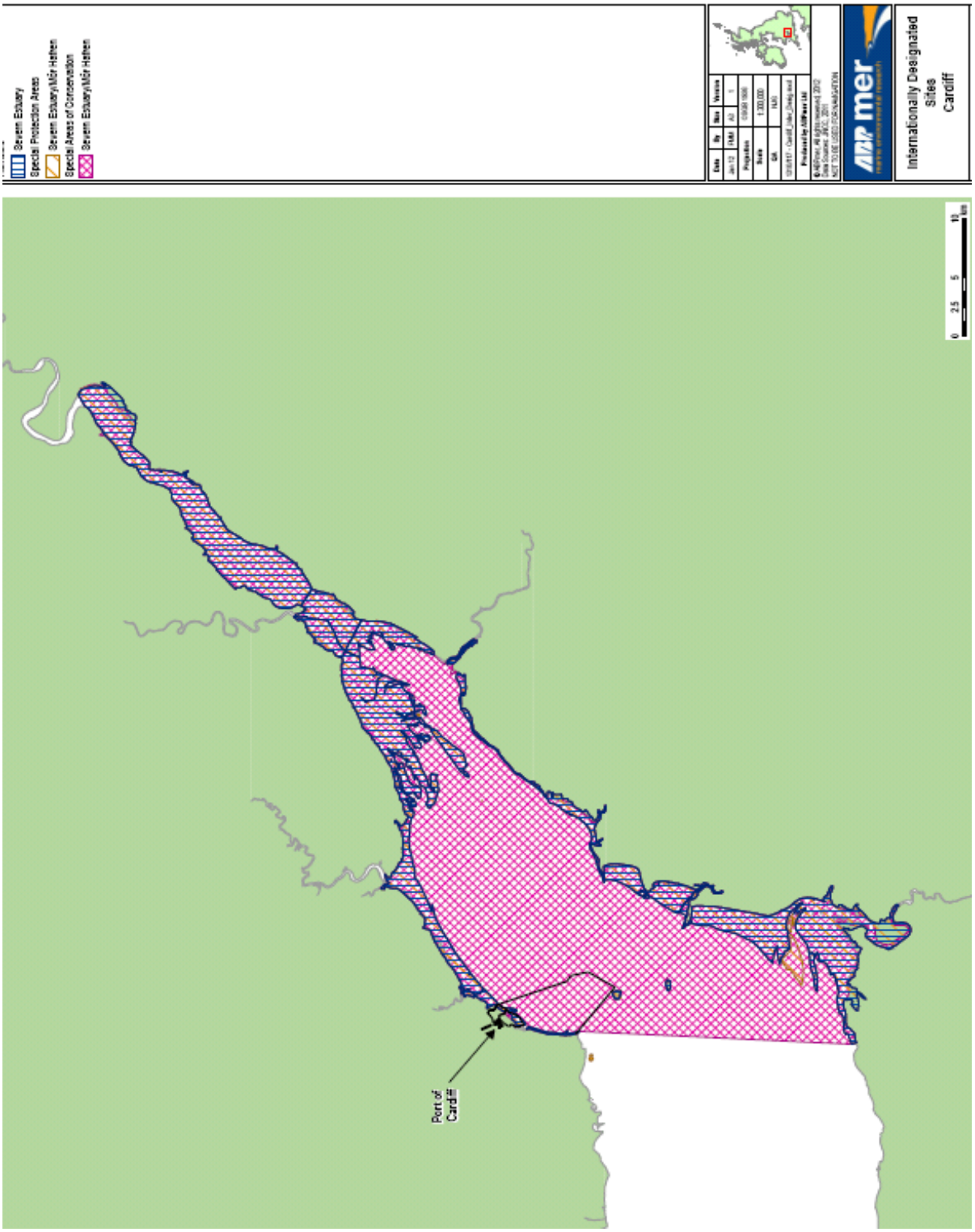
1st Cardiff Port Land Boundary and Cardiff Statutory Harbour Authority – Includes formal and informal anchorages, anchorage buoys, disposal sites, dredge areas and Wetlands of International Importance (Ramsar), Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Sites of Special Scientific Interest (SSSI) within 5 km.

2nd Cardiff Port Boundaries – 12 Sites of Special Scientific Interest (SSSI) – 5km

3rd Cardiff Port Boundaries with Wetlands of International Importance (Ramsar), Severn Estuary (Wales) Special Protection Areas, Severn Estuary/Mor Hafren Special Areas of Conservation and Severn Estuary/Mor Hafren marked.


Cardiff Port Land Boundary
Cardiff SHA
Anchorages
Formal
Informal
Anchorage Buoys
ABP Cardiff Disposal Site
ABP Cardiff Dredge Areas
Ramsar Sites within 5km
SPA Sites within 5km
SAC Sites within 5km
SSSI Sites within 5km
Port of Cardiff
Figure 1
Port of Cardiff


COG MOORS
COSMESTON LAKES
CWM CYDFIN, LESWITH
FLAT HOLM
GWENT LEVELS - RUMNEY AND PETERSTONE
HAYES POINT TO SENDRICK ROCK
PENARTH COAST
PENYLAN QUARRY
RHYMNEY RIVER SECTION
RUMNEY QUARRY
SEVERN ESTUARY
SULLY ISLAND
Distance (km)
-1 (Overlaps Port Land Boundary)
0
1
2
3
4
5
Sites of Special Scientific Interest Cardiff
Port of Cardiff

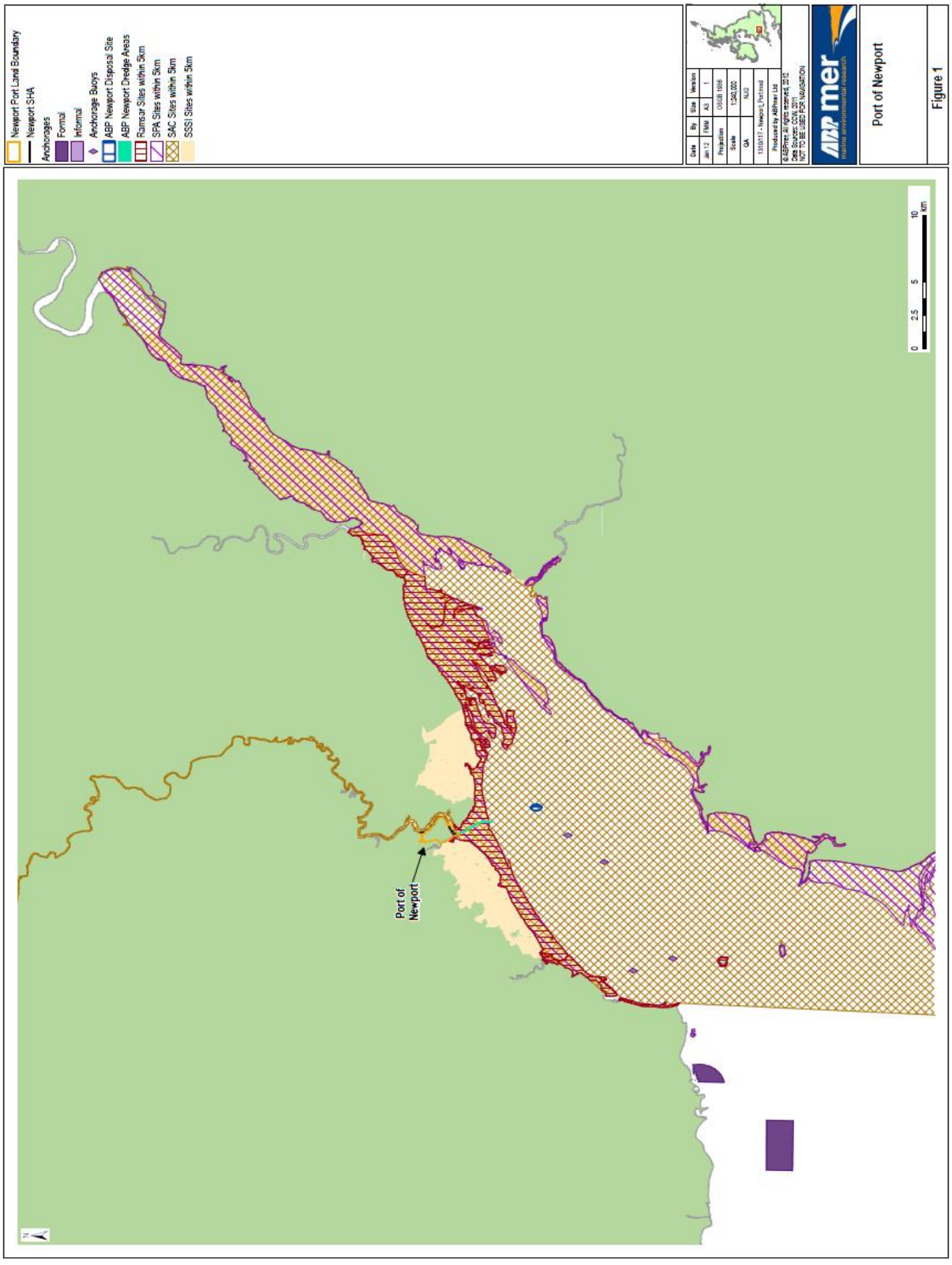

Severn Estuary
Special Protection Areas
Severn Estuary/Môr Hafren
Special Areas of Conservation
Severn Estuary/Môr Hafren
Internationally Designated Sites
Cardiff
Port of Cardiff

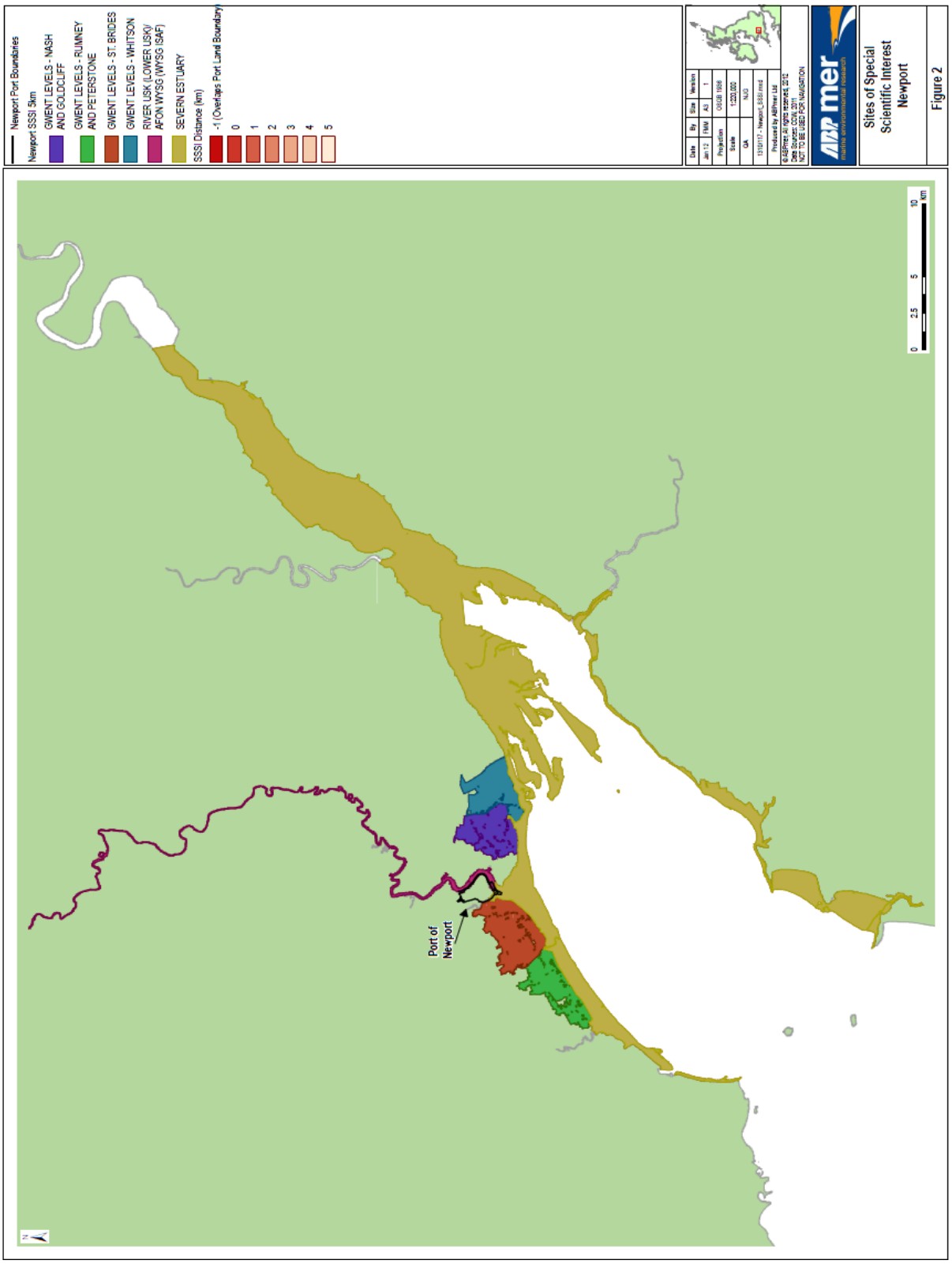
PORT OF NEWPORT

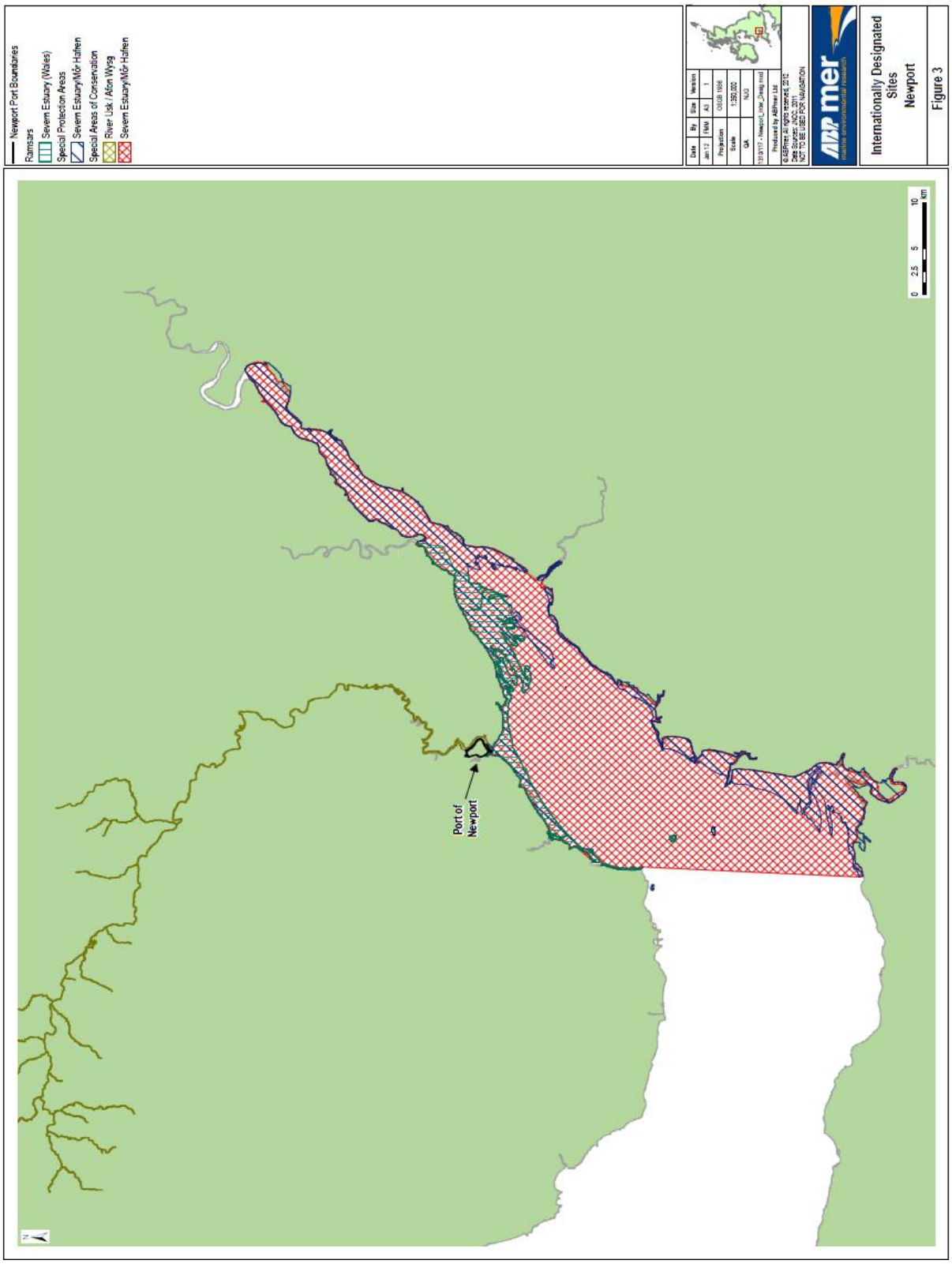
1st Newport Port Land Boundary and Newport Statutory Harbour Authority – Includes formal and informal anchorages, anchorage buoys, disposal sites, dredge areas and Wetlands of International Importance (Ramsar), Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Sites of Special Scientific Interest (SSSI) within 5 km.

2nd Newport Port Boundaries – 6 Sites of Special Scientific Interest (SSSI) – 5km

3rd Newport Port Boundaries with Wetlands of International Importance (Ramsar), Severn Estuary (Wales) Special Protection Areas, Severn Estuary/Mor Hafren Special Areas of Conservation Severn Estuary/Mor Hafren.


Newport Port Land Boundary
Newport SHA
Anchorages
Formal
Informal
Anchorage Buoys
ABP Newport Disposal Site
ABP Newport Dredge Areas
Ramsar Sites within 5km
SPA Sites within 5km
SAC Sites within 5km
SSSI Sites within 5km
Port of Newport
Figure 1
Port of Newport


Newport Port Boundaries
Newport SSSI 5km
GWENT LEVELS - NASH AND GOLDCLIFF
GWENT LEVELS - RUMNEY AND PETERSTONE
GWENT LEVELS - ST. BRIDES
GWENT LEVELS - WHITSON
RIVER USK (LOWER USK)/ AFON WYSG (WYSG ISAF)
SEVERN ESTUARY
SSSI Distance (km)
-1 (Overlaps Port Land Boundary)
0
1
2
3
4
5
Sites of Special Scientific Interest Newport
Figure 2
Port of Newport
0
2.5
5
10
km

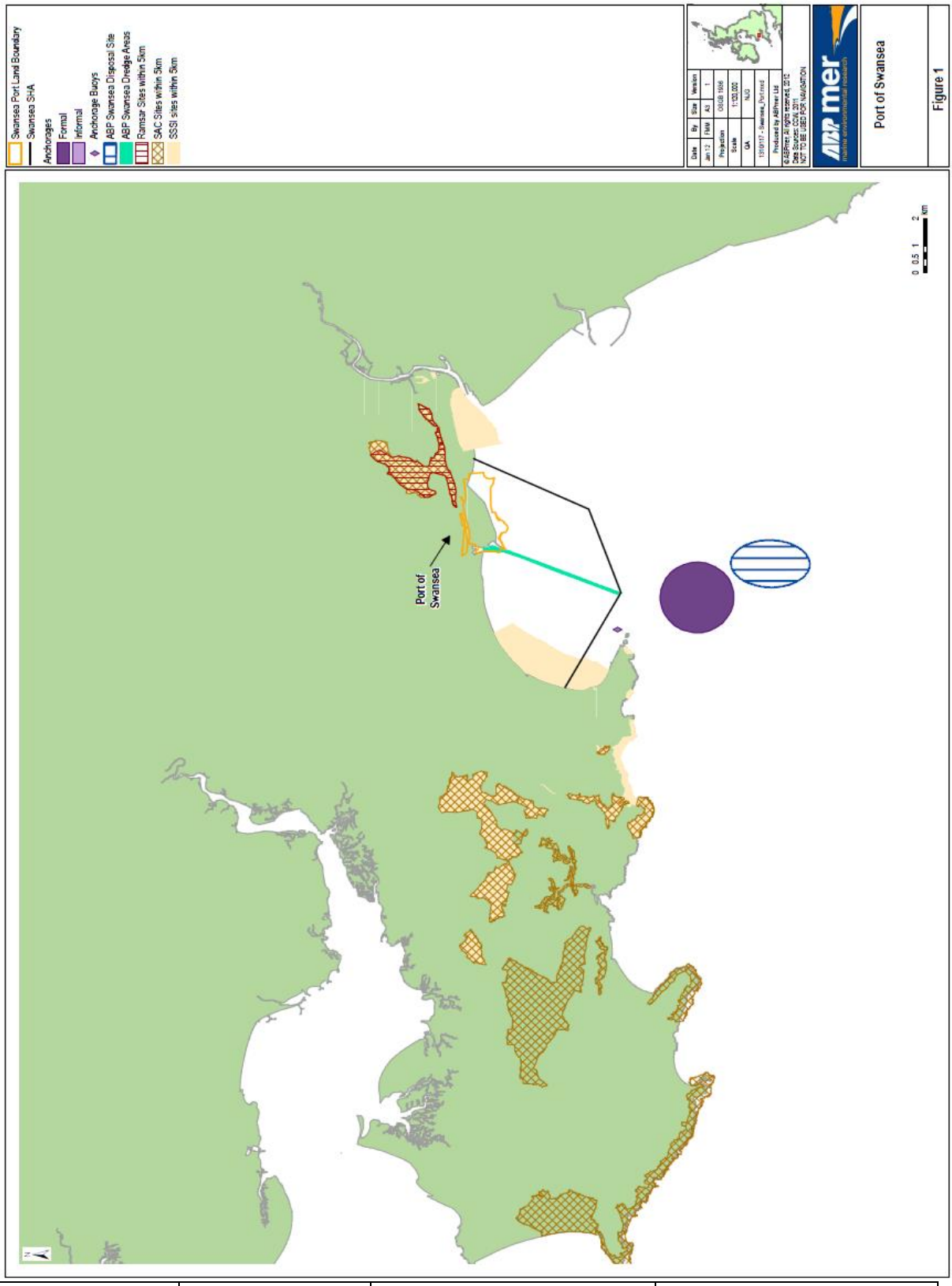

Newport Port Boundaries
Ramsars
Severn Estuary (Wales)
Special Protection Areas
Severn Estuary/Môr Hafren
Special Areas of Conservation
River Usk / Afon Wysg
Severn Estuary/Môr Hafren
Internationally Designated Sites
Newport
Figure 3
Port of Newport
0 2.5 5 10 km

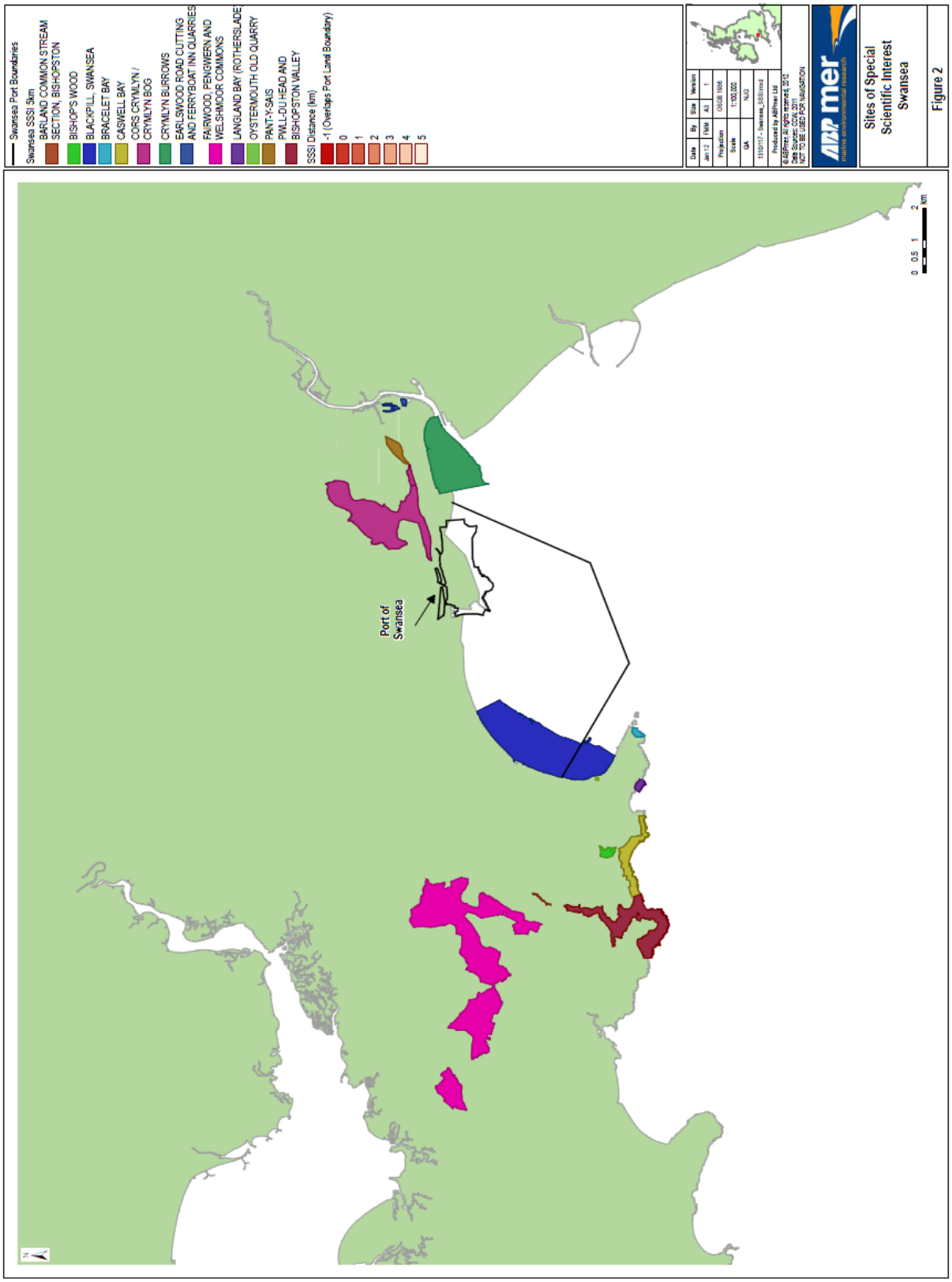
PORT OF SWANSEA

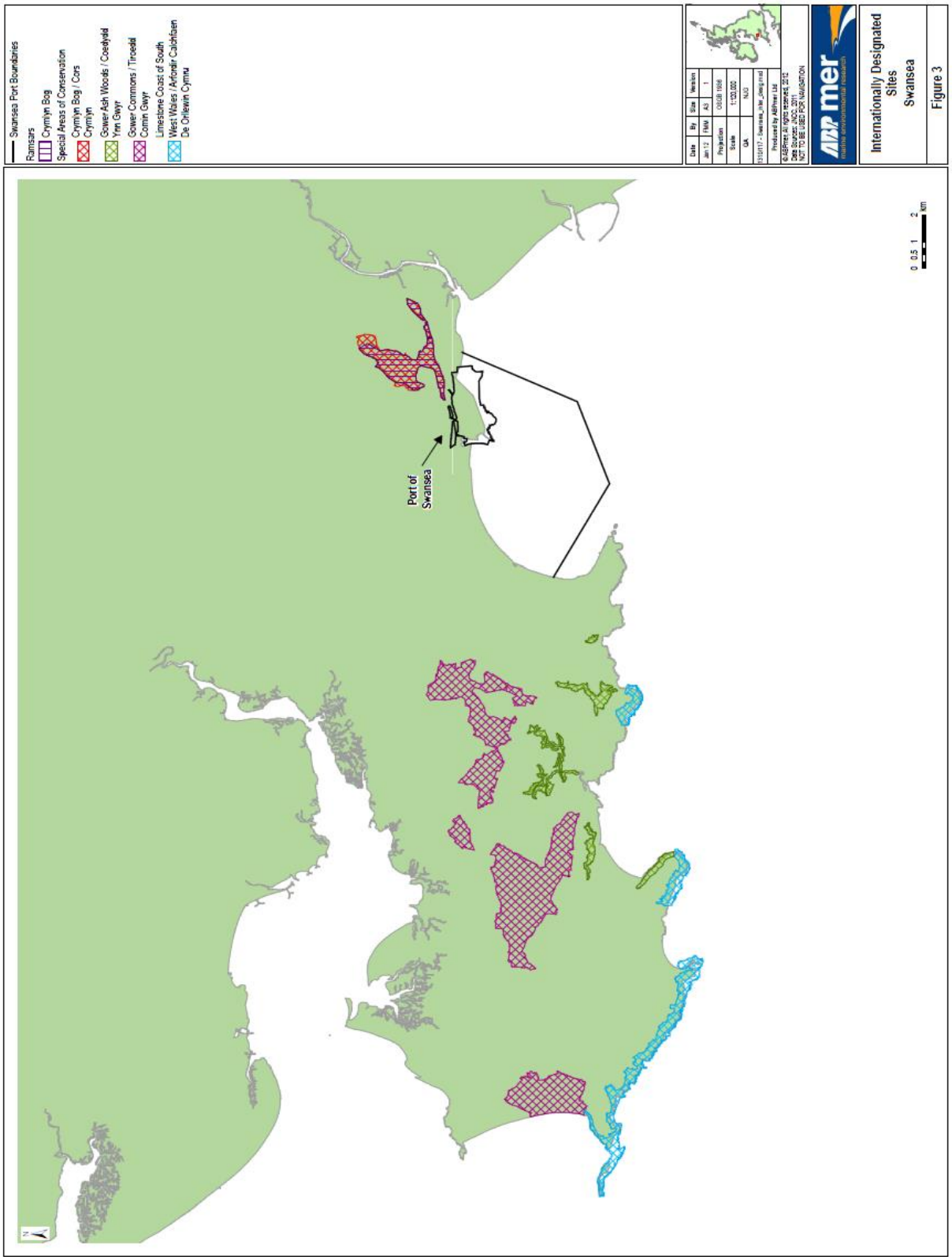
1st Swansea Port Land Boundary and Swansea Statutory Harbour Authority – Includes formal and informal anchorages, anchorage buoys, disposal sites, dredge areas and Wetlands of International Importance (Ramsar), Special Areas of Conservation (SAC) and Sites of Special Scientific Interest (SSSI) within 5 km.

2nd Swansea Port Boundaries – 13 Sites of Special Scientific Interest (SSSI) – 5km

3rd Swansea Port Boundaries with Wetlands of International Importance (Ramsar), Crymlyn Bog Special Areas of Conservation, Crymlyn Bog/Cors Crymlyn, Gower Ash Woods/Coedydd Ynn Gwyr, Gower Commons/Tiroedd Comin Gwyr and Limestone Coast of South West Wales/Arfordir Calchfaen De Orllewin Cymru.


Swansea Port Land Boundary
Swansea SHA
Anchorages
Formal
Informal
Anchorage Buoys
ABP Swansea Disposal Site
ABP Swansea Dredge Areas
Ramsar Sites within 5km
SAC Sites within 5km
SSSI sites within 5km
Port of Swansea
Figure 1
Port of Swansea
0 0.5 1 2 km


Swansea Port Boundaries
Swansea SSSI 5km
BARLAND COMMON STREAM SECTION, BISHOPSTON
BISHOP'S WOOD
BLACKPILL, SWANSEA
BRACELET BAY
CASWELL BAY
CORS CRYMLYN / CRYMLYN BOG
CRYMLYN BURROWS
EARLSWOOD ROAD CUTTING AND FERRYBOAT INN QUARRIES
FAIRWOOD, PENGWERN AND WELSHMOOR COMMONS
LANGLAND BAY (ROTHERSLADE)
OYSTERMOUTH OLD QUARRY
PANT-Y-SAIS
PWLL-DU HEAD AND BISHOPSTON VALLEY
SSSI Distance (km)
-1 (Overlaps Port Land Boundary)
0
1
2
3
4
5
Sites of Special Scientific Interest Swansea
Figure 2
Port of Swansea
0 0.5 1 2 km

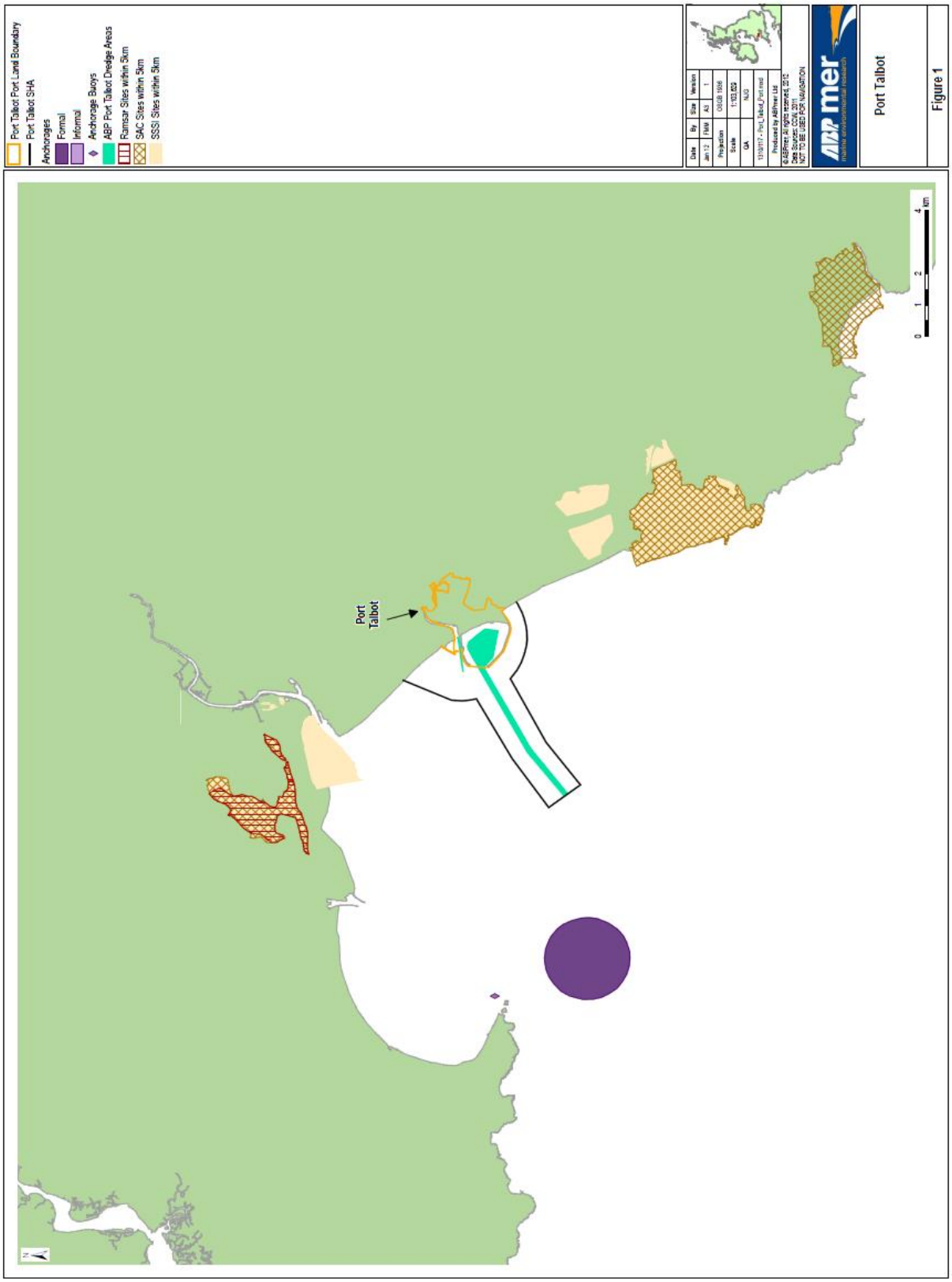

Swansea Port Boundaries
Ramsars
Crymlyn Bog
Special Areas of Conservation
Crymlyn Bog / Cors Crymlyn
Gower Ash Woods / Coedydail Ynn Gwyr
Gower Commons / Tiroedd Comin Gwyr
Limestone Coast of South West Wales / Arfordir Calchfaen De Orllewin Cymru
Port of Swansea
0 0.5 1 2 km
Internationally Designated Sites Swansea
Figure 3

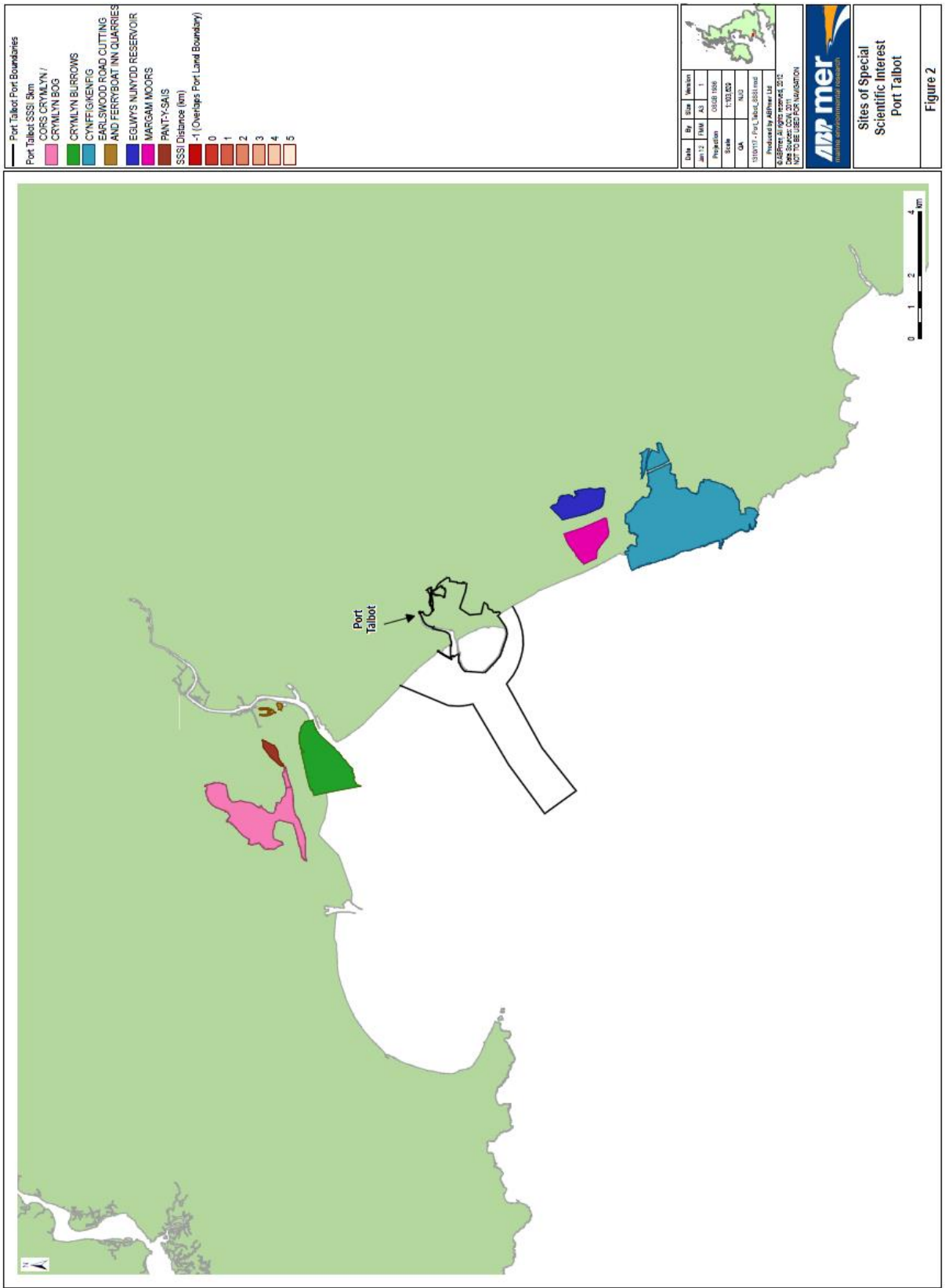
PORT OF PORT TALBOT

1st Port Talbot Port Land Boundary and Port Talbot Statutory Harbour Authority – Includes formal and informal anchorages, anchorage buoys, dredge areas and Wetlands of International Importance (Ramsar), Special Areas of Conservation (SAC) and Sites of Special Scientific Interest (SSSI) within 5 km.

2nd Port Talbot Port Boundaries – 7 Sites of Special Scientific Interest (SSSI) – 5km

3rd Port Talbot Port Boundaries with Wetlands of International Importance (Ramsar) Crymlyn Bog and Special Areas of Conservation Crymlyn Bog/Cors Crymlyn and Kenfig/cynffig.


Port Talbot Port Land Boundary
Port Talbot SHA
Anchorages
Formal
Informal
Anchorage Buoys
ABP Port Talbot Dredge Areas
Ramsar Sites within 5km
SAC Sites within 5km
SSSI Sites within 5km
Port Talbot
Figure 1
Port Talbot
0
1
2
4
km


Port Talbot Port Boundaries
Port Talbot SSSI 5km
CORS CRYMLYN / CRYMLYN BOG
CRYMLYN BURROWS
CYNFFIGIKENFIG
EARLSWOOD ROAD CUTTING AND FERRYBOAT INN QUARRIES
EGLWYS NUNYDD RESERVOIR
MARGAM MOORS
PANT-Y-SAIS
SSSI Distance (km)
-1 (Overlaps Port Land Boundary)
0
1
2
3
4
5
Sites of Special Scientific Interest Port Talbot
Figure 2
Port Talbot
0
1
2
4 km

The Port of Cardiff Dock has 2 dedicated bulk liquid hydrocarbon reception facilities

Roath Dock Oil terminal
Queen Alexander dock No1 oil terminal.

A permanently fixed bubble barrier, is in place to contain any small spill from the Roath Dock oil terminal. For a larger ship to shore spill from either of the 2 oil terminals in Cardiff, a oil boom is stored close to the Roath Dock Communication passage and can be used to contain a spill at either terminal.

The Cardiff Dock Plan shows the following:

Position of Bubble barrier
Boom position to isolate QA dock from Roath Dock

Boom Position to isolate a spill at No 1 oil berth

Port Talbot Tidal harbour

The Tidal Harbour at Port Talbot was purpose built to service Cape size vessels carrying iron ore and coal to the steel works at Port Talbot.

- The area has a high tidal rise and fall:
- 8.5m spring
- 5m neap
- Has tidal streams across the entrance of up to 3knots during spring tides.

The entrance to the harbour has a westerly aspect and is exposed to the prevailing Atlantic swells and winds. The entrance itself is over 600 m wide. The harbour is man made, the breakwaters constructed from irregular shaped stone blocks. (high Energy)

Due to the exclusive dry bulk cargo trade in the port and the natural and physical obstacles, it is not considered practical to plan to boom off the harbour in the case of the type of spill that could be expected (small bunkering spill)

Swansea Dock

There is currently no commercial activity taking place in the Queens dock at Swansea, however, there is a mussel farm situated close to the old BP facility (marked on the attached dock Plan. In the eventuality of a spill in the Kings dock (commercial activity other than bulk oil) it may be necessary to boom across the communication passage (as marked on the dock Plan)

Port approaches

The approaches to the Ports of Port Talbot, Swansea, Barry, Cardiff, Newport and the River Usk are surrounded by environmentally sensitive areas.

Sensitivity Maps have been included for each port approach, detailing the following Sites

RAMSAR
SSSI
SPA
SAC

It is considered that any attempt at deflection booming would only be deflecting the problem to another sensitive site

Swansea and Port Talbot approaches

The ports of Swansea and Port Talbot do not service any liquid bulk hydrocarbon trade. Risk assessments show that any expected spills would be relatively small .

The following are noteworthy:

- The coastlines are exposed to Atlantic swells and prevailing Westerly and South Westerly winds and are considered high energy.
- Tidal streams of 3+ knots are experienced in the vicinity
- Tidal range is in excess of 8m (spring) and 5m (neap)
- Any spill in the approaches to the ports covered in the plan would require the Services of the contracted tier 2 responder, The requirement for tier 2 response is 4 hrs, during this response time it is considered that oil from the type of spill reasonably expected would have dispersed over a large area.

For the above reasons it is not considered practical to identify predefined booming sites and plan.

Barry Cardiff, Newport and River Usk approaches.

The ports of Barry, Newport and River Usk do not service any liquid bulk hydrocarbon trade. Risk assessments show that any expected spills would be relatively small . However Cardiff has 2 liquid hydrocarbon bulk terminals and there is a potential for a significant spill in the approaches to Cardiff

The following are noteworthy:

- The Upper Bristol Channel / Severn Estuary has the 2nd largest tidal range in the world. Tidal range at Newport is in excess of 12m (springs and 7m (neaps)
- The area experiences tidal streams in excess of 5 kts (springs) (3kt neaps)
- The coastline between Barry and Cardiff is high energy
- The coastline between Cardiff and Barry consists mainly of mud flats that are exposed on a tidal basis (twice every 24hrs)
- Any spill in the approaches to the ports covered in the plan would require the Services of the contracted tier 2 responder, The requirement for tier 2 response is 4 hrs, during this response time it is considered that oil from the type of spill reasonably expected would have dispersed over a large area.

For the above reasons it is not considered practical to identify predefined booming sites

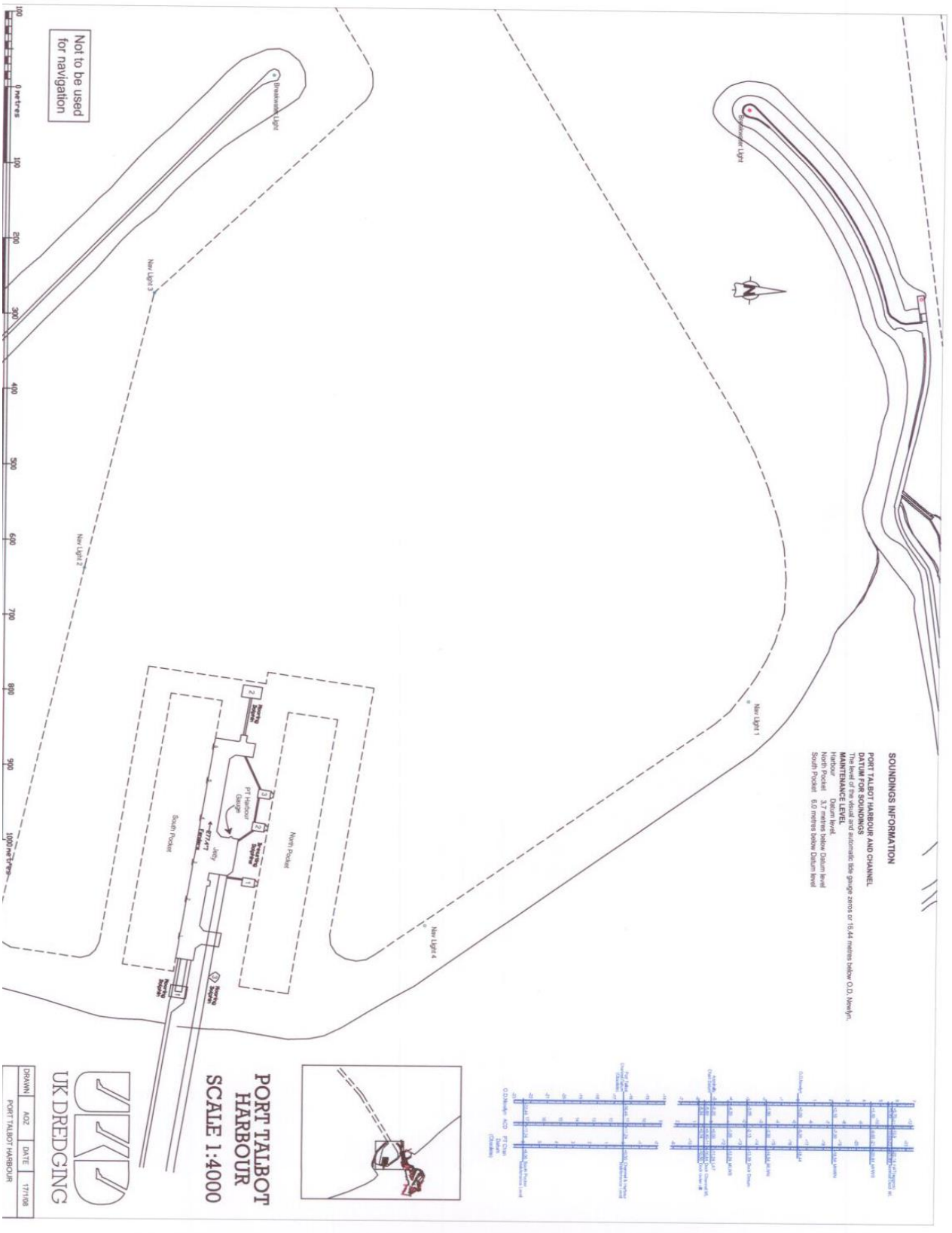
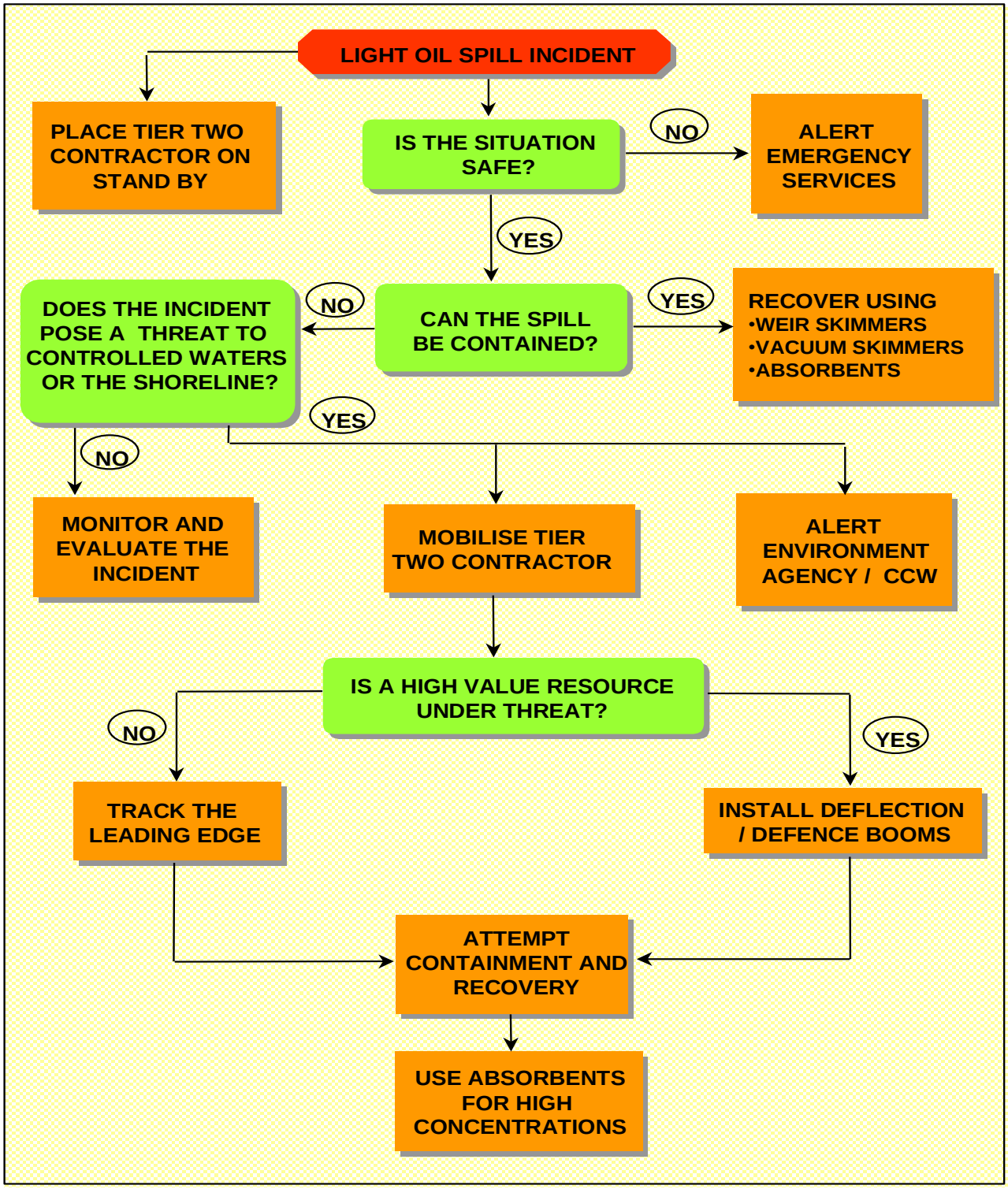
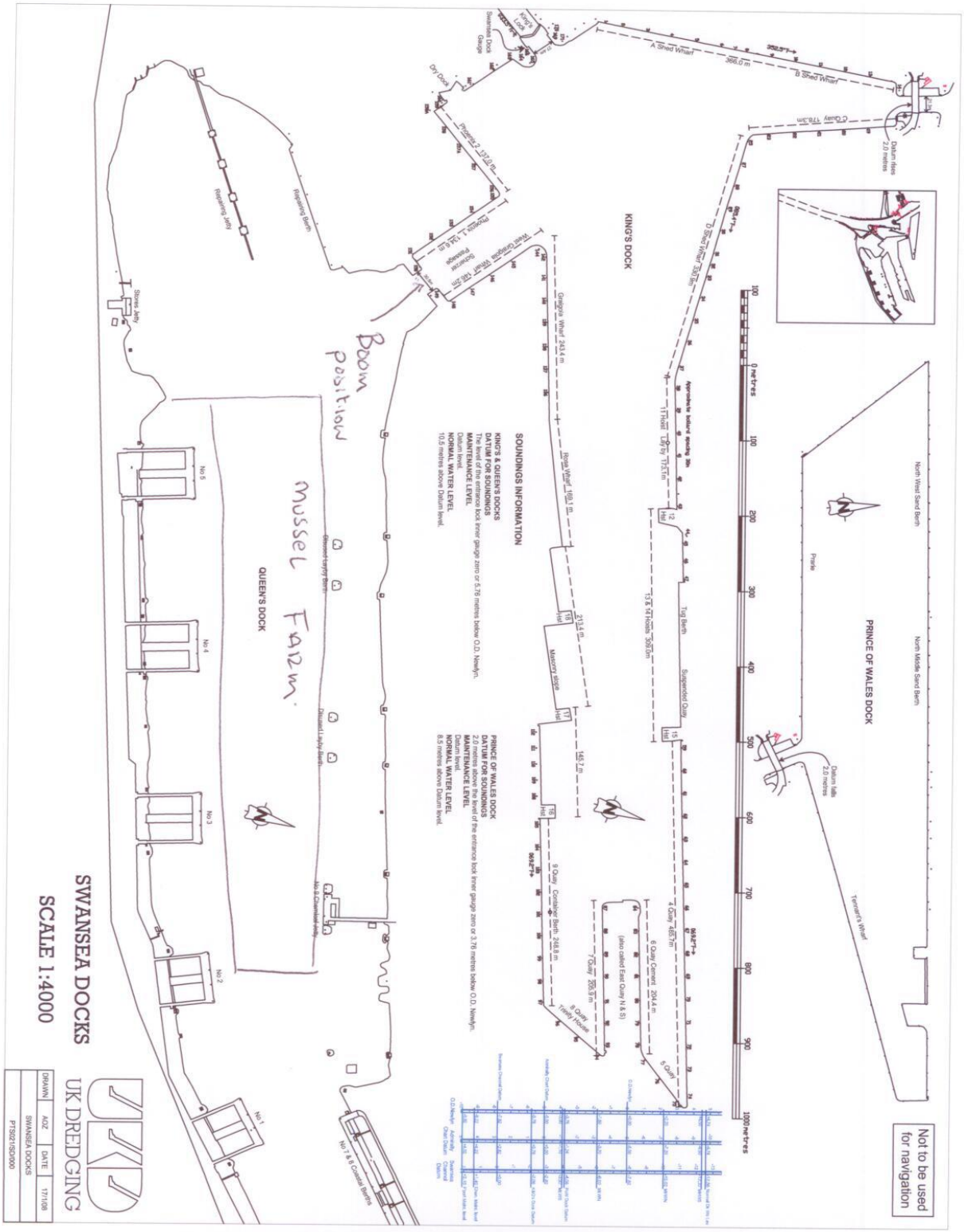
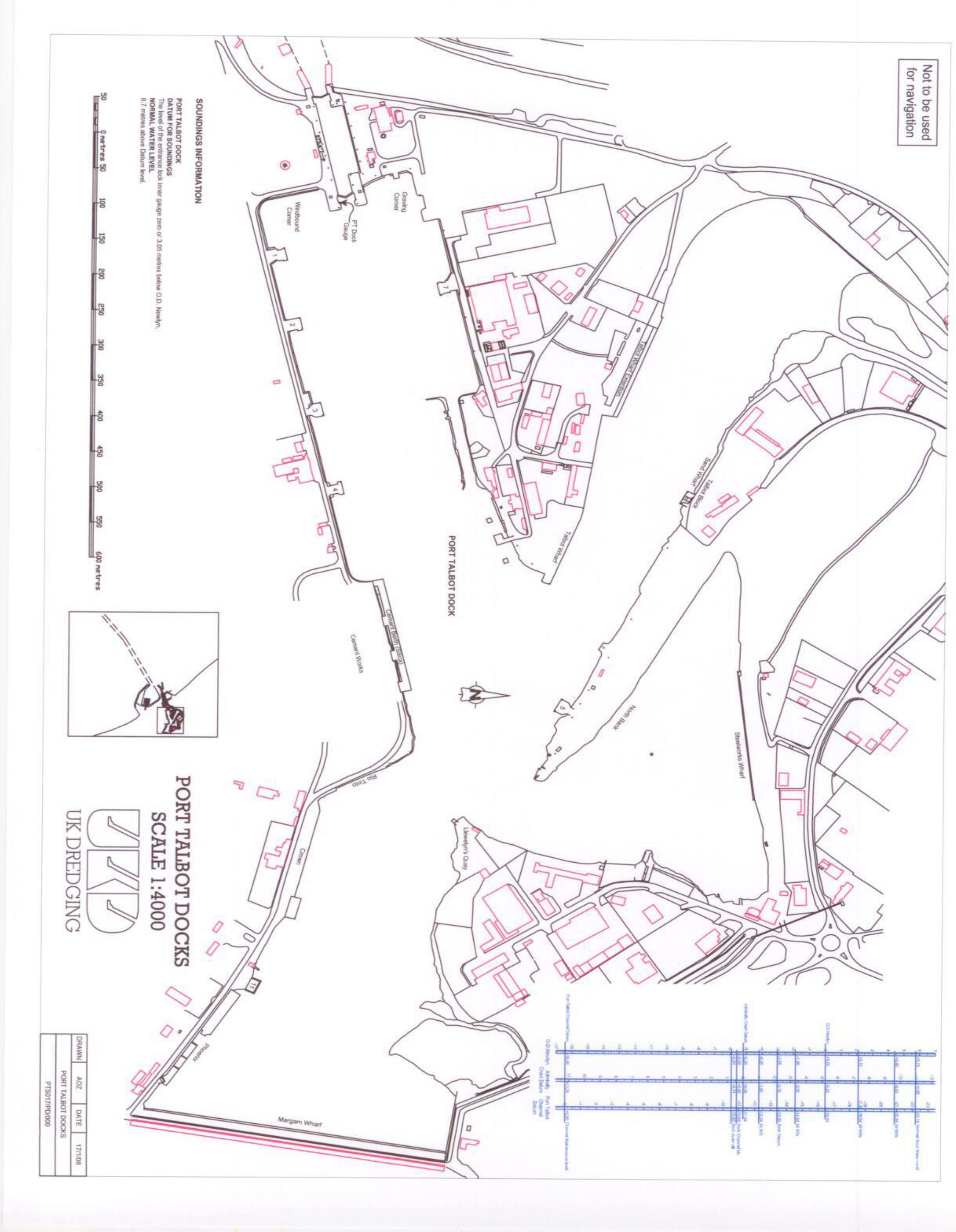
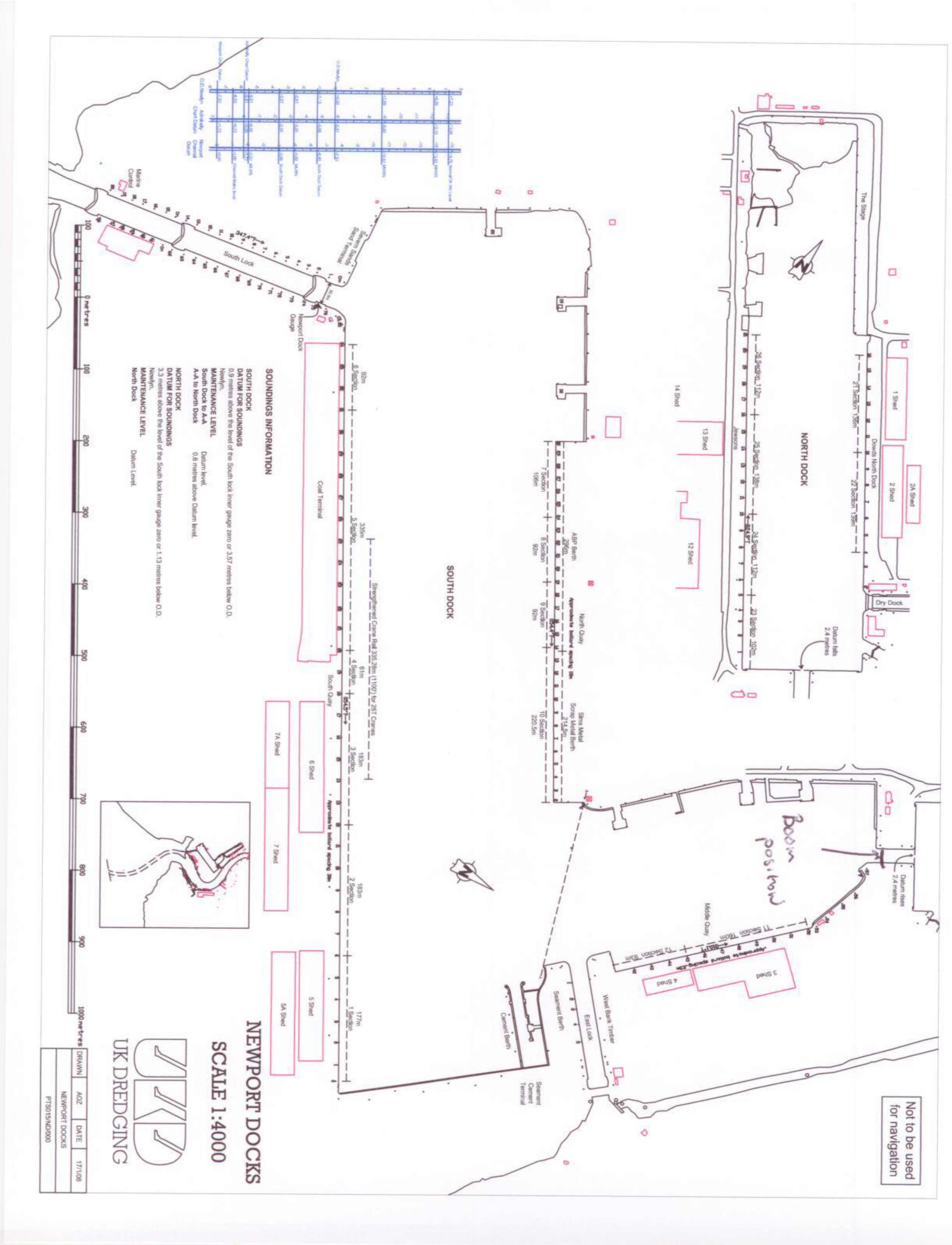

Not to be used for navigation
Breakwater Light
Nav Light 3
Nav Light 2
Nav Light 1
Nav Light 4
North Pocket
South Pocket
PT Harbour Gauge
Jetty
SOUNDINGS INFORMATION
PORT TALBOT HARBOUR AND CHANNEL
DATUM FOR SOUNDINGS
The level of the visual and automatic tide gauge zeros or 16.44 metres below O.D. Newlyn.
MAINTENANCE LEVEL
Harbour Datum level.
North Pocket 3.7 metres below Datum level
South Pocket 6.0 metres below Datum level
PORT TALBOT HARBOUR
SCALE 1:4000
UK DRAWN AOZ DATE 17/1/08
UK DREDGING
PORT TALBOT HARBOUR

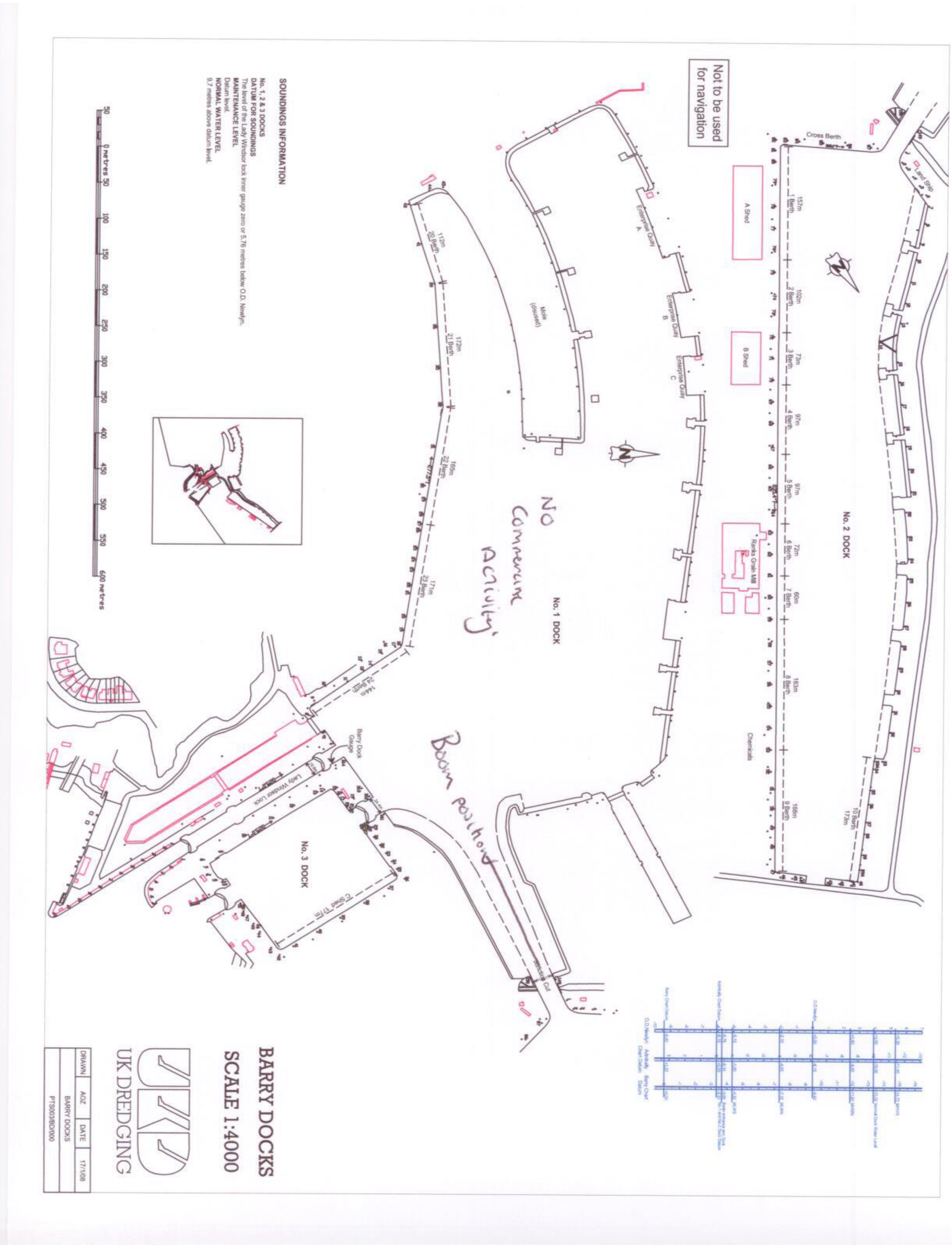
Figure 5.1 Light Oil Response Guidelines




SWANSEA DOCKS
SCALE 1:4000
UK DREDGING
KING'S DOCK
QUEEN'S DOCK
PRINCE OF WALES DOCK
SOUNDINGS INFORMATION
Boom position
mussel Farm
Not to be used for navigation


Not to be used for navigation
SOUNDINGS INFORMATION
PORT TALBOT DOCK
PORT TALBOT DOCKS
SCALE 1:4000
UK DREDGING
Margam Wharf
Steelworks Wharf
Talbot Wharf
North Bank
Cement Works


NEWPORT DOCKS
SCALE 1:4000
UK DREDGING
SOUNDINGS INFORMATION
SOUTH DOCK
NORTH DOCK
South Lock
Coal Terminal
Not to be used for navigation
Boom position


BARRY DOCKS
SCALE 1:4000
UK DREDGING
Not to be used for navigation
SOUNDINGS INFORMATION
No. 1 DOCK
No. 2 DOCK
No. 3 DOCK
A Shed
B Shed
Cross Berth
Lady Windsor Lock
No Commercial Activity
Boom positions

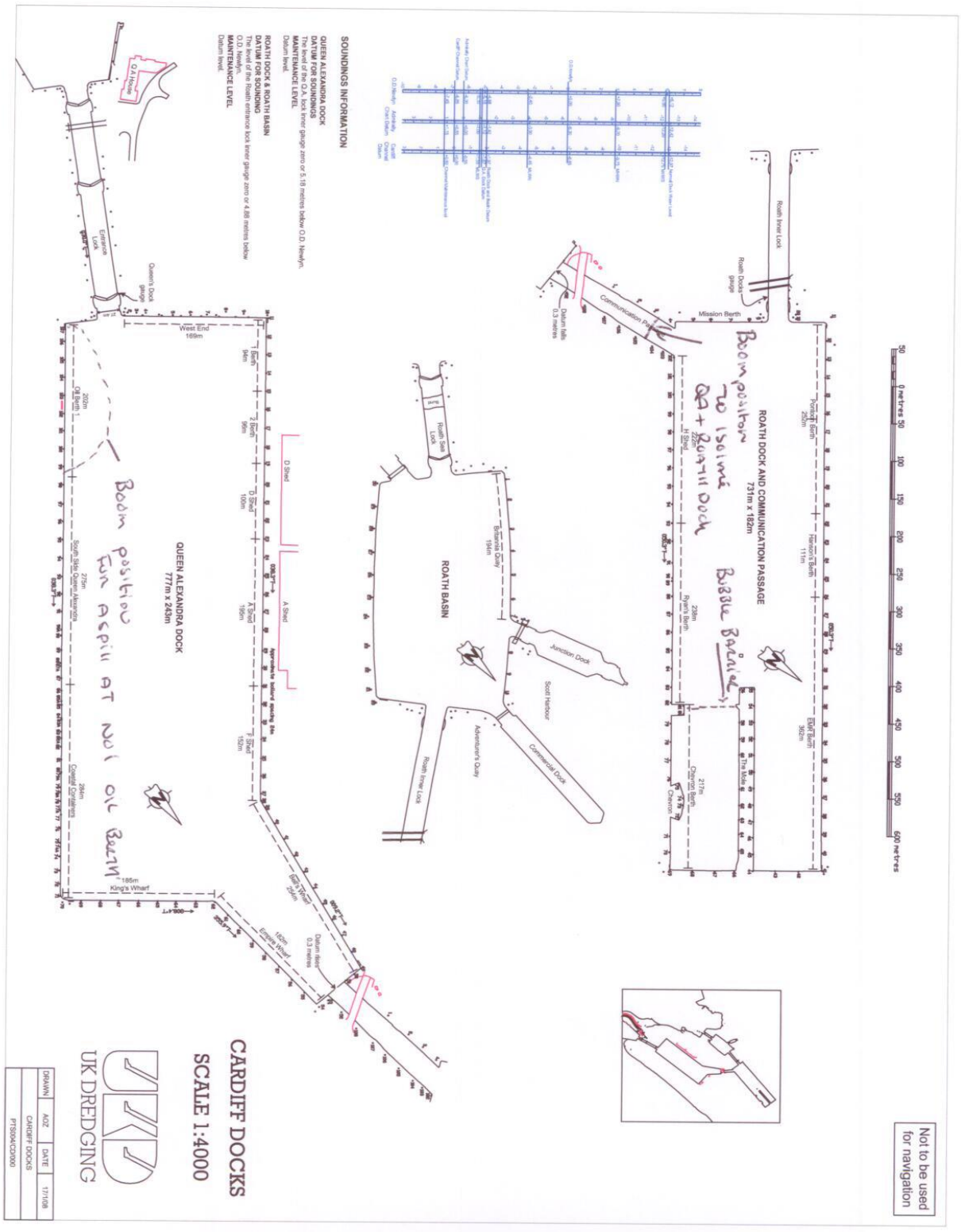
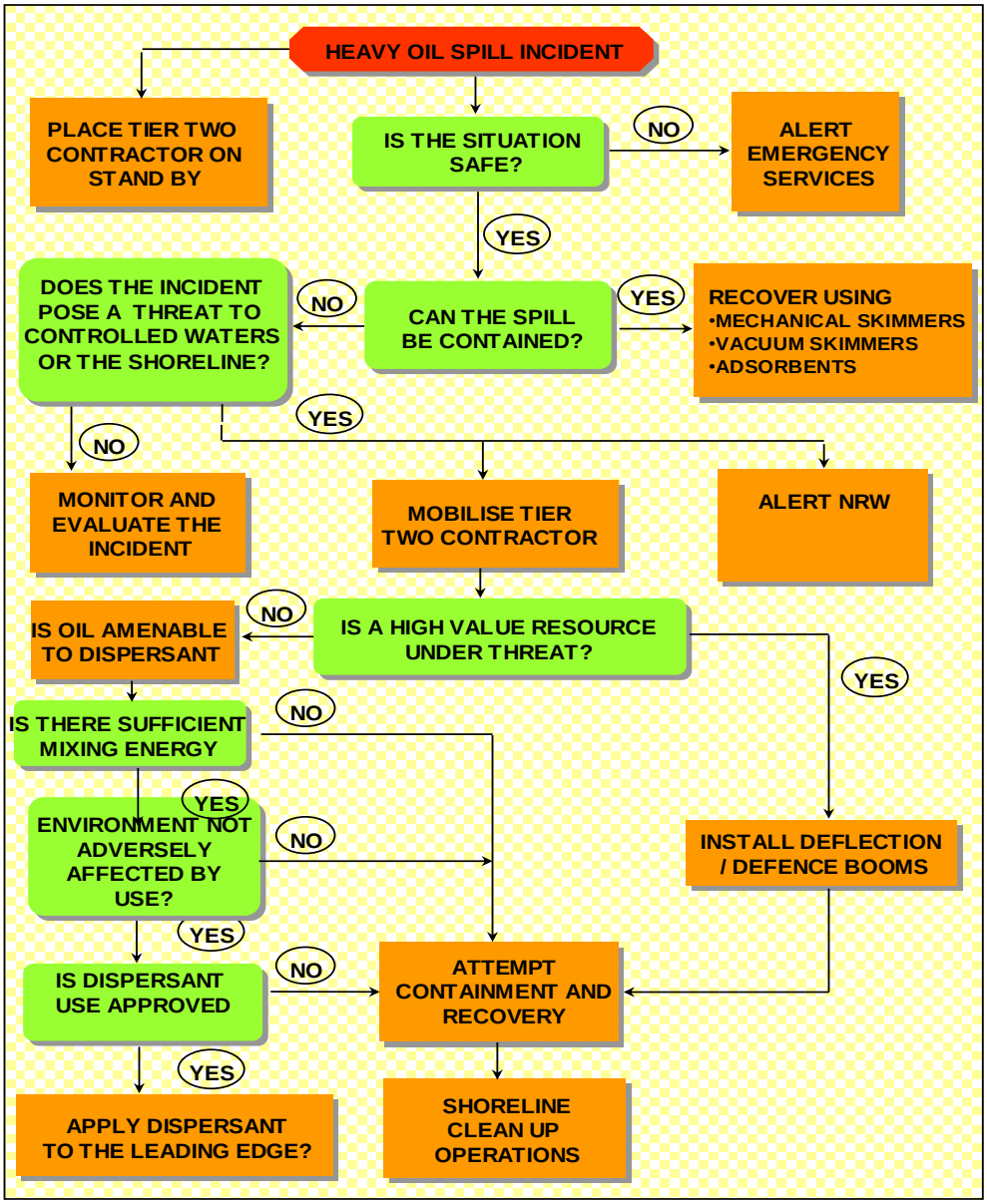
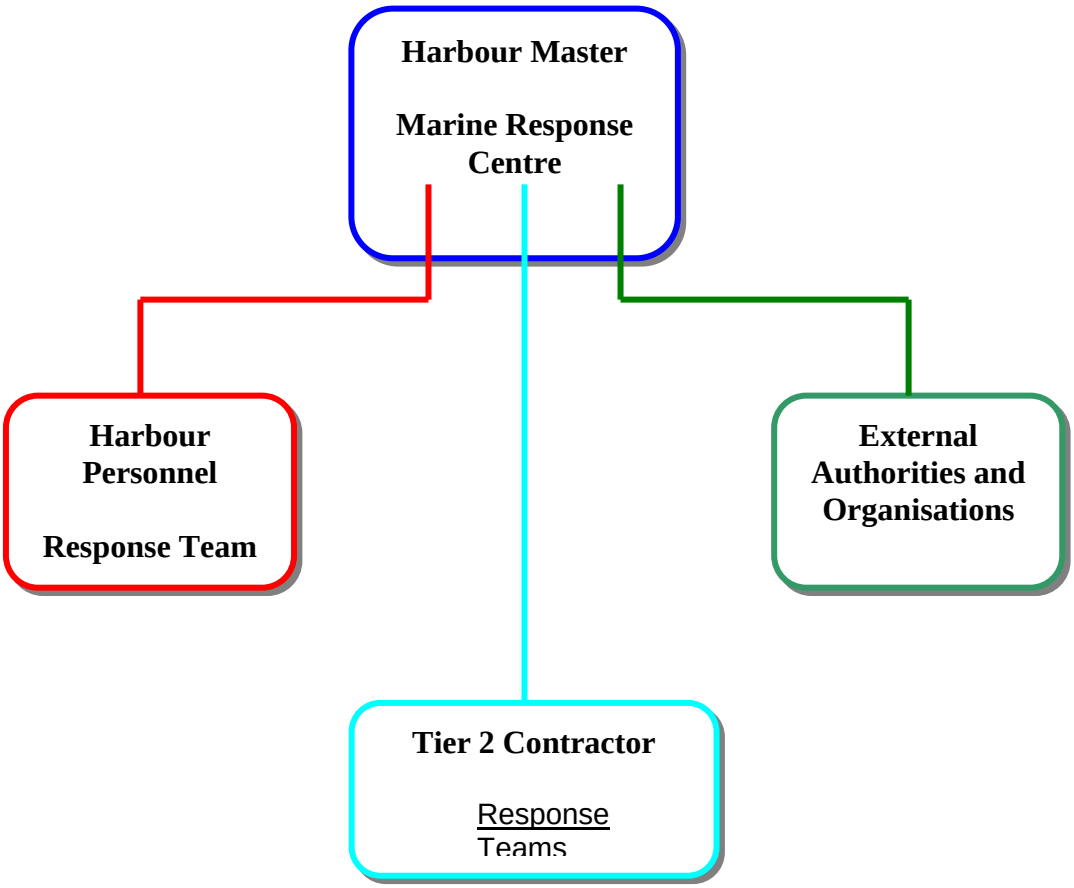

CARDIFF DOCKS
SCALE 1:4000
UK DREDGING
ROATH DOCK AND COMMUNICATION PASSAGE
731m x 182m
ROATH BASIN
QUEEN ALEXANDRA DOCK
777m x 243m
SOUNDINGS INFORMATION
Not to be used for navigation

Figure 5.2 Heavy Oil Response Guidelines



6. Communications / Public Affairs Plan

6.1 Communications Plan

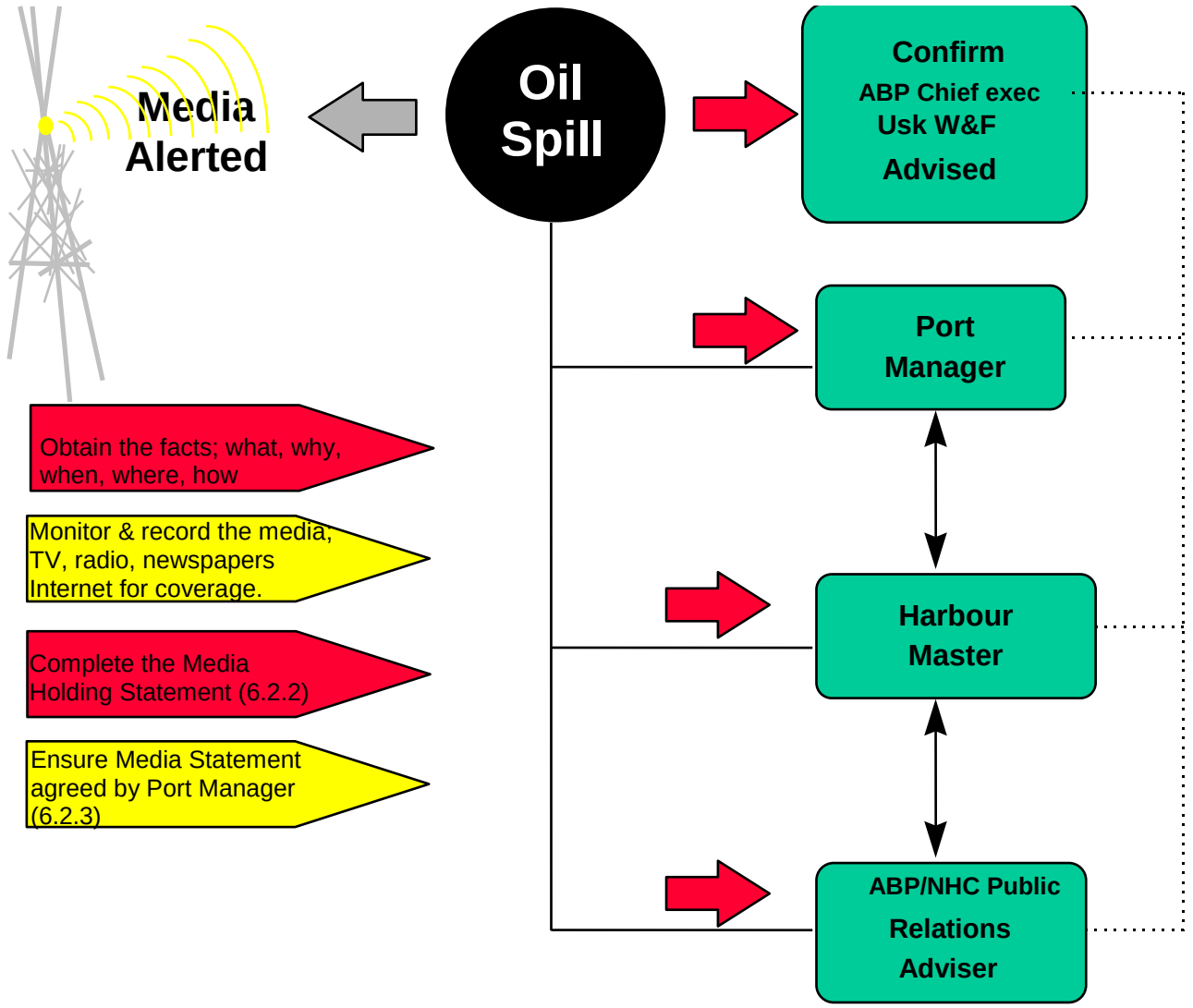


Key: **Private Channel VHF Radio / Cellular Telephone** **Telephone/Facsimile**

Private Channel UHF/VHF Radio

6.2 Public Affairs Plan

6.2.1 Media Release Procedure



6.2.2 Media Holding Statement

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

At ..... Hrs on ..... day ..... 199 ,

An oil spill occurred at (location)…….

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

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

The harbour authority has initiated spill response measures and is investigating the cause.

NEXT PRESS STATEMENT AT ..... HRS

ALL PRESS ENQUIRIES TO "INCIDENT PRESS OFFICE"

6.2.3 Media Statement

Incident Name:			
Date Prepared:		Time Prepared:	
Operational Period:			
Start:		Finish:	

Message

Contact for Further Information:

Approved by: Date:

Health and Safety Plan

7.1 Introduction

Full account must be taken of the health and safety requirements for all personnel involved in oil spill response activities. The Site Specific Health and Safety Plan Assessment Form (Section 7.2) lists site characteristics, site hazards and personal protective equipment and site facility needs. This plan is intended to act as an aide-mémoire to ensure that all applicable health and safety requirements are considered and appropriate actions are taken.

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

7.2

Site Specific Health and Safety Plan
Assessment Form

1. APPLIES TO SITE:					
2. DATE:		**3. TIME:**		**4. INCIDENT:**	
5. PRODUCT (S):				(Attach MSDS)	
6. Site Characterisation					
6a. Area	☐ Open water	☐ Inshore water	☐ River	☐ Salt marsh	☐ Mudflats
	☐ Shoreline	☐ Sand	☐ Shingle	☐ Docks	
6b. Use	☐ Commercial	☐ Industrial	☐ Public	☐ Government	☐ Recreational
	☐ Residential	☐ Other			

7. Site Hazards			
	☐ Boat safety	☐ Fire, explosion	☐ Slips, trips and falls
	☐ Chemical hazards	☐ Heat stress	☐ Steam and hot water
	☐ Cold stress	☐ Helicopter operations	☐ Tides
	☐ Drum handling	☐ Lifting	☐ Trenches, excavations
	☐ Equipment operations	☐ Motor vehicles	☐ Visibility
	☐ Electrical hazards	☐ Noise	☐ Weather
	☐ Fatigue	☐ Overhead/buried utilities	☐ Work near water
	☐ Others	☐ Pumps and hoses	

8. Air Monitoring (Oil company incident)									
	☐ O_2		☐ LEL		☐ Benzene		☐ H_2S	☐ Other	

9. Personal Protective Equipment			
☐ Foot Protection		☐ Coveralls	
☐ Head Protection		☐ Impervious suits	
☐ Eye Protection		☐ Personal Floatation	
☐ Ear Protection		☐ Respirators	
☐ Hand Protection		☐ Other	

10. Site Facilities		
☐ Sanitation	☐ First Aid	☐ Decontamination

11. Contact details:		
☐ Doctor	Phone	
☐ Hospital	Phone	
☐ Fire	Phone	
☐ Police	Phone	
☐ Other	Phone	

12. Date Plan Completed	
13. Plan Completed by	

7.3 Legislative Requirements

7.3.1 Employers' Duties

The principal duty of an employer is that imposed by The Health and Safety at Work Act **etc**. 1974 & The Management of Health and Safety at Work Regulations **1999 (as amended).** The Act states the employer is to ensure, as far as is reasonably practicable, the health, safety and welfare of their employees and anyone else who may be affected by their business activities whilst at work.

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

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

7.3.2 Employees' Duties

All employees have a duty under The Health and Safety at Work Act **etc**. 1974 & The Management of Health and Safety at Work Regulations **1999 (as amended)** to take reasonable care for the health and safety of themselves and their colleagues at work who may be affected by their acts or omissions.

Under The Health and Safety at Work Act **etc**. 1974 & The Management of Health and Safety at Work Regulations **1999 (as amended)** employees have a duty to co-operate with their employer and colleagues enabling them to comply with statutory duties and requirements.

Additionally, The Health and Safety at Work Act **etc**. 1974 & The Management of Health and Safety at Work Regulations **1999 (as amended)** states that employees must not intentionally or recklessly misuse any equipment and the like provided for them in the interests of health, safety or welfare.

The Management of Health and Safety at Work Regulations 1992, further oblige employees to:

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

7.4 Site Hazards

7.4.1 Bird Handling

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

Handling of oiled birds is usually best left to experts, or to volunteers who have received some training. Chasing and man handling birds puts them under additional stress. If you see an oiled bird notify the Beach Master who will seek advice on what action to take. If a decision is made to catch an oiled bird take the following actions:

Equipment:

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

Procedures:

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

7.4.2 Boat Safety

- Boat operators must familiarise themselves and passengers with safety features and equipment on their boats.
- Boats must be operated by qualified individuals.
- Lifejackets must be worn by personnel on boats.
- Use of cold-water immersion suits is particularly critical under conditions of cold stress.
- Boats should generally not be used after sunset for oil recovery. If this is required or poses minimal risk, areas of operation should be carefully prescribed, and individual boat operators should maintain a communication

schedule with a shore base. Each boat should be fully equipped with appropriate navigation lights.

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

7.4.3 Chemical Hazards

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

7.4.4 Cold Stress

Cold stress can occur among responders as a result of prolonged exposure to low environmental air temperatures or from immersion in low temperature water. It can lead to a number of adverse effects including frostbite, chilblain and hypothermia. The single most important aspect of life-threatening hypothermia is the fall in the deep core temperature of the body.

Workers shall be provided with warm clothing, rest opportunities, exposure protection, and warm and / or sweet fluids. Boat crew personnel will wear immersion suits the water temperature is below 15^{o}, or the combined water and air temperature is less than 48^{o} Celsius.

Figure 7.1

WIND CHILL CHART

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

Little danger to properly dressed personnel

[1]*Danger of freezing exposed flesh*

[2]**Greatest Danger**

7.4.5 **Drum Handling / Manual Handling**Drum handling at a spill site will primarily involve drums of waste and contaminated clothing. Several types of drums and containers may be used ranging from 25 to 200 litres in size. All drums and containers must be properly labelled. If in doubt as to the contents of a drum - seek advice.

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

- Wear gloves.
- Assess the weight of the load and get help if it is beyond your capability. Where appropriate, use mechanical aids provided.
- Size up the job - remove any obstructions; note any snags and make sure there is a clear space where the load has to be set down. Ensure that you can see over the load when carrying it.
- Look out for any splinters, projecting nails or sharp edges or wire.
- Stand close to the object and with your feet 20 to 30 cm apart, place one foot in advance of the other, pointing in the direction you intend to move.
- Put your chin in - avoid moving your head backwards or forwards.
- Bend your knees to a crouch position, keeping your back straight.

- Get a firm grip at opposite corners of the load with the palm of the hand and the roots of the fingers, arms as close to the body as possible.
- Lift with your thigh muscles by looking up and straightening your legs.
- Apply the above principles, to any movement such as pushing, pulling, digging, shovelling etc.
- Use the reverse procedure when setting down the load.

7.4.6 Equipment Operations

Heavy Equipment

Operators of heavy equipment, such as front-end loaders, graders, bulldozers, must be trained and qualified in their safe operation. The operator and banksman must be familiar with agreed signalling techniques. Where appropriate the banksman should use protective headgear.

Buckets must not be used for personnel transport.

Forklifts

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

7.4.7 Electrical Hazards

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

7.4.8 Fatigue

Working long hours without rest may be required, especially during the early phase of response. This, coupled with the stress of the situation and wearing required PPE, can contribute to fatigue. Symptoms include loss of concentration, errors in judgement, irritability, sleepiness, soreness and stiffness in joints and muscles. Rest and sleep are the primary treatments for fatigue. Stress can be addressed by relaxation techniques, such as deep breathing, stretching and taking breaks.

7.4.9 Fire / Explosion

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

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

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

7.4.10 Heat Stress

Heat stress can result as responders perform heavy labour work in protective and/or impermeable clothing that does not breathe or allow for the normal dissipation of body heat. Heat build up can lead to a number of adverse health effects including heat rash, heat cramps, dehydration, heat exhaustion or heat stroke.
The incidence of heat stress is dependent on a number of factors such as temperature, humidity, a person's fitness, age, weight and clothing worn. Therefore supervisors should continually monitor their employees when workloads are heavy and temperatures and/or humidity are high (see figure below for guidance).

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

Figure 7.2

HEAT INDEX

AIR TEMPERATURE CELSIUS

Relative Humidity	21º	24º	26º	30º	32º	35º	38º	40º	44º	46º
20%	19º	22º	25º	28º	31º	34º	37º	*41º	*45º	*49º
40%	20º	24º	26º	30º	34º	39º	*44º	*51º	**58º	**66º
60%	21º	25º	28º	32º	38º	*46º	**56º	**65º		
80%	22º	26º	30º	36º	*45º	**58º				

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

**** Heat stroke highly likely.**

7.4.11 Helicopter Operations

Helicopters may be used at the spill site for over flight surveillance, site characterisation, personnel/equipment transport, and rescue/medical transport. Safe working practices for passengers and other personnel include:

- Passengers must receive a safety briefing from the pilot prior to takeoff. The briefing shall include: safety features and equipment location on the aircraft; helicopter underwater escape procedures when appropriate; and emergency information.
- Passengers and ground crew should approach/depart from the **FRONT** of the helicopter only when signalled by the pilot and shall never walk under or around the tail rotor or exhaust.
- Loose fitting clothing, hats or other gear that might be caught in the rotor down draught, must be secured or removed within 100 feet of operating helicopters.
- Passengers shall wear seat belts at all times and personal flotation devices when flying over water.
- Passengers and ground crew shall wear hearing protection (which may include communication headsets) at all times around operating helicopters.
- During emergency landing on water:
- Do not exit until instructed to do so by the pilot after rotor blades stop turning or pilot signals all clear.
- Do not inflate personal flotation devices until outside of the helicopter.

7.4.12 Lifting

Cranes must be operated in accordance with the manufacturers' instructions and established construction practices. Only trained and authorised operators shall be allowed to operate cranes. Outriggers must be fully extended to assure maximum stability of the equipment. Cranes must only be operated where the ground provides adequate support.

Rigging components must be inspected daily. Only certified wire rope slings or web strops shall be used. Each sling or strop must be clearly marked or tagged with its rated capacity and must not be used in excess of this rating. Only trained personnel should be allowed under the jib or load and only for the minimum time necessary to hook or unhook the load.

7.4.13 Motor Vehicles

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

7.4.14 Noise

Appropriate hearing protection shall be used in designated high noise areas – first action level of 80 dBA where hearing protection is recommended (85 dBA being the second action level where it becomes mandatory) with a time weighted average over an 8 hour work shift/period. Additionally, no person shall be exposed to greater than 115 dBA at any time without the use of appropriate hearing protection.

7.4.15 Overhead and Buried Utilities

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

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

7.4.16 Pumps and Hoses

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

7.4.17 Slips, Trips and Falls

Slips, trips and falls on oily surfaces are the major cause of injuries at an oil spill site. Many of these injuries occur in the first few minutes of work before workers realise the conditions and begin to take precautionary measures. When entering a spill site, walk slowly and carefully in oil coated areas. Be especially careful when walking on oil-covered rocks. Oil resistant safety footwear with non-slip soles should be worn.

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

8. Waste Management Plan

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

8.1 General

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

Responsibility for the arrangement to dispose of shoreline pollution wastes rests with the local County Council. Associated British Ports, in conjunction with the Local County Council, will arrange for the disposal of all oiled waste materials arising from spillages within the dock complexes or port areas and from the clean-up of land / foreshore owned by ABP. In the event of an incident Natural Resources Wales would be able to provide advice and guidance on waste minimisation and waste disposal matters.

The following types of waste can arise:

- Recovered oil (not heavily contaminated)
- Water in oil emulsion - untreated
- Water in oil emulsion - treated with dispersant
- Thick weathered oil - lumps
- Semi-solid bunker oil
- Oil and sand mixtures
- Dry waste
- Oiled shingle
- Heavily oiled seaweed and other debris

In Tier One and Tier Two incidents which do not involve an oil company, any oil recovered from the dock or harbour waters will be transferred to one of the waste oil disposal / recycling contractors listed in section 8.4.

Waste Disposal Operations

NB: Within this Plan waste oil refers to the disposal of oil which has been contained and recovered as the result of a spill or a pollution incident. The safe handling and disposal of recovered oil is governed by relevant sections in the following legislation:

1. Control of Pollution (Amendment) Act 1989
2. The Environmental Protection Act 1990
3. The Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991
4. Environmental Permitting Regulations 2010
5. Landfill (England and Wales) Regulations 2002
6. Hazardous Waste (England and Wales) Regulations 2005
7. List of Wastes (England) Regulations 2005

If oily waste material is produced as a result of a pollution incident then the polluting party (operator) has a duty of care to ensure that the waste is contained, handled, transported and ultimately disposed of in an appropriate manner. If the material is to be handled by contractors then the operator (to reduce liabilities to a minimum) has to ensure that each contractor has the relevant transportation registration and waste management licences, where applicable. In addition HM Customs and Excise must be notified if recovered oil is brought ashore by dedicated oil recovery vessels. Landing should not be hindered by the absence of an official from HM Customs and Excise; however, the Operator should maintain a careful log on quantity and nature of the recovered oil.
The options for waste disposal or treatment of material, be it oily liquids or oil solids are:

a) Take to appropriate disposal sites;
b) Temporary store, clean, stabilise and then recover or re-use;
c) Temporary store and then take to appropriate disposal site for burial;
d) Take to a refinery/incinerator (mainly for oily liquids only)

a) Direct to Appropriate Disposal Site

Environmental Permitting Regulations 2010, there are only a few sites that are allowed to receive organic or chemically polluting materials (includes oily waste). There will be a charge levied by the site operator for depositing material at the site. In addition there is a landfill tax/levy applied to all waste deposited in a landfill. Furthermore, waste oil is likely to be classified as Hazardous Waste and should be treated as such until otherwise determined. It would therefore be subject to the EPR 2010. Mixes of sand and oil/seawater etc. would probably be considered as Hazardous Waste if the percentage of carcinogenic compounds is above 0.1%. It is therefore likely that oily beach materials and oil/water liquids would have to be handled as Hazardous Waste.
The transportation of Hazardous Wastes generally requires that the NRW be informed before the waste is removed. This is done by filling in parts A, B and D of a Hazardous Waste Consignment Note, available from the NRW, which is sent to NRW responsible for

the receiving facility. This should be done at least three clear working days before the waste is to be moved. However, in the event of an 'emergency' NRW may waive the requirement for pre-notification. The licensed waste carrier completes part C of the Consignment Note and takes it with the load to the receiving facility. The licensed operator of the receiving facility then signs the consignment note to say that they have accepted the load and that they are authorised to manage it properly.
The requirement for pre-notification generally does not apply to hazardous waste from ships. Therefore oil recovered at sea by a dedicated Oil Recovery Vessel could be discharged within a harbour to an appropriate waste reception facility without having to pre-notify NRW. However a consignment note will have to be supplied with each load sent for disposal.
To ensure that oily waste material is transported and disposed of in an appropriate manner, a licensed waste carrier and disposal company should be contracted. The Operator and Waste Disposal Company should then liaise with NRW to confirm that the disposal route identified meets with their satisfaction.

Each of the following options for disposal will be subject to all the factors listed above.

b) Temporary Storage/Clean, Treat, Stabilise, Recover, Reuse

This option aims to store temporarily the material and then, slowly over the ensuing period, to clean it or stabilise it and then to recover or reuse it. In most cases this is the best practical environmental option (BPEO). It avoids the risk of changing what was a marine pollution into an inland surface pollution problem or groundwater pollution problem.
From temporary storage the contaminated material can be stabilised with cement, lime, clay, organic binders, asphalt and composting. The characteristic of each product needs to be considered when determining the ultimate disposal route or any perceived end use. It is important to note that the treatment of wastes also comes under the waste management licensing system. Therefore, any strategy to deal with the waste in this manner can only be developed through close liaison with the Local Authority concerned and NRW. The latest guidance from the NRW indicates that if proposed temporary storage sites are pre-identified, suitable and pre-agreed with NRW, then they would not require licensing for the duration of the emergency.

c) Temporary Storage and Appropriate Disposal Site for Burial

The reasons for constructing a temporary storage site are as follows:

1. There is no immediate disposal outlet for large quantities of oil/sand mixture or for oil/water mixtures and clean-up cannot be slowed or stopped.
2. The equipment used to clean beaches is usually labour intensive and therefore requires an immediate transfer area adjacent to the site to be provided.
3. The nature of the roads precludes high traffic densities.
4. The in situ treatment of contaminated material is often preferable to removing large quantities of material from the shoreline.

In addition, under the above legislation, the temporary storage site itself may require an environmental permit or an exemption from the Environment Permitting Regulations 2010. Each site will have to be constructed in a specific manner. It is therefore essential that the construction of temporary storage sites be done through close liaison with Natural Resources Wales and the Local Authority concerned.

d) Take to a Refinery/Incinerator (mainly for oily liquids only)

This material should be removed from site by a licensed waste handling company who will then arrange for its disposal in an appropriate manner. If there is suitable access, oily liquids produced from a shoreline clean-up operation can be removed from site by road tanker.
If the oily liquids are on-board a dedicated recovery vessel following an at sea containment and recovery operation then it can be transferred across the quay, at a suitable berth to a road tanker or other suitable waste reception facility. Alternatively this waste can be fed directly into the reception facility at a marine terminal if an oil refinery. It is the responsibility of the Ships Master to ensure that this waste is disposed of appropriately. However, the Port Authority must confirm that any contractors have the necessary licenses to handle and dispose of the waste. The disposal route should also be agreed with NRW to ensure it meets with their satisfaction.

8.2 Disposal Plan

All waste arising from an oil spillage will be handled systematically and strictly in line with the current Regulations. Policy and instructions are identified in Section 1.9. A waste disposal action checklist is shown in Part 2 Section 8.3.
Within the resources of the Plan, initial holding and storage will be possible through use of portable storage tanks as listed in Part 3 Section 11 and thereafter the oil will be disposed of using a local licensed contractor. Because of the length of shoreline, and tidal flows involved, it has been difficult to nominate a specific temporary waste holding area.
In the event of a Tier 2 or 3 spill response, the legal disposal of recovered oil will be undertaken, through a disposal route agreed with the NRW, on behalf of Port Penrhyn. This will be managed by the Port's nominated oil spill contractor duly accredited to Level 3 under the NRW / UK Spill Association.

8.3 Waste Disposal Action Checklist

Oily Waste Generated from a Shoreline Clean-up Operation

a) Direct Transportation to Appropriate Disposal Site for Burial

1. Identify suitably licensed waste carrier to remove material from site.
2. Confirm with waste carrier the disposal route and ultimate disposal site. Liaise with NRW to ensure that the disposal strategy is acceptable.
3. Ensure all associated paperwork, i.e. consignment notes, are retained and catalogued.
4. Ensure all associated paperwork is retained and catalogued.

b) Temporary storage/Clean, Treat, Stabilize, Recover, Reuse

1. Discuss requirement to establish temporary storage sites along the shoreline with the Local Authority and the NRW.
2. If agreed, identify temporary storage sites in close liaison with NRW and Local Authority.
3. Instruct Oil Spill Response Contractors to construct temporary storage sites. Area to be isolated, outlets and drains plugged, membrane laid, bunded area created, skips set or lagoons lined.
4. Identify suitably licensed waste carrier to remove material from site.
5. Confirm with waste carrier the disposal route and ultimate disposal site.
6. Ensure all associated paperwork, i.e. consignment notes, are retained and catalogued.

c) Temporary Storage and then to Appropriate Disposal Site for Burial

1. Discuss requirement to establish temporary storage sites along the shoreline with NRW and the Local Authority.
2. If agreed, identify temporary storage sites in close liaison with NRW and Local Authority.
3. Instruct Oil Spill Response Contractors to construct temporary storage sites. Area to be isolated, outlets and drains plugged, membrane laid, bunded area created, skips set or lagoons lined.
4. Identify suitably licensed waste carrier to remove material from site.
5. Confirm with waste carrier the disposal route and ultimate disposal site. Liaise with NRW to ensure that the disposal strategy is acceptable.
6. Ensure all associated paperwork, i.e. consignment notes, are retained and catalogued.

d) Take to a Refinery/Incinerator (mainly for oily liquids only)

1. Identify suitably licensed waste carrier to remove material from site.
2. Identify suitable facility to receive waste.
3. Confirm with waste carrier the disposal route and ultimate disposal site. Liaise with NRW to ensure that the disposal strategy is acceptable.
4. Ensure all associated paperwork, i.e. consignment notes, are retained and catalogued.

Oily Liquids Recovered at Sea and Held on a Dedicated Oil Recovery Vessel

1. Notify HM Revenue and Customs that you intend to land recovered oil.
2. Identify suitable oil handling plant (refinery) to receive the waste.
3. If 2 is not available identify a harbour with a suitable berth for handling oils.
4. Identify a suitably licensed waste carrier to take the oily liquids off the vessel.
5. Confirm the disposal route with the waste carrier.
6. Notify Regulator and confirm that the identified disposal route meets with their satisfaction. Ensure all associated paperwork, i.e. consignment notes, are retained and catalogued.
7. The removal of landed ships waste that is Hazardous Waste to:

    a. conveyance for transport outside the harbour area.
    b. reception facilities within the harbour area.
    c. by pipeline to reception facilities outside the harbour All require to be consigned. However, there is no requirement to pre-notify these movements and consignment notes can be SC coded.
    d. all oil wastes including fuels, mixtures, emulsification and spills are classed as Absolute Entries in terms of the regulations therefore there is no longer any percentage threshold of carcinogenic compounds; they are now Hazardous Waste regardless. All waste oils with the exception of edible oils are considered Hazardous Waste irrespective of their composition, biodegradability, and synthetic nature or otherwise. There is no longer any threshold applicable to consider whether they are Hazardous Waste or not.

Notify Regulator and confirm that the identified disposal route meets with their satisfaction. Ensure all associated paperwork, i.e. consignment notes, are retained and catalogued.

8.4 Temporary Storage

This Plan being regional and covering a very large area does not designate temporary storage sites. Dependent on the nature and location of any pollution incident, Temporary Storage will be designated as an appropriate place by the on scene commander at the specific incident. Temporary Storage. Unless the incident is declared an emergency any temp Storage will need be carried out in accordance with the Environmental Permitting (England & Wales) Regulations 2010 or the non Waste Framework Directive. Please see attached for further info http://www.environment-agency.gov.uk/static/documents/Business/NWFD_2.pdf

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

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

Reprocessing is the preferred option. In general only pure oil and possibly oil/water mixtures will be acceptable. The contractors able to accept recovered oil for recycling or reprocessing are listed in section 8.4.

8.5 Waste Disposal Contractors

The following contractors are registered carriers and are capable of handling recovered oil and oiled waste materials.

Contractor	Contact Details
Adler & Allan (division of ABP and NHC tier 2 response contractor)	**0800 592 827**
Veolia Total Waste Management Limited	Tel: 02920 885897
Biffa Waste Services Limited	Tel: 01495 751213
Environmental Practical Solutions (EPS Ltd)	Tel: 01792 791426
Amber Waste Management	Tel: 01443 865965

***Note**: apart from small amounts of oily waste, contact with the above Contractors for the disposal of recovered oil and oiled waste materials should be made through, or with the knowledge of, the appropriate County Waste Disposal Manager.*

8.6 Guidance for Contingency Planning and Operation of the Technical Team Waste Management Sub Group within a National Contingency Plan Shoreline Response Centre in England and Wales can be found on the following site: -

http://www.dft.gov.uk/mca/stop_1_09_waste_july_2009.pdf

9.0 CONTACT DIRECTORY

9.1	**Cardiff LPS** Queen Alexandra House Cargo Road Cardiff CF10 4LY	**CONTACT INFORMATION DELETED ON PUBLIC COPIES**	
	ABP Cardiff & Barry See Cardiff LPS		
	Newport Harbour Commissioners 24 Bridge Street Newport Gwent NP9 4SF		
	ABP Newport Alexandra Dock Newport NP20 2UW		

Maritime and Coastguard Agency (MCA	MCA HQ 105 Commercial Rd Southhampton SO15 1EG	Counter Pollution and Salvage Officer – Wales and West of England	
Maritime and Coastguard Agency (MCA	MCA-HM Coastguard Swansea Maritime Rescue & Co-ordination Centre Tutt Head Mumbles Swansea SA3 4EX		
Maritime and Coastguard Agency (MCA)	Counter Pollution & Response Branch, Spring Place 105 Commercial Road Southampton SO15 1EG		
Tier 2 Contractor	Adler and Allan Office 6 The Huxley Centre The Dean, New Alresford Hampshire SO24 9BL		
Tata Team Leader Tata Security			
Cardiff Council Emergency Management Unit	Tim Davies Emergency Management Unit Cardiff Council, Room 151, City Hall, Cardiff CF10 3ND		

Cardiff Harbour Authority	A Middleton Environment Officer Queen Alexandra House Cargo Road Cardiff Bay Cardiff. CF10 4LY		
Civil Protection Unit – Vale of Glamorgan	Dafydd Thomas, Civil Protection Officer, Civil Protection Unit, The Alps Office, Quarry Road, Wenvoe CF5 6AA		
Department of Agriculture and Rural Development (DARD) Fisheries Division	Room 644, Dundonald House, Stormont Estate, Upper Newtownards Road, Belfast BT4 3SB		
Department for Business innovation and skills	1 Victoria St, London, SW1H OET		
Marine Management Organisation (MMO)	See Page 97		
Natural England	Pydar House Pydar Street Truro TR1 1XU		
Environment Agency (EA) (Head Office	Horizon House, Deanery Road Bristol BS1 5AH		

Environment Directorate - General	Ashdown House 123 Victoria Street London SW1E 6DE		
Food Standards Agency (FSA)	UK HQ Aviation House 125 Kingsway London WC2B 6NH		
Foreign and Commonwealth Office (FCO) Maritime Section	King Charles Street London SW1A 2AH		
Health Protection Agency (HPA)	Centre for Radiation, Chemical and Environmental Hazards UWIC Colchester Avenue Penylan Cardiff CF23 9XR		
Health and Safety Executive (HSE)	Local County Council – each Council has an HSE representative covering its district.		
International Maritime Organization (IMO)	4 Albert Embankment London SE1 7SR		
International Oil Pollution Compensation Fund (IOPC Fund)	23rd Floor Portland House Bressenden Place, London SW1E 5PN		
International Tanker Owners Federation Ltd (ITOPF)	ITOPF Ltd 1 Oliver's Yard 55 City Road London EC1Y 1HQ		

Joint Nature Conservation Committee (JNCC)	Monkstone House City Road, Peterborough, PE1 1JY		
Meteorological Office	Fitzroy Road Exeter, Devon, EX1 3PB		
Ministry of Defence Defence Crisis Management Cell	Chief of Defence Staff (Duty Officer) CMC 123 MOD Main Building Whitehall London SW1A 2HB		
Milford Haven Coastguard	Gorsewood Dr, Dyfed SA73 3HB		
Monmouthshire County Council	PO Box 106 Caldicot Monmouthshire NP26 9AN		
Natural Resources Wales (NRW)	**Head Office** Natural Resources Wales Tŷ Cambria 29 Newport Road Cardiff CF24 0TP **South East Operational Area Office** (Barry, Cardiff & Newport) Rivers House, St		

	Mellons Business Park, St Mellons, Cardiff. CF3 0EY **South West Operational Area Office** (Port Talbot & Swansea) Maes Newydd, Llandarcy, Neath Port Talbot, SA10 6JQ		
Offshore Pollution Liability Association Limited (OPOL)	The Broadgate Tower, 3rd Floor, 20 Primrose Street, London, EC2A 2RS		
National Chemical Emergency Centre	The Gemini Building, Fermi Ave, Harwell, Didcot Oxfordshire, OX11 OQR		
Welsh Assembly Agriculture and Fisheries Policy Division	Cathays Park Cardiff CF10 3NQ		
Ports Division, DfT	33 Horseferry Rd, London, SW1P 4DR		
Press Office, DfT	Communication Directorate Zone 5/01 Great Minster House, 76 Marsham Street, London SW1 4DR		

Scottish Environment Protection Agency (SEPA)	Strathallan House, The Castle Business Park, Stirling, FK9 4TZ		
Rural Affairs Department (SEERAD)	Fisheries Research Services Marine Laboratory PO Box 101 375 Victoria Road Aberdeen AB11 9DB		
Oil and Gas UK	6th Floor East Portland House Bressenden Place London SW1E 5BH		

Waste Contractors

Veolia	Unit G1 Main Avenue Treforest Industrial Estate Pontypridd CF37 5YL	
Biffa Waste Services Limited	Polo Grounds Industrial Estate New Road New Inn Pontypool Gwent NP4 0TW	
Environmental Practical Solutions Ltd	Head Office, Freightliner Depot, Crymlyn Burrows, Swansea, South Wales, SA1 8SH.	
Amber Waste Management	The Recycling Centre Dyffryn Business Park Ystrad Mynach, Hengoed Mid Glamorgan CF82 7RJ	

MARINE POLLUTION INCIDENTS

MARINE MANAGEMENT ORGANISATION (MMO) EMERGENCY CONTACTS

Office Hours (from 0900 to 1700):

Please telephone our dedicated Spill Response number:

0300 2002024

A member of MMO's Marine Pollution Response Team will give immediate priority to any calls made to this dedicated number.

Outside Office Hours (from 1700 to 0900):

Outside office hours callers should call an MMO Duty Officer on:

Mobile Phone: [redacted].

If there is no reply on either of the above numbers call the 24-hour Defra Duty Office on:

[redacted]

The Defra Duty Office should be able to contact an officer in the Marine Management Organisation by home or mobile telephone or pager and will ask them to return your call.

Fax Numbers

Defra Duty Room (provides 24-hour cover for MMO) [redacted]
Marine Management Organisation (not 24-hour) [redacted]

If action is required by MMO a telephone call must be made in addition to any message sent by fax as the fax machines are not monitored continuously.

(Non emergency contact address: [redacted], Marine Management Organisation, PO Box 1275, Newcastle Upon Tyne, NE99 5BN)

* The Marine and Fisheries Agency (MFA) became part of the Marine Management Organisation (MMO) on 1 April 2010 when the MMO was created as a consequence of the Marine and Coastal Access Act 2009.

10. Training and Exercise Policy

10.1 Training

The importance of training for harbour personnel who may become involved in the response to oil spill incidents is recognised and acknowledged. All members of the Management Team, Supervisors and Operators will undergo periodic training in line with the following matrix.

The Nautical Institute accredits the training courses for the Maritime and Coastguard Agency; the syllabus of the courses matches the requirements of UK oil spill training standards. Harbour Masters and Deputies are trained to MCA Level 4/5p.

10.2 Exercises

An annual exercise already takes place within the region and this practice will continue. Harbour personnel also participate in oil company exercises and an oil pollution element is regularly included in major exercises of the Regional Port Emergency Plan. When practicable to so do, joint exercises will also be held with Natural Resources Wales and the Bristol Channel and West Wales Standing Environment Groups.

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

Exercise Type	Frequency
Notification exercise	Quarterly
Mobilisation exercise	Twice per year
Table-top exercise	Once per year
Incident management exercise	Once every 3 years

Training and Exercise Policy.

	Duration	NHC Chairman of Works & Finance Committee	Harbour Master / MOM	Contract Operators	Frequency
Course					
Oil Spill Response (Ports) Induction 1P	1-2 days			•	Initial Induction Once every 3 years
Oil Spill Operator 2	2-3 days			•	Initial Induction Once every 3 years
Oil Spill Operations Supervisor (Ports) 4P	4-5 days				Initial Induction Once every 3 years
Oil Spill Response Executive Commander 5	2 days	•			Initial Induction Once every 3 years
Oil Spill Operations Commander (Ports) 5P	4-5 days		•		Once

Post Exercise / Incident Report

Name of Port :	
Level of exercise (Tier 1, 2, or 3) and details of any other participating ports / harbours / oil handling facilities if joint equipment deployment exercise:	
Level :	
Names :	
Date of exercise / incident :	**Time of exercise / incident :**
Location of exercise / incident :	
Name of exercise / incident co-ordinator :	
Name of personnel participating in exercise / incident and role played :	**List of equipment deployed :**
Name of other organisations / authorities participating in exercise / incident :	
Details of amendments to be made to the Contingency Plan resulting from this exercise / incident :	
(in addition to this form the revision list should be updated and the appropriate pages within the plan amended and issued to all plan holders)	
I can confirm that the details on this form provide a realistic summary of the exercise/Incident carried out. Any action points resulting from this exercise have been dealt with accordingly, the relevant documents updated and copies provided to the appropriate bodies for their attention. **Authorised by (name in block capitals) :**	
Position / Job Title :	
Signature:	**Date:**

11.0 Risk Assessment

11.1 Introduction

11.1.1 Swansea

Swansea is a tidal, locked port that handles a range of dry, bulk, and containerised cargoes. A ferry terminal is located on the River Tawe, adjacent to the entrance lock. Annual traffic volume averages some 1,500 ships ranging from coastal vessels up to a maximum vessel size of 30,000dwt.

The mean tidal range is 8.4 metres and there can be occasions when the actual height of tide may level with or overtop the lock gates. The maximum acceptable vessel size is based on length overall, breadth and draft. Acceptance criteria are 190 metres LOA, 26.2 metres beam and 9.9 metres draft

11.1.2 Port Talbot

Port Talbot handles *ca* 150 bulk carriers per annum for the import of iron ore and coal; these ships range in size from 40,000 to 220,000 dwt. There are also occasional exports of granulated slag on coastal carriers of some 4,000dwt.

The swinging area within the harbour is maintained to a dredged depth of 11.2 metres and the maintained depths at the two berths are 17.2 and 15 metres. The mean spring tidal range is 8.6 metres.

11.1.3 Barry

Barry is a tidal, locked, port which handles Timber, Chemicals, Scrap, Cement, Grain, and other general cargo. Annual traffic volume amounts to approximately 250 ships. The mean tidal range is 11.0 metres and there are some 20 days each year when the actual height of the tide requires the gates to be left open. The maximum size of vessel acceptable for the Lady Windsor lock is LOA 200 metres, Beam 19.2 metres, and Draft 9.0 metres. The Basin entrance can accommodate vessels up to LOA 200 metres, Beam 24 metres, and Draft 9.0 metres.

11.1.4 Cardiff

Cardiff is a tidal, locked, port which handles Timber, Petroleum, Chemicals, Containers, Scrap, Steel, and other general and dry bulk cargo. It also handles visits from Cruise Ships. Annual traffic volume amounts to approximately 2500 ships. The mean tidal range is 10.4 metres and the QA lock can handle vessels up to LOA 259 metres, Beam 27 metres, and Draft 10.3 metres.

11.1.5 Newport

Alexandra Dock Newport is a tidal, locked, port which handles a range of Dry Bulk, Steel, Timber, Scrap, Coal, and other general cargo. Annual traffic volumes are in excess of 1000 ships. The mean tidal range is 11.8 metres and there are some 20 days each year when the actual height of the tide requires the gates to be left open. The maximum size of vessel acceptable for the lock is LOA 244 metres, Beam 30.1 metres, and Draft 10.4 metres.

11.2 Port Operations

11.2.1 Pilotage

All ports lie within a compulsory pilotage area, pilotage is compulsory for all vessels over 85 metres LOA or carrying more than 12 passengers and it is strongly recommended for other vessels especially in the eastern ports. Masters of coastal vessels that trade regularly to the ports may be issued with pilotage exemption certificates. Tug assistance is strongly recommended for larger vessels.

11.2.2 Local Port Service

Vessel arrivals are monitored by South Wales Radio. On entering the port limits communications are handed over to the Lock Controllers at each port who remain in VHF contact during the approach to the entrance locks or harbour entrances.

11.2.3 Main Approach Channel (Swansea)

The main approach channel is buoyed and is maintained to a dredged depth of 4.2 metres below chart datum. The bottom is predominantly mud or sand. The minimum under keel clearance is 1.3 metres for the locks and 1.0 metre in the channel.

While the risk of grounding in the channel is considered to be low, it cannot be wholly eliminated. The most probable cause of such an incident would be steering or propulsion system failure but it is unlikely that there would be significant resultant damage.

11.2.4 Main Approach Channel (Port Talbot)

The main approach channel is marked by buoys and leading lights and is maintained to a dredged depth of 11.2 metres below chart datum. The bottom is predominantly coarse sand or mud. The minimum under keel clearance is 1.0 metre or 10% draft. Again, while the risk of grounding in the channel is considered to be low, it cannot be wholly eliminated. Any grounding incident could result in large bulk carriers sustaining damage to bunker tanks in the fore part of the vessel leading to small releases of fuel oil.

11.2.5 Main Approach Channel (Cardiff)

The main approach channel is marked by buoys and leading lights and is maintained to a dredged depth of 1.2 metres. The bottom is predominantly sand, mud, or gravel but there are some rock outcrops to the west of the channel in the vicinity of Penarth Head. The minimum under keel clearance is 1.0 metre. Again, while the risk of grounding in the channel is considered to be low, it cannot be wholly eliminated. Any grounding incident would be unlikely to result in significant damage to the mid-body plating of tankers but could result in large bulk/oil carriers sustaining damage to bunker tanks in the fore part of the vessel leading to small releases of fuel oil.

Main Approach Channel (Newport)

The main approach channel is marked by buoys and leading lights and is maintained to a dredged depth of 0.7 metres. The bottom is predominantly soft mud. The minimum under keel clearance is 1.0 metre. While the risk of grounding in the channel is considered to be low, it cannot be wholly eliminated. The most probable cause of such an incident would be steering or propulsion system failure but it is unlikely that there would be significant resultant damage to hull plating given the soft nature of the bottom.

11.2.7 Locking or Berthing Incident

Oil spills can occur as a result of hull contact with the knuckle end of lock entrances, breakwaters, quay walls or breasting dolphins during port entry and berthing or un-berthing manoeuvres. Such incidents are generally attributable to failure of a vessel's main propulsion or steering systems, loss of control onboard an attendant tug or pilot / master error or misjudgement. The potential spill quantities involved depend on the vessel type and the location and extent of the impact damage.

There is a remote risk that failure of the outer entrance lock gates to close properly due to debris obstruction could result in the grounding of a large vessel on the cill for the intermediate lock gates. Bottom damage from this cause has never been recorded but, in the case of larger tankers, could result in a cargo spillage of more than 100 tonnes.

No oil pollution incidents have been recorded at Port Talbot as a direct result of berthing damage although it is recognised that failure of a vessel's main engines in the final approach to the berth could result in damage to the fore part of the vessel and a consequent loss of fuel oil.

Lying Aground

Although all NAABSA berths are regularly inspected by the berth operators for debris, there remains a small risk that hull plating damage could occur when vessels take the bottom. Should bottom plating damage be sustained in way of double bottom or forward fuel oil tanks, a small amount of fuel oil could be released. Given the soft nature of the river bed, it is not anticipated that such spillages could exceed 50 tonnes.

11.2.8 Tug Impact

There are well documented national incidents where cargo or bunker oil has been released as a result of hull impact damage by tugs. This can occur when tugs are approaching a vessel underway prior to berthing, or when coming alongside a moored vessel prior to un-berthing. The potential spill quantities again depend on the location and extent of the impact damage but can be over 100 tonnes for bunker oil and 250 tonnes for cargo oil.

11.3 Bunkering (Refuelling) Operations

11.3.1 Ex-Barge

Bulk carriers are refuelled by bunkering barge at Port Talbot at rates of up to 250 tph and some larger vessels are occasionally bunkered ex- barge within any of the enclosed docks. The high-speed ferry at Swansea is also refuelled by barge. Although flexible hoses are tested at six monthly intervals and all bunkering craft are equipped with ESD (emergency shut down) facilities, the possibility of hose failure or a bunker tank overflow on board the receiving vessel must be recognised. In estimating the potential spill quantities, the facts that Check Lists are completed prior to each operation and that a continuous deck watch is maintained on board bunkering craft have been taken into account.

Cause	Assessed Risk	Estimated Maximum Spill Quantity (Tonnes)
Hose failure	Low	5
Tank overflow	Low / moderate	2

11.3.2 Ex-Road Tanker

There can be refuelling of vessels berthed within the enclosed docks by road tankers operated by various suppliers and distributors. ABP regulations insist on the completion of a pre-delivery checklist by both the vehicle driver and the receiver as a pollution prevention initiative.

Lubricating oils are also supplied in bulk ex road tanker at all ports.

Cause	Assessed Risk	Estimated Maximum Spill Quantity (Tonnes)
Hose failure	Low	0.5
Tank overflow	Moderate	0.5
Loading Arms	Low / moderate	5
Slop tank overflow	Low	3
Sea / overboard discharge valves	Low	1
Cargo tank overflow during ballasting	Low	1

12. Environmental Sensitivity Information

12.1 Summary

There are large areas in the vicinity of several of the ports that are highly sensitive for nature conservation; these are listed below. The implications for managing any oil spill vary considerably from site to site and treatment options will be agreed by NRW at the time of any oil spill incident. Full details of the scientific importance of each site are included in the Appendices to this section.

12.2 SPECIAL PROTECTION AREAS / SPECIAL AREAS OF CONSERVATION

ABP acknowledges that the Severn Estuary and many parts of the south Wales coast are of national and international importance for nature conservation. This importance is reflected in the various site designations aimed at protecting coastal and marine species and habitats. Nationally important sites are designated as Sites of Special Scientific Interest (SSSI) under the Wildlife and Countryside Act (1981 as amended by CROW 2000). Sites of international importance are designated as Special Protection Areas (SPA) under the EC Wild Birds Directive for the protection of birds and/or as Special Areas of Conservation (SAC) under the Habitats Directive for the protection of other marine species and habitats. Many coastal wetlands of international importance may also be designated as Ramsar Sites under the Ramsar convention.

The Severn Estuary is designated as an SPA and as a Special Area of Conservation (SAC) under the Habitats Directive.

The Maps shown in Section 5.3 (Sensitivity Mapping) describe the location of designated sites and the features for which site has been designated and that may be sensitive to oil pollution or the effects of clean-up. Inclusion of the maps is intended as a guide to those seeking to rapidly identify wildlife and habitat resources sensitive to oil pollution but should not replace early consultation of the Natural Resources Wales in the event of an incident.

It is recognised that ports operating in or near sites designated as SPAs, SAC and SSSI should give the highest degree of protection to these areas of European nature-conservation importance and operations that have adverse effects on their nature-conservation status should be avoided or minimised as far as practicable.

Summary

There are large areas in the vicinity of Newport which are highly sensitive for nature conservation and these areas are mapped in Figure 12.1 and listed below. The implications for managing any oil spill vary considerably from site to site, and treatment options are set out in sections 12.2 to 12.5. Full details of the scientific importance of each site are included in the Appendices to this section.

International Nature Conservation Designations

- Severn Estuary Special Protection Area (SPA)
- Severn Estuary Wetland of International Importance (Ramsar site)

Note: in the vicinity of Newport, the SPA and Ramsar boundary is the same as the Severn Estuary SSSI. The site has been classified / notified with a mobile lower boundary, so that all areas above Mean Low Water and in local planning authority jurisdiction are designated.

- The Severn Estuary (SAC).
- River Usk (SAC).

National Nature Conservation Designations

- Severn Estuary Site of Special Scientific Interest (SSSI)
- River Usk (Lower Usk) (SSSI)
- Gwent Levels – St Brides (SSSI)
- Gwent Levels – Nash and Goldcliff (SSSI)
- Gwent Levels – Whitson (SSSI)
- Newport Wetlands (SSSI)

Severn Estuary SPA / Ramsar / SSSI / SAC
Note: boundary is mainly along the top of the sea wall in the vicinity of Newport

Important Features

The overall geomorphology and dynamics of the estuary are part of the interest, which also includes saltmarsh, mudflats, shingle, rocky shores, subtidal habitats, over-wintering bird populations and their supporting habitats and fish species.

Coastal Habitat Types

Mudflats and shingle with areas of rocky shore and saltmarsh.

Treatment

Physical cleaning (eg hot water and sorbents) of rocks, shingle and man-made structures may be possible in some locations to be agreed with NRW, but oil on saltmarsh and mudflats should be left to disperse and degrade naturally. No dispersants should be used.

DISPERSANTS

The Natural Resources Wales must be consulted on the proposed use of dispersant chemicals either above the mean water mark or within enclosed docks. In determining whether the use of such chemicals is appropriate the Agency would require any dispersant product to have been approved by the MMO in England and Welsh Government in Wales and used in accordance with the manufacturer's directions. All plans should therefore include the requirements to only use MMO/WG approved products in any response strategy and the requirement to consult the NRW prior to use above the Mean High Water mark or within an enclosed dock.

12.3 River Usk

Important Features

The site is of international importance for its population of migratory fish and also otter. Also important are river habitats with saltmarsh, mudflats and other bankside habitats, and rare plant and invertebrate species.

Coastal Habitat Types

Estuarine mudflats, saltmarsh and reed beds.

Treatment

Physical cleaning (eg hot water and sorbents) of rocks, shingle and man-made structures may be possible in some locations to be agreed with NRW, but oil on saltmarsh, mudflats and reed beds should be left to disperse and degrade naturally. No dispersants should be used.

12.4 Gwent Levels

Note: these areas are behind the sea defences but need to be included here because access to the coastline may be sought across them. Their seaward boundary is mainly along the top of the sea wall in the vicinity of Newport.

Important Features

Freshwater and brackish ditch habitats with rare plant and invertebrate species.

Coastal Habitat Types

None.

Treatment

All vehicular access routes to the coastline must be approved by NRW. Any temporary oil storage will also need NRW approval and, where temporary storage is agreed, extreme caution will be required to prevent pollution of ditch habitats.

13. Roles and Responsibilities

13.1 Harbour Authority

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

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

(a) Any harbour for which there is a statutory harbour authority having an annual turnover, as defined in the schedule in the regulations, of more than £1 million.

4. - (1) states " Every -

(a) Harbour authority of a harbour to which these regulations apply:

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

There may be joint plans between the harbour authority and the operators of oil handling facilities within an area.

A Harbour Authority must submit an oil pollution emergency plan for its harbour(s), within 15 months of the regulation coming into force, to the Maritime & Coastguard agency for approval.

In preparing an oil pollution emergency plan, a harbour authority or shall take into account any guidance issued by the Maritime & Coastguard Agency.

The Statutory Harbour Authority has a responsibility under Section 133 of the Merchant Shipping Act 1995 for bringing prosecutions for the offences of discharge of oil, or a mixture containing oil, into the waters of the harbour.

Associated British Ports South Wales is a Competent Authority in respect of the Severn Estuary SPA and possible SAC under the Conservation (Natural Habitats, &c) Regulations 1994.

13.2 Local Authorities

The ABP South Wales Ports lie within areas administered by the various local authorities along that stretch of the south Wales coastline. All the relevant Authorities have accepted a non-statutory responsibility for dealing with oil on the shoreline and beaches down to the low water line, within the limit of their resources.

The Emergency Planning Officer for the relevant Authority manages joint oil spill contingency plans, Hazardous Materials and Chemicals Washed Ashore Plans, covering the coastal areas of all the Authorities.

13.3 Maritime and Coastguard Agency

The Maritime & Coastguard Agency, an executive agency of the Department of Environment, Transport and the Regions (DETR), discharges DETR's responsibility for both the co-ordination of civil maritime Search and Rescue and counter-pollution operations in UK waters.

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

A Shoreline Response Centre (SRC) would be established and exercise overall co-ordination of the shoreline clean up in accordance with the procedures and guidance in the NCP.

13.4 Marine Management Organisation (MMO)

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

Under the terms of the Food and Environment Protection Act 1985 and the Deposits in the Sea (Exemptions) Order 1985, it is a legal requirement that oil treatment products may only be used in English or Welsh waters if they have been formally approved for this purpose by The MMO. In addition, specific permission from The MMO must be obtained before any such products are used in shallow waters – these are defined as any area of the sea which is less than 20 metres deep, or within 1 nautical mile of such an area. This includes any use in tidal docks and locks and on beaches, shorelines or structures such as piers or breakwaters.

No standing approval has been agreed between The MMO and Associated British Ports South Wales to permit the use of dispersants. The MMO will therefore need to be consulted about any intended use of dispersants and agree to their use before any dispersants can be used within the statutory harbour areas.

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13.5 Natural Resources Wales

Natural Resources Wales is a Welsh Government Sponsored body incorporating the duties and functions previously exercised by the Countryside Council for Wales, Forestry Commission Wales and Environment Agency Wales together with some functions of Welsh Government. Natural Resources Wales aims to ensure that the natural resources of Wales are sustainable maintained, enhanced and used, now and in the future.

Natural Resources Wales advises Welsh Government on countryside and wildlife matters, and has statutory responsibility for wildlife conservation on land and at sea; for certain landscape conservation matters, and for promoting enjoyment of the countryside. During a maritime incident part of NRW's role would be to advise Welsh Government on the conservation and wildlife implications of maritime incidents in Welsh territorial waters.

Additionally during an incident NRW will provide specialist environmental advice and monitor the effects of, and the response to an incident, to minimise the impact on the environment. NRW will also work with the health authorities to provide them with advice on environmental impacts, which will assist in their formulation of health advice.

Natural Resources Wales is also the competent Authority in Wales for waste disposal.

13.6 Oil Spill Management Team

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

The OMT will convene at the designated Marine Response Centre under the chairmanship of the Harbour Master, and will consist of a Management Team and a Support Team as noted in section 2.2.

13.7 Shoreline Response Centre

Shoreline Response Centre (SRC) is a nationally accepted term and will only be established by agreement between Local Authorities and Central Government (MCA). Control of the onshore clean-up would at all times remain with the Local Authority and the SRC's prime purpose would be to co-ordinate the clean-up and provide easier access to government beach- cleaning equipment stockpiles and shore counter-pollution experts.

13.8 Environment Group

Following the formation of an Shoreline Response Centre a Public Health and Environment Group may be required to provide advice to any response unit set up to deal with the incident. The National Contingency Plan for maritime incidents identifies that any unit set up to deal with a maritime incident must contain a representative of the Public Health and Environment Group, referred to as the Environment Liaison Officer. Currently there are two active Public Health and Environment Groups within the ABP – South Wales Area of operation;

(i) Bristol Channel Standing Environment Group – Cover the Barry, Cardiff, Newport and River Usk Operational port areas.

(ii) West Wales Public Health and Environment Group – cover the Port Talbot and Swansea operational port areas.

Each Public Health and Environment Group is primarily is made up of representatives from the following organisations, however members of other organisations may be involved depending on the nature of the incident;

- Natural Resources Wales
- Public Health Wales
- Public Health England
- Public Health England CRCE
- MMO

To ensure continuity, a Public Health and Environment Group will be set up in incidents declared Tier 2 or 3 where it is likely that support will be required. It is also likely that the West Wales and Bristol Channel Group will also want to be informed and involved in any Tier 1 Pollution that will impact on shoreline or an environmentally sensitive area. The Public Health and Environment Group will be purely advisory but response units should take all reasonable steps to consult on any proposed action."

Annex One

Resource Directory

Associated British Ports - Newport, Cardiff & Barry, Swansea and Port Talbot

Each port has the following equipment in stock: -

- Absorbent booms 100 metres
- Absorbent pads 10 packs
- D'Arcy Oil Spill kit 2

In addition Cardiff has a Bubble Barrier in the Roath Dock and 90 metres of Triolboom GP 750.

Newport Harbour Commissioners

- Absorbent booms 50 metres
- Absorbent pads 5 packs

D'Arcy Oil Spill kit 2

Valero Ltd Cardiff

- Absorbent Pillows 4
- Absorbent Granules (20 Litres) 4 Bags

- Emergency Road Tanker and Rail Car Equipment

QA Dock Site

- Mini Boom 20 metres
- Sorbi Fibrous Absorbent 30 Bags

HCB Energy

- Absorbent bales 1
- Absorbent pads 2 packs
- Absorbent Granules (20 Litres) 2 Bags
- Sand

Navigator Terminals Windmill Ltd - Barry No 2 Dock and Windmill Site

- Spill Kit (132 Litres) 2
- Spill Kit (200 Litres) 3

Absorbent Granules (20 Litres) 10 Bags

Adler and Allan (Tier 2 Contractor)

Comprehensive response equipment inventory, including shoreline clean-up equipment, capable of dealing with spillages of both heavy and light oils.

Note: the Tier 2 Contractor's anticipated response time from call-out is 2 hours.

Annex Two

Product Information Sheets

This Section contains Material Safety Data Sheets for the following products that are handled within the docks complexes:

- Unleaded Petrol
- Gas Oil
- Derv
- Fuel oil

1 Identification of the Substance

Product Name: Unleaded/Super Unleaded Petrol
Application: To be used exclusively as fuel for spark ignition engines

2 Composition/Information on Ingredients

Chemical nature: Substances composed of paraffin hydrocarbons, Naphthalene (=<35%) and olefin hydrocarbons (=<18%), with mainly hydrocarbons from C4-C12, including benzene, toluene & n-hexane. Possibly: The following oxygenates compounds: Methanol =< 3% vol. Iso-propyl alcohol
=<10% Isobutyl alcohol =<10% vol. Terbutyl alcohol =<7% vol. Ethers (5 or more C atoms) including ETBE/MTBE =<15% vol. –multi-purpose additives to boost performance.

Composition comments	Classification	Concentration
Benzene	F, T :R11,45,46, R48/23/24/25, 65, 36/38	=<1% in volume
N-hexane	F,Xn,N:R11-R38,48/20,62,65,67,51/53	<5% in volume
Toluene	Xn,Xi Rep. Cat 3 R11,48/20,65,48,38,67,63	<10%

Dangerous ingredients	Classification	Content	CAS No.	EC No.
Gasoline	T,F,N:R12,45,46,63,38,65,67,51/53	>90%	86290-81-5	289-220-8

3 Hazards Identification

Health Hazards:

Eyes: Likely to cause irritation if splashed into the eye with redness and stinging.

Skin: May cause irritation on brief or occasional contact; prolonged, repeated and heavy direct contact with the skin over a long period of time can cause defatting of the skin erythema, dermatitis, oil acne.

Inhalation: inhalation of fumes or vapours may have a narcotic effect on the nervous system may cause headaches, nausea, drowsiness and irritation to the breathing passages
and lungs with possible effects to the central nervous system. As gasoline contains Benzene which is a known carcinogen continuous exposure to high levels of vapours may be toxic
and in extreme cases may cause Leukaemia.

Ingestion: Likely to cause nausea and diarrhoea if small amounts are swallowed, larger amounts may effect the central nervous system. Signs and symptoms of central nervous system effects may include the following; headaches, dizziness, loss of appetite, weakness
and loss of concentration. The product may be harmful due to the aspiration of the liquid into the lungs following ingestion which may cause chemical pneumonitis and can be fatal.
Extremely flammable liquid which is highly volatile and may form flammable or explosive vapour/air mixtures from uncontrolled releases.

This product is classified as Extremely flammable, Carcinogenic, Harmful & irritating and dangerous for the environment.

4 First Aid Measures

Ingestion: Wash mouth out with water. Get medical advice immediately. DO NOT INDUCE VOMITING BECAUSE OF THE DANGER OF ASPIRATION.

Skin: Wash skin as soon as possible with soap and water. Change contaminated clothing and launder before reuse. Get medical advice. Any injection of fuel under the skin should be considered an EMERGENCY – get Medical Advice URGENTLY.

Eyes: Wash out thoroughly with large amounts of water, for at least 15 minutes. If redness and/or irritation continues get medical advice.

Inhalation: In case of exposure to intense concentrations of vapours, fumes or spray move to fresh air. and allow to rest, seek medical attention immediately.

5 Fire Fighting Measures

Extinguishers: Foam, dry chemical powder, carbon dioxide, water spray

Hazards: Extremely flammable, high hazard. The liquid can release vapours at temperatures below ambient which form flammable mixtures. Vapours settle to ground level and may reach ignition sources remote from the point of escape via drains and other underground passages. Static discharge material can accumulate static charges which may cause an incendiary electrical discharge.

Measures: Use water fog or spray to cool fire exposed surfaces (containers) and to protect personnel. Only personnel trained in fire fighting should use water sprays (DO NOT USE WATER JETS). Respiratory and eye protection is essential for fire-fighting personnel exposed to smoke and fumes.

Hazardous decomposition products include smoke, sulphur oxides and carbon monoxide.

6 Accidental Release Measures

Treat any spillage as a fire hazard. Spray, vapour or mist can be a potential fire or explosion hazard.

Personal Precautions: Spilt product presents a significant slip hazard. Avoid exposure of the product to sources of ignition. Chemical grade safety Glasses/goggles. nitrile/PVC gloves and protective coveralls should be worn when dealing with any spill. Where ventilation is inadequate wear suitable breathing apparatus.

Environmental Precautions: Prevent entry into drains, sewers and water courses. The appropriate authorities should be notified if it has contaminated soil/vegetation. Spillages occurring on water should be removed from the surface using suitable absorbents. If necessary dispose of absorbed residues as described in section 13. All sources of ignition must be eliminated immediately.

Decontamination Procedures: Soak up with inert absorbent or contain and remove by pumping or best available means. Ensure explosion-proof equipment is used. In case of

spillage on water contain by a boom and collect by skimming or absorption.

SAFETY DATA SHEET

7 Handling and Storage

The design and operation of bulk storage and fuel systems must comply with national legislation and recognised codes of practice. In smaller quantities containers such as drums should be stored in cool, well ventilated surroundings, away from all sources of ignition. Electrical equipment and fittings must comply with local fire prevention regulations for this class of flammable product.
Store at room Temperature away from moisture, heat or any ignition sources. DO NOT SMOKEAVOID INHALATION OF VAPOURS AVOID CONTACT WITH THE SKIN OR MUCOUS MEMBRANES DO NOT USE MOBILE PHONES DURING HANDLING

Keep the product away from food and beverages.
Prevent the formation of vapours, mist and erosols.
Wear safety shoes and fully covering protective clothing GENERATING NO STATIC ELECTRICITY. Never weld, drill, grind or saw any empty containers
Avoid repeated contact with the skin as this may cause skin conditions, which may also be aggravated by Contact with soiled clothing.
Avoid contact with oxidisers. Remove any contaminated clothing immediately and launder before re-use.

Always use the correct grounding procedure. Store and handle in closed or properly vented containers. Ensure compliance with statutory requirements for storage and handling. Regularly check for and prevent potential leaks from containers. Installations should be designed to avoid pollution of soil and water. Use only containers, joints pipes etc. made of material which is suitable for use with aromatic hydrocarbons.

8 Exposure Control/Personal Protection

If frequent or continuous contact is likely PROTECTIVE CLOTHING should be worn. A chemical resistant overall or apron, impervious gloves and eye protection.

Any electrically operated ventilation equipment must be BASEEFA, UL or approved for use in potentially Explosive atmospheres

Workplace Exposure limits:	**8 hour TWA**	**Source**
Benzene	1ppm	EH/40 2005 (amendment 2007)
n-Hexane	20ppm	EH/40 2005 (“ “ “)

Hand and skin protection - Hand and skin protection recommended at all times. Where exposure is likely protective clothing must be worn, including nitrile/PVC or neoprene gloves approved to BS EN 374 with a breakthrough time of >360 minutes.
Eye protection - Eye protection approved to BS EN 166 is recommended at all times.

9 Physical and Chemical Properties

Typical properties:

Appearance	Clear pale yellow liquid
Odour	Pungent petroleum odour

pH	Not applicable
Boiling Range °C	25-215
Flash Point (TAGC) °C	< -40
Flammability Limits % vol	1.4 – 8.7
Auto ignition temperature °C	>300
Density at 15°C	720-770 Kg/m3
Solubility - water	Very low (0.01 g/l)
Viscosity cSt @ 20°C	0.5 – 0.75
Vapour density (relative to air)	3-4 (air=1

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10 Stability and Reactivity

This product is stable under normal operating conditions.

Conditions to avoid: Sources of ignition, elevated temperatures, water.

Materials to avoid: Strong oxidising agents such as chlorates, nitrates and peroxides.

No hazardous decomposition products will be evolved at ambient temperatures. However, incomplete Combustion and thermolysis produces potentially toxic gases such as, carbon monoxide, carbon dioxide, Various hydrocarbons, aldehydes and soot.

11 Toxicological Information

Health effects:

Eyes: Slightly irritating but does not damage eye tissue

Skin: Prolonged or repeated exposure may lead to defatting of the skin, erythema, dermatitis or oil acne. Irritation, but a low order of toxicity.

Inhalation: Contains Benzene and complex hydrocarbons. Repeated or prolonged exposure to high levels of Bezene can be toxic and in extreme cases can lead to leukaemia. Any risks will be negligible under normal conditions provided all recommended hygiene precautions are followed. This product can be harmful due to aspiration of liquid into lungs following ingestion which may cause chemical pneumonitis and can be fatal.

Ingestion: Low order of acute/systemic toxicity.
Chronic: The long term toxicity evaluation for this product is based on testing results from similar atmospheric petroleum distillates.

Acute: Based on animal testing data from similar products, the acute toxicity is expected to be: ORAL

	(rat)	LD50	>5000mg/Kg (slightly toxic)
INHALATION	(rat)	LD50	>2500mg/Kg (moderately toxic)
DERMAL	(rabbit)	LD50	>2000 mg/Kg (moderately toxic)

12 Ecological Information

This product is classified as dangerous for the environment. On release to water gasoline (petrol) floats and Hydrocarbons are lost through volatilization. Toxic to fish and invertebrates.

Ecotoxicity: Some components of gasoline are water soluble, and harmful to aquatic organisms. Acute aquatic toxicities of gasoline are in the range 1-10 mg.l

Mobility:	Mobile in soil and may contaminate groundwater. The product evaporates in the air and dissipates more or less depending Upon local conditions. However, it may stagnate in pools in low lying Areas, in an undisturbed or confined atmosphere.
Degradability:	Rapid removal of gasoline from the environment result from a combination Of evaporation, physical partitioning with flowing water and degradation. Volatile components are phyto-degraded in air by reaction with hydroxyl radicals.
Bioaccumulation Potential:	From the known properties of the hydrocarbon components, gasolines are expected to be inherently biodegradable.

13 Disposal Considerations

Place contaminated materials/packaging in suitable containers and dispose of according to the appropriate Regulations for Hazardous/Special waste. Always use a licensed disposal company. Take care as "empty" May contain flammable or explosive vapours.

14 Transport Information

Symbol: Flammable Liquid 3 Y
E Shipping name ; Gasoline unleaded UN: Flammable liquid packaging group II
UN Number (Substance Identification Number):
1203 IMO Hazard Class: 3.1
ICAO Hazard Class: 3 IATA Hazard Class 3
ADR/RID Hazard Class: 3.1

15 Regulatory Information

	Labelling:
Symbol(s):	Skull & crossbones on orange background, Dead Fish and Tree (n) Flames on orange backround
Classification	Toxic, Extremely flammable, Dangerous for the environment Extremely flammable May cause cancer Harmful may cause lung damage if swallowed. Irritating to skin Vapours may cause drowsiness and dizziness Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment If Swallowed do not induce vomiting, seek medical advice. Do not breath vapour Keep away from sources of ignition – No smoking Wear suitable clothing and gloves Avoid contact with skin Avoid release to the environment. Refer to special instructions/Safety data Sheet

16 Other information

The data and advice given apply when the product is sold for the stated application or applications. The product is not sold as suitable for any other application. Use of the product for any applications other than that as stated in this sheet may give rise to risks not mentioned in this sheet. You should not use the product other than for the stated application or applications without seeking advice from us.

If you have purchased the product for supply to a third party for use at work, it is your duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet.

If you are an employer, it is your duty to inform your employees and others who may be affected by any of the hazards described in this sheet and of any precautions which should be taken.

Approved Code of Practice: Waste Management Duty of Care.

Risk Phrases Full Text:

R12	Extremely flammable
R45	May cause cancer
R65	Harmful may cause lung damage if swallowed.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R38 Irritating to skin
R46 May cause heritable genetic damage R63 Possible risk of harm to the unborn child
R67 Vapours may cause drowsiness and dizziness

Guidance:

Prevention of Dermatitis at work (INDG-233)
Assessing and Managing risks at work from skin exposed to Chemical agents (HSG 205).
Occupational Exposure Limits (EH40)
Effects of Mineral Oil on the Skin—Cautionary Notice.

The above are available from HMSO and HSE sources.

EU Directives

Hazardous preparation Directive 1999/45/EC modified (Directive2001/60/EC) D. 67/548/EC Modified by D. 2004/73/EC (29thATP)

All reasonable care has been taken to ensure that the information in this publication is accurate at the time of printing. However, although certain hazards may be described we cannot predict all hazards that may exist whilst using the product in a workplace**.**

This MSDS should be used as a component of a risk assessment which is the responsibility of the user of the product to prepare and record before use.

MSDS - G & B 004

1 Identification of the Substance

Product Name: Gas Oil
Application: Heating & Fuels Oil for industrial applications

2 Hazards Identification

Classification of the substance or mixture:

CLP Classification (EC No. 1272/2008: H226 – Flammable Liquid - Category 3 H315 – Skin corrosion/irritation – Category 2 H304 – Aspiration Hazard – Category 1 H332 – Acute toxicity, Inhalation – Category 4 H350 – Carcinogenicity – Category 1B H336 – Specific target organ toxicity (Repeated exposure) – Category 2 H411 – Hazardous to the aquatic environment, chronic toxicity – Category 2

Superseded DSD Classification (67/548/EEC and 1999/45/EC
R10, Xi:R38, Xn:R65, Xn:R20, R65, R48/21, Carc. Cat1:R45, N:R51/53

Label Elements

DANGER

H226: Flammable liquid and Vapour
H304: May be fatal if swallowed and enters airways H315: Causes skin irritation
H332: Harmful if Inhaled
H350: May cause Cancer
H373: May cause damage to organs through prolonged or reapeated exposure H411: Toxic to aquatic life with long lasting effects

P201: Obtain special instructions before use
P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking P260: Do not breath dust/fume/gas/mist/vapours/spray
P301 + P310: IF SWALLOWED: Immediately call a POISON CENTRE or Doctor/physician P331: Do not induce vomiting
P501: Dispose of contents/container to approved disposal facility

Does not meet the criteria for persistent,bioaccumulative and toxic (PBT) or very persistent very bioaccumulative (vPvB) substances.

3 Composition/Information on Ingredients

Component	CAS No.	EINECS No.	Concentration % W/W	CLP Classification	DSD Classification
Diesel Oil C9-20	68334-30-5	269-822-7	90 - 100	H351	Carc. Cat. 3 :R40
Naphthalene	91-20-3	202-049-5	<1	H351 H302 H410	Carc. Cat. 3 :R40 Xn:R22, N:R50/53

Total Sulphur: <0.1 wt%

4 First Aid measures

Inhalation: If inhalation of vapour causes irritation or drowsiness, remove to fresh air. In emergency situations a qualified person should administer artificial Respiration.
If breathing difficulties develop, oxygen should be administered by a competent and medically Qualified person. Seek immediate medical attention.

Skin: Wash skin as soon as possible with soap and water. Change contaminated clothing immediately and launder before re-use. Get medical advice if irritation persists.

Eyes: Wash out immediately with large amounts of water for at least 15 minutes. If redness and/or irritation continues, seek medical advice.

Ingestion: Do not give anything by mouth. DO NOT INDUCE VOMITING BECAUSE OF THE DANGER OF ASPIRATION. If the victim is drowsy or unconscious, place on the left side, head down, do not leave the victim unattended and observe closely for adequacy of breathing.
Seek medical attention.

Most important symptoms and effects:

Acute: Minor respiratory irritation at high vapour concentrations.

Chronic: Dry skin and possible irritation with repeated or prolonged exposure.

5 Fire Fighting Measures

Extinguishing Media

Dry chemical, carbon dioxide, or foam is recommended. Water spray is recommended to cool or protect exposed material or Structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to avoided as water destroys the foam.
Water may be ineffective for extinguishment, unless used under favourable conditions by experienced fire fighters.

Special hazards arising from the substance or mixture
Flammable. This material can be ignited by heat, sparks flame or other sources of ignition (e.g. static electricity, pilot lights, mechanical/electrical equipment, electronic devices such as cell phones, computers, calculators and pagers that have not been certified as intrinsically safe) .
Vapours may travel considerable distances to a source of ignition where they can ignite, flash back, or explode.
May create vapour/air explosion hazard indoors, in confined spaces, outdoors or in sewers. This product will float and can be re-ignited on the surface water. Vapours are heavier than air and can accumulate in low areas. If container is not properly cooled, it can rupture in the heat of a fire.

Hazardous combustion products: Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion. Oxides of nitrogen and sulphur may also be formed.

Special protective actions for Firefighters.
For fires beyond the initial stage, emergency responders in the immediate hazard area should wear protectice clothing. When the potential chemical hazard is unknown, in enclosed or confined spaces, a self contained breathing apparatus should be worn. In addition wear other appropriate protective equipment as conditions warrant (see section 8)

6 Accidental Release Measures

Personal Precautions:	Spilt product presents a significant slip hazard. Avoid exposure of the product to sources of ignition. Chemical grade safety Glasses/goggles. nitrile/PVC gloves and protective coveralls should be worn when dealing with any spillages. Do Not Smoke, avoid inhaling vapours, avoid contact with skin & eyes. Ensure any electrical equipment used is intrinsically safe. Avoid wearing clothing that may generate static electricity. For large spillages persons downwind of the spill must be notified. Isolate immediate hazard area and keep unauthorised persons out. It may be necessary to wear respiratory equipment depending upon a risk assessment of the particular situation.
Environmental Precautions:	Prevent entry into drains, sewers and water courses. The appropriate authorities should be notified if it has contaminated soil/vegetation. Spillages occurring on water should be removed from the surface using suitable absorbents. If necessary dispose of absorbed residues as described in section 13.
Decontamination Procedures:	Soak up with inert absorbent or contain and remove by pumping or best available means. Ensure explosion-proof equipment is used. In case of sp

case of soil contamination, remove contaminated soil for remediation or disposal in accordance with local regulations.

7 Handling and Storage

Handling: Take precautionary measures against static discharge. Non-sparking tools should be used. Keep away from ignition sources such as heat/sparks/open flame – no smoking. Wear protective gloves/clothing and eye/face protection. A high standard of personal hygiene should be maintained, Wash thoroughly after handling. If clothing or PPE becomes contaminated remove and ensure items are thoroughly cleaned before reusing. The product is flammable and may vaporise easily at ambient temperatures, the vapour is heavier Then air and may create explosive mixtures of vapour and air. Beware of accumulation in low lying areas and confined areas. The use of explosion-proof electrical equipment is recommended. Do not enter confined spaces such as tanks or pits without following the correct entry procedures. The use of hydrocarbon fuel in an area without adequate ventilation may result in hazardous levels of incomplete combustion products and low oxygen levels.

Storage: Store in containers designed to contain flammable liquids and ensure storage area is not close to heat or any sources of ignition. Drums should be stored on their sides preferably under cover, out of direct sunlight, in well ventilated conditions. Containers should be tightly closed and properly labelled. Empty containers retain residue and may be dangerous, do nor pressurise, cut, weld, braze, solder, drill, grind or expose such containers to heat, sparks, flame or other sources of ignition. All containers should be disposed of in an environmentally safe manner in accordance with the appropriate disposal of hazardous waste regulations.

8 Exposure Controls/Personal protection

Where prolonged or repeated exposure is likely ANTI-STATIC PROTECTIVE CLOTHING should be worn including impervious gloves and eye protection

Respiratory Protection: Unlikely to be required in normal use but ensure good ventilation. However, where concentration in air may be excessive, approved respirators fitted with appropriate cartridges suitable for organic vapours may be required to BS EN 140)

Workplace exposure limits: Not assigned

Eye Protection: Chemical grade eye protection approved to BS EN 166 is recommended at all times. Skin Protection: Hand & Skin protection is recommended at all times where exposure is likely. Protective clothing must be worn, including PVC or nitrile gloves to BS EN 374 with a breakthrough time of > 360 minutes.

Suggestions provided in this section for exposure control and specific types of PPE are based on readily available Information. Users should consult with the specific manufacturer to confirm the performance of their PPE. Specific situations May require consultation with industrial hygiene, safety, or engineering professionals.

9 Physical and Chemical Properties

Appearance:	Clear liquid (red)
Odour:	Diesel fuel
pH:	No Data
Flash Point:	<55°C (PMCC)
Boiling point range	180 – 390^{O} C
Density at 15°C	0.82 – 0.875
Solubility - Water:	Very Low
Viscosity cSt at 20°C:	4.8mm^{2}/s
Auto Ignition temp °C :	250
Pour point °C:	-24
Melting/freezing point	No data
Vapour Pressure	<0.3 kPa@20 ^{O}C
Upper Explosive Limits (vol.% in air)	5.0
Lower Explosive Limits (vol.% in air)	0.5

10 Stability and Reactivity

Conditions to Avoid **-** Heat (Note: Flash Point <55°C min). Prevent vapour accumulation.

The product is generally not chemically reactive and stable under normal ambient conditions of use. Hazardous Decomposition Products **-** thermal decomposition may lead to the formation of a multiplicity of compounds some of which may be hazardous. With incomplete combustion smoke and hazardous fumes and gases, including carbon monoxide may be formed.

11 Toxicological Information

High concentrations may cause respiratory irritation, headache, drowsiness, dizziness, loss of co-ordination, disorientation And fatigue.
Aspiration is considered to be a hazard, may be fatal if swallowed and enters airways
Vapours and spray may be irritating to the respiratory tract and for mucous membranes. The product is not classified as sensitising or allergenic. Prolonged and repeated contact with the product may cause drying of the skin and possibly dermatitis. Causes mild eye irritation.
May cause cancer. Petroleum middle distillates have been shown to cause skin tumours in mice following Repeated and prolonged skin contact. Follow up studies have shown that these tumours are produced through a Non-genotoxic mechanism associated with frequent cell damage and repair, and that they are not likely to cause tumours In the absence of prolonged skin irritation.

Middle distillates with low polynuclear aromatic hydrocarbon content have not been identified as carcinogens by the International Agency for Research on Cancer (IARC).
Specific Target Organ Toxicity (Single exposure): Not expected to cause organ effects from a single exposure.
Specific Target Organ Toxicity (Repeated exposure): May cause damage to organs through repeated exposure.
Dermal application of a distillate fuel component at doses >125mg/Kg, 5d/wk, for 13 weeks resulted in decreased Liver, thymus and spleen weights, and altered bone marrow function. Microscopic alterations included liver hypertrophy And necrosis, decreased hematopoesis and lymphocyte depletion.

Information on hazardous components:
Naphthalene
Carcinogenicity: Naphthalene has been evaluated in two year inhalation studies in both rats and mice. The US National Toxicology Programme (NTP) concluded that there is clear evidence of carcinogenicity in male and female rats based on increased incidences of respiratory epithelial adenomas and olfactory epithelial neuroblastomas of the nose.

NTP found some evidence of carcinogenicity in female mice (alveolar adenomas) and no evidence of carcinogenicity in male mice. Naphthalene has been identified as a carcinogen by IARC and NTP.

Inhalation:	>4.65 mg/L (mist) LC50/LD50
Skin absorption:	> 4.1g/Kg LC50/LD50
Ingestion:	> 5g/KG LC50/LD50

Not expected to cause genetic heritable effects. Not expected to cause reproductive toxicity.

12 Ecological Information

Ecotoxicity:	Acute aquatic toxicity studies on samples of gas oils show acute Toxicity values of 2 -20mg/L . these values are consistent with the predicted Aquatic toxicity of these substances based on their hydrocarbon compositions. should be regarded as toxic to aquatic organisms, with the potential to cause long-term adverse effects in the aquatic environment. Classification H411: Chronic Cat 2
Mobility:	Releases to water will result in a hydrocarbon film floating and spreading on the surface. For the lighter components, volatilisation is an important loss product and reduces the hazard to aquatic organisms. In air, the hydrocarbon vapours react readily with hydroxyl radicals with half life of less than one day. Photoxidation on the water surface is also a significant loss process particularly for polycyclic aromatic compounds. In water the majority of components will be adsorbed on sediment. Adsorbtion is the most predominant physical process on release to soil. Adsorbed hydrocarbons will slowly degrade in both water and soil.
Degradability:	Inherently biodegradable by Micro-organisms.
Bioaccumulation Potential:	Gas oil components have measured or calculated low Kow values ranging from 3.9 to 6 and therefore would be regarded as having the potential to bioaccumulate. Lower molecular weight compounds are readily metabolised and the actual bioaccumulation potential of higher molecular weight compounds is limited by the low water solubility and large molecular size.

An assessment revealed that this product was not a Persistent, bioaccumulative or Toxic substance.

13 Disposal Considerations

European Waste Code; 13 07 01 Fuel oil and diesel

This product, if discarded as produced would be considered as hazardous waste pursuant to Directive 91/689/EEC on hazardous waste, and subject to the provisions of that directive unless Article 1(5) of that directive applies.

This code has been assigned based upon the most common uses for this material and may not reflect contaminants Resulting from actual use. Waste generators/producers are responsible for assessing the actual process used when generating the waste and its contaminants in order to assign the proper waste disposal code.

Container contents should be completely used and emptied prior to disposal. All containers should be disposed of in an Environmentally safe manner and in accordance with all applicable Regulations.

14 Transport Information

UN Prper shipping name GAS OIL or DIESEL FUEL or HEATING OIL ,LIGHT UN Number (Substance Identification Number): 1202
Transport class: 3
Packing Group: III
Environmental Hazards: Marine Pollutant

If transported in bulk by marine vessel in international waters, product is being carried under the scope of MARPOL annex 1.

15 Regulatory Information

Health, safety & Environmental Regulations pertaining to the product:

EC 1272/2008 – Classification, Labelling and Packaging of Substances & Mixtures EN 166:2002 – Eye Protection
EN 529:2005 – respiratory Protective Devices
BS EN 374-1:2003 Protective gloves against chemicals and micro-organisms Workplace Exposure Limits, (EH40/2005), Control of Substances Hazardous to Health
Directive 91/689/EEC on Hazardous Waste (European Waste codes)
Directive 2000/76/EC on the incineration of waste Directive 1999/31/EC on Landfill of waste

16 Other Information

List of relevant Hazard Statements under CLP classification:

H226: Flammable liquid and vapour H302: Harmful if swallowed
H304: May be fatal if swallowed and enters airways H315: Causes skin irritation
H332: Harmful if inhaled
H350: May cause cancer
H351: Suspected of causing cancer
H373: May cause damage to organs through prolonged or repeated exposure H411: Toxic to aquatic life with long lasting effects

List of relevant Hazard Statements under DSD Classification:

R10:Flammable R20: Harmful by inhalation
R22:Harmful if swallowed
R38:Irritating to skin
R40:Limited evidence of carcinogenic effect
R45:Maycause cancer
R48/21: Harmful: danger of serious damage to health by prolonged exposure in contact with skin
R65: Harmful may cause lung damage if swallowed
R66: Repeated exposure may cause skin dryness or cracking
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Guidance Notes: Prevention of Dermatitis at work (INDG-233)
Occupational exposure limits (EH 40)
Effects of mineral oil on the skin – Cautionary Notice
Assessing and Managing risks at work from skin exposed to chemical agents (HSG205) The above publications are available from HMSO and HSE Sources)

The information presented in this Data Sheet is based upon data believed to be accurate when the Data Sheet was prepared. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be Implied regarding the accuracy or completeness of the information provided above, the results to be obtained from the use of This information, or the product, the safety of this product, or the hazards relating to its use. No responsibility is assumed for Any damage or injury resulting from abnormal use or from any failure to adhere to any recommended practices.
The information provided above, and the product, are furnished on the condition that the person receiving them shall make Their own determination as to the suitability of the product for their particular purpose and on the condition that they assume The risk of their use.

MSDS –GB 002

1 Identification of the Substance

Product Name: Derv
Application: Fuel

2 Hazards Identification

Classification of the substance or mixture:

CLP Classification (EC No. 1272/2008: H226 – Flammable Liquid - Category 3 H315 – Skin corrosion/irritation – Category 2 H304 – Aspiration Hazard – Category 1 H332 – Acute toxicity, Inhalation – Category 4 H350 – Carcinogenicity – Category 1B H336 – Specific target organ toxicity (Repeated exposure) – Category 2 H411 – Hazardous to the aquatic environment, chronic toxicity – Category 2

Superseded DSD Classification (67/548/EEC and 1999/45/EC
R10, Xi:R38, Xn:R65, Xn:R20, R65, R48/21, Carc. Cat1:R45, N:R51/53

Label Elements

DANGER

H226: Flammable liquid and Vapour

H304: May be fatal if swallowed and enters airways H315: Causes skin irritation

H332: Harmful if Inhaled

H350: May cause Cancer

H373: May cause damage to organs through prolonged or reapeated exposure H411: Toxic to aquatic life with long lasting effects

P201: Obtain special instructions before use

P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking P260: Do not breath dust/fume/gas/mist/vapours/spray

P301 + P310: IF SWALLOWED: Immediately call a POISON CENTRE or Doctor/physician
P331: Do not induce vomiting
P501: Dispose of contents/container to approved disposal facility

Does not meet the criteria for persistent,bioaccumulative and toxic (PBT) or very persistent very bioaccumulative (vPvB) substances.

3 Composition/Information on Ingredients

Component	CAS No.	EINECS No.	Concentration % W/W	CLP Classification	DSD Classification
Diesel Oil C9-20	68334-30-5	269-822-7	90 - 100	H351	Carc. Cat. 3 :R40
Naphthalene	91-20-3	202-049-5	<1	H351 H302 H410	Carc. Cat. 3 :R40 Xn:R22, N:R50/53

Total Sulphur: <0.1 wt%

4 First Aid measures

Inhalation: If inhalation of vapour causes irritation or drowsiness, remove to fresh air. In emergency situations a qualified person should administer artificial Respiration.
If breathing difficulties develop, oxygen should be administered by a competent and medically Qualified person. Seek immediate medical attention.

Skin: Wash skin as soon as possible with soap and water. Change contaminated clothing immediately and launder before re-use. Get medical advice if irritation persists.

Eyes: Wash out immediately with large amounts of water for at least 15 minutes. If redness and/or irritation continues, seek medical advice.

Ingestion: Do not give anything by mouth. DO NOT INDUCE VOMITING BECAUSE OF THE DANGER OF ASPIRATION. If the victim is drowsy or unconscious, place on the left side, head down, do not leave the victim unattended and observe closely for adequacy of breathing.
Seek medical attention.

Most important symptoms and effects:

Acute: Minor respiratory irritation at high vapour concentrations.

Chronic: Dry skin and possible irritation with repeated or prolonged exposure.

5 Fire Fighting Measures

Extinguishing

Me
dia

Dry chemical, carbon dioxide, or foam is recommended. Water spray is recommended to cool or protect exposed material or Structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to avoided as water destroys the foam.

Water may be ineffective for extinguishment, unless used under favourable conditions by experienced fire fighters.

Special hazards arising from the substance or mixture

Flammable. This material can be ignited by heat, sparks flame or other sources of ignition (e.g. static electricity, pilot lights, mechanical/electrical equipment, electronic devices such as cell phones, computers, calculators and pagers that have not been certified as intrinsically safe) .

Vapours may travel considerable distances to a source of ignition where they can ignite, flash back, or explode.

May create vapour/air explosion hazard indoors, in confined spaces, outdoors or in sewers. This product will float and can be re-ignited on the surface water. Vapours are heavier than air and can accumulate in low areas. If container is not properly cooled, it can rupture in the heat of a fire.

Hazardous combustion products: Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion. Oxides of nitrogen and sulphur may also be formed.

Special protective actions for Firefighters.

For fires beyond the initial stage, emergency responders in the immediate hazard area should wear protectice clothing. When the potential chemical hazard is unknown, in enclosed or confined spaces, a self contained breathing apparatus should be worn. In addition wear other appropriate protective equipment as conditions warrant (see section 8)

6 Accidental Release Measures

Personal Precautions:	Spilt product presents a significant slip hazard. Avoid exposure of the product to sources of ignition. Chemical grade safety Glasses/goggles. nitrile/PVC gloves and protective coveralls should be worn when dealing with any spillages. Do Not Smoke, avoid inhaling vapours, avoid contact with skin & eyes. Ensure any electrical equipment used is intrinsically safe. Avoid wearing clothing that may generate static electricity. For large spillages persons downwind of the spill must be notified. Isolate immediate hazard area and keep unauthorised persons out. It may be necessary to wear respiratory equipment depending upon a risk assessment of the particular situation.
Environmental Precautions:	Prevent entry into drains, sewers and water courses. The appropriate authorities should be notified if it has contaminated soil/vegetation. Spillages occurring on water should be removed from the surface using suitable absorbents. If necessary dispose of absorbed residues as described in section 13.
Decontamination Procedures:	Soak up with inert absorbent or contain and remove by pumping or best available means. Ensure explosion-proof equipment is used. In case of sp case of soil contamination, remove contaminated soil for remediation or

disposal in accordance with local regulations.

7 Handling and Storage

Handling: Take precautionary measures against static discharge. Non-sparking tools should be used. Keep away from ignition sources such as heat/sparks/open flame – no smoking. Wear protective gloves/clothing and eye/face protection. A high standard of personal hygiene should be maintained, Wash thoroughly after handling. If clothing or PPE becomes contaminated remove and ensure items are thoroughly cleaned before reusing. The product is flammable and may vaporise easily at ambient temperatures, the vapour is heavier Then air and may create explosive mixtures of vapour and air. Beware of accumulation in low lying areas and confined areas. The use of explosion-proof electrical equipment is recommended. Do not enter confined spaces such as tanks or pits without following the correct entry procedures. The use of hydrocarbon fuel in an area without adequate ventilation may result in hazardous levels of incomplete combustion products and low oxygen levels.

Storage: Store in containers designed to contain flammable liquids and ensure storage area is not close to heat or any sources of ignition. Drums should be stored on their sides preferably under cover, out of direct sunlight, in well ventilated conditions. Containers should be tightly closed and properly labelled. Empty containers retain residue and may be dangerous, do nor pressurise, cut, weld, braze, solder, drill, grind or expose such containers to heat, sparks, flame or other sources of ignition. All containers should be disposed of in an environmentally safe manner in accordance with the appropriate disposal of hazardous waste regulations.

8 Exposure Controls/Personal protection

Where prolonged or repeated exposure is likely ANTI-STATIC PROTECTIVE CLOTHING should be worn including impervious gloves and eye protection

Respiratory Protection: Unlikely to be required in normal use but ensure good ventilation. However, where concentration in air may be excessive, approved respirators fitted with appropriate cartridges suitable for organic vapours may be required to BS EN 140)

Workplace exposure limits: Not assigned

Eye Protection: Chemical grade eye protection approved to BS EN 166 is recommended at all times. Skin Protection: Hand & Skin protection is recommended at all times where exposure is likely. Protective clothing must be worn, including PVC or nitrile gloves to BS EN 374 with a breakthrough time of > 360 minutes.

Suggestions provided in this section for exposure control and specific types of PPE are based on readily available Information. Users should consult with the specific manufacturer to confirm the performance of their PPE. Specific situations May require consultation with industrial hygiene, safety, or engineering professionals.

9 Physical and Chemical Properties

Appearance:	Clear liquid (Straw coloured)
Odour:	Diesel fuel
pH:	No Data
Flash Point:	<55°C (PMCC)
Boiling point range	165--375^{O} C
Density at 15°C	0.82 – 0.875
Solubility - Water:	Very Low
Viscosity cSt at 20°C:	4.8mm^{2}/s
Viscosity cSt at 40°C:	2-4.5 mm^{2}/s
Auto Ignition temp °C :	250-270
Pour point °C:	-24
Melting/freezing point	No data
Vapour Pressure	<0.3 kPa@20 ^{O}C
Upper Explosive Limits (vol.% in air)	5.0
Lower Explosive Limits (vol.% in air)	0.5

10 Stability and Reactivity

Conditions to Avoid - Heat (Note: Flash Point <55°C min). Prevent vapour accumulation.

The product is generally not chemically reactive and stable under normal ambient conditions of use.
Hazardous Decomposition Products - thermal decomposition may lead to the formation of a multiplicity of compounds some of which may be hazardous. With incomplete combustion smoke and hazardous fumes and gases, including carbon monoxide may be formed.

11 Toxicological Information

High concentrations may cause respiratory irritation, headache, drowsiness, dizziness, loss of co-ordination, disorientation And fatigue.
Aspiration is considered to be a hazard, may be fatal if swallowed and enters airways
Vapours and spray may be irritating to the respiratory tract and for mucous membranes. The product is not classified as sensitising or allergenic. Prolonged and repeated contact with the product may cause drying of the skin and possibly dermatitis. Causes mild eye irritation.
May cause cancer. Petroleum middle distillates have been shown to cause skin tumours in mice following Repeated and prolonged skin contact. Follow up studies have shown that these tumours are produced through a
Non-genotoxic mechanism associated with frequent cell damage and repair, and that they are not likely to cause tumours In the absence of prolonged skin irritation.

Middle distillates with low polynuclear aromatic hydrocarbon content have not been identified as carcinogens by the International Agency for Research on Cancer (IARC).
Specific Target Organ Toxicity (Single exposure): Not expected to cause organ effects from a single exposure. Specific Target Organ Toxicity (Repeated exposure): May cause damage to organs through repeated exposure.
Dermal application of a distillate fuel component at doses >125mg/Kg, 5d/wk, for 13 weeks resulted in decreased Liver, thymus and spleen weights, and altered bone marrow function. Microscopic alterations included liver hypertrophy And necrosis, decreased hematopoesis and lymphocyte depletion.

Information on hazardous components:

Naphthalene

Carcinogenicity: Naphthalene has been evaluated in two year inhalation studies in both rats and mice. The US National Toxicology Programme (NTP) concluded that there is clear evidence of carcinogenicity in male and female rats based on increased incidences of respiratory epithelial adenomas and olfactory epithelial neuroblastomas of the nose. NTP found some evidence of carcinogenicity in female mice (alveolar adenomas) and no evidence of carcinogenicity in male mice. Naphthalene has been identified as a carcinogen by IARC and NTP.

Inhalation:	>4.65 mg/L (mist) LC50/LD50
Skin absorption:	> 4.1g/Kg LC50/LD50
Ingestion:	> 5g/KG LC50/LD50

Not expected to cause genetic heritable effects. Not expected to cause reproductive toxicity.

12 Ecological Information

Ecotoxicity: Acute aquatic toxicity studies on samples of Diesel show acute Toxicity values of 2 -20mg/L . these values are consistent with the predicted Aquatic toxicity of these substances based on their hydrocarbon compositions. should be regarded as toxic to aquatic organisms, with the potential to cause long-term adverse effects in the aquatic environment.

Classification H411: Chronic Cat 2

Mobility: Releases to water will result in a hydrocarbon film floating and spreading on the surface. For the lighter components, volatilisation is an important loss product and reduces the hazard to aquatic organisms. In air, the hydrocarbon vapours react readily with hydroxyl radicals with half life of less than one day. Photoxidation on the water surface is also a significant loss process particularly for polycyclic aromatic compounds. In water the majority of components will be adsorbed on sediment. Adsorbtion is the most predominant physical process on release to soil. Adsorbed hydrocarbons will slowly degrade in both water and soil.

Degradability: Inherently biodegradable by Micro-organisms.

Bioaccumulation Potential: Diesel components have measured or calculated low Kow values ranging from 3.9 to 6 and therefore would be regarded as having the potential to bioaccumulate. Lower molecular weight compounds are readily metabolised and the actual bioaccumulation potential of higher molecular weight compounds is limited by the low water solubility and large molecular size.

An assessment revealed that this product was not a Persistent, bioaccumulative or Toxic substance.

13 Disposal Considerations

European Waste Code; 13 07 01 Fuel oil and diesel

This product, if discarded as produced would be considered as hazardous waste pursuant to Directive 91/689/EEC on hazardous waste, and subject to the provisions of that directive unless Article 1(5) of that directive applies.

This code has been assigned based upon the most common uses for this material and may not reflect contaminants Resulting from actual use. Waste generators/producers are responsible for assessing the actual process used when generating the waste and its contaminants in order to assign the proper waste disposal code.

Container contents should be completely used and emptied prior to disposal. All containers should be disposed of in an Environmentally safe manner and in accordance with all applicable Regulations.

14 Transport Information

UN Prper shipping name GAS OIL or DIESEL FUEL or HEATING OIL ,LIGHT UN Number (Substance Identification Number): 1202
Transport class: 3
Packing Group: III
Environmental Hazards: Marine Pollutant

If transported in bulk by marine vessel in international waters, product is being carried under the scope of MARPOL annex 1.

15 Regulatory Information

Health, safety & Environmental Regulations pertaining to the product:

EC 1272/2008 – Classification, Labelling and Packaging of Substances & Mixtures EN 166:2002 – Eye Protection
EN 529:2005 – respiratory Protective Devices
BS EN 374-1:2003 Protective gloves against chemicals and micro-organisms
Workplace Exposure Limits, (EH40/2005), Control of Substances Hazardous to Health Directive 91/689/EEC on Hazardous Waste (European Waste codes)
Directive 2000/76/EC on the incineration of waste Directive 1999/31/EC on Landfill of waste

16 Other Information

List of relevant Hazard Statements under CLP classification:

H226: Flammable liquid and vapour H302: Harmful if swallowed
H304: May be fatal if swallowed and enters airways H315: Causes skin irritation
H332: Harmful if inhaled
H350: May cause cancer
H351: Suspected of causing cancer
H373: May cause damage to organs through prolonged or repeated exposure H411: Toxic to aquatic life with long lasting effects

List of relevant Hazard Statements under DSD Classification:

R10: Flammable
R20:Harmful by inhalation
R22:Harmful if swallowed
R38:Irritating to skin
R40:Limited evidence of carcinogenic effect R45: May cause cancer
R48/21: Harmful: danger of serious damage to health by prolonged exposure in contact with skin R65: Harmful may cause lung damage if swallowed
R66: Repeated exposure may cause skin dryness or cracking
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Guidance Notes: Prevention of Dermatitis at work (INDG-233)
Occupational exposure limits (EH 40)
Effects of mineral oil on the skin – Cautionary Notice
Assessing and Managing risks at work from skin exposed to chemical agents (HSG205) The above publications are available from HMSO and HSE Sources)

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The risk of their use.

MSDS –GB 003

Material Safety Data Sheet

SECTION 1

RESIDUAL MARINE FUELS, RMA-RMK

Product Use: Fuel Oil

Synonyms: 24114 BUNKER FUEL HS, 180 MM2/S MAX AT 50°C, 28090 BUNKER FUEL HS, 420 MM2/S MAX AT 50°C, 28276 BUNKER FUEL HS, 380 MM2/S MAX AT 50°C, 28724 BUNKER FUEL HS, 320 MM2/S MAX AT 50°C, 28800 BUNKER FUEL HS, 280 MM2/S MAX AT 50°C, 29066 BUNKER FUEL HS, 240 MM2/S MAX AT 50°C, 29068 FUEL HEAVY 380 CST, 29435 MARINE RESIDUAL FUEL - RMF 25, 29442 FUEL OIL, 65 MM2/S MAN (at 100C), 29754 FUEL OIL, 440 MM2/S MAX (AT 50C) - 3.5% S, 29785 FUEL OIL, 420 MM2/S MAX (AT 50C) - 1% S, 32788 BUNKER FUEL HS, 100 MM2/S MAX AT 50°C, 32789 BUNKER FUEL HS, 120 MM2/S MAX AT 50°C, 32790 BUNKER FUEL HS, 80 MM2/S MAX AT 50°C, 32791 BUNKER FUEL HS, 60 MM2/S MAX AT 50°C, 32792 BUNKER FUEL HS, 40 MM2/S MAX AT 50°C, 32793 BUNKER FUEL HS, 30 MM2/S MAX AT 50°C

Company Identification

Chevron Marine Products LLC 1500 Louisiana Street

Houston, TX 77002
United States of America

Transportation Emergency Response

USA: CHEMTREC (800) 424-9300 or (703) 527-3887
Asia: +65 6883 1111

Health Emergency

Chevron Emergency Information Center: Emergency Information Centers are located in the USA. International collect calls accepted. (800) 231-0623 or (510) 231-0623

Product Information

Product Information: USA: 832-854-6000
MSDS Requests: USA: 832-854-6000

SECTION 2 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Fuel oil, residual	68476-33-5	100 %weight

SECTION 3 HAZARDS IDENTIFICATION

****

EMERGENCY OVERVIEW

- COMBUSTIBLE LIQUID AND VAPOR
- MAY RELEASE HIGHLY TOXIC AND FLAMMABLE HYDROGEN SULFIDE GAS (H2S)
- SUSPECT CANCER HAZARD - MAY CAUSE CANCER
- DO NOT ATTEMPT RESCUE WITHOUT SUPPLIED-AIR RESPIRATORY PROTECTION
- HARMFUL TO AQUATIC ORGANISMS. MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT

****

IMMEDIATE HEALTH EFFECTS

Eye: Not expected to cause prolonged or significant eye irritation. If this material is heated, thermal burns may result from eye contact.

Skin: Skin contact may cause drying or defatting of the skin. Contact with the skin is not expected to cause an allergic skin response. Symptoms may include pain, itching, discoloration, swelling, and blistering. Not expected to be harmful to internal organs if absorbed through the skin. If this material is heated, thermal burns may result from skin contact.

Ingestion: Not expected to be harmful if swallowed.

Inhalation: Not expected to be harmful if inhaled. Hydrogen sulfide has a strong rotten-egg odor. However, with continued exposure and at high levels, H2S may deaden a person's sense of smell. If the rotten egg odor is no longer noticeable, it may not necessarily mean that exposure has stopped. At low levels, hydrogen sulfide causes irritation of the eyes, nose, and throat. Moderate levels can cause headache, dizziness, nausea, and vomiting, as well as coughing and difficulty breathing. Higher levels can cause shock, convulsions, coma, and death. After a serious exposure, symptoms usually begin immediately.

The U.S. National Institute for Occupational Safety and Health (NIOSH) considers air concentrations of hydrogen sulfide gas greater than 100 ppm to be Immediately Dangerous to Life and Health (IDLH).

DELAYED OR OTHER HEALTH EFFECTS:

Cancer: Prolonged or repeated exposure to this material may cause cancer. See Section 11 for additional information. Risk depends on duration and level of exposure.

SECTION 4 FIRST AID MEASURES

Eye: No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water. If heated material should splash into eyes, flush eyes immediately with fresh water for 15 minutes while holding the eyelids open. Remove contact lenses, if worn. Get immediate medical attention.

Skin: Wash skin with water immediately and remove contaminated clothing and shoes. Get medical attention if any symptoms develop. To remove the material from skin, apply a waterless hand cleaner, mineral oil, or petroleum jelly. Then wash with soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse. If the hot material gets on skin, quickly cool in water. See a doctor for extensive burns. Do not try to peel the solidified material from the skin, or use solvents or thinners to dissolve it. The use of vegetable oil or mineral oil is recommended for removal of this material from the skin.

Ingestion: No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

Inhalation: No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs. If exposure to hydrogen sulfide (H2S) gas is possible during an emergency, wear an approved, positive pressure air-supplying respirator. Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.

Note to Physicians: Administration of 100% oxygen and supportive care is the preferred treatment for poisoning by hydrogen sulfide gas. For additional information on H2S, see Chevron MSDS No. 301.

SECTION 5 FIRE FIGHTING MEASURES

See Section 7 for proper handling and storage.

FIRE CLASSIFICATION:

OSHA Classification (29 CFR 1910.1200): Combustible liquid.

NFPA RATINGS: Health: 1 Flammability: 2 Reactivity: 0

FLAMMABLE PROPERTIES:

Flashpoint: (Pensky-Martens Closed Cup) 62 °C (143 °F) Minimum

Autoignition: 263 °C (505 °F) (Estimated)

Flammability (Explosive) Limits (% by volume in air): Lower: 0.7 Upper: 5 (Estimated)

EXTINGUISHING MEDIA: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

PROTECTION OF FIRE FIGHTERS:

Fire Fighting Instructions: For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form oxides of: Sulfur .

SECTION 6 ACCIDENTAL RELEASE MEASURES

Protective Measures: Eliminate all sources of ignition in the vicinity of the spill or released vapor. If this material is released into the work area, evacuate the area immediately. Monitor area with combustible gas indicator. If this material is released into a work area, evacuate the area immediately. Persons entering the contaminated area to correct the problem or to determine whether it is safe to resume normal activities must comply with all instructions in the Exposure Controls/PersonalProtection section.

Spill Management: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. All equipment used when handling the product must be grounded. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. If heated material is spilled, allow it to cool before proceeding with disposal methods.

Reporting: Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

SECTION 7 HANDLING AND STORAGE

Precautionary Measures: Liquid evaporates and forms vapor (fumes) which can catch fire and burn with explosive force. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches. Fire hazard is greater as liquid temperature rises above 29C (85F). Do not get in eyes, on skin, or on clothing. Avoid contact of heated material with eyes, skin, and clothing. Wash thoroughly after handling.

Unusual Handling Hazards: Toxic quantities of hydrogen sulfide (H2S) may be present in storage tanks and bulk transport vessels which contain or have contained this material. Persons opening or entering these compartments should first determine if H2S is present. See Exposure Controls/Personal

Protection -Section 8. Do not attempt rescue of a person over exposed to H2S without wearing approved supplied-air or self-contained breathing equipment. If there is a potential for exceeding one-half the occupational exposure standard, monitoring of hydrogen sulfide levels is required. Since the sense of smell cannot be relied upon to detect the presence of H2S, the concentration should be measured by the use of fixed or portable devices.

General Handling Information: Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

General Storage Information: DO NOT USE OR STORE near heat, sparks, flames, or hot surfaces . USE AND STORE ONLY IN WELL VENTILATED AREA. Keep container closed when not in use.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

ENGINEERING CONTROLS:

Use in a well-ventilated area.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice. If this material is heated, wear chemical goggles or safety glasses or a face shield.

Skin Protection: Wear protective clothing to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operations conducted. Suggested materials for protective gloves include: Nitrile Rubber, Polyvinyl Alcohol (PVA) (Note: Avoid contact with water. PVA deteriorates in water.), Viton. If this material is heated, wear insulated clothing to prevent skin contact if engineering controls or work practices are not adequate to prevent skin contact. **Respiratory Protection:** No respiratory protection is normally required.

Determine if airborne concentrations are below the occupational exposure limit for hydrogen sulfide. If not, wear an approved positive pressure air-supplying respirator. For more information on hydrogen sulfide, see Chevron MSDS No. 301.

Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

No applicable occupational exposure limits exist for this material or its components.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

Color: Black **Physical State:** Liquid **Odor:** Petroleum odor **pH:** Not Applicable

Vapor Pressure: <0.04 psi (Estimated) **Vapor Density (Air = 1):** >1 (Estimated) **Boiling Point:** 160°C (320°F) - 600°C (1112°F)

Solubility: Insoluble in water.

Freezing Point: No Data Available

Specific Gravity: 1.005 @ 15°C (59°F) (Estimated)

Density: 1010 kg/m3 @ 15°C (59°F) Maximum

Viscosity: 10 - 55 cSt @ 100°C (212°F)

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Incompatibility With Other Materials: May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Hazardous Decomposition Products: Hydrogen Sulfide (Elevated temperatures)

Hazardous Polymerization: Hazardous polymerization will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

IMMEDIATE HEALTH EFFECTS

Eye Irritation: The eye irritation hazard is based on evaluation of data for similar materials or product components.

Skin Irritation: The skin irritation hazard is based on evaluation of data for similar materials or product components.

Skin Sensitization: The skin sensitization hazard is based on evaluation of data for similar materials or product components.

Acute Dermal Toxicity: The acute dermal toxicity hazard is based on evaluation of data for similar materials or product components.

Acute Oral Toxicity: The acute oral toxicity hazard is based on evaluation of data for similar materials or product components.

Acute Inhalation Toxicity: The acute inhalation toxicity hazard is based on evaluation of data for similar materials or product components.

SECTION 12 ECOLOGICAL INFORMATION

ECOTOXICITY

This material is expected to be harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

ENVIRONMENTAL FATE

Ready Biodegradability: This material is not expected to be readily biodegradable. The biodegradability of this material is based on an evaluation of data for the components or a similar material.

SECTION 13 DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT Shipping Description: PETROLEUM OIL, N.E.C.; NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR
Additional Information:NOT HAZARDOUS BY U.S. DOT. ADR/RID HAZARD CLASS NOT APPLICABLE.

IMO/IMDG Shipping Description: MAY BE REGULATED AS DANGEROUS GOODS FOR TRANSPORTATION UNDER THE IMDG CODE

ICAO/IATA Shipping Description: NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORTATION UNDER ICAO

SECTION 15 REGULATORY INFORMATION

EPCRA 311/312 CATEGORIES:

1. Immediate (Acute) Health Effects:ES
2. Delayed (Chronic) Health Effects: YES
3. Fire Hazard: YES

4. Sudden Release of Pressure Hazard: NO
5. Reactivity Hazard: NO

REGULATORY LISTS SEARCHED:

1-1 =IARC Group 1 03=EPCRA 313
1-2 A=IARC Group 2A 04=CA Proposition 65
01-2B=IARC Group 2B 05=MA RTK
02=NTP Carcinogen 06=NJ RTK
07=PA RTK

No components of this material were found on the regulatory lists above.
Fuel oil, residual 04

CHEMICAL INVENTORIES:

All components comply with the following chemical inventory requirements: AICS (Australia), DSL (Canada), EINECS (European Union), IECSC (China), PICCS (Philippines), TSCA (United States).

WHMIS CLASSIFICATION:

Class B, Division 3: Combustible Liquids
Class D, Division 1, Subdivision A: Very Toxic Material - Acute Lethality
Class D, Division 2, Subdivision A: Very Toxic Material - Carcinogenicity

SECTION 16 OTHER INFORMATION

NFPA RATINGS: Health: 1 Flammability: 2 Reactivity: 0

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

REVISION STATEMENT: This revision updates the following sections of this Material Safety Data Sheet: 1, 16.

Revision Date: June 24, 2009

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
	CAS - Chemical Abstract Service Number
ACGIH - American Conference of Government Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	MSDS - Material Safety Data Sheet
CVX - Chevron	NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)
IARC - International Agency for Research on Cancer	OSHA - Occupational Safety and Health Administration

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by the Chevron Energy Technology Company, 100 Chevron Way, Richmond, California 94802.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

Appendix 1 Guidelines To Information Required By the MMO In Considering Request For Dispersant Spraying Approval

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

Note: Annex D of the MMO Oil Spill Contingency Plan Guidelines, a copy of which is held by the Harbour Master, gives a pro-forma report that should be submitted to the MMO after the use of any oil treatment product.

Appendix Two

Extract from Statutory Instrument 1998 No. 1056

Reporting of incidents: harbour authorities and oil handling facilities

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

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

Appendix 3:

POLREP CG77

INSTRUCTIONS FOR COMPLETING FORM CG77 (POLREP)

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

CG77 POLREP

A. CLASSIFICATION of report - (I) Doubtful, (ii) Probable, (iii) Confirmed.

B. DATE and TIME pollution observed/reported, and identity of observer/reporter

C. POSITION (**Always** by **LATITUDE & LONGITUDE)** and EXTENT of pollution. If possible, also state range and bearing from a prominent landmark or Decca position and estimated amount of pollution (e.g. size of polluted area, number of tonnes of oil spilled or number of containers, drums etc. lost). When appropriate, give position of observer relative to the pollution.

D. TIDE, WIND speed and direction.

E. Weather conditions and SEA state.

F. CHARACTERISTICS of pollution. Give type of pollution e.g. oil (crude or otherwise), packaged or bulk chemicals, or garbage. For chemicals give proper name or United Nations Number if known. For all, give also appearance, e.g. liquid, floating, solid, liquid oil, semi-liquid sludge, tarry lumps, weathered oil, discoloration of sea, visible vapours etc. should be given.

G. SOURCE and CAUSE of pollution e.g. from vessel or other undertaking. If from vessel, say whether as a result of apparently deliberate discharge or a casualty. If the latter, give a brief description. Where possible give name, type, size, nationality and Port of Registry of polluting vessel. If vessel is proceeding on its way, give course, speed and destination.

H. Details of VESSELS IN THE AREA. To be given if polluter cannot be identified and the spill is considered to be of recent origin.

I. NOT USED

J. Whether PHOTOGRAPHS have been taken and/or SAMPLES for analysis.

K. REMEDIAL ACTION taken or intended to deal with the spillage

L. FORECAST of likely pollution (e.g. arrival on beach), with estimated timing.

M. NAMES of those informed other than the addressee

N. Any OTHER relevant information (e.g. names of other witnesses, references to other instances of pollution pointing to source).

PART II - SUPPLEMENTARY INFORMATION TO BE PROVIDED LATER

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

O. RESULT of SAMPLE analysis

P. RESULTS of PHOTOGRAPHIC analysis

Q. RESULTS of SUPPLEMENTARY ENQUIRIES (e.g. inspections by Surveyors, statement of ship's personnel etc. if applicable)

R. RESULT OF MATHEMATICAL MODELS

NOTES

1. POLREPs should be used for oil, chemical or dangerous substance spillages and for illegal discharges of garbage.

2. All messages should be pre-fixed by the codeword POLREP followed by a serial number issued by the originator. Subsequent updating or amplifying reports should repeat this information and add a SITREP number, e.g. "POLREP 21/SITREP 1" would be followed by "POLREP 21/SITREP 2". The first report is assumed to be Sitrep 1 with subsequent reports being numbered sequentially.

3. Groundings, collisions or breakdowns of oil tankers or other vessels carrying pollutants, including bunkers, should be treated as potentially serious incidents with a classification of "PROBABLE" until proved otherwise. The use of link calls or Inmarsat calls to Masters of ships is often the best method of obtaining information.

4. Local C/P alerting plans should establish the following responsibilities:

   (a) Coastguard to inform the County Oil Pollution Officer (COPO) in England and Wales, the Local Oil Pollution Officer in Scotland, Department of

Environment in Northern Ireland, or the appropriate authority in the Channel Islands or Isle of Man where there is an immediate or potential risk of oil coming ashore in their area.

(b) In England, Scotland and Wales, MCA-HM Coastguard to inform COPOs/LOPOs in the counties immediately adjacent to counties at risk, that they may be at risk.

5. Care should be taken to avoid undue escalation of UNCONFIRMED pollution incidents with consequent misleading publicity.

Appendix 4 Oil Spill Progress Report

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

Appendix 5 Tier 2 Contractor Briefing Report

Adler and Allan Briefing Report	
FAX TO:	**FAX NO:**
FROM (Sender's name):	
POSITION:	
COMPANY:	
CONTACT (e.g. phone / fax)	

1. **Designated callout authority**
2. Location of spill
3. Time of spill (GMT and local time)
4. Source of spillage
5. Quantity (if known)
6. Oil type and characteristics
7. Weather conditions and forecast
8. Resources at risk
9. Cleanup resources available on site or others ordered with estimated time of arrival
10. Nearest airport and facilities if known; availability of onward transportation
11. Port of embarkation for equipment; location of secure storage for equipment
12. Vessel availability for equipment deployment, storage of recovered oil
13. Location of Command Centre
14. Name of On Scene Commander and designated contact(s) and/or deputies
15. Security, medical advice, visa requirements, immunisations required