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Section 1: Introduction and Policy

1.1 Purpose of the Plan

This Oil Spill Contingency Plan is designed to guide Weymouth Harbour's response personnel through the processes required to manage an oil spill originating from operations within or approaching their harbour under their jurisdiction. The requirement to have an Oil Spill Contingency Plan for Harbours, Ports and Oil Handling Terminals around UK waters has been formalised by the Merchant Shipping (Oil Pollution Preparedness, Response and Co-operation Convention) Regulations 1998, which implement the International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC, 1990). This Convention, adopted by the International Maritime Organisation (IMO) is aimed to "mitigate the consequences of major oil pollution incidents involving, in particular, ships, offshore units, sea ports and oil handling facilities".

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The competent national authority designated to oversee all matters pertaining to the OPRC convention under the Merchant Shipping Act 1995 as amended by the Merchant Shipping and Maritime Security Act 1997 is the Maritime and Coastguard Agency (MCA). This plan has been prepared in accordance with the 'Oil Spill Contingency Plan Guidelines for Ports, Harbours & Oil Handling Facilities' issued by the Maritime and Coastguard Agency (MCA) which is responsible for applying the regulations to all harbours, ports and oil handling facilities in the UK.

1.2 Document Control and Plan Revision

The Weymouth Harbour Oil Spill Contingency Plan is a controlled document. All document holders, detailed in the distribution list, are assigned a specific copy number. Any changes to the situation at the harbour, to the plan or any other updates will be issued as amendments to all holders of the plan within 3 months of such change. Irrespective, the plan will be revised on an annual basis so as to incorporate changes occurring during the year plus lessons learned from exercises and incidents. This document has an approved life span of 5 years from the date of approval by MCA and it shall be submitted in its entirety for re-approval during year four to maintain continuity. The Harbour Master will be responsible for maintenance and plan review.

This document is compiled in consultation with the following statutory bodies and authorities:

- Environment Agency (EA)
- Natural England (NE)
- Marine Management Organisation (MMO)
- Dorset County Council (DCC)

1.3 Use of the Plan

This Plan is specifically for operations within Weymouth Harbour and for all vessels entering the harbour boundary (Figure 1). The Plan is designed to initiate an appropriate oil spill response in the event of an incident. It details a tiered response strategy that is in accordance with UK legislative requirements and takes into account the spill risk associated with the operation; the nature of the hydrocarbons that could be spilt; the prevailing meteorological and hydrographic conditions and the environmental sensitivity of the surrounding areas.

1.4 Area of Operation

Figure 1: Location Map showing Weymouth Harbour Port Limits (black dashed line)

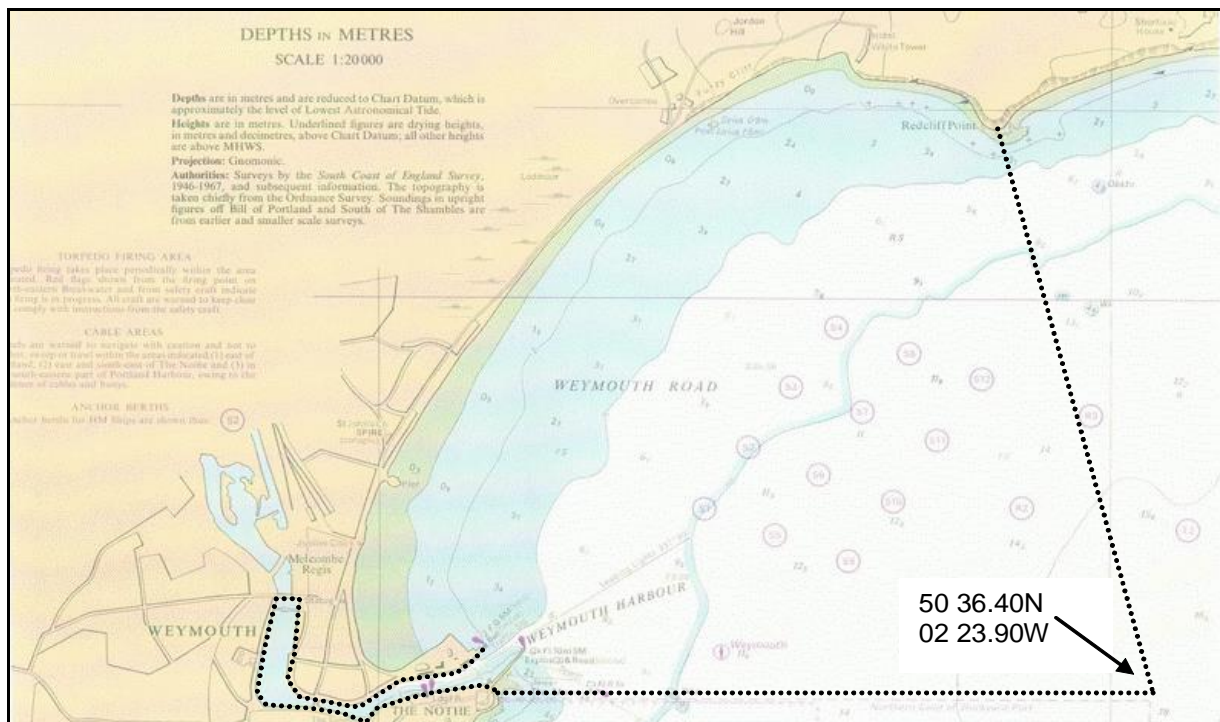


Figure 1 illustrates the Harbour Limits. Weymouth Harbour Authority is responsible for the waters in Weymouth Bay from Redcliff Point, out to the Northern Limit of Portland's Harbour and across to the North. Statutory jurisdiction includes up to river to the Westham Bridge.

1.5 Identification of the Roles and Responsibilities of Parties Associated with this Plan

Within the UK there is an adopted structure and procedure for response to marine Oil Spills, which clearly defines the roles and responsibilities of industry, UK Government (including environmental agencies) and Maritime Authorities. Each statutory body has a designated area of jurisdiction within zones extending from the High Water Mark to 200nm or the UK Territorial Limit.

Table 1: Statutory Jurisdiction

Authority	Jurisdiction						
	HWS	LWS	1nm	3nm	6nm	12nm	200nm
Harbour	All operations within harbour limits						
Local ¹							
	Oil spill response out of Port limits						
MCA	Oil spill response, monitoring, advice						
MCA (HMCG)	Search and Rescue						
NE/JNCC ²	Conservation of the natural heritage						
MMO ³	Marine environment, fisheries protection and dispersant authorisation						
EA ⁴	Water quality						
HMRC	Import duty						

Local Authority¹ Has a duty of care (under the CCA, 2004), to prepare and implement an oil spill contingency plan for response to an oil spillage on the coastline from HWS to LWS including out of harbour limits.

NE / JNCC² Natural England requires to be notified up to 12nm. JNCC's remit extends from 12nm to 200nm.

MMO³ Approves dispersants and their use in shallow water and advise on their use in deeper waters.

EA⁴ Requires to be notified on water quality issues up to 1nm.

Roles and Responsibilities of Concerned Authorities

The roles and responsibilities of all authorities requiring notification in the event of a spill and the appropriate paths of communication to be followed in the event of a spill are shown in Section 3.6 of this Plan. In the event of an oil spill incident, Weymouth Harbour will be responsible for clean-up and the overall co-ordination of spill response within the area of jurisdiction. The NCP provides guidance on the responsibilities that have been imposed or accepted for the clean-up of pollution within the jurisdiction of a Harbour Authority.

Vessels in Transit

The statutory duty for reporting and dealing with pollution from any vessel en route to Weymouth prior to entering limits lies with the Master and vessel owners. However, Weymouth Harbour should be notified of an incident occurring during the vessels approach and will respond as per procedure to assist with clean-up where possible. After commencing transit to Weymouth through the designated

area of jurisdiction covered by this plan, reporting and response to any pollution incident will be co-ordinated through the Oil Spill Contingency Plan.

1.6 Scope of Plan

This plan has been compiled to cover the response to any spillage caused by vessels or during operations associated with safe passage to or from Weymouth and within its jurisdiction.

The scope of the plan covers response to all the “Essential Elements” contained within the MCA Oil Spill Contingency Guidelines for Ports, Harbours & Oil Handling Facilities.

The Plan describes the Tier 1 response available at the harbour relevant to the perceived risk through normal operations as well as a mechanism for calling upon Tier 2 or 3 responses in the event of an abnormal incident or major accident requiring the harbours involvement. A definition of the tiered levels used in this harbour is shown below and the process of response escalation is described in Section 1.9 with notifications in Part 2 Section 6.1.

Weymouth Harbour will supply a work boat with two experienced boatmen and other personnel as appropriate to assist in an oil pollution incident in Portland Harbour if requested by the Portland Harbour Master.

Portland Harbour Authority will supply oil spill response equipment and operating personnel as appropriate to assist at an oil pollution incident in Weymouth Harbour if requested by the Weymouth Harbour Master.

Table 2: Tiered Response Definitions

Response Tier	Definition
Contained Operational Spills	These are spills, which are contained on the vessel or dockside and do not enter the water.
Tier 1	Small operational spills that may occur within a location as a result of daily activities. The level at which events can be controlled using on site resources. A Tier 1 spill is not likely to require recourse to intervention by resources out with the port, an external incident response organisation or external authorities, except for purposes of notification.
Tier 2	Medium sized spills that will be handled by Harbour Personnel and a nominated contractor or other external assistance as nominated within this plan. A Tier 2 incident may involve local government. Oil spill response to be co-ordinated via Weymouth Harbour. Local Authorities would be available to assist with an incident.
Tier 3	Larger spills or a loss of containment incident that will require full involvement of other authorities and possible mobilisation of Tier 3 and national stockpiles. A Tier 3 incident is beyond the capabilities of both local and regional resources.

1.7 Risk Assessment

A risk assessment to meet with OPRC Contingency Planning requirements for Ports & Harbours has been completed by Adler and Allan Ltd on the basis of a format previously agreed with MCA.

Scope of Assessment

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This assessment covers operations where vessels and users are under the jurisdiction of Weymouth Harbour. The Port of Weymouth is situated to the north of Portland Bill, midway between Southampton and Plymouth and half a mile north of Portland Harbour Breakwaters (latitude 50° 36' N, longitude 002° 27' W). The Inner Harbour contains three marinas (two council owned, one commercial) and pontoons for small craft (circa 1000), the majority of which are for leisure. The Outer Harbour contains berths for visiting yachts, fishing vessels and other commercial craft. No cargo transport or ferries have been present for several years and the Port has no plans to re-start these operations at present.

There are approximately 6,000 visitors to the Harbour for leisure of which 4,500 are seasonal. Up to 100 other visitors include MOD vessels, Border Agency, Sail Training, Trial Vessels, Offshore Trawlers, Steamships and Survey Vessels. On average there are circa 200 movements a day in season and 50 a day in the winter.

Weymouth Harbour does not handle any Hazard and Noxious Substances (HNS) and therefore has not be classified as a risk in relation to this Plan.

Factors and Assessment

This risk assessment is designed to identify potential oil sources, the size of potential spills and to estimate the probability of events that may result in a release of oil into the marine environment. The result will be a targeted, specific investigation which will identify areas of unacceptable risk and potential mitigation methods.

In order to assess the consequence and subsequent overall risk acceptance criteria of a spill, it is important to identify the oil containing systems associated with Harbour operations. All oil containing systems (source) connected with the Harbour operations, initiating events that could result in an accidental spillage and the potential maximum volume that could be released were identified and examined. Probability and consequence are then combined in a risk matrix model to ascertain overall risk acceptance criteria.

The frequency of a specific type of incident can be expressed as probability and when classified into criteria should provide an indication as to the most commonly occurring events. Control measures can reduce the probability of an event occurring. Therefore the full range of control measures implemented by Weymouth Harbour to minimise the risk of an oil spill event have been considered before applying specific probability criteria.

The following tables (Tables 3 and 4) describe the probability and consequence ratings used in this risk assessment.

Table 3: Probability of Scenario Occurrence

Level	Frequency Description
1	Remote, a highly improbable occurrence
2	Low
3	Moderate
4	High, a remotely possibility but known occurrence
5	Very High

Table 4: Consequences

Level	Consequence	Description
1	Insignificant	Causes slight nuisance off or on site of short duration Slight excursion above consent/detectable fish kill/discolouration of receiving water Aroma of oil in air, slight silvery sheen on water
2	Minor	Moderate excursion above consent/minor impact on receiving water Aroma of oil, definite rainbow sheen on water
3	Moderate	Extensive damage to immediate environment Definite aroma of oil in air Oil visible as metallic sheen on water surface Large diesel spill or small heavy oil spill
4	Major	Severe and extensive damage to environment Extensive contamination of nearby shorelines Large heavy oil spill
5	Catastrophic	Severe environmental damage to surrounding area

Probability and consequence can be multiplied to produce an overall risk rating. This can then be applied to specific scenarios in order to prioritise potential control measures and risk minimisation procedures. The following table determines the overall level of risk. In principle, all risks should be within the insignificant to minor categories. Moderate risks and above will require attention and improvement plans to reduce the risk.

Table 5: Overall Level of Risk

Probability	Consequence				
	Catastrophic (5)	Major (4)	Moderate (3)	Minor (2)	Insignificant (1)
Very high (5)	Very high (25)	High (20)	Moderate (15)	Minor (10)	Low (5)
High (4)	High (20)	High (16)	Moderate (12)	Minor (8)	Low (4)
Moderate (3)	Moderate (15)	Moderate (12)	Moderate (9)	Minor (6)	Low (3)
Low (2)	Minor (10)	Minor (8)	Minor (6)	Minor (4)	Low (2)
Remote (1)	Low (5)	Low (4)	Low (3)	Low (2)	Low (1)

When potential hazards and the probability of their occurrence have been established, the oil type and fate of the oil must be considered to evaluate the consequence hydrocarbons may have upon the resources within the marine environment and to establish the area of potential impact. It should be remembered that although the level of risk of an incident occurring may be low, the level of impact on the natural heritage can potentially be high (high volume or increased toxicity of the fuel etc.). The consequence of each identified hazard is evaluated using the level of risk and the impact. Should the biological impact be rated high, the risk overall will have a higher rating.

Hydrocarbons are broadly grouped into four categories: group I oils such as diesels are non-persistent and will tend to dissipate completely within a few days. Group II and III oils are more persistent and have a tendency to form emulsions. Group IV oils are very persistent due to the lack of volatile constituents and will remain in the environment indefinitely (ITOPF 2006/2007). The volume and type of hydrocarbons released will determine the consequence for low to high probabilities. The consequence for all low to high probabilities will be mild to severe unless proven otherwise.

Risk: Collision between Vessels

Before approaching the Harbour entrance on arrival or departure, all but particularly large visiting vessels should contact the port radio signal station 'Weymouth Harbour' on VHF channel 12. This is not manned 24 hours but essentially daylight hours only. The channel leading into the harbour lies within two piers. Red transit lights on the South Quay bearing 239° 38' indicate the main channel and are conspicuous when entering the Harbour. Traffic signals are displayed in a vertical line from a mast on the South Pier during movements of large vessels.

As with the majority of Harbour/ Port operations, there is always a risk for those vessels operating in a close proximity to collide with each other. Within Weymouth Harbour, this risk is reduced by virtue of that fact that vessels not familiar with the Harbour must report their intentions to the relevant Harbour Master and the use of a pilot is an available option. Due to the positioning of fuel tanks within vessels frequenting the Harbours and also the relatively low speeds at which they travel, the chances of an oil spillage as a result of collision is remote.

Risk: Collision between Vessel and Fixed Installation

The potential of a vessel impacting a fixed installation must also be addressed. This incident could occur within the Harbour in a number of ways including:

- Impact with the breakwaters or piers entering/ leaving the Harbour
- Impact whilst berthing.

An impact could occur in each of these areas due to the following occurrences:

- Loss of power to the vessels engines/ manoeuvring aids
- Misjudgement of wind, tide and current influences.

There is also a potential pollution risk associated for moving vessels to collide with moored vessels. However, this risk is reduced with utilisation of a Pilot.

Risk: Vessel Grounding

The Harbour area is not subject to drying out periods of low tide.

The Harbour area is divided in half by Weymouth Town Bridge, a lifting bridge that allows access between the outer, old Harbour and the Inner Harbour. The inner Harbour offers mooring space for approximately 1000 boats on council owned and privately leased pontoons. In regards to the outer Harbour, ships up to 130m length overall (LOA) with a maximum draft of 5.2m can be accommodated at any state of the tide. Weymouth has the advantage of having the smallest tidal range and the shortest navigable access distance of any Harbour on the South Coast. However, there is a low risk of a vessel dragging its anchor or losing power in Weymouth Bay and drifting onto the beach. This type of incident is hard to plan for and advice should be taken from Harbour Authority personnel.

Risk: Bunkering Operations

There is a fuel station, operated by Mechanical Services, dispensing diesel. This is located opposite the Harbourmaster's office and consists of a subterranean 30,000-litre tankage and flexible hose to fuel vessels tied to a pontoon.

In addition, the RNLI have a fuel tank at their location. The storage facility for the Severn's diesel tank is located under the bank seat at the start of the gangway to the pontoon. This consists of a bunded tank, inside a tank (two skinned tank inside an existing tank), covered by concrete. When 98% full, the tank holds 8,000 litres. The diesel is transferred to the Severn via triple walled reinforced hoses. If there is a leak, the fuel automatically shuts off as the system has a pressure monitor installed. The RNLI can also store up to 300 litres of petrol for the ILB (Inshore Lifeboat) adjacent to the door to the of the ILB station in 10 litre metal cans.

In addition, there are at least two mobile fuel trucks that refuel vessels alongside. Such operations are not subject to pipeline failures or blowouts so the risk of spillage is relatively low. However, human error does exist and carelessness could result in valves not being closed properly and over filling, ultimately leading to a spillage.

Risk: Inherited Incident

The proximity of the English Channel and its associated vessel traffic means that a risk of oil pollution within Weymouth Harbour could come from an incident occurring outside of the Harbours jurisdictional waters (i.e. pollution that has been driven into the Harbour area by the wind and tide). This type of incident is difficult to plan for as there can be no pre knowledge of the type and the potential quantity of oil spilled.

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Bunkering operations are carried out on a regular basis in Portland Harbour outer anchorages by freighting tankers to other vessels at anchor. This creates a discrete risk to Weymouth as if a spill occurs the incident could be inherited. Once again it is hard to know the quantities of oil that could enter Weymouth Harbour if such an incident occurred. Portland Harbour Authority do provide direction for bunkering operations which states that any bunkering barge engaged in bunkering operations shall be equipped with an oil resistant boom. This boom's specification and method of deployment requires approval in writing by the Portland Harbour Master. If more than one bunkering operation is running concurrently and a pollution incident occurs, then all bunkering operations will be ceased immediately.

Table 6: Summary of Risk to the Environment

Source Land/air/marine	Hazard	Volume	Risk prior to control	Control measures	Consequence	Probability	Risk overall
Operational							
Marine	Passage and berthing (including collisions)	160m ³	Moderate	Keep speed and wash to a reduced level. Seek guidance from harbour authority personnel	2	3	Minor
Land/ Marine	Bunkering operations	30m ³	Minor	Close valves properly and remain vigilant. Pressure monitors installed	3	2	Minor
Marine	Vessel grounding	Unknown	Low	Monitor a depth gauge and seek advice from harbour authority personnel	3	1	Low
Land	Refuelling vessels from mobile fuel trucks	Unknown	Moderate	Refuelling company and customer SOPs (Standard Operating Procedures)	2	2	Minor
Marine	Bunkering operations by freighting tankers to other vessels at anchor	Unknown	Moderate	Close valves properly and remain vigilant. SOPEP (Ship Oil Pollution Emergency Plan)	2	2	Minor

Response Strategy

Small oil spills within the harbour will likely be recovered using Tier 1 materials (namely sorbent equipment) held in stock by the Harbour itself. In the event of a Tier 2 spill, this will be contained, recovered and disposed of by the nominated contractor, Adler and Allan who offer a <4.0 hour response time in working hours and a <6.0 hour response time out of working hours. Oily waste shall be disposed of by a certified disposal route. Dispersants will not be used. Any spillage of the size nominated within this study (risk summary above) would be recovered using sorbents or mechanical means where possible. Booming would be used to contain the oil.

Overall Conclusion

Weymouth Harbour is considered to be a low risk. Proper controls exist through set procedures. It is considered that there are adequate procedures in place to ensure that the chance of an operational spill is low.

1.8 Environmental Sensitivities and Priorities for Protection

General Strategy

Weymouth Harbour is situated to the North of the Isle of Portland and Portland Harbour. Its main commercial berths lie to the east of the inner harbour entrance which is backed by Radipole Lake SSSI and RSPB Reserve. Weymouth Beach is predominantly sandy backed by the town seafront and does contain some invertebrate interest in the lower shore especially. Eelgrass beds are found within the shallow water fronting Weymouth Harbour (including Weymouth Pier, Weymouth Bay and Ringstead Bay) .

To the east of Weymouth, the beach is predominantly shingle backed by a seawall and coastal road, behind which lies Lodmoor SSSI and RSPB Reserve. The Harbour limits continue east to Redcliff Point which lies within the South Dorset Coast SSSI. Weymouth Bay itself is included within the Portland and Fleet Sensitive Marine Area for the shallow water habitats and is a locally important gull roost. An area south of Weymouth Bay has been designated as a Marine Conservation Zone (MCZ). This South Dorset MCZ lies mainly within the 12nm limit but a small part extends further seawards. It is located approximately 17.5km south of St Alban's Head, to the south-east of Swanage. This site covers an area of circa 193km² making it one of the largest MCZ's. Another MCZ is present to the west, Chesil Beach and Stennis Ledges.

In addition, there are two Special Areas of Conservation (SAC) located outside of the Weymouth OSCP area but are within circa 5km. The first being Studland to Portland SAC (33191.09 ha) which protects important reef habitats. These reefs exhibit a large amount of geological variety and biological diversity. The second being the Chesil and the Fleet SAC (1631.63 ha) which protects Chesil Beach (relatively undisturbed shingle bar) and the important lagoon habitats within the Fleet.

There are numerous other designations in the surrounding area including SSSIs (Isle of Portland, Portland Harbour Shore) and the Dorset and East Devon World Heritage Coast. There are currently a pMCZ's (potential) for the Purbeck Coast and South of Portland.

All the above designations can be accessed via the Multi-Agency Geographic Information for the Countryside (MAGIC) website <http://magic.defra.gov.uk/MagicMap.aspx> with further hyperlinks available to observe designation criteria. In addition hyperlinks are available from the designations listed below.

The following sites are located immediately adjacent to Weymouth Harbour Authorities jurisdiction:

- **Portland Harbour Shore SSSI** – this site protects the cliffs, maritime grassland and intertidal habitat around Portland Harbour and The Nothe.
- **Radipole Lake SSSI** – a wetland site connected to Weymouth Harbour via sluices in Westham Bridge.
- **Lodmoor SSSI** – a wetland site connected to Weymouth Bay via a sluice under the sea wall.
- **South Dorset Coast SSSI** – this site protects coastal habitat from Bowleaze Cove eastwards to Swanage.
- **Isle of Portland to Studland Cliffs SAC** – this site protects coastal habitat from Portland peninsula around to St Alban's Head.

The following protected sites are located outside of Weymouth Harbour Authorities jurisdiction but within close proximity (listed in order of distance):

- Studland to Portland SAC
- Purbeck Coast pMCZ (proposed MCZ)
- Isle of Portland SSSI
- Chesil and the Fleet SAC
- Chesil Beach and the Fleet SPA
- Chesil and the Fleet Ramsar
- Chesil & the Fleet SSSI
- South of Portland pMCZ
- Chesil Beach and Stennis Ledges MCZ
- Solent and Dorset pSPA (potential SPA)
- South Dorset MCZ

General Strategy (Dispersant)

Where possible, considering safety and open water conditions, any floating gas oil on the water surface should either be allowed to degrade naturally or be removed physically – **no chemical dispersants are to be used.**

Note: *The Marine and Coastal Access Act 2009 and the Marine Licensing (Exempted Activity) Order 2011, requires approval for the use of substances to treat oil on the surface of the sea. However, approval is not needed under this order for the use of equipment to control, contain or recover oil. This means that respondents do not need to approach MMO before the use of items of equipment like recoverable absorbent booms, absorbent rolls, absorbent tails and absorbent pads. Respondents do however need to ensure that they have MMO approval for the use of any items like loose absorbent granules, chips, moss, sawdust or chemicals which would be classified as substances rather than equipment if there is a possibility of these substances entering the marine environment.*

On all occasions Dorset Standing Environmental Group must be contacted if an incident were to occur. Natural England can also be contacted for immediate advice in the event of a pollution incident as per contact details in the Contact Directory.

Commercial Fisheries

An oil spill within Weymouth Harbour limits can have serious effects on the fin-fisheries and shellfisheries in the area. There is a water intake for Weyfish Ltd. within the harbour and various fisheries, including razor fish, within the bay. In addition shellfish are kept in store pots in the area. With this in mind, the fishing business, MMO and the IFCA are identified so they can urgently be contacted. Protection of the fisheries is a major consideration when determining the course of action to minimise the effect of a spill.

Immediately adjacent to Weymouth Harbour limits there are extensive shell fish beds and particularly scallop operations within Portland Harbour and the Fleet. The area covered within the Portland breakwaters includes Portland Several Order and mussel beds. Within the breakwaters are the intakes for Dorset Cleanerfish Ltd. and outside the breakwaters in Newton's Cove are the intakes for the fish tanks at the Centre for Environment, Fisheries and Aquaculture Science, a DEFRA Agency that operates a fish laboratory at Weymouth. It is therefore important that if there is an oil or chemical contamination within the vicinity that these bodies are contacted and advised to close down their intakes. Around the breakwaters there are prawn and shellfish colonies that are fished by local industry. In addition to the shellfish sector there is extensive netting for bass and mullet within and outside the harbour. The Fleet is a designated Bass Nursery Area and also the site of an Oyster Farm.

Sensitivity Maps

The map below is an extract from the Dorset Local Resilience Forum Coastal Pollution Plan from the DCC Emergency Planning Service dated March 2016.

The page after the sensitivity map is also an extract from the Coastal Pollution Plan which details the coastline description, designations and resources at risk.

Sector 10 – Weymouth Bay SY683 780 to SY710 816

- **Length of Coastline** - 6.4km
- **Aspect** – Preston Beach Easterly 10% of the year. Prevailing weather from the south-west.
- **Exposure** – Northern Weymouth Bay - moderately exposed
- **Weymouth Bay** - sheltered
- **Coastline Description** - a developed coastline with rocky cliffed shores at the north-eastern end, shingle in the centre and a high amenity sandy beach north of Weymouth Harbour.
- **Conservation** - ecologically sensitive SSSIs at Lodmoor and Radipole Lake.
- **Resources at Risk** - Weymouth beach has a very high amenity value, with the whole area being popular for recreation and sport fishing.
- **Clean-up Strategy** - prioritise for high amenity and ecologically sensitive area, particularly around Weymouth Town.
- **Access to Shoreline** - good access available along sector. (Note: no heavy plant to be positioned around the Beach Office due to underground toilets.
- **RVP 8** – Greenhill Sea Life Centre Car Park
- **RVP 9** – Bowleaze Cove
- **Beachmasters Command Post** - Harbour Office and Portacabins along the promenade.
- Temporary Waste Sites:** Pavilion Car Parks – Tarmac Surface
Weymouth Promenade – Tarmac Surface
Intermediate Waste Site – Lodmoor Household Recycling Centre be closed to the public

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Access to Shoreline and Rendezvous Points (RVPs)

30.	Newton's Cove (SY 683 784). No direct access, but possible access to shoreline over rock armouring.
31.	Melcombe Regis (SY 687 807) to Alexandra Gardens (SY 683 789) served by tarmac/dam promenade - ample hardstanding and ramps to sand beach.
32.	Preston (SY 696 816) to Melcombe Regis (SY 688 807) separated from the A353 road by a 4 foot high concrete wall. Ramp giving access to pebble beach at Overcombe Corner. Hardstanding on road.
33.	Bowleaze Cove (SY 704 819) off A353 via car park to ramp and jetty for pebble/sand beach. Hardstanding on car park.
RVP8	Greenhill / Sea Life Centre Car Park (SY 687 807)
RVP9	Bowleaze Cove (SY703 819)

COASTLINE DESCRIPTION	
Variability Along Sector	Variability is given to the coastal edge by the contrasts provided by the rocky cliffed shores at the north-eastern end, the shingle section in the centre and the high amenity sand beach north of Weymouth Harbour.
Backshore Zone	Beaches from the coastal edge along almost the entire length of this sector, which includes the entrance to Weymouth Harbour. Cliffs emerge to the north of Weymouth Bay where they rise to about 50m near Redcliff Point. At the foot of the cliffs and above high water mark are narrow strip beaches built of either boulders or cobbles and shingle. Much of the area comprises either anthropogenic features such as sea walls, roads or shingle and sand beaches. <ul style="list-style-type: none"> • LODMOOR - Salt marsh, reedbed and brackish grassland, shingle foreshore. • RADIPOLE LAKE - Former estuary of the River Wey, now tidal up to the sluice. The site consists of saltmarsh, reed-beds, scrub and wet grassland.
Intertidal Zone	Boulder beaches are found to the west of Redcliff Point. These beaches are narrow strip beaches at the foot of the cliffs. They are generally made up of large calibre boulders and slabs of rock with some cobbles and shingle and are moderately steep. The beach faces are generally steep and have been moulded by the waves into beach cusps. These features occur to the north of Weymouth Bay in the Lodmoor area. In Weymouth Bay the shingle beaches may have a predominantly sandy or mixed sand and shingle intertidal zone which has a fairly gentle slope. The intertidal zone of the boulder beaches is generally made up of large calibre boulders and slabs of rock with some cobbles and shingle. The boulder beaches are generally moderately steep and narrow, ranging in width from about 10 - 15m to about 40m in places.
Wave Energy	Wave energy in the southern half of Weymouth Bay is low. However, wave energy in the more exposed sections of the coast is generally high. This is indicated by a number of landforms that are formed by high-energy waves. Examples of these forms are beach cusps and wave-cut rock platforms, particularly where these are swept clean of sediment.
Man-made features	The mouth of the River Wey at Weymouth is marked by several piers and extensive sea walls, forming Weymouth Harbour
Marine Biology: Littoral Zone Assessment	The SSSIs of Lodmoor and Radipole Lake consist primarily of saltmarsh, reedbeds and grassland with Lodmoor also having a shingle foreshore. The western end of Weymouth Bay has a wide sandy beach.
Conservation	
Lodmoor	Provides an overwintering site for wildfowl and waders, including snipe, lapwing, greenshank, ruff, spotted redshank and whimbrel. During the summer there are breeding populations of bearded tits that nest in the reedbeds. The site also supports populations of two scarce insect species.
Radipole Lake	Is important for wintering wildfowl, including a regular flock of shoveler. During the summer, bearded tits, reed warblers the rare cetti's warbler nest in the reedbeds Radipole Lake is rich in invertebrates.
	Designations: Portland Harbour Shore SSSI , Radipole Lake SSSI , Lodmoor SSSI , South Dorset Coast SSSI , Isle of Portland to Studland Cliffs SAC
RESOURCES AT RISK	
Tourism and Recreation	Tourism is an important contributor to the economy of this sector, the centre for tourism being Weymouth with a very high amenity beach. Sport and sea angling occur extensively along the coastal edge at Weymouth Beach, Overcombe Beach and Bowleaze Cove. There is extensive use of the harbour by visiting boats and marine recreation.
Fisheries and Mariculture	Lobsters, crabs, scallops and whelks are caught in the bay.
Industrial	Sea water abstraction at Weymouth Sealife Centre. Abstraction from the harbour by CEFAS and Weyfish.

Impacts of Oil on Wildlife

The sea and shoreline bird populations can be severely affected from oil impacting their habitat. The first and generally most important effect on birds is external contamination of the feathers from contact with oil. Often the birds ability to thermo-regulate is impacted and they become hypothermic. In seeking shelter, they can be washed ashore and left vulnerable and detached from their food source.

Many of the effects on mammals are similar to those on birds. Oil can coat the fur of some marine mammals such as fur seals, which they depend on for thermo-regulation once again leading to hypothermia. Inhalation and ingestion of oil can potentially damage the liver and kidneys as well as leading to pneumonia. Clinical signs may include conjunctivitis, ulcers and skin ulceration.

Dead or dying wildlife attract and contaminate predators/ scavengers, thus the prompt removal of oiled bodies will reduce secondary exposure and bioaccumulation. Oiled carcasses must be disposed of in accordance to the correct legislation. The wildlife response effort may insist upon documenting each corpse and storage for later identification and analysis. Even though the public may be stimulated to aid struggling wildlife themselves, this should remain the remit of an organised response team as untrained personnel can often place their families and the animals at even greater risk.

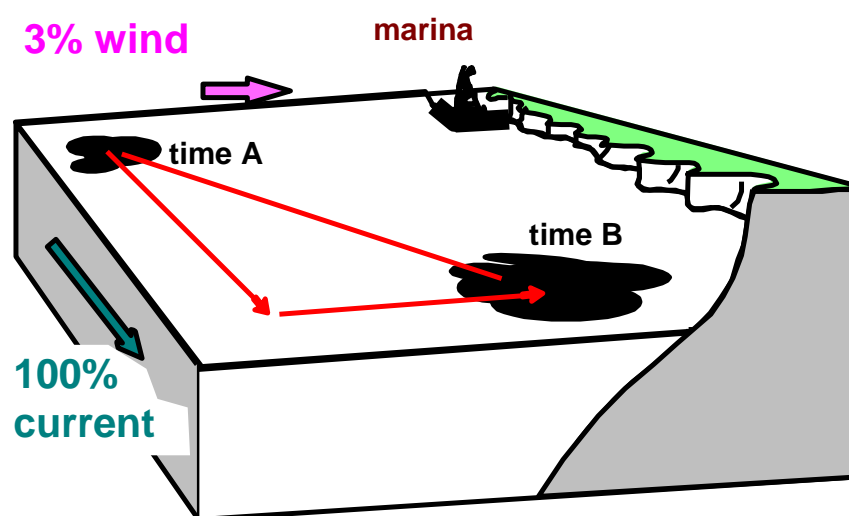
The impact of oil on marine organisms depends on the life stage of the organism and the characteristics of the oil spill such as toxicity, viscosity, quantity and the time of exposure to the organism. The direct toxicity of oil to organisms is attributable mainly to light aromatic compounds. Light oils tend to evaporate fairly quickly, however, oil reaching the shore soon after spillage is likely to be more intoxicating to the intertidal population than weathered oil.

Light oils can have direct lethal effects and also cause deaths by inducing a state of narcosis in which animals can be dislodged from their substrates. Some organisms may be washed into the strandline where they cannot survive but others may recover and re-establish themselves. Heavier oils can be termed 'persistent pollutants' where degradation by natural processes take a considerable amount of time for complete decomposition. Therefore, it is dependent on several factors including shore exposure to wave action and biodegradation by micro-organisms. Well-weathered crude oils have little effect, however if oil comes ashore in great quantities, intertidal populations may be smothered.

Fate and Movement of Spilled Oil

The fate and movement of spilled oil cannot be easily predicted because of several unknowns such as the point of spillage and prevailing wind conditions at the time of the spillage. Spilled oil on water moves as a function of the current and wind. The current has a 100% effect on the speed and direction of the oil slicks movement. For example, if the current heads north at 3 knots, then the oil slick will travel north at a rate of 3 knots. On the other hand, wind has only a 3% influence on the movement of the oil slick. This is shown in the figure below.

Figure 2: Oil Movements on Sea Surface



In general terms, the Harbour Authority will attempt to stop any movement of oil from the point of spillage using the Tier 1 equipment available within this plan. If oil does spread and leaves the area of the Harbour Jurisdiction in any quantity that may impact a sensitive area, the spill shall be upgraded to Tier 2. The EA, NE and LA will be advised and the appropriate action taken as described within Part 2 of this plan.

The booming and collection of such oil after it leaves the area of the Harbour Jurisdiction will be dealt with as described within the Protection Strategy Plan for the surrounding area. The Harbour Authority will advise on the likely track of the spill and possible point of impact and the response will then become the joint responsibility of the Harbour Authority, Tier 2 contractors, EA, Dorset Standing Environmental Group and the Local Authority response plan.

1.9 Categories of Incident

Weymouth Harbour has in place a three tiered incident response system for an oil spillage. The responsibility of escalating an incident from Tier 1 to Tier 2 lies with the harbour.

Levels of Call-out

Tier 1 Spills

For minor spills, where the response is addressed within the Harbour area, Weymouth Harbour will take the appropriate action and arrange for safe storage and legal disposal of waste arising. Since all oil spills, regardless of size, have to be reported to the Authorities, the harbour will always alert the MCA.

Tier 2 and Tier 3 Spills

For all spills of a higher level, Weymouth Harbour will activate the response required according to this Plan.

1.10 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.

In the event of a fuel or oil pollution incident where clean-up is required, the wastes arising should as far as possible be segregated to minimise cross contamination and as an aid to effective waste recycling and recover. Where all wastes arising from a pollution incident are co-mingled it can significantly increase disposal costs and can make the effective recovery of certain wastes much more difficult.

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 (EPR) 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 EA 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 EA, which is sent to EA 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' the EA 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 special 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 EA. 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 EA 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 EA. The latest guidance from the EA indicates that if proposed temporary storage sites are pre-identified, suitable and pre-agreed with EA, then they would not require licensing for the duration of the emergency.

There are no land fill sites suitable for oily waste in the Weymouth area at present. The most likely option would be to use lined skips and store the waste at the Weymouth Waste Transfer Station on Commercial Road awaiting permanent disposal.

Table 7: Storage Methods

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

In the event of a large spill it would be possible to dig and line pits on Weymouth Beach above high water mark for very short term use. Although these are preferable options, the EA in consultation with NE should be consulted over proposals to store or dispose of oily waste material to ensure that sensitive nature conservation sites are not affected.

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 creating a temporary storage site it is essential that consideration be given to the positioning of the sites to ensure that there will be no spread of pollution. A flat clear area needs to be set aside (car park or similar). Preparation should include the isolation of the area by blanking drains, stoppering outlets and laying impermeable membrane so as to provide laydown area for skips or suitable bunkering for waste containment. In addition, under the above legislation, the temporary storage site itself may require a Registered Exemption from Waste Management Licensing. 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 the EA, NE if in or near a SSSI, and the Local Authority concerned.

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

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 Harbour 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 EA to ensure it meets with their satisfaction.

For more information please refer to STOp note 3/16.

Section 2: Training and Exercise Policy

2.1 Training Policy

In order to familiarise personnel in the use of this Oil Spill Contingency Plan and comply with MCA guidelines, Oil Spill Response training courses will be held for selected employees of Weymouth Harbour, their contractors and harbour operators with an identified role within the Plan. In addition, there will also be awareness briefings with other Harbour users and the Agencies who were involved in the consultation process.

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After initial training, instruction will be specific; with the use of the Tier 1 oil spill response equipment located at Weymouth. This will be tested and deployed using those personnel who will be responsible for operating this equipment in the event of a spill.

Consideration should be made to ensure that the harbour workforce are trained to be familiar with the detail of the OSCP to cover periods of leave. In order to meet the minimum levels as recommended in the MCA guidelines, the training and exercising of key personnel is detailed below.

Table 8: Training in the use of this Plan

Training in the use of the this Plan				
Position	Awareness	Minimum hours	Ports and Harbours	Target audience
Operators	Basic use of tier 1 sorbents and understanding contingency plans and operations	8	MCA 1p (minimum)	First responder – absorbent response
Management	Ability to control and put a specific contingency plan into action as OSC	32	MCA 4p	A training course providing in-depth knowledge of the main functions of an oil spill management team
All personnel	Refresher	8	MCA R	Those who have undertaken training not more than 3 years previous

Weymouth Harbour has the Harbour Master trained to Level 4P with a minimum of six other Harbour personnel trained to Level 2P. In accordance with the MOU (Appendix IV), there is also access to trained staff from nearby Portland Port. These qualifications are valid for three years when a refresher course must be attended. If the refresher course is not attended within 39 months (including three months grace) of the date of the original qualification, the whole course must be sat again.

2.2 Exercise Programme

To ensure that the Oil Spill Contingency Plan is understood by all those involved in its use, communications and practical exercises should be undertaken on an annual basis. This will be undertaken using those personnel who will be responsible for operating this equipment in the event of a spill.

Table 9: Exercise in the use of this Plan

Exercise type	Frequency
Notification Exercises	Twice per year
Mobilisation Exercises	Twice per year
Table-top Exercise (may incorporate mobilisation and deployment of local response equipment)	Once per year
Incident Management Exercise (IME) (will incorporate mobilisation and deployment of resources up to Tier 2 Level)	Once every 3 years

2.3 Forms to be completed – Post Exercise/ Incident

Below is a post exercise/ incident report form which should be completed and forwarded to CPSO and all relevant plan holders, each time an exercise is carried out. Similarly, if a real incident were to occur, details should be logged and copied to the MCA.

Post Exercise / Incident* Report			
Name of Port/Harbour/Oil handling facility:			
Tier level (1, 2 or 3):		Name exercise / incident:	
Names of any other participating ports, harbours or oil handling facilities if joint equipment deployment exercise / incident:			
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 any other organisations or authorities participating in exercise / incident:			
Details of amendments to be made to the Contingency Plan resulting from this exercise / incident:			
<small>I can confirm that the details on this form provide a realistic summary of the exercise / incident. Any action points resulting from this exercise / incident have been dealt with accordingly, the relevant documents updated and copies provided to the appropriate bodies for their attention</small>			
Authorised by: (block capitals)		Position / job title:	
Signature:		Date:	

*Delete as appropriate

2.4 Forms to be Completed on an Annual Basis

To ensure that MCA's records remain up-to-date, Harbour Authorities should complete an annual return of changes made (e.g. exercise conducted, new personnel trained etc.). 'Nil' returns should also be submitted. Electronic copies of the following form can be obtained from the MCA.

Ports and Harbours Annual Return Form

Weymouth Harbour		
Annual return for period:		to:
Plan approval date:		Plan re-approved by:
Summary of exercise undertaken:		
<p><i>(NB: response to actual incidents which require activation of the plan should also be summarised here)</i></p>		
New pollution training undertaken:		
(signed)	(print)	(dated)

Section 3: Incident Response Organisation

3.1 Introduction

This plan has been compiled to cover the response to any spillage caused during operations within the jurisdiction of Weymouth Harbour. Spills from shore side operations, vessels alongside in transit or passage. The Plan indicates the Tier 1 response available at the Harbour relevant to the perceived risk through normal operations as well as a mechanism for calling upon Tier 2 or Tier 3 responses in the event of an abnormal incident or major accident affecting the harbour. All harbour users and contractors should be encouraged to report any spills of oils or fuels to the IC as part of valuable data on incident management, trends and rolling incident reduction targets.

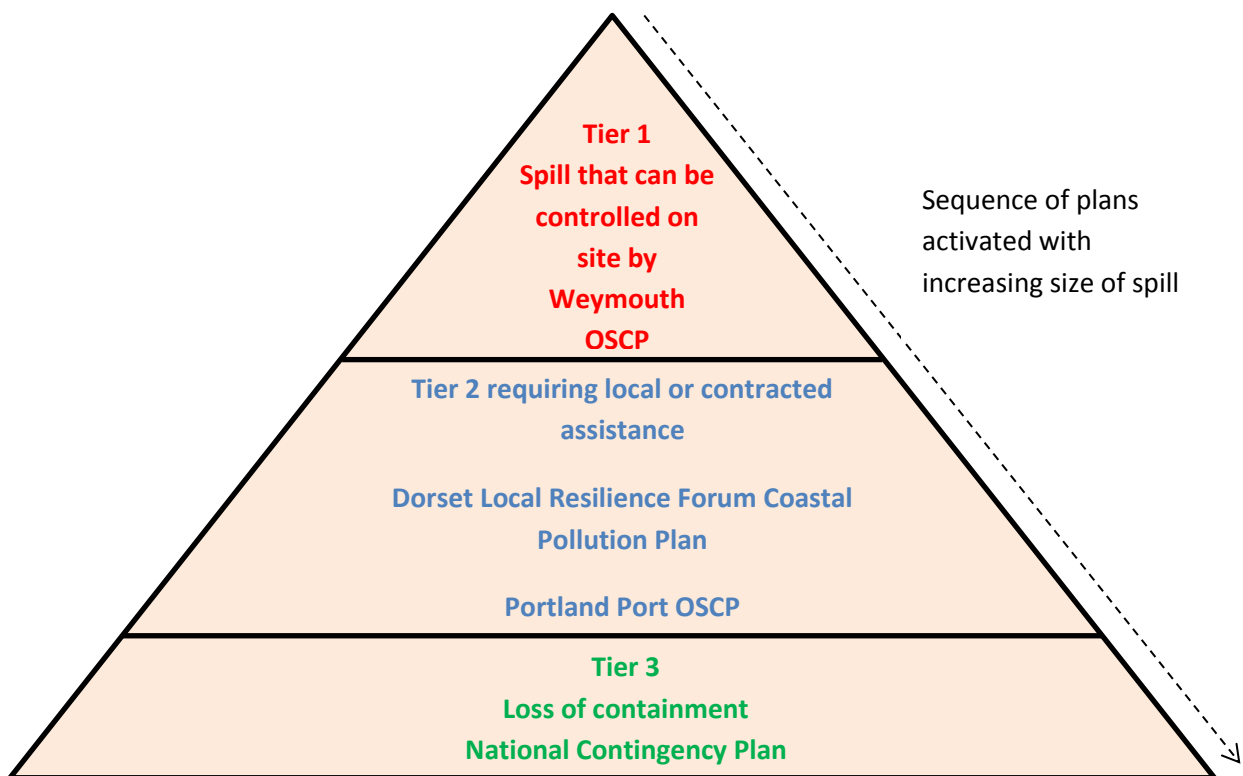
3.2 Responsibilities and Incident Control Arrangements

The Response Team will be led by the Harbour Master with support on scene from the Duty Berthing Officer acting as On Scene Commander and trained responders. An ICC will be established in the Harbour Office.

3.3 Dispersant Use

The use of chemical dispersant is not permitted within the area covered by this plan. Under The Marine and Coastal Access Act 2009 and the Marine Licensing (Exempted Activity) Order 2011, it is a legal requirement that oil treatment products may only be used in English or Welsh waters if they have been formally approved for this purpose by MMO. In addition, specific permission from the MMO must be obtained before any such products are used in all water depths. The 2013 amendment meant that MMO approval to use a dispersant is required in all (English) waters regardless of the depth of water.

3.4 Interfaces with other Contingency / Emergency Plans



3.5 The Role of the SOSREP

The Secretary of State's Representative's (SOSREP) role has been created as part of the Government's response to Lord Donaldson's Review of Salvage and Intervention and their command and control. The report identified that during salvage activities, ultimate control over all operations should become the responsibility of a single designated Secretary of State's Representative (SOSREP) for purposes of maritime salvage and intervention and that the SOSREP could not abdicate his responsibility. Whether or not he exercised any intervention powers at all SOSREP would be in no doubt what so ever that he was in charge and would be held responsible for the outcome of all plans and decisions. Put simply - to ignore a situation is not an option.

The powers of Intervention with which SOSREP is invested could indeed not be more far reaching. They are however presently wider for response to pollution than for safety. They provide that SOSREP can direct a person to take, or refrain from taking "any action of any kind whatsoever. Indeed, if SOSREP is not convinced that the person directed can, or will, take the action then he may cause the action to be taken himself - even if this includes the total destruction of a vessel. The legislation also creates criminal offences for noncompliance with a Direction. It should be noted that directions must be given to specified persons who are those being in charge of a vessel, Port or Harbour Authority.

3.6 Internal Alerting and Call-out Procedures

An initial spill report will come in the first instance, during working hours, to the Harbour Office. Out of working hours reports are liable to come via MCA, Police, EA or the public. The information received must be passed immediately to the Harbour Authority. The Harbour Master will do their best to confirm the incident details and determine the level of clean-up operation necessary and the requirement as to whether to activate a Response Team. All calls and decisions made must be recorded and an oil spill report form raised.

In the event of an incident requiring salvage operations the Secretary of State's Representative (SOSREP) will decide whether it is necessary to set up a Salvage Control Unit (SCU). If the size of the incident merits the establishment of a SCU, the SOSREP will travel to the scene at the appropriate time. Upon establishment of a SCU, Weymouth Harbour will become an active member of the SCU team liaising with the SOSREP throughout the course of the incident. The members of the SCU are:

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

Environment Group

The purpose of the Environment Group (EG) is to minimise the impact of a marine incident on the environment and public health. The type of event most likely to require the activation of an EG would be a Tier 2 or 3 incident under the NCP. The initial POLREP to the MCA would stimulate a request to form the EG. See STOp note 2/16 for more details.

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The Dorset County Council Coastal Counter Pollution Plan may be activated by the Environment Group's Chair or Dorset County Council separately or prior to the activation of the National Contingency Plan, dependant on the size or scale of the pollution threat or incident.

There is now a regional EG (SW England) and the three regional Chairs will rotate annually. However, each consistent EG will retain its core membership as they have the local knowledge and expertise. Therefore if the incident is in Dorset, that group will form up, however there may be a different Chair.

The Maritime and Coastguard Agency

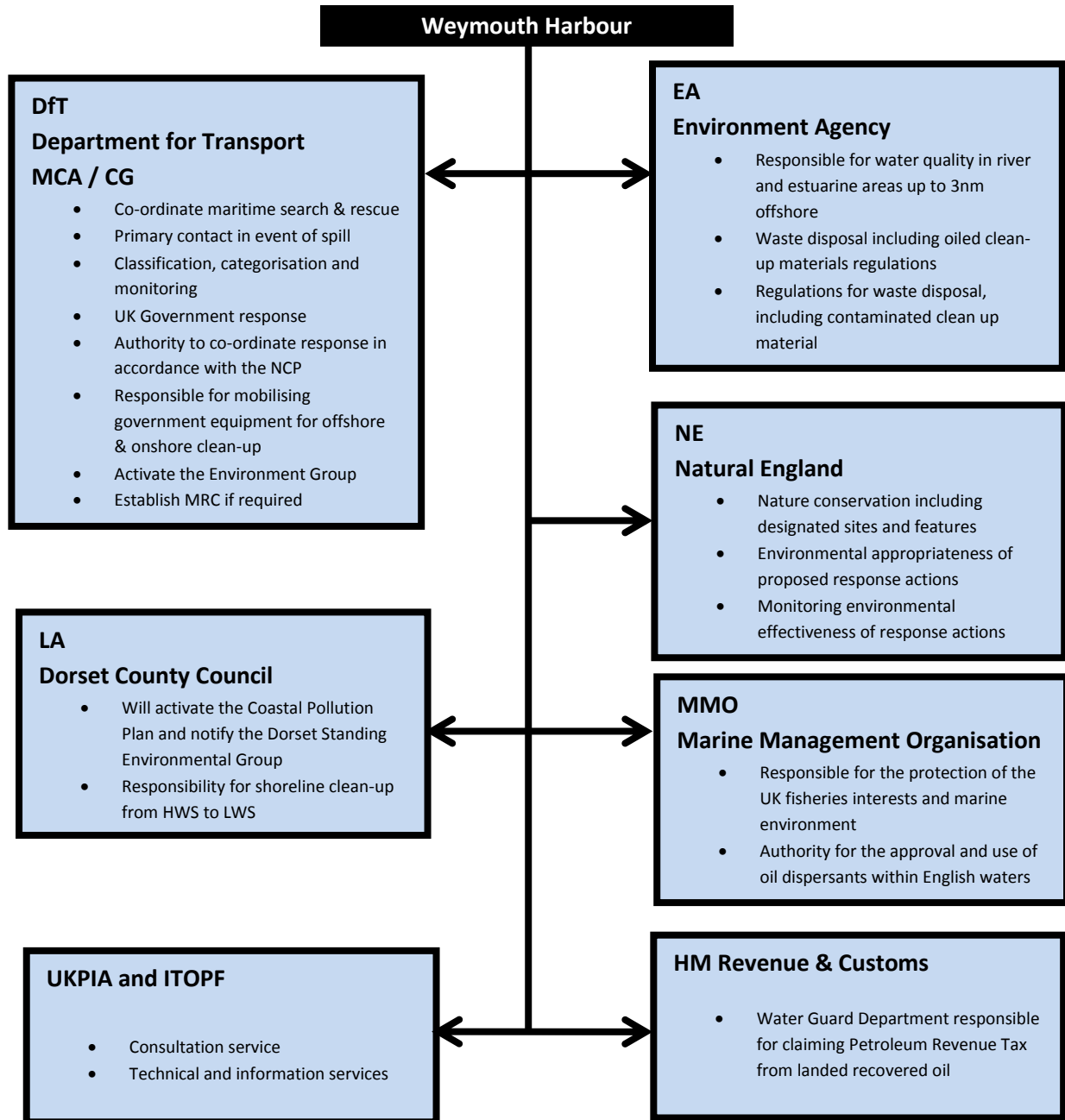
The MCA is an executive agency of the DfT; the Agency is responsible for:

- Minimising loss of life amongst seafarers and coastal users;
- Responding to maritime emergencies 24 hours a day;
- Developing, promoting and enforcing high standards of maritime safety and pollution prevention for ships; and
- When pollution occurs, minimising the impact on UK interests.

During an incident the Agency's Chief Executive continues to manage the Agency as a whole. The Director of Maritime Operations is responsible, with Maritime Safety and Environment colleagues for ensuring that Ministers are kept informed of incident progress, liaising with the Chief Executive on matters of Agency policy. The Directorate of Maritime Operations is also responsible for civil maritime search and rescue, counter pollution and at sea clean-up operations, and liaises with MCA colleagues on survey and inspection, and any enforcement action. The Counter Pollution and Salvage Branch has specific responsibility for counter pollution preparedness and response at sea and the management of the UK Government's stockpiles of equipment and dispersant.

3.7 Liaison Procedures with Other Agencies

Rapid passing of information to other affected agencies is essential for effective response. Shown below are agencies concerned and their roles:



3.8 Shoreline Clean-up Responsibilities (due to the updated NCP, September 2014)

The responsibility for the clean-up of the shoreline lies with the District or Unitary Authority within whose boundary the pollution has landed. Overall coordination of the incident is the responsibility of the County Council in liaison with the affected district/unitary council, the Maritime and Coastguard Agency (MCA) and any other organisation required.

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As per the arrangements in the updated National Contingency Plan, Civil Contingencies Act (CCA) coordination structures will be utilised. The response will be dependent on the category of incident, please see below:

Tier 1

- Response can be managed within the capability and resources of the local authority
- Local response plans will be utilised and the lead responder identified
- Media will be handled locally with partner agencies and coordinated by the lead responder
- Local coordination group may be required, this would be a dynamic decision made at the time of the incident

Tier 2

- Tier 2 response plans would be required and local plans would be utilised
- A Strategic Coordinating Group (SCG) could be convened in the response phase, the SCG would manage the strategic decisions required to bring the incident under control. The SCG may be supported during the response phase by a Tactical Coordinating Group (TCG) the TCG would deliver the work set by the SCG.
- The SCG will include a Science and Technical Advice Cell (STAC)/Environment Group (EG) (note that STAC and EG will likely combine under the new arrangements) and Strategic Media Advisory Cell (SMAC)
- It is likely that for shoreline clean-up a Recovery Working Group (RWG) would be established to support the SCG in managing the clean-up, the SCG would hand over to a Recovery Coordinating Group (RCG) post response phase
- The RCG would manage the recovery and clean-up phase of the incident

Tier 3

- Would be determined by the National Competent Authority
- All relevant category 1 responders would be involved
- As with a Tier 2 incident an SCG/TCG/RWG structure would likely be employed with an RCG established post response

For more information please refer to STOp note 1/16.

Section 4: Response Strategies

4.1 Health and Safety

It is essential that an effective health and safety management plan be maintained at all levels throughout oil spill clean-up operations.

Statutory Duties - Applicable Statutory Law and its Implications

The Health and Safety at Work Act 1974 places a clear duty on all employers and persons responsible for premises to ensure that the workplace is safe and in the case of the employer, to have a safe system of work. This duty is placed regardless of whether the workers are employees, sub-contract workers, temporary workers or self-employed persons.

Implementation of the Health and Safety at Work Regulations 1999 requires that all employers carry out suitable and sufficient Risk Assessments of all tasks to be undertaken in the workplace. Where five or more employees are employed then the Assessment is to be recorded and those at particular risk must be informed accordingly.

These same regulations require that the employer executes a Safety Management System and that measurement of performance against standards is made. All employees must receive adequate training, information and supervision additionally, there is a requirement for all employees to receive suitable and sufficient health surveillance to ensure that they are fit to carry out the work and that the work and conditions do not cause them adverse effect.

The Provision and Use of Work Equipment Regulations 1998 requires that all equipment provided for use at work is safe and fit for purpose. The persons using the equipment must be adequately trained in its use and the operation must be properly supervised.

The Personal Protective Equipment Regulations 1992 requires that all equipment provided is fit for purpose and does not cause adverse effect. That all personnel are trained in its use and that all associated risks are recorded controlled and pointed out to those affected.

The Manual Handling Regulations 1992 requires that all work where lifting, pulling and pushing is involved, is assessed and all risks to the health and safety of those involved are reduced to a level as low as reasonably practicable.

The Control of Substances Hazardous to Health Regulations 2002 requires that all substances to which a worker may be exposed, including dusts and gasses are properly assessed and the risks to health reduced to a safe and acceptable level.

Site Safety Plan

To achieve Safe Operations, those in charge of the Response must follow those generalised parts of the Contingency Plan, which apply in all circumstances. Additionally they must have available the means to prepare those elements of the Plan which are Site and Response Specific.

The Site Safety Plan is intended to prevent uncontrolled incidents occurring which may cause further damage to the environment or loss due to damage, injury or illness. The Site Safety Plan should comprise the following sections:

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- a. Site Survey
- b. Operations Analysis
- c. Site Control including 'hot' (immediate contaminate site), 'warm' (transition zone / decontamination corridors) and 'cold' (support services) zones
- d. Logistics and Supplies
- e. Personnel

Each Section should be addressed jointly and separately before work commences and the appropriate steps taken to ensure that requirements are adequately met.

a) Site Survey

A Site Survey Form should be available, which when followed correctly will add all of those site unique details which assist in the decision making process and remind staff of essentials which might otherwise be omitted. The Site Survey should address the safety of those personnel taking part in the clean-up as well as those members of the public who may also be involved. The following list indicates a few of those subjects which, should be assessed and reported in the survey. The list is by no means exhaustive.

- Communications requirements
- Exposure to temperature
- Feasibility of handrails or ropes
- Hazards to the eyes
- Lack of or shelter from weather
- Lighting conditions
- Machinery usage
- Manoeuvrability
- Manual handling
- Pedestrian traffic
- Requirement to access confined spaces
- Sample collection
- Terrain surface and incline
- Vehicle traffic
- Visibility
- Water Hazards

b) Operations Analysis

Having surveyed the site and assessed the aspects which are influenced by the terrain, water conditions, and other pertinent factors. The on scene commander will assess the way in which the operation is to be conducted. The intention to use the following facilities can be stated and the reasons for and priorities of each facility established.

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- Booms and skimmers
- Cranes
- Boats
- Breathing apparatus
- Detergents
- Forklifts
- Hoses and pumps
- Low loaders
- Motor vehicles
- Raking and sweeping gear
- Winches

c) Site Control

It is essential that those in charge of the spill clean-up have control of the site as soon as possible and before any significant part of the clean-up operation begins. Access to the site must be restricted to those personnel who are essential to the clean-up operation. Arrangements must be made for the area to have a barrier, closed and policed such that no one can enter the work area without reporting to the site supervisor. No workers should be allowed on site until they have received the full vetting and briefing with respect to the Safety Assessment.

d) Logistics and Supplies

Specifically with respect to safety, it should be ensured that the appropriate equipment, materials and substances are available at the required times. Particular attention should be paid to the availability of the various sizes of protective clothing required. This sometimes cannot be established until the members of the workforce have been detailed and their individual roles and tasks decided.

Consideration must be given for a prolonged clean-up operation possibly stretching to 24 hours operations. In which case, shelter, accommodation, feeding, refreshment, rest areas, sanitation and first aid must be available.

Where training has to be delivered prior to work commencing, the necessary instructors and equipment must be available before work commences. It is an error to allow experienced workers to commence work whilst others are waiting for training.

Protective Clothing. If the weather is at all inclement, the protective clothing issued to workers must be warm, water and chemical-proof. It should include coveralls, gloves, boots, eye protection and headgear. If the weather is warm, the use of the same protective clothing may be necessary, but the requirements for ventilation and cooling will be greater.

Personal Protective Equipment (PPE)

- Breathing Apparatus including Respirators
- Flotation Suits and Vests
- Gloves/Gauntlets
- Protective Clothing
- Goggles, Visors and Safety Glasses
- Hard Hats
- Insulated Clothing
- Reinforced Boots, Shoes and Gloves

First Aid. The Health and Safety (First Aid) Regulations 1981, together with the New Code of Practice on First Aid, lay down the requirements for trained first aiders and the equipment that must be provided. A foreshore clean-up is considered as a special circumstance and the appropriate extra provisions should be taken into account.

e) Personnel

Selection of Personnel to carry out the clean-up must be dominated by safety considerations.

Safety on the Water

Agreements with the Coastguard should be reviewed and complied with. At the very least, they should be informed of the vessels operating in their area together with all necessary detail of vessel capability and persons on board.

Protective Clothing. Workers operating from sea-going vessels should be equipped at all times with a self or automatic inflating lifejacket and the appropriate safety equipment, following the procedures of the vessel.

Hazard Identification. The identification of all hazards at a worksite or spill location is a singular task that should be done by involvement of the people who are expected to carry out the work. The supervisor responsible for co-ordinating the risk assessment should ensure that all hazards are identified before the next step in the process is attempted. A hazard is an object, place, process or circumstance with the potential to do harm in the form of injury, damage, delay or pollution.

Decontamination

Conditions requiring decontamination

Where workers have been wearing waterproof and protective clothing, it is likely that the clothing will become contaminated by oil or chemicals that might have been used during the clean-up operation. The clothing needs to be cleaned to prevent further contamination. Facilities for such cleansing should be made available either near to rest or feeding areas or close by, but clear of the work site.

Personal hygiene practices on the job

Workers should be instructed on the dangers of ingesting hydrocarbons and chemicals through contact of contaminated equipment or clothing, such as gloves via the mouth and nose. Facilities for removing protective clothing and washing before consuming food or smoking should be made available.

Decontamination Area Drainage

The decontamination area where clothing and personal equipment is cleansed should be arranged so that cleansing water and contaminants are drained into tanks. Care should be taken to ensure that contaminated waste does not drain into either the normal drainage system or into the soil under the decontamination area.

Disposal of Contaminated Clothing

Clothing, which is not fully washable or capable of having all traces of contaminant removed, may need to be disposed of safely. Such clothing may comprise special or hazardous waste. If incineration facilities do not exist at the site, the clothing may need to be bagged in suitable containers, stored within an identified temporary holding area before having delivered to the LA or to a Hazardous Waste Contractor.

4.2 Oil Spills

Introduction

An oil spill can occur almost anywhere – a leakage or accident during transportation or during use, which can affect many areas including sea, coastlines, ports, harbours and land.

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Oil contains a variety of different types of hydrocarbons. The exact composition is dependent upon its origin. Oil may also contain a variety of impurities such as sulphur and nitrogen products. Generally oil is of relatively low toxicity; however this is dependent upon the properties of the source oil. The route of human exposure is via inhalation and skin absorption.

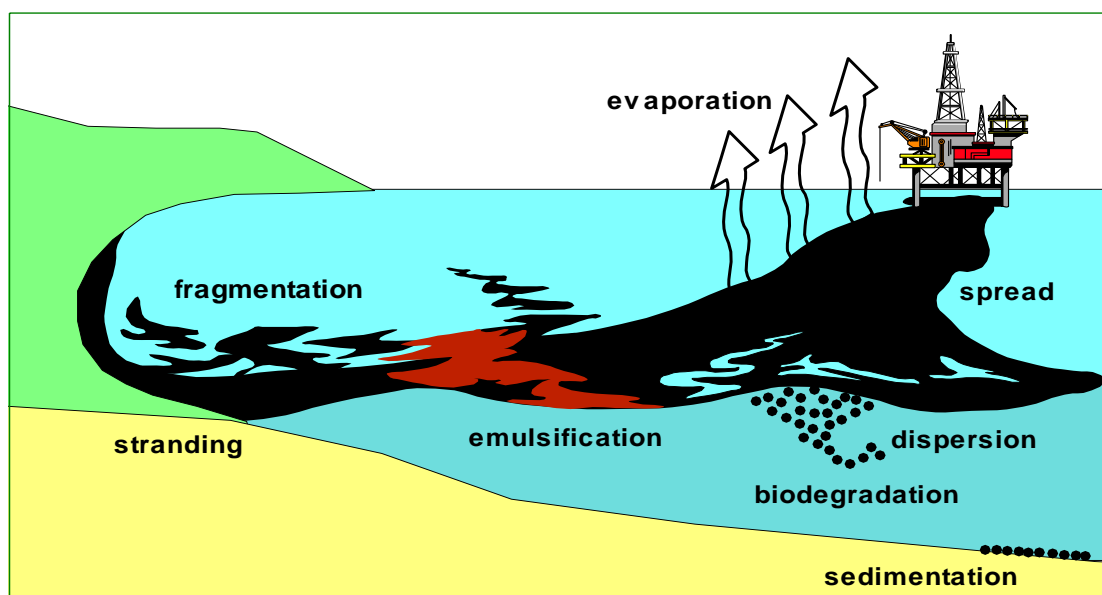
Oil when released in a spill will be subjected to various processes:

- Spreading
- Evaporation
- Oxidation
- Dissolution
- Emulsification
- Microbial degradation

The effect of all these actions is to reduce the original oil volume by evaporation but increase it by emulsification, also reduce its flammability and its toxicity. The rate of these actions is dependent upon the physical composition of the oil and environmental conditions prevailing at the time. Therefore to be able to effectively combat a spill these factors must be known.

The physical and chemical changes which spilled oil undergoes are collectively known as weathering (Figure 3). Knowledge of these processes and how they interact to alter the nature and composition of the oil with time is valuable in preparing and implementing this contingency plan for effective oil spill response.

Figure 3: Combined Weathering Process of Spilled Oil



Oil Spill Quantification

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

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

Table 10: Oil Spill Quantification Table According to Bonn Agreement Pollution Observation Log

Colour	Oil Type	Thickness (mm)	Volume (m³/km²)
<i>Silvery</i>	<i>Light Sheen</i>	<i>0.0001</i>	<i>0.1</i>
<i>Iridescent</i>	<i>Sheen</i>	<i>0.0005</i>	<i>0.5</i>
<i>Light Brown</i>	<i>Thick Sheen/ Fuel Oil</i>	<i>0.001</i>	<i>1</i>
<i>Brown</i>	<i>Fuel Oil/ Crude Oil</i>	<i>0.01</i>	<i>10</i>
<i>Black</i>	<i>Crude Oil</i>	<i>0.1</i>	<i>100</i>
<i>Orange</i>	<i>Emulsion (Mousse)</i>	<i>1.0</i>	<i>1000</i>

Response to Oil Spills

Oil spill within the Harbour Area

Oil spilled within the Harbour Area will be recovered wherever possible using Tier 1 equipment held by Weymouth Harbour. Personnel should be trained to MCA level 1 as a minimum, if necessary owners can mutually assist each other. In the event that a larger spill occurs, it will be recovered and disposed of by the accredited contractor. Consideration as to the effectiveness of the above will need to be taken into account and will depend on the tidal regime and the time of the spill.

Some small light oil spills would be allowed to evaporate and disperse naturally. Where heavy concentrations were threatening a sensitive area, boats capable of sweeping the oil with booms will be mobilised. In order to reduce the amount of oil liable to impact the harbour, collection and recovery would be undertaken.

Oil spill sampling

Samples of the spilt oil should be taken as soon as possible before the oil has weathered. These samples may be required as evidence in legal proceedings. Guidance in the matter of collection samples is given in MCA STOp Notice 4/2001 which can be found in the Appendices.

4.3 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. Oil will be disposed of using a licensed contractor or the Tier 2 contractor (A+A).

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In the event of a Tier 2 or Tier 3 spill responses, the legal disposal of recovered oil will be undertaken through a disposal route agreed with the EA, on behalf of the harbour. The path will depend on the Tier level and the type /volume of spilled product.

Material Safety Data Sheets (MSDS) of common products encountered at Weymouth are kept in the Harbour Office (i.e. MGO).