



PORT OF ABERDEEN OIL SPILL CONTINGENCY PLAN

CONTROLLED COPY

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DISTRIBUTION LIST

COMPANY	COPY NUMBER
Aberdeen Harbour Board	1 (Electronic)
Port of Aberdeen Harbour Master	2 (Electronic)
The Maritime and Coastguard Agency (MCA) Counter Pollution & Salvage Officer Scotland Mainland	3 (Electronic)
The UK Coastguard (Zone3@hmcg.gov.uk)	4 (Electronic)
Scottish Environment Protection Agency (SEPA)	5 (Electronic)
Marine Directorate	6 (Electronic)
NatureScot	7 (Electronic)
Aberdeen City Council	8 (Electronic)
Grampian Local Resilience Partnership (GLRP)	9 (Electronic)
Briggs Environmental Services Limited (BESL)	10 (Electronic)

DOCUMENT CONTROL AND PLAN REVISION

The Port of Aberdeen Oil Spill Contingency Plan is a controlled document. All document holders, detailed in the distribution list, are assigned a specific copy number. It is the responsibility of the Harbour Master for the maintenance of the document.

Any changes to the situation at the port, changes to be made 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 the annual exercise.

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 in its fifth year.

REVISION PAGE

Section No.	Remove Pages	Insert Pages	Date Amended	Received & Inserted Into Plan By	Copy
ISSUE No: 3 REVISION No: 1					
Environmental Policy			18/12/2024	Rosie Letham	

STATEMENTS FROM CONSULTEES

Statement for MCA

I can confirm that Port of Aberdeen's Oil Spill Contingency Plan gives a realistic assessment of the perceived risk of Oil Pollution, and the response strategy required, for the area covered by this plan.

Signed **Danny Pendrey**

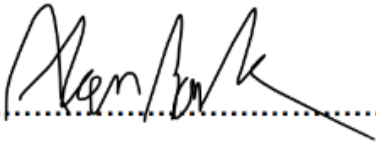
Name and Position **Daniel Pendrey, Marine Licensing & Business and Operational Delivery Section Leader**

Representing **Marine Directorate**

Date **20 May 2024**

Statement for MCA

I can confirm that Port of Aberdeen's Oil Spill Contingency Plan gives a realistic assessment of the perceived risk of Oil Pollution, and the response strategy required, for the area covered by this plan.

Signed 

Name and Position **Alan Monk, Operations Officer, North**.....

Representing**Naturescot**.....

Date**14th June 2024**.....

Statement for MCA

I can confirm that Port of Aberdeen's Oil Spill Contingency Plan gives a realistic assessment of the perceived risk of Oil Pollution, and the response strategy required, for the area covered by this plan.

Signed **A.MacDonald**

Name and Position **A.MacDonald Resilience Officer**

Representing **SEPA**

Date **24/06/2024**

Statement for MCA

I can confirm that Port of Aberdeen's Oil Spill Contingency Plan gives a realistic assessment of the perceived risk of Oil Pollution, and the response strategy required, for the area covered by this plan.

Signed 





Name and Position **Emergency Planning and Resilience Lead**

Representing **Aberdeen City Council**

Date **29/7/2024**

CERTIFICATE OF APPROVAL FROM THE MCA

ID: 0dbb768f-39c7-4042-88fc-55703fa16871

		 Maritime & Coastguard Agency		<h3>APPROVAL OF OIL SPILL CONTINGENCY PLAN</h3>	
<p>Issued in accordance with the requirements of the Merchant Shipping (Oil Pollution Preparedness Response and Co-Operation Convention) Regulations 1998 under the authority of the Government of the United Kingdom of Great Britain and Northern Ireland by the Maritime and Coastguard Agency, an Executive Agency of the Department for Transport</p>					
<h4>PARTICULARS OF COMPANY</h4>					
Name of Port		Port of Aberdeen			
Category of Port		A&B			
Address		Harbour Office, 16 Regent Quay, Aberdeen			
Postcode		AB11 5SS	Country		United Kingdom
<h4>APPROVAL</h4> <p>I declare that the Oil Spill Contingency Plan submitted by the above is relevant and complete in every respect in accordance with the requirements of the Merchant Shipping (Oil Pollution Preparedness Response and Co-Operation Convention) Regulations 1998 and the Guidelines issued by the Maritime and Coastguard Agency and is hereby approved by the Secretary of State for the Department of Transport</p>					
Date of Plan		02 September 2024		Plan Version	
				Issue 3 Revision 1	
<p>This Plan is valid until 01 September 2029.</p>					
Place	Aberdeen Marine Office	Signed	 <small>Signed electronically in accordance with the 2009 eIDAS Act</small>		
			Signature of authorised official issuing the certificate		
Date	02 September 2024	Name	Gary Spark		

1/1 MSF 3303 v1.0

ENVIRONMENTAL POLICY

Environment and Sustainability Policy



As a trust port, Port of Aberdeen, seeks to continually improve its environmental performance and strives to be an exemplar in sustainability for the benefit of our customers and community.

We are committed to sustainable development (meeting the needs of the present without compromising the ability of future generations to meet their own needs) as a guiding principle within our work.

We will:

- Actively reduce emissions across scopes 1, 2 and 3, in co-operation with our clients and partners, to achieve net zero by 2040, ahead of legislated Scottish Government and UK Government targets.
- Promote energy conservation and awareness among our employees to foster a culture of sustainability.
- Facilitate decarbonisation innovation in the energy transition.
- Regularly review the impacts of climate change and the effectiveness of new adaptation measures.
- Reduce waste, increase recycling, eliminate single use plastics wherever possible and promote the circular economy.
- Benchmark and monitor environmental resource status and protect biodiversity.
- Promote sustainability risk thinking, strategy and procedures throughout daily decision making.
- Provide the necessary information, training, supervision, and resource to ensure our compliance with the environmental management system ISO14001:2015 and seek continuous improvement with the system.
- Comply with environmental legislation and other compliance obligations that relate to the Port of Aberdeen.
- Protect the environment from negative impacts including pollution and contamination.
- Actively promote best practice in environment and sustainability amongst Port of Aberdeen employees, port users, and wider shipping industry.

Bob Sanguinetti
Chief Executive
21 November 2024

This policy is available to the public, and to any interested party, and shall be communicated to any person working for or on behalf of Port of Aberdeen. It shall be reviewed annually.

GLOSSARY

Abbreviation	Definition
ALARP	As Low As Reasonably Practicable
BESL	Briggs Environmental Services Ltd
DfT	Department for Transport
DCO	Dock Control Officer
GLRP	Grampian Local Resilience Partnership
HFO	Heavy Fuel Oil
HMRC	His Majesty's Revenue and Customs
HSG	Health and Safety Guidance
IFO	Intermediate Fuel Oil
IMO	International Maritime Organisation
ITOPF	International Tanker Owners Pollution Federation
JNCC	Joint Nature Conservation Committee
LA	Local Authority
LAN	Local Area Network
LFO	Light Fuel Oil
MCA	Maritime and Coastguard Agency
MD	Marine Directorate
MFO	Marine Fuel Oil
MGO	Marine Gas Oil
MRC	Marine Response Centre
MRCC	Maritime Rescue Coordination Centre
NCP	National Contingency Plan
OPRC	Oil Pollution Preparedness, Response and Co-operation Convention
OSCP	Oil Spill Contingency Plan
POLREP	Pollution Report
PPE	Personal Protective Equipment
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SCU	Salvage Control Unit
SEPA	Scottish Environment Protection Agency
SOSREP	Secretary of State's Representative
SPA	Special Protection Area
SRC	Shoreline Response Centre
SSSI	Site of Special Scientific Interest
UK	United Kingdom
UKC	Under Keel Clearance
VTS	Vessel Traffic Service

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PART 1: ACTIONS & OPERATIONS

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SECTION 1: FAST FACTS PORT OF ABERDEEN

1.1 NORTH HARBOUR



Harbour Office contact details	Port of Aberdeen (Aberdeen Harbour Board) 16 Regent Quay Aberdeen AB11 5SS	
	Telephone	01224 597 000
	Email	Harbour-masters@portofaberdeen.co.uk
	Website	www.portofaberdeen.co.uk
Latitude and longitude of harbour entrance	Approx. Latitude 57° 08.03' N Longitude 002° 02.55' W	
Admiralty chart numbers	BA 1446	
Maximum available draft	9.3m (Chart datum)	
Maximum available length	165m	
Maximum beam	30m	
Navigational access – <i>i.e. leading lights, buoyage</i>	Fixed red lights which combine to form the leading line 237.2' into the harbour; these are changed to GREEN when it is unsafe to enter. IALA Maritime Buoyage System – Region A (Red to Port). Sector Light Dir. WRG. 7m9M QR 238° - 239° RW 237.5° - 238° QW 236.5° - 237.5° GW 236° - 236.5° QG 235° - 236°	
Environmental sensitivities	SAC River Dee/ Navigational Channel, SPA Ythan Estuary, Sands of Forvie	
Tugs	Available as required provided by Targe Towing	
Pilotage	Compulsory for vessels over 75m and for vessels 60m ~ 75m without a working bow thruster	
Berths	47 quayside berths Excluding provisions for double/ triple banking etc	
Repair facilities – <i>i.e. dry docks and slipways</i>	Drydock operated by Dales Marine	
Cargo handling facilities – <i>i.e. bulk, fuel, containers</i>	2 harbour cranes Port handles bulk, fuel, containers, wood, scrap, grain and a wide variety of other cargoes to do with offshore energy	
Local authority	Aberdeen City Council	
Hazards – <i>pipelines, overhead cables</i>	None	
Tidal range	MHWS 4.3 / MHW 3.4 / MLWN 1.6 / MLWS 0.6. Tidal Range 3.7m.	
ISPS compliant	Yes	

1.2 SOUTH HARBOUR



Harbour Office contact details	Port of Aberdeen (Aberdeen Harbour Board) 16 Regent Quay Aberdeen AB11 5SS	
	Telephone	01224 597000
	Email	Harbour-masters@portofaberdeen.co.uk
	Website	www.portofaberdeen.co.uk
Latitude and longitude of harbour entrance	Approx. Latitude 57° 08.03' N Longitude 002° 02.55' W.	
Admiralty chart numbers	BA 1446	
Maximum available draft	10.5m (Chart datum)	
Maximum available length	300m	
Maximum beam	45m	
Navigational access – <i>i.e. leading lights, buoyage</i>	Leading Lights Rear 34.0m 5M AND 2M (NA102) Front 27.8m 5M AND 2M (NA101) ISO R, AL.RW, ISO W, AL.WG, ISO G. IALA Maritime Buoyage System – Region A (Red to Port).	
Environmental sensitivities	SSSI – Nigg Bay	
Tugs	Available as required provided by Targe Towing	
Pilotage	Compulsory for vessels over 75m and for vessels 60m~ 70m without a working bow thruster	
Berths	4 Berths 1588m of length (in total) quayside	
Repair facilities – <i>i.e. dry docks and slipways</i>	N/A	
Cargo handling facilities – <i>i.e. bulk, fuel, containers</i>	General cargo	
Local authority	Aberdeen City Council	
Hazards – <i>pipelines, overhead cables</i>	N/A	
Tidal range	MHWS 4.3 / MHWN 3.4 / MLWN 1.6 / MLWS 0.6. Tidal Range 3.7m.	
ISPS compliant	Yes	

SECTION 2: INTRODUCTION

2.1 PURPOSE OF THE PLAN

The requirement to have an Oil Spill Contingency Plan for Ports, Harbours and Oil Handling Facilities around UK waters has been formalised by the Merchant Shipping (Oil Pollution Preparedness, Response and Co-operation Convention) Regulations 1998, which implements the International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC 1990). The 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”.

This plan has been prepared in accordance with the “Oil Spill Contingency Plan Guidelines for Ports, Harbours and Oil Handling Facilities” issued by the Maritime Coastguard Agency who are responsible for applying the regulations to all Ports, Harbours and Oil Handling Facilities in the UK.

This plan has been compiled to cover the response to any spillage caused by or during operations within the jurisdiction of Port of Aberdeen. The plan details a tiered response strategy that is in accordance with UK legislative requirements and takes into account the spill risk associated with operations; the nature of the hydrocarbons/ substances that could be spilled; the prevailing meteorological and hydrographical conditions and the environmental sensitivity of the surrounding areas.

The plan is designed to guide response personnel at Port of Aberdeen through the processes required to manage an oil spill originating from operations within their harbours.

2.1.1 CONSULTATION

This document has been compiled in consultation with the following statutory bodies and Authorities:

- Aberdeen City Council
- Scottish Environment Protection Agency (SEPA)
- NatureScot
- Marine Directorate
- The Maritime and Coastguard Agency (MCA)

2.1.2 USE OF THE PLAN

This plan is specifically for operations within Port of Aberdeen 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 spilled; the prevailing meteorological and hydrographic conditions and the environmental sensitivity of the surrounding areas.

2.2 LEVELS OF CALL OUT

Tier 1 spills

For minor spills, where the response is addressed within the harbour, the Port of Aberdeen Harbour Master will take the appropriate action and arrange for safe storage and legal disposal of waste. Tier 1 spills will be monitored and will be dealt with by the Port of Aberdeen Harbour Master and in the event that the situation escalates into Tier 2 spill, then an external oil pollution contractor (Briggs Environmental Services Ltd) will be brought in. Since all oil spills, regardless of size, have to be reported to the appropriate authorities, the Harbour Master will always alert the MCA.

Tier 2 and Tier 3 spills

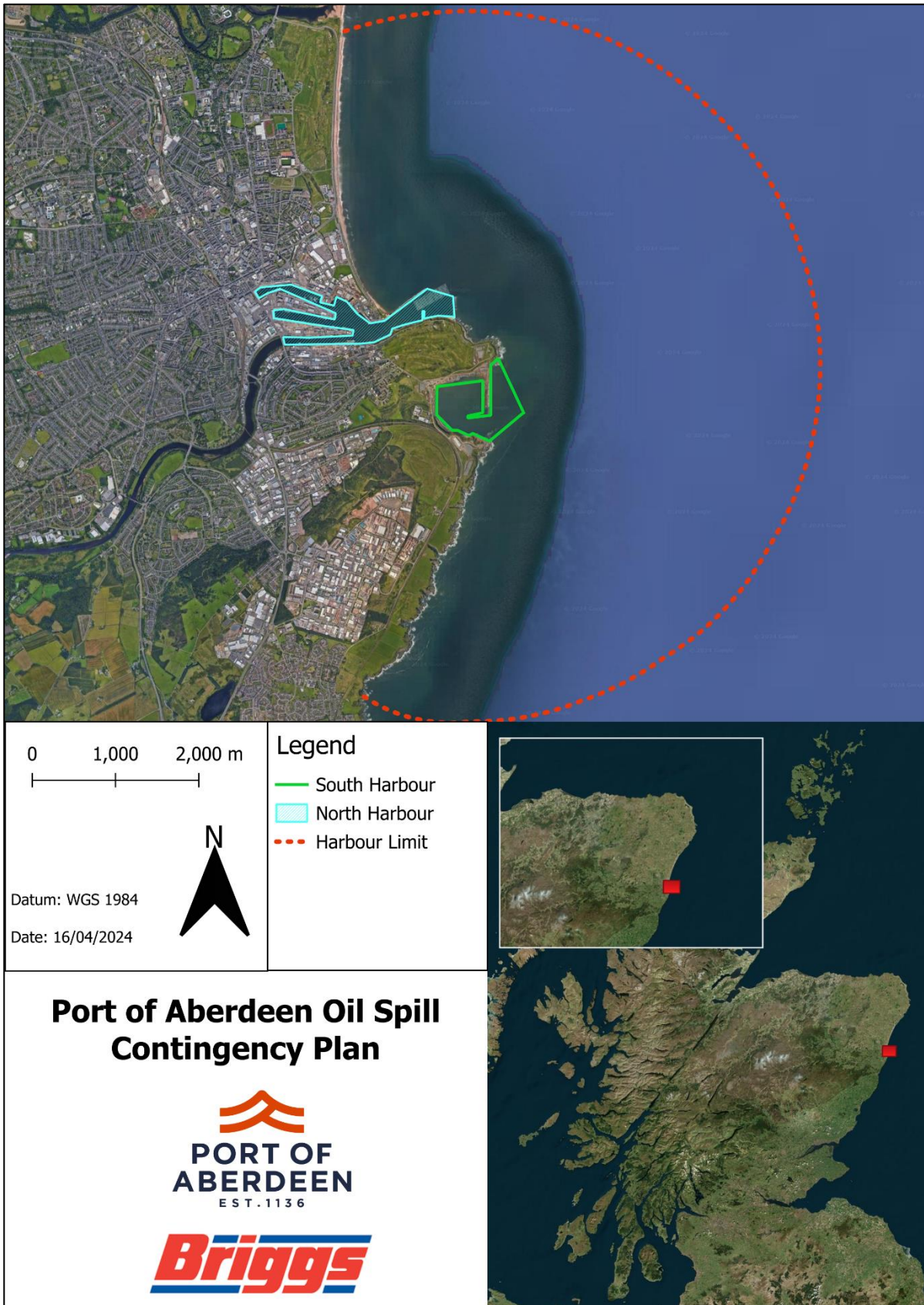
For all spills of a higher level or those which escape the confines of the harbour, the Harbour Master will alert the Incident Response Organisation according to this Plan.

Table 1: 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 type spills that may occur within a location as a result of daily activities. The level at which a response operation could be carried out successfully using individual resources and without assistance from others.
Tier 2	A medium sized spill within the vicinity of a company's location where immediate resources are insufficient to cope with the incident and further resources may be called in a mutual aid basis. A Tier 2 incident may involve Local Government.
Tier 3	A Large spill where substantial further resources are required and support from a national (Tier 3) or international co-operative stockpile may be necessary. A Tier 3 incidents that requires national assistance through the implementation of the National Contingency Plan and will be subject to Government controls.

Source: Contingency Planning for Marine Pollution Preparedness and Response: Guidelines for Ports (2016)

SECTION 3: AREA OF OPERATION



SECTION 4: ROLES AND RESPONSIBILITIES

4.1 ROLES AND RESPONSIBILITIES OF PARTIES ASSOCIATED WITH THIS PLAN

4.1.1 Port of Aberdeen

The responsibility for control of oil pollution within the statutory harbour area rests with Port of Aberdeen. The authority to act on their behalf has been given to the Harbour master, the Harbour master's Strategy & Support roles and responsibilities include:

- Having in place appropriate contingency planning procedures.
- Ensuring adequate resources and trained personnel available to respond to any oil spill in harbour waters.
- Implementing and co-ordinating all measures outlined in the Oil Spill Contingency Plan.
- Employing outside contractors, equipment, or vessels as necessary.
- Liaison with HM Coastguard, MCA, NatureScot, Scottish Environment Protection Agency (SEPA) and other external agencies as required.
- Co-ordinate with Executive Leadership Team communications team for the release of information to the media.

4.1.2 Tanker or Vessel Owners

- Responsible for having in place adequate Shipboard Oil Pollution Emergency Plan (SOPEP).
- Responsible for having third party liability, including pollution liability, insurance.

4.1.3 Maritime and Coastguard Agency (MCA)

- Responsible for ensuring that port and harbour authorities have adequate contingency plans and resources for dealing with a spill in harbour waters.
- Co-ordinate government response to pollution at sea.
- Act in accordance with the National Contingency Plan.
- Mobilise government equipment resources as required.

4.1.4 HM Coastguard

- Co-ordinate maritime search and rescue.
- Provide early warning system for oil pollution and report all spills to the MCA.

4.1.5 Secretary of State's Representative (SOSREP)

The role of the SOSREP is to represent the Secretaries of State for the Department for Transport (in relation to ships) and for the Department for Business, Energy and Industrial Strategy (BEIS) (in relation to offshore installations) by removing or reducing the risk to safety, property and the UK environment arising from accidents involving ships, fixed or floating platforms or sub-sea infrastructure. SOSREP's powers extend to UK territorial waters (12 nautical miles from the coast/baseline) for safety issues and to the Exclusive Economic Zone (EEZ) for pollution. SOSREP is empowered to make crucial and often time-critical decisions, without delay and without recourse to higher authority, where such decisions are in the overriding UK public interest.

Working closely with the MCA, its parent organisation the Department for Transport (DfT) and the Department for Business, Energy and Industrial Strategy (BEIS), SOSREP's key responsibilities include:

- Acting at the earliest point during a shipping or offshore incident to assess the risk to safety, to prompt the end of any such incident and to ensure that increasing risk is evaluated and appropriate measures taken to prevent or respond to escalation.
- Monitoring all response measures to significant incidents involving shipping and the offshore industry.
- If necessary, exercising ultimate control by implementing the powers of intervention, acting in the overriding interests of the UK and its environment.
- Participating in major national and international exercises.
- Reviewing all activities after significant incidents and exercises.

4.1.6 NatureScot

- Lead conservation body with respect to oil pollution incidents within the 12-mile territorial limit.
- Provide advice on conservation issues to SRC.
- Will participate in the advisory Environment Group should one be established.
- Carry out surveys of any affected coastline in the event of an oil spill.
- Responsibility to safeguard and enhance Scotland's natural heritage, particularly its natural, genetic and scenic diversity.

4.1.7 Scottish Environment Protection Agency (SEPA)

SEPA is responsible for environmental protection in Scotland and adopts an integrated approach to the protection and enhancement of water, air and land and associated natural resources. SEPA has powers to prevent, minimize or reduce pollution of the environment (air, water and land) and enforces environmental legislation. SEPA also performs the following functions:

- Regulates the treatment, storage, movement and disposal of waste.
- Provides, as flood warning authority, regularly updated information on flood warnings (Floodline) across Scotland.
- Administers jointly with the Health and Safety Executive the Control of Major Accident Hazards (COMAH) legislation.
- Regulates the disposal of radioactive waste and manages Scottish interests in the Radioactive Incident Monitoring Network (RIMNET).
- In general, during an emergency, SEPA, as a regulatory body, will not be responsible for any clean-up operations leading to the restoration of normality. It will, however, deploy its comprehensive scientific capability to give support and advice to Government, other agencies and to the general public on related environmental matters.
- In responding to an incident or emergency SEPA will:
As a Category 1 responder in the terms of the Civil Contingencies Act 2004 SEPA will deploy appropriate staff to co-operate with and support other responder organisations in the response to, and recovery from, any incident or emergency.
- Provide advice on all aspects of environmental impact, protection and recovery.
- Assist in determining the footprint and movement of any contamination.
- Provide advice about implications to the environment regarding containment, storage, transportation and disposal of contaminated liquid or solid waste products.
- In consultation with Health Protection Scotland, deploy our Airborne Hazard Emergency Response (AHER) team to a significant incident involving an airborne hazard release which has the potential to impact on human health.
- Support communicating with the public and media management arrangements.
- Maintain operational links with Scottish Water, Local Authorities, Environmental Health Departments and Health & Safety Executive.

4.1.8 Marine Directorate

- Responsible for marine planning, marine nature conservation, fisheries and aquaculture policy and sustainable use of the marine environment. Will provide environmental advice in the event of marine pollution incidents.
- If an Environment Group (EG) is formed the Marine Directorate is expected to chair the group.
- For Scottish sea areas within shallow waters (the 20 metres plus one nautical mile rule) Marine Directorate must be consulted before the use of dispersant unless in the case of "force majeure" conditions, e.g. where people's health is at risk, or the safety of a vessel or offshore installation is threatened.

4.1.9 Royal Society for the Protection of Birds (RSPB)

- A voluntary organisation concerned with the conservation of birds and their habitats.
- Provides up to date information on the numbers and whereabouts of birds at risk.
- Can mobilise staff and volunteers to establish numbers of oiled birds on beaches.

4.1.10 Ministry of Defence (MoD)

- Responsible for dealing with pollution caused by naval or other MoD vessels.

4.1.11 International Oil Pollution Compensation Fund (IOPC)

- Provides compensation for oil pollution damage from laden tankers over and above the liability of the vessel owner.

4.1.12 International Tanker Owners Pollution Federation (ITOPF)

- Provide technical advice on oil spill response.
- Advises IOPC fund on technical aspects of the response option and reasonableness of claims for compensation.
- Advises vessel owners and P&I club insurers on technical aspects of oil spill response.
- Provides advice to central and local government on clean-up measures with particular relevance to compensation schemes.

4.1.13 UK Petroleum Industry Association (UKPIA)

- Consultation service.
- Technical and information services.

4.1.14 HM Revenue and Customs (HMRC)

- Responsible for claiming Petroleum Revenue Tax from landed recovered oil.

4.1.15 Aberdeen City Council

- Coordinate local response for shoreline oil spill clean up operations.
- Coordinate with MCA concerning the establishment of a Shoreline Response Centre (SRC).

4.2 INTERFACES WITH OTHER PLANS

The divisions of responsibility, which are adhered to by the MCA Counter Pollution Branch (as the national competent authority) and which determine which contingency plans will be activated to respond to a pollution incident, are defined in the National Contingency Plan. These divisions of responsibility are dependent on the source of pollution and the likelihood of oil beaching.

Under the National Contingency Plan, ports and harbours are responsible for responding to incidents of marine pollution within their areas of jurisdiction.

In addition, the National Contingency Plan states that in the early stages of an incident, the local authority establishes a Tier 1 or Tier 2 response.

4.3 INCIDENT RESPONSE ORGANISATION

In response to an oil spill, Port of Aberdeen personnel will be mobilised. The level of response is determined by the size of oil spill incident. The Harbour Master will be responsible for co-ordinating response to oil spill incidents in Port of Aberdeen.

As an incident response progresses it is imperative to have feedback from sites in the field, assessment of the situation and forward planning, all on a regular basis.

Location of pollution	Responsibility for clean-up lies with:
On the water	Port of Aberdeen
Jetties/wharves/structures owned by Harbour Authorities	Port of Aberdeen
Beach/shoreline owned by the Harbour Authority	Port of Aberdeen
Foreshore owned by a private individual or group	Foreshore owner(s)
Shoreline (including land exposed by falling tide) and other structures	Local Authority

4.4 RESPONSIBILITIES AND INCIDENT CONTROL ARRANGEMENTS

The SOSREP has overall responsibility for salvage and containment issues for incidents involving shipping and offshore oil and gas infrastructure and determines if a Salvage Control Unit, in relation to shipping, or an Operations Control Unit, in relation to oil and gas activities is required. Although the SOSREP does not have responsibility for either at-sea or shoreline clean-up activities, the SOSREP does have the responsibility for exercising the intervention powers where there is a risk of significant pollution or where there is a risk to safety or human health. The SOSREP therefore liaises with other response cells and may have options to exercise the intervention powers, where appropriate, in particular, where differing requirements and priorities emerge. As the scale of an incident becomes apparent various aspects of the Port of Aberdeen plan will be invoked to accommodate an influx of responders, press, volunteers, etc, as well as dealing with external media enquiries. In this case Port of Aberdeen will render advice and every assistance to SOSREP in achieving his objectives whilst ensuring that ultimate responsibility for the response remains, and is seen to remain, with SOSREP. The SCU will be located at the Marine Operations Centre located on the North Pier. Facilities available at the Harbour Master's Office include adequate space for at least 11 personnel, mobile phone coverage, Local Area Network (LAN) connectivity, Wi-Fi connectivity, and full VHF radio coverage of the area.

In a major spill situation (Tier 3) where Port of Aberdeen resources are not sufficient to deal with the spill a Shoreline Response Centre (SRC) may be established for pollution on the shore line. An SRC will only be established at the request of the Port of Aberdeen with advice from the Maritime & Coastguard Agency (MCA) and with the mutual agreement of both parties. A Marine Response Centre (MRC) may be established to coordinate an at sea (on the water) response. Port of Aberdeen will retain control of determining strategy and priorities for action and the MCA will assist in achieving these objectives.

Port of Aberdeen have outlined provisions for a long running incident. Emergency duty rosters would be set up at the time of the incident. There is adequate accommodation in the surrounding area for a sustained response.

4.4.1 Environment Group

The Environment Group provides a single advisory line on public health and environmental issues at sea to all response cells. Where the incident poses a significant threat to health or the environment on land, the SCG may establish a Science and Technical Advice Cell (STAC) (see below) and this may be integrated with the Environment Group. At the outset of an incident, at sea, the MCA may trigger the formation of an Environment Group to provide advice requiring a local, regional or national response. Standing Environment Groups cover the entire UK coastline and MCA co-ordinates the geographical coverage of individual Standing Environment Groups, their contact details and call out arrangements. The Environment Groups comprises the statutory environmental regulators, fisheries departments, nature conservation bodies and public health bodies plus a range of specialist public sector and non-government organisations.

The Environment Group framework enables a co-ordinated and timely environmental input to any other more localised or specialised incidents. The Group may be set up as a precautionary approach when the possibility of incident escalation has potential. In many minor incidents the operational Environment Group remains a "virtual" Group responding with advice when requested.

The Environment Group's remit is advisory and it has no powers of direction or enforcement. Regulatory functions of individual members of the Group are exercised outside the Group structure and function.

4.4.2 Marine Response Centre (MRC)

The MCA lead the at-sea response, through a Marine Response Centre that is established by the MCA's Counter Pollution and Salvage Branch. The MRC, subject to any priority requirements of the SOSREP, and in consultation with other cells, decides on actions to track, contain, disperse or mitigate pollutants whilst at sea. National pollution response assets are controlled by the MCA and, when used in incident response, are normally managed by the Marine Response Centre (MRC). Requests for use of national assets is considered when resources become overwhelmed and should be passed to the MCA's CPS Branch or the MRC, when activated for pollution incidents of national significance. It is important to note that support from the MCA/MRC can be requested at any level of response. Assistance may be requested by the operators of offshore installations, spill response contractors, oil handling facilities, and the harbour masters/operators of ports/harbours, where planned and currently deployed response capability is overwhelmed or may be in the future. The MRC can supply support and advice as necessary. Where national resources are allocated and deployed, they are accompanied and operated by MCA contractors at all times. Depending on the circumstances and duration of the incident, operational control of national assets may be retained by the MCA/MRC who co-ordinates collaborative activity with other response capability.

4.4.3 Place of Refuge

A place of refuge is defined as a place where a ship in need of assistance can take action to enable it to stabilise its condition, reduce hazards to navigations and to protect the environment and human life. A ship in need of assistance is defined as a ship in a situation that could give rise to the loss of the vessel or an environmental or navigational hazard. This does not include situations which require rescue of those on-board the vessel.

Port of Aberdeen may be chosen by the SOSREP as a place of refuge for vessels.

SECTION 5: ACTION SHEETS

5.1 Harbour Master Action Sheet

In the event of a call out requirement, the following action sheets should be used as a checklist to ensure proper cover of all aspects of response. This section covers the overview of incident control arrangements held by personnel within the Port of Aberdeen in the event of an oil spill. Personnel call out will be determined by the specific oil spill situation and it is the responsibility of the oil pollution officer to determine the personnel call out requirements.

HARBOUR MASTER		
NO	ACTION	ACTIONED
1	Obtain all available information. Establish communication with all concerned parties and ensure that statutory reporting requirements have been carried out. Ensure that an incident log has been taken or delegated to office staff and that immediate action has been taken to stop the spill. Complete POLREP and despatch to MCA	<input type="checkbox"/>
2	Determine initial level of manpower and equipment resource mobilisation required. Mobilise personnel as required.	<input type="checkbox"/>
3	Determine level of response that has been initiated and ensure MCA, SEPA, MARINE DIRECTORATE and NATURESCOT of intended response. Inform Aberdeen City Council as necessary if spreading out of port limits. Determine level of response required from duty personnel. Inform appropriate council duty officer(s) and fully brief them of the incident	<input type="checkbox"/>
4	Ensure that a sample of spilt oil has been taken, especially when the origin of the spill is unknown or legal proceedings are liable to be taken.	<input type="checkbox"/>

PORT OF ABERDEEN EXECUTIVE LEADERSHIP TEAM		
NO	ACTION	ACTIONED
5	Obtain briefing from Harbour Master with situation report and then relocate to Harbour Office if required	<input type="checkbox"/>
6	Assess incident in terms of: <ul style="list-style-type: none"> • People • Environment • Damage to facilities • Disruption to business 	<input type="checkbox"/>
7	Approve outline response strategy	<input type="checkbox"/>
8	Approve immediate and future contracted equipment	<input type="checkbox"/>
9	Head of communications to arrange initial public relations programme	<input type="checkbox"/>
10	Attend review meetings in Marine Response Centre	<input type="checkbox"/>

TIER 2 AND TIER 3 SPILL RESPONSE		
NO	ACTION	ACTIONED
11	Contact Briggs Environmental Services and Aberdeen City Council, Aberdeenshire Council and Moray Council to agree primary level of response required.	<input type="checkbox"/>
12	Start and maintain an accurate log of all communications with response contractor	<input type="checkbox"/>
13	Establish communication link with the Briggs Environmental Services Duty Manager and issue a call back number	<input type="checkbox"/>
14	Determine extent of incident in terms of; <ul style="list-style-type: none"> • Any casualties • Any safety hazard • Damage to facilities • Extent of pollution: Results of any action taken so far	<input type="checkbox"/>
15	Brief response supervisor of actions as appropriate	<input type="checkbox"/>
16	Establish review/planning meetings. Continue normal communications and ad hoc briefings	<input type="checkbox"/>
17	When incident is stood down, confirm incident closure with all agencies involved	<input type="checkbox"/>
18	Complete incident log and ensure receipt of report from Response Supervisor	<input type="checkbox"/>

5.2 Escalation of Response

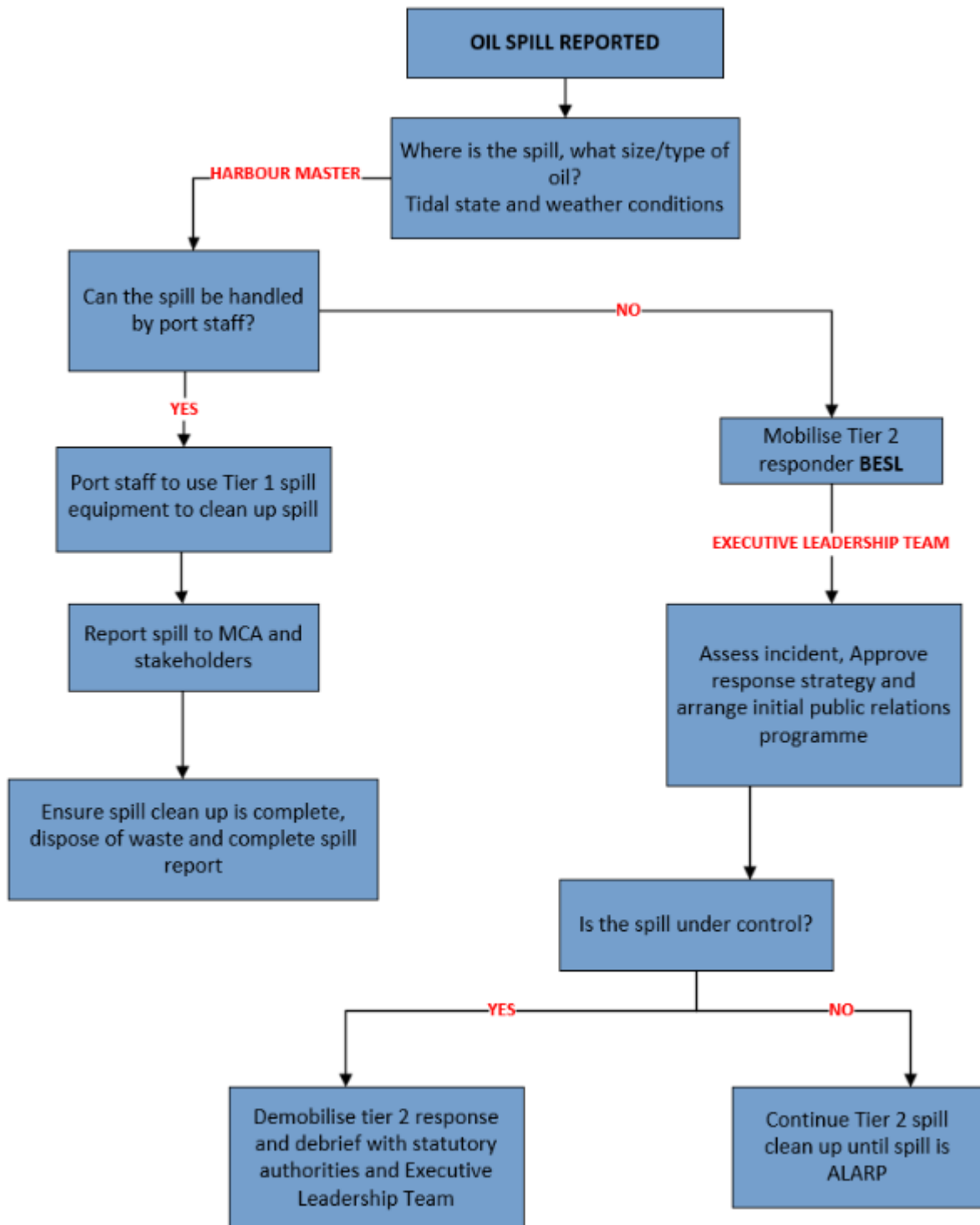
In the event that a response escalates to Tier 2/3 level, sufficient personnel must be mobilised to establish a Marine Response Centre and a room must be made available to meet with personnel from external agencies. The Harbour Master will retain the position of Incident Controller unless any change is agreed with the Government Agencies involved.

The Emergency Response Room at the Marine Operations Centre may be used as a Marine Response Centre.

If the response is likely to become protracted, the Harbour Master must make arrangements for the Marine Response Centre to be managed and run according to the needs of the response team. This may entail providing catering and accommodation arrangements locally.

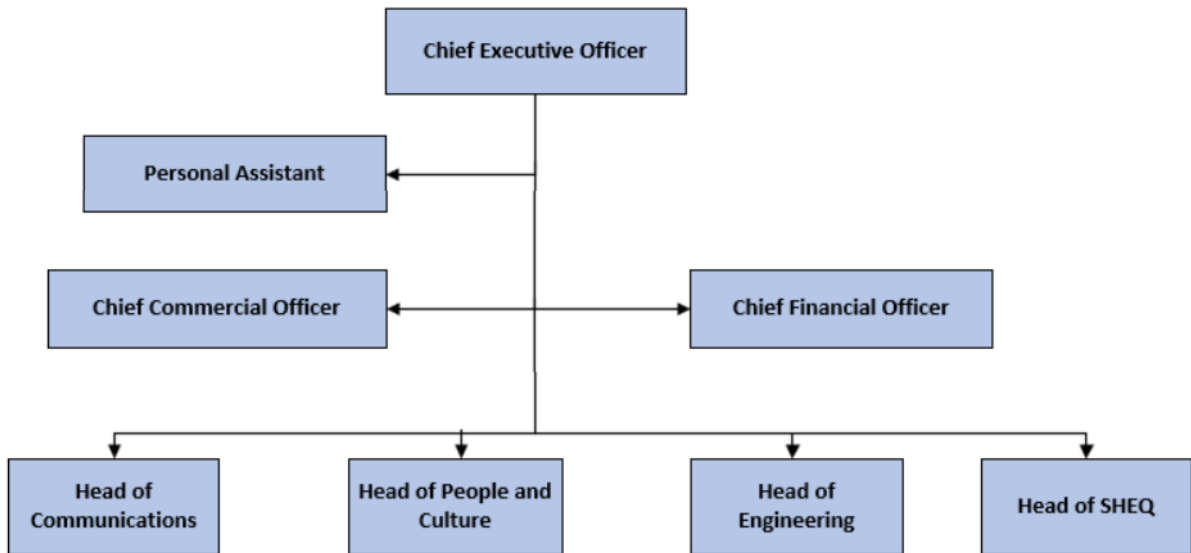
In the event that outside contractors are employed to assist with the clean-up, due notice must be taken of the Health and Safety and environmental code of conduct for contractor's policies.

5.3 Management Response Structure



5.4 Executive Leadership Team

The Executive Leadership Team is mobilised when any significant spill has the potential to be raised to a Tier 2 or is a Tier 2 spill confirmed by the Harbour Master. The Executive Leadership Team for Port of Aberdeen will be responsible for dealing with the media and ensuring detailed logs of actions are taken and made available to the Harbour Master.



SECTION 6: INCIDENT SHEETS

6.1 INFORMATION TO BE OBTAINED AS INITIAL SPILL REPORT (CG 77 POLREP)

To MCA - UK Coastguard – Zone 3/4

Copy to Agencies as required

From To zone3@hmcg.gov.uk

INCIDENT:	
Classification	i) Doubtful
	ii) Probable
	iii) Confirmed
Date	
Time	
Name of person reporting incident	
Job title	
Details of company / organisation or address	
Call back number	
Location of the incident	
Extent of spill (m² / km²)	
Estimated quantity of spill (litres / tonnes)	
Type of oil / substance spilled	
If bulk chemicals, UN Number (if known)	
Source of spill (if known)	
Reason for spill	
Action taken to prevent further spillage	
Is the spill continuous (Y/N)	
Has the MCA / MRCC been informed?	
Other relevant information	

SECTION 7: NOTIFICATIONS

7.1 NOTIFICATION MATRIX

Organisation	Oil Spill Tier			Contact Details	Remarks
	1	2	3		
Harbour Master	✓	☎	☎	Office Hours: 01224 597 000 Mobile: 07506 882 680 Email: Harbour-masters@portofaberdeen.co.uk	
Available director / ELT Port of Aberdeen	✓	☎	☎	01224 597 000	
Vessel Traffic Services				24 Hours 01224 597 000 VHF Radio: Chan. 12 & 16 vts@portofaberdeen.co.uk	Ask for VTS
EIS Waste Collection Ltd				01224 784 100	
Dee District Salmon Fishery Board				01339 880411 info@riverdee.org	If out of office hours contact SEPA
Aberdeen City Council				Regional Communication Centre 01224 620 610	Ask for Aberdeen City Duty Emergency Response Coordinator (DERC) contacted and for them to call back. Give RCC contact number, name, organisation, and description of incident
Maritime and Coastguard Agency Aberdeen MRCC	☎	☎	☎	Shetland MRCC: 01595 692 976 Aberdeen MRCC: 01224 592 334	Coastguard will require information from the Oil Spill Report Form. Confirm details by email. Coastguard will inform the Counter Pollution and Salvage Branch.
NatureScot Marine Pollution Duty Officer	✓	☎	☎	0131 316 2610 marinepollution@nature.scot	Contact immediately by telephone if spill exceeds one tonne.
SEPA	☎	☎	☎	Pollution hotline: 0800 807 060 environmentalevents@sepa.org.uk	Call routed to a 24 hour call centre and cascaded to appropriate persons
Marine Directorate	✓	☎	☎	07770 733 423 (Duty Officer) md.spillresponse@gov.scot	Marine Directorate will notify fish farm operators and shellfish farm operators
Oil Spill Contractor (Briggs Environmental Services Ltd)	✓	☎	☎	01224 898 666 0800 374 348	Contact 24 hour contact number and ask for the Duty Manager.

✓ Notify during normal hours

☎ Notify immediately by phone

For additional contact details and telephone numbers see Section 7.3.

7.2 COMMUNICATIONS AND REPORTING

Reporting of oil pollution

It is essential that all spills are reported by whatever means as quickly as possible.

- A. Responsibility for reporting of oil pollution rests with the Harbour Master in all cases involving a vessel and with the berth operator in the case of a berth or quayside incident. In cases involving a vessel alongside both parties are equally responsible.
- B. Any person either ashore or afloat, seeing oil pollution on the water within the Harbour Authority's jurisdiction or liable to pose a threat to it, should report it whether or not the source is known (*Section 5.1*).
- C. The Harbour Master is responsible for ensuring mandatory notifications are made.

Communications

Initially reports will be passed by both landline and mobile telephone (when using mobile consideration should be given to security implications). The Harbour Authority maintains VHF sets, which would be issued to On-scene Commanders once a clean-up strategy had been established. VHF Channel 10 is the channel designated for use by all concerned with an oil spill.

Procedures for alerting commercial activities in the surrounding area in case of an incident consist of contact via telephone, text, email or on their website.

Records

It is essential that all events occurring during an incident are logged and recorded. This will provide assistance if liability, compensation or reimbursement issues arise as a result of the incident. To achieve this, the Executive Leadership team will keep logs by all key personnel namely Incident Controller and On-scene Commander, Clean-Up Supervisor and Communication Controller.

Entries in the log should detail as a minimum of events, actions taken, communications with outside agencies, decisions made and points relevant to the operation.

The Executive Leadership Team logs should be forwarded to the Harbour Master once the incident has ended to form part of the final incident report and provide the basis for a "wash-up" meeting.

7.3 CONTACTS DIRECTORY

COMPANY NAME	CONTACT	OFFICE HOURS / OUT OF HOURS
British Divers Marine Life Rescue (BDMLR)	Head office	01825 765 546 (For deceased marine mammals contact SMASS)
RSPB	Inverness Office	01463 715 000

COMPANY/ BODY NAME	CONTACT	OFFICE HOURS
Briggs Environmental Services Ltd	24-hour Duty Manager	0800 374 348
Peterson Logistics	Manager	01224 288 121
ASCO	Manager	01224 580 396
Certas Energy	Manager	01224 213 132
Dales Shipping dry dock	Manager	01224 212 778

SECTION 8: RESOURCES DIRECTORY

8.1 TIER 1 RESPONSE EQUIPMENT

Within the Port of Aberdeen there are various companies who operate within the Port who have equipment for their own Tier 1 response. All Tier 1 oil spill equipment is to be held in a location adjacent to the fuel transfer process areas, road tanker operations and always be available.

Petersons have 4 spill kits situated at TMB:

- 1 at the fuel bowser
- 1 at the cargo inspection area
- 1 at Berth 3
- 1 at Berth 4.

They also hold 4 spill kits at their sea base:

- 1 at the fuel bowser
- 1 at the cargo inspection area,
- 1 at Berth 4
- 1 at Berth 2.

The spill kits located at these two locations for Petersons are checked and restocked on a weekly basis.

ASCO have two will have onsite spill equipment along with quayside resources which can be utilised in the event of a spill which are checked weekly and topped up when required.

Port of Aberdeen have a mobile spill kit which can be transported throughout the port and have stationary spill kits situated at Mearns Quay and Albert Quay.

MOBILE SPILL KIT
200x Absorbent Pads
Various absorbent booms
50x bags of absorbent granules
Chemical suits
Gauntlets
Goggles
Masks
Chemical absorbent pads and booms
Burst drum dam it paste
Brushes, shovels, disposal bags

8.2 TIER 2

Provision of Tier 2 resources will be from Briggs Environmental Services Ltd within 4-6 hours of the mobilising call.

SPILL RESPONSE CONTRACTOR			
Company Name	Contact	Office Hours	Out of Hours
Briggs Environmental Services Ltd	24 hour Emergency Response	0800 374 348	0800 374 348
	Duty Manager	01224 898 666	01224 898 666

8.3 TIER 3

Tier 3 Response resources may be available from the MCA UK stockpiles. The response will be in accordance with the National Contingency Plan.

SECTION 9: PRESS AND PUBLIC INFORMATION

9.1 PRESS AND PUBLIC INFORMATION

In the event of a pollution incident, the Communications Team which is part of the Executive Leadership Team will be responsible for dealing with all matters relating to the media. It will be necessary for an efficient and comprehensive information service to be brought into action so as to:

- Deal professionally with the representatives of the media.
- Co-ordinate and release information to the general public regarding the pollution incident and Port of Aberdeen's response to it.
- Keep Port of Aberdeen staff and board members informed of developments regarding the progress of the incident; in so far as it affects their responsibilities.
- Minimise the pressures on those directly concerned with combating the spill.
- The communications team are responsible for any media relation needs and respond accordingly to any queries.

Please note that unless you are designated as your organisation's spokesperson you are NOT authorised to offer comment on behalf of the organisation therefore, please decline media requests.

9.2 INITIAL PRESS STATEMENT

'Port of Aberdeen confirms that an incident has occurred (*state where and give brief description*) at approximately (*give time*) hours today.
Emergency response procedures have been initiated and relevant authorities (*have been/ are being*) advised. All support services are being co-ordinated through the authority's incident response team and every possible effort is being made both to minimise risk to personnel at the scene and to contain and mitigate any effects to the environment and property.
Further information will be released, (as it becomes available) at a press conference scheduled for time today.'

PART 2: STRATEGY

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SECTION 10: RISK ASSESSMENT

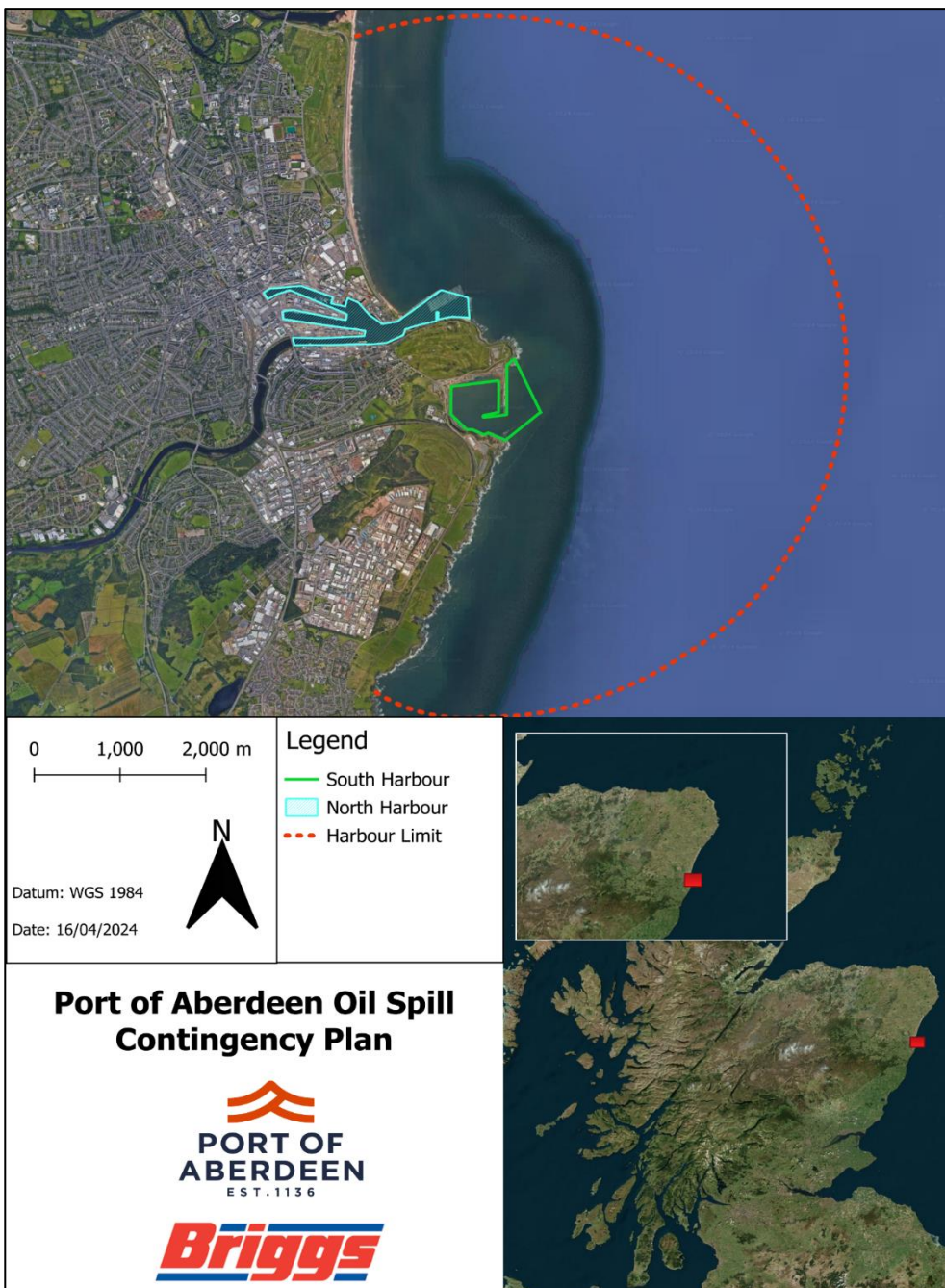
10.1 RISK ASSESSMENT

A risk assessment to meet with OPRC Contingency planning requirements for ports, harbours and terminals has been completed by Briggs Environmental Services Ltd (BESL) on the basis of format previously agreed with the Maritime Coastguard Agency (MCA).

10.2 ASSESSMENT SCOPE

This assessment covers operations carried out within Port of Aberdeen's jurisdiction of the piers, harbours as well as the potential risk from the product storage tanks and the associated pipelines.

The area of jurisdiction is on Port of Aberdeen owned property and within the Port of Aberdeen limits. (See Figure 1 below)



10.3 METHODOLOGY

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 assessment 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 those systems that contain oil and are associated with the harbour's operations. Operations that could initiate events resulting in an accidental spillage are examined and the potential maximum volume that could be released is identified. 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. When classified against criteria this should provide an indication as to the most commonly occurring events. Control measures can reduce the probability of an event occurring. The full range of control measures implemented by Port of Aberdeen to minimise the risk of an oil spill event have therefore been considered before applying specific probability criteria.

Table 1 shows the probability and consequence ratings used in this risk assessment.

Table 1: Probability of Scenario Occurrence

Risk Rating	Description
Low	Minimal or no impacts detectable; No detectable aroma of oil or silvery sheen. A small operational type spill confined to harbour limits.
Moderate	Minor to Moderate damage to immediate environment; Definite aroma of oil in the air; Oil visible as metallic sheen on water surface; Moderate bunkering spill or small hydraulic spill.
High	Extensive damage to immediate environment; Extensive contamination of nearby shorelines; Oil visible as metallic sheen on water surface; Large diesel spill or heavy oil spill.

Probability and consequences 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. Table 2 determines the overall level of risk. In principle, all risks should be within the insignificant to minor categories. Moderate risk and above will require attention and improvement plans to reduce the risk.

Table 2: Overall Level of Risk

Risk	Description
Low	Risks are broadly acceptable. Need to maintain assurance that risks remain at this level.
Moderate	Tolerable risks – action may be required to reduce risks in this region. Risks are tolerable provided they can be demonstrated to be ALARP (As Low As Reasonably Practicable), i.e. if risk reduction is impracticable or its cost is disproportionate to the improvement gained.
High	Unacceptable risks – action generally required to reduce risks in this region.

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 consequence. It should be remembered that although the level of risk of an incident occurring may be low, the level of impact on the environment can potentially be high (high volume or increased toxicity for example). The consequence for 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 consequences for low to high probabilities. The consequences for all low to high probabilities will be mild to severe unless proven otherwise.

The risk assessment contains a table which identifies the initiating events and corresponding control measures that were considered in relation to the oil containing systems.

10.4 HISTORICAL DATA

Date	Type of spill	Quantity	Comments
19/03/2019	Diesel	200-300 litres	Bunkering from road tanker
2020	No spills recorded		
26/02/2021	Diesel	20-30 litres	Overfilling of day tanker on vessel
2022	No spills recorded		
16/06/2023	Unknown (Rainbow sheen)	Unknown amount	Unknown cause
10/10/2023	Unknown	Unknown amount	Burst hydraulic pipe of crane on fishing vessel
10/04/2024	Mud based oil	Unknown amount	Entered River Dee through interceptor

10.5 FACTORS OF ASSESSMENT

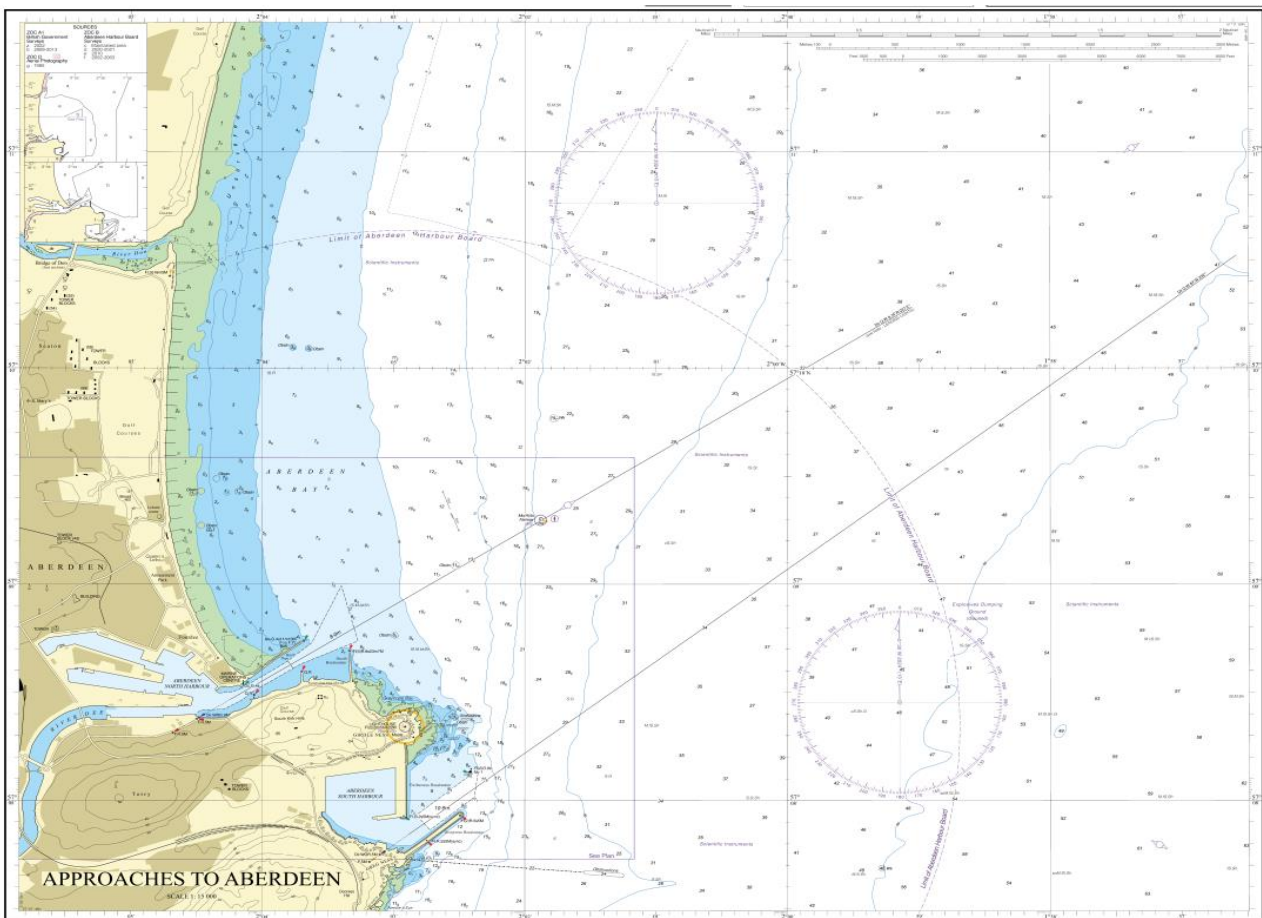
Port of Aberdeen is located on the East Coast of Scotland and consists of two harbours, The North Harbour, and the South Harbour. The North Harbour consists of the Albert Basin, River Dee, Telford Dock, Tidal Harbour, and Victoria Dock. Ro-Ro berths are available at Commercial Quay, Jamieson Quay Terminal and Matthews Quay Terminal. The South Harbour offers 1500m of deep water berths to a maximum depth of 15m and can accommodate vessels up to 300m in length.

Port of Aberdeen consists of all the building, berths, loading arms and bunkering facilities.

Port of Aberdeen is used by several companies such as Petersons, ASCO, Certas and Dales Marine Services. It has numerous berths available at North and South Harbour.

Port of Aberdeen has various tenants on site who handle cargo such as bulk, fuel, containers, wood, scrap, grain and a wide variety of other cargoes to do with offshore energy. Oil products such as diesel, gas oil, motor spirit, base/drilling oil and kerosene are also handled on site.

Anchorage within the port limits is not permitted, there are designated anchorage sites. One is located to the North of the harbour limits and there is a deep-water anchorage 5 nautical miles Southeast of the Fairway buoy. Port of Aberdeen generally advise vessels to anchor as convenient in depths of 9-11m sand within the Aberdeen Bay.



Pre-Arrival Checks

All tankers are required to report their operational condition in accordance with Marine Statutory Regulations (schedule 2), vessels are also required to submit Port of Aberdeen's Pre-Arrival Notification which shows the operational condition of equipment on board, this is normally done via the ships agent. The Master of an incoming vessel is given full instructions by the Vessel Traffic Service (VTS) prior to entering port limits, this includes any navigational information, confirmation of tidal condition and any anchorage position if appropriate.

In order to ensure that a vessels passage is controlled, the vessel will be directed to the pilot boarding area and advised of any changes needed in the approach. Vessel pilotage can be arranged via pre-notification from the agent, charterer, or base operator. Pilotage can also be arranged via direct contact from the ship to

VTS one hour before arrival, the vessel's draft will be checked then too. The vessel's passage will then be arranged in consultation between the Master, pilot and VTS before entering the port.

If the Master of the vessel reports any leaking oil, then the pilot will report this to VTS. If the vessel does not request a pilot, then the master will contact VTS before entering.

Vessels in Transit

Vessel entry to port may be restricted by weather conditions, operational control or tidal constraints. Navigation within the port is controlled by Vessel Traffic Services (VTS). Fixed red lights which combine to form the leading line 237.2' into the harbour; are changed to GREEN when it is unsafe to enter the harbour.

Maximum dimensions and size for vessels entering Aberdeen North Harbour are currently set at length 165m, beam 30m and draft 9.3m.

Maximum dimensions for vessels entering Aberdeen South Harbour are currently set at length 300m, beam 40m draft 10m. All vessels require a minimum under keel clearance (UKC) on transit of 1m.

Other vessels maybe permitted entry after a full and detailed assessment has been undertaken – assessed on a case-by-case basis by the Marine & Operations Department under the auspices of our Marine Navigational Safety Management System.

The channels and berths are all surveyed at regular intervals as per the Port's Marine Navigational Safety Management System.

	2023 Berthings (North)	Tonnage (North)	2023 Berthings (South)	Tonnage (South)
Cruise	18	109059	19	561296
General Cargo	205	922128	71	462708
Ferry	663	6416854	0	0
Offshore Supply	3343	12989105	67	442143
Other Vessel	828	1445595	26	237154
Project Vessel	46	430256	71	779976
Renewables	629	227700	13	104441
Tanker	236	928222	9	16007
MISC	697	162806	1	9

10.6 AVAILABILITY OF TUGS AND PILOT VESSELS

All berths are alongside quays, although some berths offshore supply vessels may be berthed up to three abreast. Tugs are available within the port through a licenced tug operator. An agreement exists which retains one tug permanently in Aberdeen, however in practice there are three tugs most of the time. 2 of which will have a bollard pull.

Pilotage is compulsory for vessels between 60 -75m without an operational bow thruster and for all vessels over 75m within both the North and South Harbours.

Berthing assistance is also available from licensed boatmen, harbour operations staff on the quayside if required and a pilot cutter which can assist with smaller vessels.

SECTION 11: HARBOUR CHARACTERISTICS

Many harbour operations carry with them a risk of hydrocarbon spillage in to the sea. A risk assessment has therefore been carried out to:

- Identify as far as possible likely oil spill scenarios from harbour operations.
- Quantify the possible frequency and size of spills.
- Identify the likely consequences of a hydrocarbon spill.

The risk assessment undertaken considered the risk of oil pollution in the areas covered by this section. Based on the risk assessment, a response strategy for each area has been devised.

North Harbour

Cargo handling facilities: bulk, fuel, containers, wood, scrap, grain and a wide variety of other cargoes to do with offshore energy. Oil products such as diesel, gas oil, motor spirit, base/drilling oil and kerosene.

Companies working out of Port of Aberdeen: Petersons, ASCO, Certas, Total, Streamline, 3T Training Solutions, Northlink Ferries and Dales Marine Services.

South Harbour

Cargo handling facilities: General cargo and offshore energy decommissioning.

OPERATIONAL HAZARDS NORTH HARBOUR

RISK AT PETERSONS

Port of Aberdeen has a few different companies utilising the port. Peterson has the Waterloo tank farm which is located along Waterloo Quay, at the extension of York Place, at the South Eastern end of Victoria dock. There are two tanks which replenish via road tanker (1 per week) to Pocras and supplies 166,000 tonnes per annum. There are approximately 44 bunkering operations of an average 200 tonnes each undertaken each month at this location.

The Pocras tank farm, located on the northern side of the tidal harbour has a capacity of 2,000,000 litres which is connected to Waterloo by pipeline. On average 10 vessels per month are bunkered at Pocras.

RISK AT ASCO

ASCO is an offshore supply and logistics group which receives approx. 465,000 tonnes per annum. It operates at various locations throughout the Port of Aberdeen: Pocras, Mearns Quay, Albert Quay and Torry Berths. There are 4 tank farms managed by ASCO which supply fuel to vessels of a variety of clients.

- i) Tank farm located at the junction of North Esplanade East and Midchungle Road which receives 31 tankers per year. There are four individual tanks at this farm and products are imported and exported by road tankers and by sea.
- ii) A second tank farm with berthing facilities which receives approx. 159 tankers per year and is located at Torry Quay Berth 2 on the southern side of the River Dee adjacent to Sinclair Road. There are 8 separate tanks on site. Oil is imported using two loading arms, located on the quayside within the Torry Marine Base. A gantry also allows fuel to be loaded into road tankers. If required oil can be imported at this location and pumped via pipelines to the tank farm at South Esplanade East. Approx 25,000 tonnes of oil is imported per month. Situated within this tank farm are stores for Marine Gas Oil, Kerosene, Derv and base oil.
- iii) A third tank farm is located on the southern bank of the River Dee just below the Victoria Bridge in Torry on the South Esplanade East. The loading arms at Torry Quay berth 2 are located approximately 500m down river from the tank farm. Four loading arms are used for importing oil. This site also contains stores for gas oil, derv, kerosene and base oil.
- iv) A fourth tank farm is located at Pocras on the northern side of the tidal harbour covering over 1 acre. The jetty receives 35 tankers per annum and the product received is Marine Gas oil which is stored in 2 tanks. The tanks are fitted with overflow alarms, are bunded and all drainage from around the tanks drain into an interceptor. All fuel transfer operations are carried out with well-established checklists with all pump rates recorded. There are two 8" pipelines from the jetty to the tank farm and all cargo transfers go through a 90' length of 6" hose with a cargo isolation valve and non-return valve in the line.

ASCO bunker approximately 109 vessels per month at the quayside facilities and will transfer 250 tonnes of fuel. They also bunker around 60 vessels per month from road tankers with either gas oil or base oil.

RISK: BUNKERING AT PORT OF ABERDEEN

Bunkering is available from the North Harbour at various locations. From Pocras Quay fuel can be supplied to 17 hydrant points for bunkering vessels. At each hydrant there is a manual isolation valve. Fuel bunkering also takes place at Telford dock by fixed quayside pipes which are built into the quayside.

NorthLink Ferries: NorthLink ferries operate regular ro-ro ferry sailings to Orkney and Shetland. All vessels are bunkered by road tankers which deliver approx. 25,000 tonnes of fuel oil to the vessels berthed alongside Jamieson's Quay. Freight service operating at the Eurolink.

ASCO

Bunkering operations of marine gas oil takes place at a variety of jetties and bunkers 27 vessels per month are fuelled within an average of 5 hours.

Petersons

Bunkering operations of marine gas oil takes place at Waterloo Quay, Pocras and Torry. At Waterloo Quay there is around 44 bunkering operations bunkering on average 200 tonnes each per month. At Pocras it bunkers on average 10 vessels per month.

Certas:

Bunkering operations at Certas are on average 600 bunkering's annually for various customers, each bunkering operation has on average 250m³ per bunker. Fuel bunkering of gas oil takes place along point law using 3" hoses. Up to 50 vessels per month are bunkered with an average bunkering time of between 2-6 hours. There is an isolation valve during bunkering which is located at the meter.

RISK: LOADING ARM FAILURE

Loading arms located at Torry Quay and have a configuration of three pipes: Inner arm, outer arm and drop pipe. The loading arms around 6" diameter and 20m long and have a loading rate of 4m³ per minute. If the loading arm fails it would result in a loss of approximately 4m³ per minute. The loading hoses are 3" in diameter and 20m long hoses which have a loading rate of 800-900 litres per minute and would result in an approximate 2m³ loss.

RISK: ROAD TANKER BUNKERING

Port of Aberdeen fuel delivery is carried out by a local supplier and is on an ad hoc basis. The tanker parks alongside the vessel and discharge is via flexible hose to a on deck manifold. All valves are shut until a secure connection is made to the vessel to all valves are open allowing fuel directly to the tank. Hydrocarbons are supplied by a qualified operator. During fuel delivery the road tanker driver remains with the tanker and the vessel operator will be in attendance. Prior to delivering fuel the volume required is agreed and the volume of the tank confirmed using external gauges on the tank. The road tanker carries an oil spill response kit which is easily accessible should it be required.

ACCIDENTAL HAZARDS

RISK: FUEL STORAGE ON SITE

There are a number of oil storage facilities on site with tank farms being situated at ASCO and Petersons. Port of Aberdeen has various companies which store fuel onsite, stored in bunded tanks and trained staff operate the bunkering operations.

RISK: BERTHING FAILURE OR COLLISION

Port of Aberdeen is mainly used by commercial and offshore support vessel within the North Harbour and can be berthed up to 3 abreast. Tugs and pilotage are available and berthing assistance is also available from licensed boatmen, harbour operations staff and a pilot cutter to assist smaller vessels.

Vessels can potentially collide with each other or the pier walls when navigating in the immediate vicinity of the quayside.

RISK: OTHER SOURCES OF SPILLAGE

There is still the possibility of oil products reaching the water by discharge into the upper dock via the Denburn adjacent to Jamiesons Quay, the removal and transport of waste oil products. Oil may also be discharged into the harbour via surface water drainage systems.

SUMMARY OF POTENTIAL SPILLAGE

Risks associated with harbour activities within Port of Aberdeen are shown to be as low as reasonably practicable (ALARP) however in the event that an unacceptable risk is identified when assigning a risk criteria, Port of Aberdeen will introduce additional control measures to reduce the acceptance criteria to an acceptable level.

Material Safety Data Sheets:

Stored on an internal system which all staff and pier operators have access to.

Waste Disposal:

In a Tier 1 incident where Port of Aberdeen's response is adequate the specialist waste contractor EIS would be used to safely dispose of contaminated waste. In a Tier 2 incident where the oil spill response contractor was mobilised (in this case Briggs Environmental Services Ltd) they would be responsible for waste disposal, also using a specialist contractor, most likely Taylor's Industrial Services Ltd.

Table 3 Risk of an Oil Spill at Port of Aberdeen North Harbour

Hazard	Spill Volume (tonnes)	Risk Prior To Control	Existing Control Measures	Risk Following Control
OPERATIONAL				
Road Tanker Delivery	25m ³	Moderate	<ul style="list-style-type: none"> Carried out by trained and competent individuals; Follow set procedures; Electronic shut-off valve on hoses; Tanks fully bunded and comply with all legislation; Fuelling points clearly marked and well maintained; 	Low
Bunkering	1-10m ³	Moderate – High	<ul style="list-style-type: none"> Linkspan maintained by qualified operators who make visual inspections prior to each berthing; Automated control measures are in place; Storage of the hydraulic oil is housed sufficiently far up the linkspan and cannot be damaged in the event of a collision; Linkspan has built in shock absorbers to absorb impact if any accidental collision occurs. 	Low
Loading arm failure	2m ³	Moderate - Low	<ul style="list-style-type: none"> Draining and closing off before disconnecting; Emergency release system; Fuelling points clearly marked and well maintained; Loading arms stop connect to boat and have emergency stop valves. 	Low
ACCIDENTAL				
Berthing Failure/Collision	3-4m ³	Moderate - High	<ul style="list-style-type: none"> Procedures in place for movement of vessels within the area of jurisdiction; Clear system of lights and marker buoys; Restricted speed; Experienced Masters; Structural integrity of the vessels; Traffic will be suspended for the arrival or large vessels. 	Low
Fuel Storage	>500000 m ³	Moderate - High	<ul style="list-style-type: none"> Tanks are fully bunded and bund will contain 110% of any spillage. 	Low

OPERATIONAL HAZARDS SOUTH HARBOUR

RISK: ROAD TANKER BUNKERING

Port of Aberdeen fuel delivery is carried out by a local supplier and is on an ad hoc basis. The tanker parks alongside the vessel and discharge is via flexible hose to a manifold in the fuel tank. While discharging to the tank all valves are open diverting all fuel directly to the tank. Hydrocarbons are supplied by a qualified operator. During fuel delivery the road tanker driver remains with the tanker and a vessel operator in attendance. Prior to delivering fuel the volume required is agreed and the volume of the tank confirmed using external gauges on the tank. The road tanker carries an oil spill response kit which is easily accessible should it be required.

RISK: SHIP TO SHIP BUNKERING

Port of Aberdeen fuel bunkering by barge is on an ad hoc basis and must have prior approval from the Harbour Master. The bunkering barge must provide information on the vessel receiving the bunker, mooring plan and fender arrangements, type and quantity of bunker and the expected date and time of transfer. All bunkering barges will carry a sufficient spill response kit and adequate personnel to deploy in an emergency.

ACCIDENTAL HAZARDS

RISK: BERTHING FAILURE OR COLLISION

Port of Aberdeen is mainly used by commercial and fishing vessels within the North Harbour and offshore support can be berthed up to 3 deep. Tugs and pilotage are available and berthing assistance is also available from licensed boatmen, harbour operations staff and a pilot cutter to assist smaller vessels.

Vessels can potentially collide with each other or the pier walls when navigating in the immediate vicinity of the quayside.

SUMMARY OF POTENTIAL SPILLAGE

Risks associated with harbour activities within Port of Aberdeen are shown to be as low as reasonably practicable (ALARP) however in the event that an unacceptable risk is identified when assigning a risk criteria, Port of Aberdeen will introduce additional control measures to reduce the acceptance criteria to an acceptable level.

Hazard	Spill Volume (tonnes)	Risk Prior To Control	Existing Control Measures	Risk Following Control
OPERATIONAL				
Road Tanker Delivery	25m ³	Moderate – High	<ul style="list-style-type: none"> Carried out by trained and competent individuals; Follow set procedures; Electronic shut-off valve on hoses; Tanks fully banded and comply with all legislation; Fuelling points clearly marked and well maintained. 	Low
Ship to ship bunkering	1-10 m ³	Moderate - High	<ul style="list-style-type: none"> Bunker barges in excess of 600 MT are required to be of double hull construction; Hoses have to be in good condition, adequate for transfer. No kinks, sharp angles, flats; All seals and secure connection must be checked at both ends; Bunkering from barge to vessel is only permitted between sunrise and sunset. 	Low
ACCIDENTAL				
Berthing Failure/Collision	3-4m ³	Moderate - High	<ul style="list-style-type: none"> Procedures in place for movement of vessels within the area of jurisdiction; Clear system of lights and marker buoys; Restricted speed; Experienced Masters; Structural integrity of the vessels; Traffic will be suspended for the arrival or large vessels. 	Low

SECTION 12: RESPONSE STRATEGY

12.1 HEALTH AND SAFETY

Statutory Duties

Table 4 provides a synopsis of applicable statutory law and its implications for the work place.

Table 4: Applicable Statutory Law

LAW	IMPLICATIONS
The Health and Safety at Work Act 1974	Places duty on all employers and persons responsible for premises to ensure 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	<p>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.</p> <p>The employer is required to execute 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.</p>
The Provision and Use of Work Equipment Regulations 1998	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 use must be properly supervised.
The Personal Protective Equipment Regulations 1992	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	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	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.

12.2 Site Safety Plan

To achieve a safe operation, 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 sections shown in Table 4. Each section should be addressed jointly and separately before work commences and the appropriate steps taken to ensure that requirements are adequately met.

Table 4: Site Safety Plan Sections

SECTION	CONTENTS
<p>Site survey</p>	<p>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.</p> <p>The site survey should address the safety of those personnel taking part in the cleanup as well as those members of the public who may also be involved. The following indicates a few of those subjects which, should be addressed, assessed and reported in the survey. The list is by no means exhaustive.</p> <ul style="list-style-type: none"> • 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; and • Water hazards.
<p>Operations analysis</p>	<p>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.</p> <p>The intention to use the following facilities can be stated and the reasons for and priorities of each facility established.</p> <ul style="list-style-type: none"> • Cranes. • Boats. • Breathing apparatus. • Detergents. • Forklifts. • Hoses and pumps. • Low loaders. • Motor vehicles. • Raking and sweeping gear; and • Winches

SECTION	CONTENTS
Site Control	<p>It is essential that those in charge of the spill cleanup have control of the site as soon as possible and before any significant part of the cleanup operation begins. Access to the site must be restricted to those personnel who are essential to the cleanup operation.</p> <p>Arrangements must be made for the area to be barriered, 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 plan.</p>
Logistics and supplies	<p>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.</p> <p>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.</p> <p>Where training has to be delivered, 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.</p> <p>Personal Protective Equipment (PPE). 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.</p> <p>PPE includes:</p> <ul style="list-style-type: none"> • Flotation suits and vests. • Gloves / gauntlets. • Protective clothing. • Goggles, visors, and safety glasses. • Hard hats. • Insulated clothing; and • Reinforced boots, shoes, and gloves. <p>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.</p>
Personnel	<p>Selection of Personnel to carry out the cleanup must be dominated by safety considerations.</p>

12.3 Safety on the Dockside

During the execution of a foreshore Site Survey, access to the area to be cleaned must to be carefully assessed. Account needs to be taken of low and high tides and the need for workers to access difficult to navigate inlets, cliffs and terrain. Tide tables should be consulted as well as the taking of advice from those with local knowledge.

Where necessary and appropriate, the use of equipment such as handrails, ropes and ladders should be considered. Where workers are, by necessity, required to work out of sight of one another, communication between them and the supervisor is essential. The provision and use of Personal Emergency Beacons and Distress Flares by appropriate personnel should be considered.

12.4 Safety on the Water for HSE Purposes

The Harbour Master's Office should be informed of vessels involved in operations together with all the necessary details of vessel capability and POB.

Workers operating from sea-going vessels should be equipped with harnesses built to BS 1397. They should, at all times, wear an approved self or automatic inflating lifejacket and should be protected by a survival suit.

12.5 Safe Operations

12.5.1 Risk Assessment

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 Harbour Master 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.

12.6 Decontamination

12.6.1 Conditions requiring decontamination

Clothing contaminated by crude oil or chemicals, which might have been used during the cleanup operation, 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.

12.6.2 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. Facilities for removing protective clothing and washing before consuming food or smoking should be made available.

12.6.3 Decontamination area drainage

Cleansing water and contaminants washed from clothing and personal equipment should be drained into tanks. Care should be taken to ensure contaminated waste does not drain into either the normal drainage system or into soil under the decontamination area.

12.6.4 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 delivered to the Local Authority or to a Special Waste Contractor.

12.7 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, harbours and land.

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 actions:

- 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.

12.7.1 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. Oil samples can be arranged by the Harbour Master. For information regarding STOp notices, please see <https://www.gov.uk/government/publications/scientific-technical-and-operational-advice-notes-stop-notes>

It should be noted that MCA STOp Notice 4/2001 does not refer to the requirements in Scotland, to have every step of the sampling and analytical process witnessed if the results of the analysis are to be used in the report to the Procurator Fiscal. A sample label format has been developed to prompt the sampler to obtain a witness and deal correctly with the sample.

12.7.2 Material Safety Data Sheets

They are stored electronically and are available in the Marine Operations Centre.

SECTION 13: TRAINING AND EXERCISE POLICY

13.1 TRAINING POLICY

The Contingency Planning for Marine Pollution Preparedness and Response Guidelines for Ports state all personnel likely to be involved in a marine pollution incident have to meet certain requirements and standards. Training should be conducted by a Nautical Institute accredited training provider.

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 all employees of Port of Aberdeen, their contractors and port operators with an identified role within the plan. In addition, there will also be awareness briefings with other harbour users and the agencies involved in the consultation process.

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

In order to meet the minimum levels as recommended in the MCA guidelines, the training and exercising of key personnel is detailed below.

Table 5: Training in the use of this Plan to cover both North and South Harbour

Position	Personnel Trained	MCA Training
Harbour Master/ Deputy Harbour Master/ Ops Manager/ DCO	X10	Level 4
Port operatives/ Marine support staff/ SHEQ	X19	Level 1
Oil Spill On Scene Commander	X1	Oil Spill On Scene Commander

13.2 EXERCISE PROGRAMME

The Contingency Planning for Marine Pollution Preparedness and Response Guidelines for Ports state:

“Each Port / harbour / oil handling facility must participate in exercises in accordance with the provisions within their OPRC Compliant Oil Spill Contingency plan”

To ensure that the Oil Spill Contingency Plan is “user friendly” and understood by all those involved in its use, communications and practical exercises will be undertaken on an annual basis.

A record of Personnel Training and Contingency Plan Exercises will be held by the Harbour Master of Port of Aberdeen and available for inspection by MCA.

The provisions specific to Port of Aberdeen are detailed in table 6 on the next page.

Table 6: Exercises 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 (will incorporate mobilization and deployment of resources up to Tier 2 level)	Once every 3 years*
*In an instance where a port, harbour or oil handling facility considers this requirement to be unduly onerous on the basis of the risk assessment, they may submit an alternative exercise programme to the Regional CPSO for consideration and approval, on an individual basis. In some circumstances it may be permissible to undertake an Incident Management Exercise in the fourth year of the plan's five-year life-cycle providing for the 'lessons-learned' to be captured within the final plan review/update year.	

Sharing of Exercises

In a situation where a group of ports and harbours are within a distinct geographic region and sharing the same Tier 2 contractor, there may be scope to undertake a joint exercise at one of the ports. Key individuals from nearby ports could be invited to observe or participate, thus gaining from the experience of the hosting port. In any case, each plan holder must host their own exercise involving mobilisation and deployment of their Tier 2 response, at least every three years.

A post exercise/incident form should be completed and forwarded to the Regional CPSO, and all relevant plan holders, each time an exercise is carried out.

Further guidance can be found in Section 17.

13.3 FORMS TO BE COMPLETED – POST EXERCISE

Below is a post exercise / incident report form which should be completed and forwarded to the regional 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.

Proforma on following page.

Post Exercise / Incident* Report



Name of Port/Harbour/Oil Handling Facility:	
---	--

Tier Level (T1,2 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:	
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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:
(in addition to this form the revision list is to be updated & the appropriate pages within the plan amended & issued to all plan holders)

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.

Authorised by (name in block capitals):		Position / Job Title:	
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Signature:		Date:	
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13.4 FORMS TO BE COMPLETED ON AN ANNUAL BASIS

To ensure that the MCA's records remain up-to-date, Port / Harbour authorities should complete an annual return of changes made (e.g. exercises conducted, new personnel trained, etc.). 'Nil' returns should also be submitted.

Electronic copies of the following form can be obtained from the MCA.



OPRC Annual Return

Name of Port, Harbour or Oil Handling Facility:			
Annual Return Period:		to	
Plan Approval date:	(5 year life span of plans)		
Summary of Incidents: (include date, source, type and quantity of pollution)			
Summary of Exercises: (include date and type of exercise conducted)			
Pollution Training Undertaken (include date, MCA Level, Name & certificate No.)			
Summary of Amendments: (include date, amendment No., & item(s) changed)			
Signed:	Print:		
Position:	Date:		

This form must be completed by Ports, Harbours and Oil Handling facilities at the end of each calendar year by the 31st January and returned to the Regional Counter Pollution & Salvage Officer. Continue on separate sheet if necessary. Nil returns are required.

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PART 3: DATA DIRECTORY

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SECTION 14: MCA STOp NOTICE 4/2001



SCIENTIFIC, TECHNICAL AND OPERATIONAL ADVICE NOTE

- STOp 4/2001

IMPORTANT

This STOp notice replaces STOp 2/98; please destroy your copy of STOp 2/98
ADVICE TO LOCAL AUTHORITIES ON THE COLLECTION AND HANDLING OF OIL SAMPLES

1. **Background**
2. **Sampling from the sea and shoreline**
3. **Size of samples**
4. **Methods of collecting samples**
5. **Bottling, sealing, packaging and boxing of samples**
6. **Labelling and addressing of samples**
7. **Transportation of samples**
8. **Handling of samples for Bonn agreement states**

Appendices

Appendix A: Oil Pollution Sample – Standard Label

Appendix B: Collection of Sample – Standard Form

Note: This document should be read in conjunction with:

- **STOp 1/2001 - The Environment Group and Maritime pollution response in the UK.**
- **STOp 2/2001 - The Establishment, Management Structure, Roles and Responsibilities of a Shoreline Response Centre during a Maritime Pollution Incident in the United Kingdom.**
- **The National Contingency Plan for Marine Pollution from Shipping and Offshore Installations (NCP).**

All extant MCA STOp notices may be found on the MCA web site: www.mcga.gov.uk and all enquiries regarding this and other MCA STOp notices should be directed to meor@mcga.gov.uk

1. BACKGROUND

Where an oil pollution incident is thought to have arisen from an illegal operational discharge an effort should be made to collect a sample of the pollutant and, if possible, matching samples from the suspect ship or other source for analysis, comparison, and possible subsequent use in legal proceedings. Samples of the pollutant may need to be taken from the sea or coastline. When beach pollution has occurred, local authorities or HM Coastguard would usually take the necessary samples. For advice on sampling at sea, contact the Counter Pollution Branch of the Maritime and Coastguard Agency (MCA) on 02380 329483. This notice sets out the procedures to be followed when collecting and handling oil samples.

The MCA's Enforcement Unit will collect evidence concerning pollution incidents from shipping at sea, upon which a decision will be made as to prosecute or not. In England, Wales and Northern Ireland the MCA will conduct prosecutions. In Scotland the case will be presented to the Procurator Fiscal for action.

If samples are likely to be used in connection with legal proceedings then the following procedures should be implemented:

In England and Wales

Although a single sealed sample of each type of pollutant is required by law, MCA would prefer three samples to be collected.

In Scotland

There is no longer a legal requirement for three sealed samples of each type of pollutant in Scotland but as in England MCA recommend three samples: one for analysis, a second to be handed to the owner or master of the suspect vessel for retention and any appropriate action, and the third for production in court, where the prosecution will be handled by the local Procurator Fiscal.

In Northern Ireland

Although the law in Northern Ireland concerning this matter is the same as that in England and Wales, the Director of Public Prosecutions, who is responsible for handling prosecutions in Northern Ireland, has asked that for the sake of safety, three sealed samples of each type of pollutant should be provided on the same basis as in Scotland.

Responsibility for the collection of oil samples in Northern Ireland rests with Environment and Heritage Service, Department of the Environment (Northern Ireland).

Samples will usually be requested by a scientist/mariner in the MCA's Counter Pollution Branch or one of the Principal Counter Pollution and Salvage Officers as part of the response to a reported incident. Once a sample has been taken, agreement must be obtained from the Counter Pollution Branch before it is analysed.

Please remember that analysis of sample will only be carried out and paid for by the MCA if authorised by the Counter Pollution Branch.

Please note that organisations such as ports and harbours or the environmental regulator may be taking independent samples as part of their own individual responsibilities for oil spill response and pollution regulation. The analysis of the samples and the cost of analysis of such samples will be the responsibility of the organisation taking the sample and not the MCA.

2. SAMPLING FROM THE SEA & SHORELINE

When a large oil slick exists at sea or on a coastline, the number of samples that MCA may require is:

offshore spill - minimum of 1 sample / slick / day where possible,

onshore spill - representative samples from the shoreline, following discussion with Counter Pollution Branch .

Following an incident, attempts may be made to infer that not all the oil pollution came from one vessel, and that some of it may have come from other sources. Where therefore an oiled beach is being sampled, a careful and detailed examination of the beach should be made to determine the uniformity of the oil deposit and the extent to which it is polluted by more than one type of oil. In particular, if there are any tarry, semi-solid lumps or wet tarry patches, their presence should be recorded and some idea of their quantity and extent obtained. In addition, samples of such pollution should be retained and an attempt should be made to estimate costs expended on the cleanup of different oils.

In cases where samples have been taken at intervals along the beach, these should be clearly identified (see section 6 on labelling). It is desirable that samples of oil are taken in the area where the oil is first washed ashore. This is helpful since the fresher the oil the easier it is to identify by laboratory techniques.

3. SIZE OF SAMPLES

Modern analytical methods mean that very little original pollutant is required to carry out most analyses. However, a larger sample is likely to be more representative. Detailed analyses are often hampered by either contamination or the loss of the oil's lighter fractions. A larger undisturbed sample may consist of a weathered oil crust covering a less weathered (holding a greater percentage of lighter fractions) and therefore more valuable sample. The recommended minimum quantities required for a detailed programme of analyses are:

Type	Quantity
Unweathered oils that are liquid and substantially free of water	10ml
Oil exposed to seas surface and forming water-in-oil emulsion "chocolate mousse"	10ml
Overside water discharge where contravention of 100ppm or 15ppm is suspected	1 litre of the discharge
Tarry lumps as found on beaches	10 grammes

A sample should not be withheld because the recommended quantity cannot be obtained, since much smaller samples can give useful results. In cases of pollution within UK territorial waters, when it is only necessary to prove that some oil has been discharged, a relatively small sample may be acceptable. Larger samples may be useful to carry out a range of tests to determine the most appropriate response/clean-up strategy. MCA can advise when and why such an approach is desirable.

4. METHODS OF COLLECTING SAMPLES

TO BE COMPLETED BY BRIGGS ENVIRONMENTAL SERVICES LTD

When liquid samples are skimmed off the surface of the sea, care should be taken to ensure that the sample contains sufficient oil. Various techniques may be adopted to skim thin layers of oil from the waters' surface and consolidate using a bucket with a hole.

Care should be taken to minimise contamination of liquid samples by solid matter. Oil deposited on rocks or other impervious materials should be scraped off and placed directly into the sample container. Lumps of tarry or waxy pollutant should be placed directly into sample containers; no attempt should be made to heat or melt these samples to enable them to flow into a container. The sample container should be sealed as soon as possible to minimise evaporation of the higher fractions.

Oil adhering to seaweed, small pieces of wood, sand, plastic, material, cloth, vegetation or other debris should be dealt with by placing the complete specimen comprising oil and support material into the sample container.

5. BOTTLING, SEALING, PACKAGING AND BOXING OF SAMPLES

All samples should be securely packed and sealed, using screw topped containers and UN approved fibreboard boxes to ensure safe carriage of the sample. These have been supplied to HM Coastguard Stations and MCA Marine Offices for use by MCA Staff. In consultation with CPB, MCA sampling bottles can be made available to local authorities.

As proof against unauthorised opening, the sample container should be sealed with wire and a lead or sealing wax seal. Alternatively, adhesive labels with a signature stuck on the bottle top in such a way that they have to be broken to open the bottle are acceptable.

The bottle should then be placed inside a plastic bag, which should be sealed with a further adhesive label in the same way as for the sample bottle to ensure that it is not tampered with.

If it is necessary to take an oil sample where one of the standard containers above is not available the receptacle should be of glass with a screw-cover and a seal which would not be affected by the oil. Small (100ml) and medium (500ml) glass bottles are readily obtainable from chemists or hardware shops.

The use of closed metal receptacles or plastic jars is strongly discouraged as contact with metal or plastic can, in some cases, interfere with the analysis. Avoid the use of any metal tool made of nickel or vanadium based alloys, as these metals occur naturally in crude oils and refined products and their levels may assist in the identification of the oil source.

When boxing the sealed samples for transport, the Peters and May (Dangerous Goods) Ltd, packing instructions should be followed, to ensure the integrity of the package for transport under Dangerous Goods regulations. Vermiculite should be used to surround the sample(s) in the box for added protection and to absorb any possible seepage. Make sure that the dangerous goods documentation is completed. Whenever possible, samples should be stored in refrigerators or cold rooms at less than 5 degrees C in the dark. These precautions are particularly important for samples containing water or sediment, but less so for bulk oil samples.

When ordering sample bottles it is important to consider the following:

- Wide necked bottles make sampling easier.
- Sample security can be achieved with locking cap seal.
- Ensure that no components of the bottle can interfere with analysis, e.g. waxed cap inserts.

6. LABELLING AND ADDRESSING OF SAMPLES

Care should be taken to ensure that every sample bottle is not only suitably sealed but also clearly labelled before being submitted to the MCA for analysis. It is important that a sample is positively identified, particularly where more than one is taken during an incident. It is of vital importance to maintain continuity in the chain of evidence. MCA recommend that each sample is labelled *and* is accompanied by more detailed information set out on a standard proforma. The form accompanying each container should therefore provide the following details: -

- | | | | |
|----|------------------------|-------|----------|
| a. | An identifying number: | year | 2 digits |
| | | month | 2 digits |
| | | day | 2 digits |

and the initials of the official in charge of taking the samples.

For example 02/04/17/JS = Sample taken on 17th April 2002 by John Smith

- Description of samples.
- Position from which sample was taken, grid reference if possible.
- Date and time of sampling.
- Purpose for which sample was taken.
- If known, suspected source, e.g. name of tanker or ship.
- Whether or not dispersants have been used and, if known, their type and make.
- Method of sampling (description of sampling device and any possible contamination).
- Name, address and contact details of person taking the samples and of anyone witnessing the taking of it.

If possible the following information would also be helpful:

- Wind direction and velocity.
- Air and water temperature.
- Sample descriptions, i.e. viscosity, colour and contaminants.
- Description of the oil spill, i.e. distribution and consistency.

An example of the recommended oil pollution sample standard label can be found in Appendix A. The recommended sample form is at Appendix B.

To assist with any subsequent investigations it is important that a letter is sent to MCA quite independently of the sample (but a copy should be sent with the samples), setting out details a to m, where available.

7. TRANSPORTATION OF SAMPLES

If a sample needs to be analysed the Counter Pollution Branch will contact their contractor to arrange for the sample to be collected by courier and analysed.

Please ensure that samples are labelled correctly and securely packed in UN approved boxes to avoid breakage. It is important that the standard proforma described in section 6 should also be included with the sample along with all carriage documentation. To facilitate sample transportation, clear information on the number of samples to be collected, the location they need to be collected from and a contact name and phone number must be given to Counter Pollution Branch.

8. HANDLING OF SAMPLES FOR BONN AGREEMENT STATES

In cases where samples are taken at the request of a contracting member of the Agreement for Co-operation in Dealing with Pollution of the North Sea by Oil, the Bonn Agreement, the Counter Pollution Branch would be the focal point for processing the samples for either analysis or onward transmission to the requesting member state. The results of such tests would not be made public until the contracting party involved was informed.

SECTION 15: SPILL SAMPLING

15.1 OIL POLLUTION SAMPLE – STANDARD LABEL

OIL POLLUTION SAMPLE – STANDARD LABEL				OIL POLLUTION SAMPLE - STANDARD LABEL			
ID No.	Date/Time	Location) (Grid Ref)	Name and Address of person taking sample	ID No.	Date/Time	Location) (Grid Ref)	Name and Address of person taking sample
For continuity of evidence: Please complete clearly Sample passed to:				For continuity of evidence: Please complete clearly Sample passed to:			
Date	Name	Address	Signature	Date	Name	Address	Signature

15.2 OIL POLLUTION SAMPLE - STANDARD FORM

Collection of oil samples - This form to be completed by person taking sample If in doubt please refer to MCA STop Notice on sampling. Remember to complete sample jar label and sign		
A	ID Number - YY/MM/DD - with initials of person taking sample	
B	Sample description	
C	Location of sample – OS Grid Ref or Lat/Long if possible	
D	Date and time of sample collection	
E	Purpose for which sample was taken	
F	If known, suspected source	
G	Were dispersants used?	
H	Method of sampling (device?)	
I	Name, address, e-mail address & Tel No of person taking sample and any witnesses	
If possible the following information would also be helpful		
J	Wind speed and direction	
K	Air and Sea Temperature	
L	Sample description, viscosity, colour, any contaminants?	
M	Description of the oil spill, distribution and consistency	
Original form to be kept with sample - please send copy of the form to the Counter Pollution Branch of the MCA - Bay 1/11, Spring Place, 105 Commercial Road, Southampton, SO15 1EG Tel:023 8032 9485		

15.3 SAMPLE LABEL FORMAT FOR PROCURATOR FISCAL

<u>DATE:</u>
<u>TIME:</u>
<u>NATURE OF SAMPLE:</u> (description)
<u>SAMPLED AT:</u> (Site / positions)
<u>SAMPLED BY:</u>	Print name SIGNATURE
<u>WITNESSED BY:</u>	Print name SIGNATURE
<u>REFERENCE NUMBER OF TAMPER PROOF PLASTIC TAG</u>

SECTION 16: BONN AGREEMENT COLOUR CODES

Code 1 – Sheen (< 0.3 µm)

The very thin films of oil reflect the incoming light slightly better than the surrounding water and can therefore be observed as a silvery or grey sheen. All oils in these thin layers can be observed due to this effect and not the oil colour itself.

Oil films below approximately 0.04 µm thickness are invisible. In poor viewing conditions even thicker films may not be observed.

Above a certain height or angle of view the observed film may disappear.

Code 2 – Rainbow (0.3 µm – 5.0 µm)

Rainbow oil appearance represents a range of colours, yellow, pink, purple, green, blue, and red, copper, orange; this is caused by an optical effect and independent of oil type.

Depending on angle of view and layer thickness, the distinctive colours will be diffuse or very bright.

Oil films with thicknesses near the wavelength of different coloured light, 0.2 µm – 1.5 µm (blue, 400nm or 0.4 µm, through to red, 700nm or 0.7 µm) exhibit the most distinct rainbow effect. This effect will occur up to a layer thickness of 5.0 µm. Bad light conditions may cause the colours to appear duller.

A level layer of oil in the rainbow region will show different colours through the slick because of the change in angle of view. Therefore if rainbow is present, a range of colours will be visible.

Code 3 – Metallic (5.0µm – 50 µm)

The appearance of the oil in this region cannot be described as a general colour and is oil type dependent. Although a range of colours can be observed, blue, purple, red and greenish the apparent colour is not caused by interference of light or by the true colour of the oil. The colours will not be similar to 'rainbow'. Where a range of colours can be observed within a rainbow area, metallic will appear as a quite homogeneous colour that can be either blue, brown, purple or another colour. The 'metallic' appearance is the common factor and has been identified as a mirror effect, dependent on light and sky conditions. For example blue can be observed in blue-sky conditions.

Code 4 – Discontinuous True Colours (50 µm – 200 µm)

For oil slicks thicker than 50 µm the true colour will gradually dominate the colour that is observed. Brown oils will appear brown, black oils will appear black. The broken nature of the colour, due to thinner areas within the slick, is described as discontinuous. This is caused by the spreading behaviour under the effects of wind and current.

'Discontinuous' should not be mistaken for 'coverage'. Discontinuous implies true colour variations and not non-polluted areas.

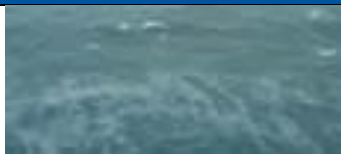




Code 5 – True Colours (>200 µm)

The true colour of the specific oil is the dominant effect in this category.

A more homogenous colour can be observed with no discontinuity as described in Code 4.

This category is strongly oil type dependent and colours may be more diffuse in overcast conditions.

Table 1: Oil Characteristics

Code	Oil Appearance / Colour	Pictorial	Quantity (Tonnes / km ²)	Litres per km ²
1	Sheen (Silvery / Grey)		0.04 to 0.30	40 – 300
2	Rainbow		0.30 to 5.0	300 – 5000
3	Metallic		5.0 to 50	5000 – 50,000
4	Discontinuous true oil colour		50 to 200	50,000 – 200,000
5	Continuous true oil colour		More than 200	More than 200,000

16.1 ESTIMATING THE SIZE OF A SPILL

It is important to determine the size of the spill and to classify it. **Where possible, calculate the volume of oil spilled from methods other than the evaluation of a spill on the sea for example from:**

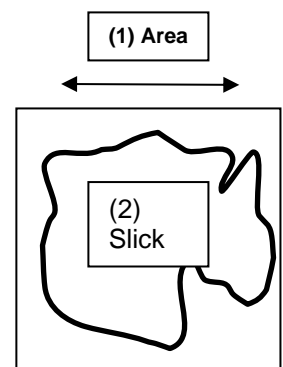
- volume of diesel in hose;
- lost or unaccounted volume of diesel or oil.

If an estimate of the spill size cannot be determined from operational information, a visual inspection may be made by observing the slick on the sea surface. Although this can be performed from a pier or vessel, best estimates are made during aerial surveillance flights. When using this technique, bear in mind that the entire area of the slick may not be visible and that this can only provide an order of magnitude estimate of the amount of oil spilled. The following tables and graphs should be used to assist you to make a best estimate of spill size.

Calculation of the volume of oil spilled from the appearance of oil film on water

Estimate total size of the area as a square or rectangle (in km) i.e. maximum extremities of the slick.

- 1 Assess the area affected by the slick in km² calculated as a % of the total area in (1).
- 2 Estimate the area covered by each colour of oil, calculated as a % of the total area affected.
- 3 Multiply the area covered by each colour by the appropriate figure in the oil quantity table below.
- 4 Adding all of the colour figures will give the total quantity of oil in m³ within the slick.



Example: if the total area of a rectangle is 30km² and the area within that covered by oil is estimated to be about 75% then total area affected is 22.5km². If the area covered by “blue” oil is 40% then that will equal 9m³, area covered by “rainbow” oil is 60% then that will be 4m³; total amount of oil spilled will then be about 13m³.

Table 2: Oil Quantity estimation by colour

Code	Appearance/colour	Quantity (m ³ /km ²)
1	Silvery	0.02
2	Grey	0.1
3	Rainbow	0.3
4	Blue	1
5	Blue/brown	5
6	Brown/black	15-25
7	Dark brown/black	>100

Mass Balance Calculations

With the variable compositions of oils the initial volume spilt can often be significantly different to the amount which remains on the water over time or is stranded on the shoreline. This is because of the processes of evaporation, dissolution and emulsification. Whilst some idea of the magnitude of these processes can be ascertained from an examination of the physical properties of the fresh oil this can be only a guide.

On the NOAA website: <http://response.restoration.noaa.gov> there are a number of tools available to oil spill responders, one of these is a software package called ADIOS 2 which is available for free download. This application has a database of oil characteristics and by entering a number of simple parameters (volume spilt, wind speed, time since spill) it will calculate and graph changes in the mass balance i.e.: amount evaporated, amount emulsified, etc. This gives a much better overview of the changes through time of the amounts of material likely to be encountered.

16.2 SLICK TRACKING AND SURVEILLANCE

After the initial spill assessment has been completed, the slick should be tracked and monitored throughout the incident to evaluate the extent of the slick, monitor the movement of the slick and decide on the appropriate action. This will occur as follows:

- 1 In the early stages of the incident, the slick may be monitored from the pier side or harbour vessel. Figure 1, which predicts the movement of oil on water as a function of wind and current, should be used to assist this.
- 2 For large spills, the Oil Pollution Officer should mobilise aircraft to undertake aerial surveillance. Surveillance should be undertaken at least twice per day until such time as no oil is visible on the sea surface. Port of Aberdeen will notify the HM Coastguard of its intentions to use aerial surveillance. Aerial surveillance will be undertaken as soon as possible after an incident has occurred.

Table 3: Slick surveillance/tracking checklist

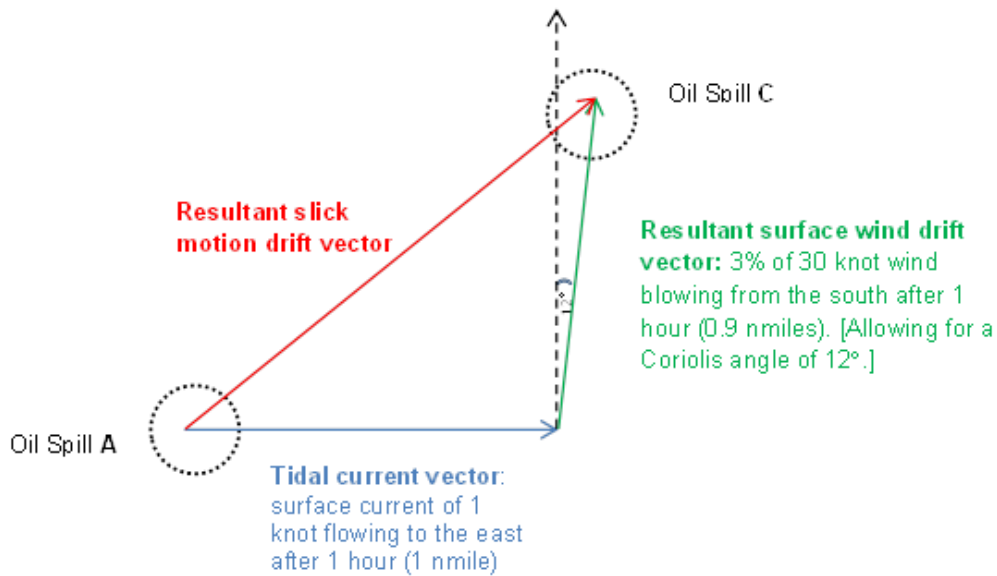
Checklist	Notes
Determine extent and co-ordinates of slick	
Chart slick size, growth patterns and affected area(s); estimate quantities if possible.	Estimate by direct observation and use Annex 34.
Carry out slick trajectory predictions	Use vectors (⇒ Figure 1 over page)
Follow direction of movement of slick	
Identify heaviest concentrations of oil	Likely to be at downwind leading edge of spill
Identify onset and progress of water in oil emulsion formation	Heavy oil (eg intermediate fuel oil) will change in appearance soon after spill; in initial stages, the thicker parts will appear as dense, black areas, but as emulsification takes place, the colour will change to brown, orange or yellow.
Watch for any flocks of birds	Refer to Environmental Maps
Watch for any oil floating subsurface	
Watch for break up of slick and determine direction of movement of any oil patches	
Report on progress of natural dispersion	This is likely to be good for diesel or base oil hydrocarbon spills
Report on effectiveness of response	If dispersants are employed watch particularly for signs of dispersant not working.

In addition to gravity spreading which will cause the oil to cover a progressively larger area, the oil moves on water as a function of wind and current – the current has a 100% influence and the wind a 3% influence. A slick will continue to spread until a thickness of about 1-mm is reached. Once this stage is reached, the slick may break up into windrows, which will further increase the spread of the slick. To plot the movement of a slick, the following steps should be taken in association with Figure 1:

- 1 Plot 100% of the current speed on an appropriate chart in the direction that it flows (i.e. if the current is 1 knot, then plot 1 nautical miles on an appropriate chart).
- 2 From this end point then plot the wind direction as 3% of its value in the direction it is blowing (i.e. if the wind is 30 knots, then plot 0.9 nautical miles in the direction it is blowing).
- 3 Point B will be the centroid of the oil spill 1 hour later and vector AB its predicted trajectory.

For best results, the plot should be updated hourly and verified with overflights.

Figure 1: Manual prediction of oil slick trajectory prediction



Computerised Slick Tracking

There are a number of software applications used to predict the movement of oil spills. Over the years these have become increasingly sophisticated with a library of oil types and aspects of the 3-Dimensionality being incorporated. However, they remain fundamentally limited to the quality of the environmental data i.e.: wind speed/current speed fed into them. Thus, they are useful tools to forecast slick movement when visual observation is impossible but visual observation should always be used to calibrate and correct the forecasts. Within confined waters, as would be found around Port of Aberdeen, the timescale to beaching is often so short to highlight further limitations in the modelling packages.

SECTION 17: ENVIRONMENTAL SENSITIVITIES AND PRIORITIES FOR PROTECTION

17.1 GENERAL STRATEGY

If anything other than small operational spills occur, SEPA and NATURE SCOT should be verbally contacted.

Where possible, considering safety and local conditions, any floating oil on the water surface should either be allowed to degrade naturally or be removed physically – no chemical dispersants are to be used. Removal should particularly be attempted where this may significantly reduce the possibility of quantities of oil coming ashore on areas of recreational and environmental importance. Floating absorbent should be used when necessary to prevent oil coming ashore and to reduce the amount of oil on the water.

Where access to shoreline is possible, considering safety and local conditions, mechanical methods to clean up oil may be used – no chemical dispersants are to be used – otherwise oil should be left to degrade naturally.

Where oil comes ashore, it should generally be left to degrade naturally although some manual removal (but not mechanically) may be possible. No chemical dispersants are to be used during this treatment. In some instances the use of protective or deflective booms to reduce oil on the shore may be possible.

In general, any areas within the Sites of Specific Scientific Interest (SSSIs) should be protected from gross disturbance e.g. by use of vehicles. Land within the SSSI should not be used for wider oil spill control/ co-ordination works.

17.2 SENSITIVE AREAS

Sites of Specific Scientific Interest (SSSI)	
Nigg Bay	Nigg Bay has been recognised as a key reference site for interpreting glacial history and ice movement patterns in the Northeast Scotland
Cove	Cove is located 5km from Port of Aberdeen and comprises of a section of maritime cliff and adjacent slopes with coastal grassland, wet flushes, and coastal heath. The cliff edges here support colonies of a rare Dickie's bladder-fern. There are areas of herb rich grasslands on base rich areas which form a colourful mixture of calcium loving plants such as kidney vetch, bloody crane's bill, burnet rose, common rockrose and the rare purple milk-vetch. Along with these plants are maritime plants such as thrift, sea campion and sea plantain.
Findon Moor	Findon Moor is heathland situated around 15km from Port of Aberdeen and is the largest and best example area of heathland.
Garron Point	Garron point is a rocky coastal promontory with cliffs and coastal grassland located 15km south of Aberdeen and just north of Stonehaven. The site is internationally important for having yielded a unique fauna and unique fish genus. The area around Skatie shore, Garron point and Craigeven Bay has one of the richest coastal floras in Aberdeenshire. Cliff grassland predominates but small areas of sand dune, salt marsh and shingle which are uncommon habitats within Aberdeenshire. The cliff grassland are the habitat of an important population of rare whorl snail and rare species of northern brown argus butterfly.
Fowlsheugh	Located on the east coast of Aberdeenshire about 5km south of Stonehaven and has the largest colony of breeding seabirds in the northeast of Scotland and one of the largest colonies in mainland Britain. Kittiwake, guillemot, and razorbill are present in nationally and internationally important numbers, contributing to 100,000 individual bird populations.
Foveran Links	Situated about 20km to the North of Aberdeen and is important geologically and biologically for its sand dunes.
Sands of Forvie and Ythan Estuary	The sands of Forvie are located along the east coast of Aberdeenshire, 20km north of Aberdeen. These form the 5 th largest sand dune system in Britain and the River Ythan is one of the least modified and most extensive in the northeast. The site is important geologically and biologically for its landforms, habitats, plants, and birdlife. The Ythan

	Estuary is one of the few largely unaltered estuaries of Europe with intertidal flats and saltmarsh. The dunes hold important breeding colonies of terns and eider duck, and the estuary supports important populations of wintering and passage wildfowl and waders. The site also supports diverse assemblages of breeding birds and vascular plants.
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Special Areas of Conservation

River Dee	Major east coast Scottish river which flows uninterrupted from the Cairngorms to the North Sea. Supports populations of freshwater pearl mussel, Atlantic salmon, and otters.
Garron Point	Site contains coastal sand dunes, sand beaches with shingle, sea cliffs, bogs, marshes, and humid grassland which supports populations of Narrow mouthed whorl snail.
Sands of Forvie	Sands of Forvie is one of the three sites on the east coast of Scotland which represent the northern part of the UK range of embryonic shifting dunes, shifting "white dunes" and a sequence of decalcified, fixed dune ridges.

Special Protected Areas

Ythan Estuary, Sands of Forvie and Meikle Loch	<p>This site is a complex area that contain the long, narrow estuary of the River Ythan, the Sands of Forvie on the east back of the estuary, the eutrophic Meikle Loch and a marine component covering the area between Aberdeen and Cruden Bay to the North.</p> <p>This site regularly supports populations of European importance of the Sandwich tern, common tern and little tern. The marine component, immediately offshore of the terrestrial area form the foraging zone for both Sandwich terns and little terns. Migratory species of European importance such as the pink footed goose and in excess of 20,000 individual waterfowl such as eider, redshank and lapwing all utilise this site.</p>
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See figure 2 for diagram of sensitive areas within the jurisdiction of Port of Aberdeen.

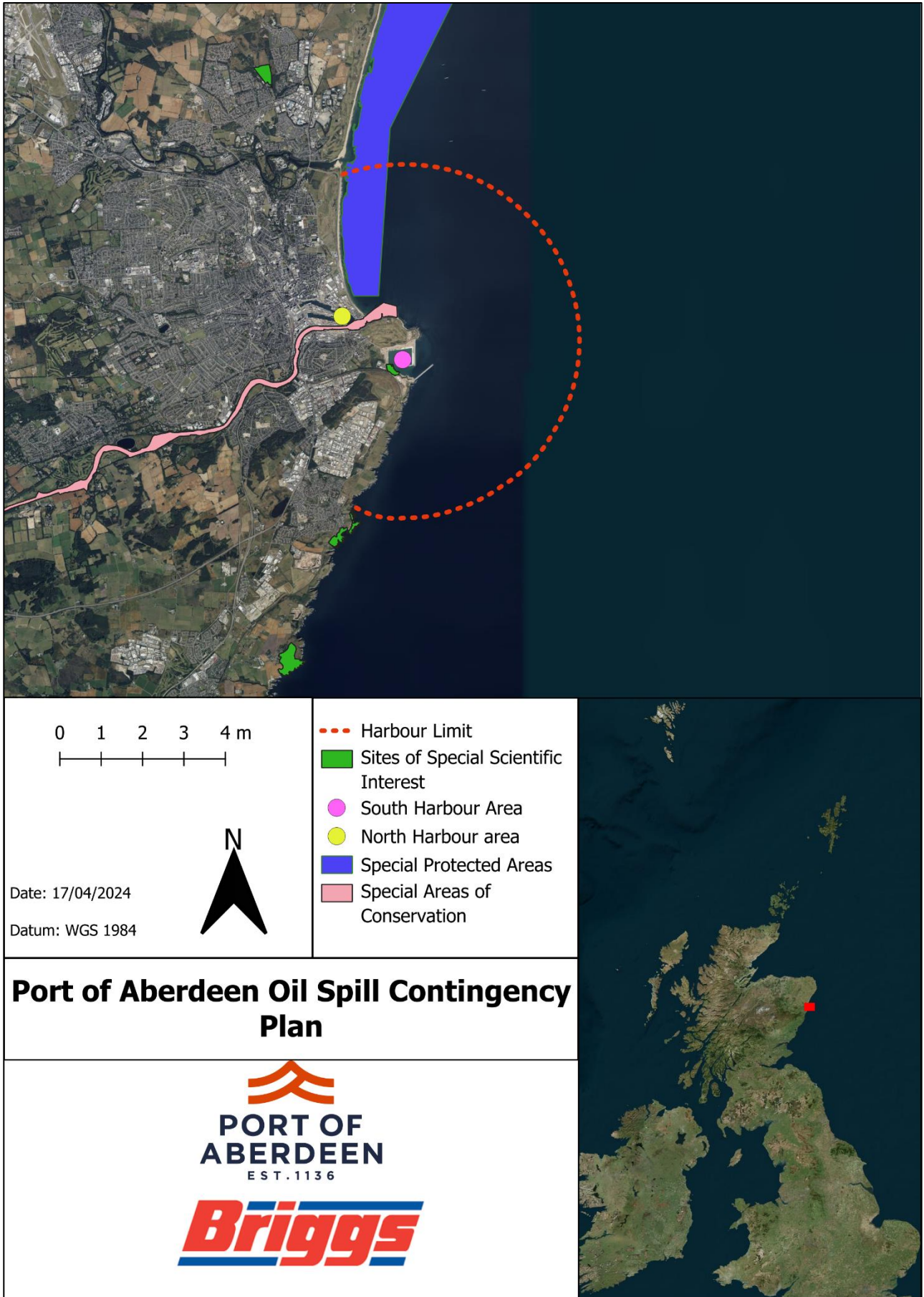


Figure 2: Environmental Sensitivities

17.3 DISPERSANT USE

It is not the Port of Aberdeen policy to use dispersants unless a 'force majeure' situation exists.

Under the provisions of Part 4 of the Marine (Scotland) Act 2010, as read with regulation 15 of The Marine Licensing (Exempted Activities) (Scottish Inshore Region) Order 2011 (SSI 2011 No 204), and regulation 13 of The Marine Licensing (Exempted Activities)(Scottish Offshore Region) Order 2011 (SSI 2011 No. 57), no deposit may be made in the sea of any (a) marine chemical treatment substance, (b) marine oil treatment substance, or (c) marine surface fouling cleaner in an area of the sea where the depth of water is less than 20 metres or within one nautical mile of any such area except with the prior approval of the Scottish Ministers. This includes any area submerged at mean high water springs (e.g. beaches and other inter-tidal zones). Scottish Ministers are the marine licensing authority for internal waters, UK territorial waters, and UK controlled waters adjacent to Scotland, while staff at Marine Directorate act as the first point of contact within the Scottish Government in the event of an oil or chemical spill in these specified sea areas.

For Scottish sea areas out with shallow waters (the 20 metres plus one nautical mile rule) there is no such statutory obligation. Those responsible for responding to oil and chemical spills are however advised that it is UK Government/Scottish Government policy that the appropriate licensing authority should be consulted in advance of all proposals to use treatment substances except under "force majeure" conditions, eg where people's health is at risk, or the safety of a vessel or offshore installation is threatened. It is therefore essential to consult Marine Directorate for advice in advance of treatment operations commencing about the implications for fisheries and the marine environment of using treatment substances except where other arrangements have been approved in advance.

To request approval for dispersant spraying, please contact the Marine Directorate Duty Officer as detailed below:

Duty Officer

Mobile 07770 733 423

E-mail md.spillresponse@gov.scot

(Should normally only be used once initial contact has been established by phone.)

MARINE DIRECTORATE LICENSING OPERATIONS TEAM

Email: md.marinelicensing@gov.scot

SECTION 18: BOOMING AND WASTE DISPOSAL

18.1 BOOMING

In general, spills should be contained in the smallest area possible. This can be achieved by drawing booms across corners of docks or around vessels to capture the oil.

N.B: No recovery or containment of any oils or spilt fluids should be attempted without donning the appropriate Personal Protective Equipment (PPE).

18.2 WASTE DISPOSAL OPERATION

NB: Within this plan waste oil refers to 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:

- a) The Environmental Protection Act 1990;
- b) The Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991;
- c) Control of Pollution (Amendment) Act 1989;
- d) The Waste Management Licensing Regulations 2011;
- e) Special Waste Regulations 1996 (as amended);
- f) The Water Environment (Controlled Activities) (Scotland) Regulations 2011
- g) Landfill (Scotland) Regulations 2003

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.

The Local Authority, NATURE SCOT and SEPA (as the Waste Regulatory Authority) should be consulted on any proposal to dispose or store waste material to ensure that sensitive wildlife areas such as designated sites are not affected. SEPA should also be consulted to ensure compliance with the relevant legislation relating to controlled waste and the protection of controlled waters. In addition HM Revenue and Customs 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 Revenue and Customs; however, the Operator should maintain a careful log on the quantity and nature of the recovered oil.

The options for waste disposal or treatment of material, be it oily liquids or oiled solids are:

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

Each disposal option is examined below with various points for consideration highlighted.

a) Temporary storage / clean, treat, stabilise, recover, reuse

This option aims to store the material temporarily and then, slowly over the ensuing period, to clean or stabilise it and then to recover or reuse it. In most cases this is the best practicable environmental option (BPEO), avoiding the risk of changing what was a marine oil pollution problem into an inland surface pollution problem or groundwater pollution problem. Any waste would be temporarily stored in approved skips in the bunded, hard standing area of Port of Aberdeen.

From temporary storage the contaminated material can be stabilised with cement, lime, clay, organic binders and asphalt. 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 SEPA.

SEPA should be consulted on any intention to temporarily store oil collected on shores and beaches under paragraph 41 Exemption under Schedule 3 of the Waste Management Licensing Regulations 1994. Furthermore, waste oil is likely to be classified as Special Waste and should be treated as such until otherwise determined. It would therefore be subject to the Special Waste Regulations (as amended) 1996. Mixes of crude oil / sand and oil / seawater etc would be considered as Special Waste if the percentage of carcinogenic compounds is above 0.1% or where the waste would be considered as an absolute entry in the European Waste Catalogue (EWC 1994). It is therefore likely that oily beach materials and oil / water liquids would have to be handled as Special Waste.

b) Temporary storage and take to an 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 a Registered Exemption from Waste Management Licensing. Each site will have to be constructed in a specific manner. It is essential that the construction of temporary storage sites be done through close liaison with the Local Authority concerned and SEPA.

SEPA should be consulted on any intention to temporarily store oil collected on shores and beaches under paragraph 41 Exemption under Schedule 3 of the Waste Management Licensing Regulations 1994. Furthermore, waste oil is likely to be classified as Special Waste and should be treated as such until otherwise determined. It would therefore be subject to the Special Waste Regulations (as amended) 1996. Mixes of crude oil / sand and oil / seawater etc would be considered as Special Waste if the percentage of carcinogenic compounds is above 0.1% or where the waste would be considered as an absolute entry in the European Waste Catalogue (EWC 1994). It is therefore likely that oily beach materials and oil / water liquids would have to be handled as Special Waste.

c) 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 onboard 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 of 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 SEPA to ensure it meets with their satisfaction.

Waste oil is likely to be classified as Special Waste and should be treated as such until otherwise determined. It would therefore be subject to the Special Waste Regulations (as amended) 1996. Mixes of crude oil / sand and oil / seawater etc would be considered as Special 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 Special Waste.

d) Direct to appropriate disposal site

All disposal sites require a Waste Management Licence. The licence is specific to the type of material that can be disposed of at the site. There are only a few sites that are licensed to receive organic or chemically polluting materials (includes oily waste). The Landfill (Scotland) Regulations 2003 ban the landfill of liquid wastes including oily waste. There will be a charge levied by the site operator for depositing material at the site. In addition there is landfill tax / levy applied to all waste deposited in a landfill.

Furthermore, waste oil is likely to be classified as Special Waste and should be treated as such until otherwise determined. It would therefore be subject to the Special Waste Regulations (as amended) 1996. Mixes of crude oil / sand and oil / seawater etc would probably be considered as Special 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 Special Waste.

The transportation of Special Wastes generally requires that the Scottish Environment Protection Agency (SEPA) be informed before the waste is removed. This is done by filling in parts A, B and D of a Special Waste Consignment Note, available from the SEPA, which is sent to SEPA 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' SEPA 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 SEPA. 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 SEPA to confirm that the disposal route identified meets with their satisfaction.

18.3 WASTE DISPOSAL ACTION CHECKLIST

Oily Waste Generated from a Shoreline Clean-up Operation

Temporary storage / clean, treat, stabilise, recover, reuse

1. Discuss requirement to establish temporary storage sites along the shoreline with SEPA and the Local Authority.
2. If agreed, identify temporary storage sites in close liaison with SEPA and Local Authority.
3. Instruct Oil Spill Response Contractors to construct temporary storage sites.
4. Confirm treatment methods and ultimate disposal with SEPA and Local Authority.
5. In close liaison with the Oil Spill Response Contractors agree course of action and assist with the necessary arrangements where necessary.
6. Ensure all associated paperwork, i.e. consignment notes, is retained and catalogued.

Temporary storage and appropriate disposal site for burial

1. Discuss requirement to establish temporary storage sites along the shoreline with SEPA and the Local Authority.
2. If agreed, identify temporary storage sites in close liaison with SEPA and Local Authority.
3. Instruct Oil Spill Response Contractors to construct temporary storage sites.
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 SEPA to ensure that the disposal strategy is acceptable.
6. Ensure all associated paperwork, i.e. consignment notes, are retained and catalogued.

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 the waste.
3. Confirm with waste carrier the disposal route and ultimate disposal site.
4. Liaise with SEPA to ensure that the disposal strategy is acceptable.
5. Ensure all associated paperwork, i.e. consignment notes, are retained and catalogued.

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.
3. Liaise with SEPA 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 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 special 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 harbourAll require to be consigned. However, there is no requirement 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 special waste regardless. All waste oils with the exception of edible oils are considered special waste irrespective of their composition, biodegradability, synthetic nature or otherwise. There is no longer any threshold applicable to consider whether they are special waste or not.
8. 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

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