



# Sullom Voe Harbour

## **Oil Spill Contingency Plan**

### **(SVHOSCP)**

*Shetland Islands Council Sullom  
Ports & Harbours Operations  
Port Administration Building  
Sella Ness  
Sullom Voe  
Shetland  
ZE2 9QR  
Tel-01806 244200*

*EnQuest  
Sullom Voe Terminal  
Sullom Voe  
Shetland  
ZE2 9TU  
Tel-01806 243000*

Oct 2024

## Preface

### Introduction

This oil Spill Contingency Plan (OSCP) contains the actions and requirements for Sullom Voe Harbour Authority (SVHA), Shetland Island Council (SIC) and the Sullom Voe Terminal Operator (SVTO) during an oil spill incident. It covers tiered preparedness and response, consistent with the Maritime and Coastguard Agencies (MCA) Oil Pollution Preparedness Response and Co-operation (OPRC) Guidelines for Ports<sup>1</sup>, which is in line with the OPRC Convention<sup>2</sup>.

Guidance is provided to personnel for any oil spill response related to the operations in Sullom Voe Harbour (SVH). It supplies the SVHA and the SVT on-scene, tactical and strategic level teams with the response techniques, communication procedures and information required during an oil spill response.

Under the Sullom Voe Ports and Harbours Agreement (Clause 12(f)), action to deal with any spillage within Sullom Voe and any pollution resulting there from has been delegated to the SVTO. The foregoing does not mean that the SVTO's staff will always carry out the physical operations themselves. They may contract the works to the Harbour Authority, or third parties. The Harbour Authority may also act on its own behalf under which circumstances the SVTO will be advised of the action.

---

<sup>1</sup> CA OPRC Guidelines for Ports – Contingency Planning for Marine Pollution Preparedness and Response (September 2016)

<sup>2</sup> International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC '90)

## Document Management and Control

OSCPs prepared by or on behalf of the Sullom Voe Harbour Authority (SVHA) - Shetland Island Council (SIC) are controlled documents. All copyholders, detailed within the distribution list, are assigned a specific copy number.

This document will:

- Ensure compliance with regulatory requirements and current industry practice
- Reflect exercise/audit findings and recommendations
- Include changes to operational activity and procedures
- Remove any activities which are, or have become obsolete
- Incorporate current contact details

This document has an approved lifespan of 5 years from the initial submission date to the MCA and it shall be submitted in its entirety for re-approval 2 months before that time.

This document will be subject to review on an annual basis. In addition, SIC will review, revise and update the OSCP, for the following reasons:

- Changes to the National Oil Spill Contingency plan
- Changes in ownership or high-level organisation restructuring of SVHA and/or SVTO
- Changes in availability of oil spill response resources
- Changes in logistical support available
- Changes to the oil spill risk assessment
- Changes in ecological or socio-economic sensitivities
- Oil spill exercises and/or incidents

It is the responsibility of the registered copyholder to maintain the accuracy of this document. All updates must be promptly inserted and receipt acknowledged.

**Amendment Log**

| Date              | Amendment No / Items   | Entered By   |
|-------------------|--|--|
| 07 March 2018     | Issue 6:<br>Updates to plan to address MCA comments  | Simon Skinner<br>(Shetland Island Council) /<br>Katie Abbott (EnQuest) |
| 01 August<br>2018 | Rev 1<br>Updates to plan to address MCA, SVTO and<br>SIC issues with the plan.   | Simon Skinner<br>(Shetland Island Council)                             |
| 21 Nov 2022       | Rev 2<br>Updates to plan to relect management<br>structure changes and address changes<br>Reviewed by G Maitland (SIC), R Moore<br>(EnQuest), B Clifton (SIC) & J Evans (SIC)                    | Greg Maitland<br>(Shetland Islands Council)                            |
| 25 Oct 2024       | Rev 3<br>Minor Updates to plan to relect management<br>structure changes and address changes<br><br>Reviewed by G Maitland (SIC), R Moore<br>(EnQuest), Ross Gordon (SIC) & James<br>Milne (SIC) | Ross Gordon<br>(Shetland Islands Council)                              |
|                   |  |  |
|                   |  |  |
|                   |  |  |
|                   |  |  |
|                   |  |  |

## Distribution List

### Holders of Controlled copies

| Copy | Copy Holder   | Location  |
|------|---|---|
| 1    | <b>SVHA – the registered copy holder</b> (hard copy)                                | SVHA ICR  |
| 2    | <b>Executive Manager – Harbour Master</b>   | Harbour Masters Office  |
| 3    | <b>Executive Manager - Ferry &amp; Airport Operations &amp; Port Infrastructure</b> | Executive Managers Office   |
| 4    | Team Leader, Deputy Harbour Master(s) (hard copy)                                   | SVHA, Shetland  |
| 5    | Port Safety Officer (hard copy)   | SVHA, Shetland  |
| 6    | Vessel Traffic Services (VTS) Control Room (hard copy)                              | SVHA, Shetland  |
| 7    | UK Coastguard (electronic copy to Zone 1)   | Coastguard Maritime Rescue Co-ordination Centre (MRCC) – Zone 1<br><a href="mailto:zone1@hmcg.gov.uk">zone1@hmcg.gov.uk</a>   |
| 8    | SIC Emergency Planning Officer (hard copy)  | Shetland  |
| 9    | SVHA Incident Control Room (hard copy)  | Shetland  |
| 10   | MCA Counter Pollution and Salvage Officer (electronic copy)                         | <a href="mailto:HQ_counterpollution@mcga.gov.uk">HQ_counterpollution@mcga.gov.uk</a>  |
| 11   | Duty Officer for Spill Response (electronic copy)                                   | Marine Scotland, Aberdeen<br><a href="mailto:ms.spillresponse@gov.scot">ms.spillresponse@gov.scot</a>   |
| 12   | Oil Spill Response Limited Document Control Dept. (electronic copy)                 | Oil Spill Response Limited (OSRL), Southampton<br><a href="mailto:contingencyplans@oilspillresponse.com">contingencyplans@oilspillresponse.com</a>                              |
| 13   | Duty Officer for Spill Response (electronic copy)                                   | Marine Management Organisation (MMO), Newcastle Upon Tyne   |
| 14   | Incident Management Centre (hard copy)  | Terminal Operator, SVT  |
| 15   | EnQuest Emergency Response Room (hard copy & electronic copy)                       | ERSC, 1 <sup>st</sup> Floor Marine House, Blaikies Quay, Aberdeen, AB11 5EZ<br><a href="mailto:ersc.libraryteam@petrofactraining.com">ersc.libraryteam@petrofactraining.com</a> |
| 16   | EnQuest Operations Control Unit (hard copy & electronic copy)                       | ERSC, 1 <sup>st</sup> Floor Marine House, Blaikies Quay, Aberdeen<br><a href="mailto:ersc.libraryteam@petrofactraining.com">ersc.libraryteam@petrofactraining.com</a>           |
| 17   | EnQuest Back-up Emergency Response Room (hard copy & electronic copy)               | BridgeView, Aberdeen, AB11 5QF<br><a href="mailto:ersc.libraryteam@petrofactraining.com">ersc.libraryteam@petrofactraining.com</a>  |
| 18   | EnQuest HSE Manager (hard copy)   | EnQuest, Level 6, Annan House, Palmerston Road, Aberdeen, AB11 5QP  |
| 19   | EnQuest BMS (electronic copy)   | C/O EnQuest BMS, Annan House<br><a href="mailto:EnQuest.BMS@enquest.com">EnQuest.BMS@enquest.com</a>  |
| 20   | EnQuest CMT (hard copy)   | C/O HSEA Performance Improvement Advisor<br>EnQuest, Level 6, Annan House   |
| 21   | Tug “Dunter” Hard Copy  | SVHA, Shetland  |

---

|    |                         |                |
|----|-------------------------|----------------|
| 22 | Tug "Tystie" Hard Copy  | SVHA, Shetland |
| 22 | Tug "Tirrick" Hard Copy | SVHA, Shetland |
| 23 | Tug "Shalder" Hard Copy | SVHA, Shetland |

**MCA Letter of Approval (Appendix K.1)**

This document has been approved by the MCA and confirmed by that Agency as meeting the requirements of the Merchant Shipping (OPRC Convention) Regulations 1998.

Prepared by an independent oil spill response consultancy in consultation with the SVHA and SVTO and published jointly by the SIC's Sullom Voe Harbour Authority (SVHA) and the Operator of Sullom Voe Oil Terminal.

## Contents

|  |           |
|--|-----------|
| <b>Preface</b> .....   | <b>2</b>  |
| <b>Distribution List</b> .....   | <b>5</b>  |
| <b>Contents</b> .....  | <b>7</b>  |
| <b>Glossary of Terms</b> .....   | <b>11</b> |
| <b>1 Checklists/Action Cards</b> .....   | <b>16</b> |
| 1.1 Vessel Traffic Service (VTS) .....   | 16        |
| Spill Report - Initial Data Collection Sheet .....                                     | 17        |
| 1.2 Harbour Launch/Mooring Boat Crews .....  | 18        |
| 1.3 Duty Pollution Officer .....   | 19        |
| 1.4 Duty Harbour Master (DHM) .....  | 21        |
| 1.5 Harbour Master ( Executive Manager) .....  | 23        |
| 1.6 Executive Manager .....  | 25        |
| <b>2 Tiered Assessment Guidance</b> .....  | <b>27</b> |
| <b>3 Primary Notifications</b> .....   | <b>28</b> |
| 3.1 Alert and Confirmation Procedure .....   | 28        |
| 3.2 Internal Notifications .....   | 29        |
| 3.3 Initial Internal Communications .....  | 30        |
| 3.4 Statutory Notifications .....  | 31        |
| 03000 999 999 .....  | 31        |
| 3.5 Additional Notifications .....   | 32        |
| 07511 754554 .....   | 32        |
| <b>4 POLREP</b> .....  | <b>33</b> |
| 4.1 POLREP Completion Guidance .....   | 34        |
| <b>5 Response Strategy Selection and Resources</b> .....                               | <b>35</b> |
| 5.1 Response Strategy Principles .....   | 35        |
| 5.2 Response Strategy Selection .....  | 36        |
| See Appendix B.6 Shoreline Clean-up Assessment Technique (SCAT) .....                  | 37        |
| B.5 Containment and Recovery .....   | 37        |
| See Appendix B.6 Shoreline Clean-up Assessment Technique (SCAT) .....                  | 37        |
| See Section 5.3 & Appendix B.2 Dispersant Application .....                            | 37        |
| See Appendix B.7 Shoreline Protection .....  | 37        |
| See Appendix B.8 Manual Shoreline Clean-up .....                                       | 37        |
| See Appendix B.3 <a href="#">Spur Boom Deployment</a> .....                            | 37        |
| See Appendix B.4 Assisted Natural Dispersion .....                                     | 37        |
| Note – Sampling should also be conducted throughout a response (see B.9 Sampling ..... | 37        |
| ).   | 37        |

|                          |   |           |
|--------------------------|---|-----------|
| Appendix B.3             | Spur Boom Deployment.....   | 39        |
| Appendix B.4             | Assisted Natural Dispersion.....                                  | 39        |
| B.4                      | Assisted Natural Dispersion.....                                  | 39        |
| Appendix B.5             | Containment and Recovery.....                                     | 39        |
| Appendix B.6             | Shoreline Clean-up Assessment Technique (SCAT).....               | 39        |
| Appendix B.7             | Shoreline Protection.....   | 40        |
| Appendix B.8             | Manual Shoreline Clean-up.....                                    | 40        |
| Section 5.3 Appendix B.2 | Dispersant Application.....                                       | 40        |
| 5.3                      | Dispersant Application.....                                       | 42        |
| 5.4                      | Strategy Defined Resources.....                                   | 44        |
| <b>6</b>                 | <b>Health and Safety.....</b>                                     | <b>50</b> |
| 6.1                      | SIC Health, Safety and Welfare Policy.....                        | 50        |
| 6.2                      | Risk Assessment.....  | 50        |
| <b>7</b>                 | <b>Media Strategy.....</b>  | <b>52</b> |
| 7.1                      | Holding Statement and Press Releases.....                         | 52        |
| 7.2                      | Media Briefing Centre.....  | 53        |
| 7.3                      | Public Enquiries.....   | 53        |
| <b>8</b>                 | <b>Waste Management.....</b>                                      | <b>54</b> |
| 8.1                      | Waste Minimisation.....   | 54        |
| 8.2                      | Considerations for types of oily waste.....                       | 55        |
| 8.3                      | Waste Storage Locations.....                                      | 55        |
| 8.4                      | Waste Transfer.....   | 55        |
| 8.5                      | Waste Disposal Options.....                                       | 56        |
| <b>9</b>                 | <b>Wildlife Response.....</b>                                     | <b>58</b> |
| <b>10</b>                | <b>Ongoing Communications.....</b>                                | <b>60</b> |
| 10.1                     | Internal Incident Communications.....                             | 60        |
| 10.2                     | External Incident Communications.....                             | 61        |
| <b>11</b>                | <b>Oil Spill Modelling.....</b>                                   | <b>63</b> |
| 11.1                     | Modelling Inputs.....   | 63        |
| 11.2                     | Modelling Outputs.....  | 63        |
| <b>12</b>                | <b>Environmental and Socioeconomic Sensitivities.....</b>         | <b>65</b> |
| 12.1                     | Sullom Voe Special Area of Conservation and Designated Areas..... | 65        |
| 12.2                     | Shoreline Types.....  | 65        |
| 12.3                     | Biological Sensitivities.....                                     | 65        |
| 12.4                     | Socioeconomic Sensitivities.....                                  | 66        |
| 12.5                     | Priorities for Protection.....                                    | 66        |
| 12.6                     | Species Sensitivities.....  | 66        |
| <b>13</b>                | <b>Beach Workpacks.....</b>                                       | <b>75</b> |
| <b>14</b>                | <b>Contact Directory – All Contacts.....</b>                      | <b>77</b> |

|              |  |            |
|--------------|--|------------|
| <b>15</b>    | <b>Response Stockpiles</b>                     | <b>83</b>  |
| <b>16</b>    | <b>Statutory Requirements</b>                  | <b>88</b>  |
| 16.1         | Plan and Readiness Responsibilities            | 88         |
| 16.2         | Lead Authorities                               | 89         |
| 16.3         | Consultation                                   | 90         |
| <b>17</b>    | <b>Scope</b>                                   | <b>91</b>  |
| 17.1         | Geographical Boundary                          | 96         |
| 17.2         | Interfacing Plans                              | 97         |
| <b>18</b>    | <b>Operational Oil Spill Risk Assessment</b>   | <b>99</b>  |
| 18.1         | Assessment Approach                            | 99         |
| 18.2         | Risk Assessment Matrix                         | 101        |
| 18.3         | Risk Register (HAZID)                          | 102        |
| <b>19</b>    | <b>Incident Response Organisation</b>          | <b>104</b> |
| 19.1         | Incident Management Response                   | 106        |
| 19.2         | Regional or National Incident Organisation     | 107        |
| 19.3         | Port of Refuge                                 | 109        |
| <b>20</b>    | <b>Authorities Roles and Responsibilities</b>  | <b>111</b> |
| <b>21</b>    | <b>Training and Exercise</b>                   | <b>114</b> |
| 21.1         | Oil Spill Training                             | 114        |
| 21.2         | Oil Spill Exercises                            | 114        |
| <b>A.1</b>   | <b>Communication Log Sheet</b>                 | <b>118</b> |
| <b>B.1</b>   | <b>Response Strategy Guidance</b>              | <b>119</b> |
| B.1.1        | Surveillance and Monitoring                    | 119        |
| B.1.2        | Bonn Agreement Oil Appearance Code (BAOAC)     | 120        |
| <b>B.1.3</b> | <b>Release Size Estimate Guide</b>             | <b>121</b> |
| B.2          | Dispersant Application                         | 122        |
| B.2.1        | Testing Dispersant Efficacy Procedure          | 122        |
| B.2.2        | Record of Dispersant Use                       | 124        |
| B.2.3        | Dispersant Spray Operators Log                 | 125        |
| B.2.4        | Notification of Dispersant Usage               | 126        |
| B.3          | Spur Boom Deployment                           | 127        |
| B.4          | Assisted Natural Dispersion                    | 128        |
| B.5          | Containment and Recovery                       | 129        |
| B.6          | Shoreline Clean-up Assessment Technique (SCAT) | 130        |
| B.7          | Shoreline Protection                           | 131        |
| B.8          | Manual Shoreline Clean-up                      | 132        |
| B.9          | Sampling                                       | 133        |
| B.9.1        | Release Sampling Guide                         | 133        |

---

|            |   |            |
|------------|---|------------|
| B.9.2      | Sampling Labels and Sample Form .....                             | 136        |
| <b>C.1</b> | <b>Approvals and Consultation Letters.....</b>                    | <b>138</b> |
| C.1.1      | Standing Approval Letter.....                                     | 138        |
| C.1.2      | Consultation Statements .....                                     | 142        |
| <b>D.1</b> | <b>Media Holding Statement .....</b>                              | <b>145</b> |
| <b>E.1</b> | <b>Sensitivity Maps .....</b>                                     | <b>146</b> |
| <b>F.1</b> | <b>Sellaness UKSpill Accreditation .....</b>                      | <b>165</b> |
| <b>G.1</b> | <b>Post Exercise/Incident Report Form.....</b>                    | <b>166</b> |
| <b>H.1</b> | <b>Port/Harbour Fast Facts .....</b>                              | <b>168</b> |
| <b>I.1</b> | <b>Material Safety Data Sheets (MSDS).....</b>                    | <b>170</b> |
| <b>J.1</b> | <b>Ship to Ship Transfer Authority.....</b>                       | <b>171</b> |
| <b>K.1</b> | <b>MCA – Approval of Spill Contingency Plan Certificate .....</b> | <b>172</b> |

## Glossary of Terms

| Name               | Description  |
|--------------------|--|
| <b>4WD</b>         | Four Wheel Drive   |
| <b>API</b>         | American Petroleum Institute (gravity)   |
| <b>ARRC</b>        | Automated Rescue and Recovery Craft  |
| <b>BAOAC</b>       | Bonn Agreement Oil Appearance Code   |
| <b>BTO</b>         | British Trust for Ornithology  |
| <b>CDOIF</b>       | Chemical and Downstream Oil Industry Forum   |
| <b>CEH</b>         | Centre for Ecology and Hydrology   |
| <b>MRCC</b>        | Maritime Rescue Co-ordination Centre   |
| <b>CMT</b>         | Crisis Management Team   |
| <b>CCMT</b>        | Corporate Crisis Management Team   |
| <b>COMAH</b>       | Control of Major Accident Hazards  |
| <b>DHM</b>         | Duty Harbour Master  |
| <b>DP</b>          | Dynamic Positioning  |
| <b>EC</b>          | European Community   |
| <b>ECR</b>         | Emergency Control Room   |
| <b>ECT</b>         | Emergency Communication Team   |
| <b>EEZ</b>         | Exclusive Economic Zone  |
| <b>EG</b>          | Environment Group  |
| <b>EMSA</b>        | European Maritime Safety Agency  |
| <b>ERA</b>         | Emergency Response Auxiliary   |
| <b>ERP</b>         | Emergency Response Plan  |
| <b>ERRV</b>        | Emergency Response and Rescue Vessel   |
| <b>ERSC</b>        | Emergency Response Service Centre  |
| <b>ESD</b>         | Emergency Shutdown Device  |
| <b>HM</b>          | Harbour Master or Duty Harbour Master  |
| <b>HMCG</b>        | HM Coastguard  |
| <b>HSE</b>         | Health and Safety Executive  |
| <b>Hydrocarbon</b> | <p>As defined in <b>OPRC 98 Regulations</b>: petroleum in any form including crude oil, fuel oil, sludge oil, oil refuse and refined products.</p> <p>As defined in the <b>OPPC Regulations</b>: liquid oil or substitute liquid oil, including dissolved or dispersed oils or substitute oils that are not normally found in the liquid phase at standard temperature and pressure, whether obtained from plants or animals, or mineral deposits or by synthesis.</p> <p>As defined in <b>OCR Regulations</b>: Oil chemicals, and substitute oil chemicals, controlled under OCR.</p> |
| <b>ICR</b>         | Incident Control Room  |
| <b>IBC</b>         | Intermediate Bulk Container  |

|                |   |
|----------------|---|
| <b>IMO</b>     | International Maritime Organisation   |
| <b>IMT</b>     | Incident Management Team  |
| <b>ISO</b>     | International Organisation for Standardisation  |
| <b>ITOPF</b>   | International Tanker Owners Pollution Federation  |
| <b>JNCC</b>    | Joint Nature Conservation Committee   |
| <b>MarNIS</b>  | Maritime Navigation and Information Services  |
| <b>MARPOL</b>  | International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978                             |
| <b>MATTE</b>   | Major Accident to the Environment   |
| <b>MCA</b>     | Maritime and Coastguard Agency  |
| <b>MSDS</b>    | Material Safety Data Sheet  |
| <b>MEP</b>     | Major Emergency Plan  |
| <b>MLA</b>     | Marine Loading Arm  |
| <b>MMO</b>     | Marine Management Organisation  |
| <b>MRC</b>     | Marine Response Centre  |
| <b>MS</b>      | Marine Scotland   |
| <b>NAFC</b>    | North Atlantic Fisheries College  |
| <b>NEBA</b>    | Net Environmental Benefit Analysis  |
| <b>NHS</b>     | National Health Service   |
| <b>NI</b>      | Nautical Institute  |
| <b>OCR</b>     | <a href="#">SI 2002/No 1355 The Offshore Chemicals Regulations 2002</a>   |
| <b>OCU</b>     | Operations Control Unit (SOSREP's Offshore Monitoring Group)  |
| <b>OGP</b>     | International Association of Oil and Gas Producers  |
| <b>OH</b>      | Office Hours  |
| <b>OIM</b>     | Offshore Installation Manager   |
| <b>OOH</b>     | Out of Office Hours   |
| <b>OPEP</b>    | Oil Pollution Emergency Plan  |
| <b>OPPC</b>    | <a href="#">SI 2005/No 2055 The Offshore Petroleum Activities (Oil Pollution Prevention and Control) Regulations 2005</a>                 |
| <b>OPRC 90</b> | The International Convention on Oil Pollution Preparedness, Response and Co-operation 1990  |
| <b>OPRC 98</b> | <a href="#">SI 1998/No 1056 The Merchant Shipping (Oil Pollution Preparedness, Response and Co-operation Convention) Regulations 1998</a> |
| <b>OSCAR</b>   | Oil Spill Contingency and Response  |
| <b>OSCP</b>    | Oil Spill Contingency Plan  |
| <b>OSRA</b>    | Oil Spill Risk Assessment   |
| <b>OSRL</b>    | Oil Spill Response Limited  |
| <b>PMCC</b>    | Premiam Monitoring Coordination Cell  |
| <b>POLREP</b>  | Marine Pollution Report   |

|                 |   |
|-----------------|---|
| <b>PPE</b>      | Personal Protective Equipment   |
| <b>PSO</b>      | Port Safety Officer or Duty Port Safety Officer   |
| <b>PSV</b>      | Platform Supply Vessel  |
| <b>RSPB</b>     | Royal Society for the Protection of Birds   |
| <b>RSPCA</b>    | Royal Society for the Prevention of Cruelty to Animals  |
| <b>RSV</b>      | Remote Supply Vessel  |
| <b>SAC</b>      | Special Area of Conservation  |
| <b>SAR</b>      | Search and Rescue   |
| <b>SCAT</b>     | Shoreline Clean-up Assessment Technique   |
| <b>SCG</b>      | Strategic Coordinating Group  |
| <b>SCU</b>      | Salvage Control Unit  |
| <b>SEPA</b>     | Scottish Environment Protection Agency  |
| <b>SG</b>       | Specific Gravity  |
| <b>SIC</b>      | Shetland Islands Council  |
| <b>SINTEF</b>   | Norwegian: Stiftelsen for industriell og teknisk forskning<br>English: The Foundation for Scientific and Industrial Research                              |
| <b>SLA</b>      | Service Level Agreement   |
| <b>SNH</b>      | Scottish Natural Heritage   |
| <b>SOPEP</b>    | Shipboard Oil Pollution Emergency Plan (all oil tankers >150 gross register tonnage and vessels >400 gross register tonnage must carry a SOPEP on-board). |
| <b>SOS</b>      | Shoreline Oiling Survey   |
| <b>SOSREP</b>   | Secretary of State's Representative for Maritime Salvage and Intervention   |
| <b>SOTEAG</b>   | Shetland Oil Terminal Environmental Advisory Group  |
| <b>SPA</b>      | Special Protected Area  |
| <b>SRC</b>      | Shoreline Response Centre   |
| <b>SRT</b>      | Strategic Response Team   |
| <b>SSI</b>      | Site of Special Scientific Interest   |
| <b>SSPCA</b>    | The Scottish Society for Prevention of Cruelty to Animals   |
| <b>STAC</b>     | Scientific and Technical Advisory Committee   |
| <b>STOp</b>     | Scientific, Technical and Operational Advice note   |
| <b>STR</b>      | Shoreline Treatment Recommendation  |
| <b>SVHA</b>     | Sullom Voe Harbour Authority  |
| <b>SVHA-ICR</b> | Sullom Voe Harbour Authority – Incident Control Room  |
| <b>SVHOSCP</b>  | Sullom Voe Harbour Oil Spill Contingency Plan   |
| <b>SVT</b>      | Sullom Voe Terminal   |
| <b>SVT-IMT</b>  | Sullom Voe Terminal – Incident Management Team  |
| <b>SVTO</b>     | Sullom Voe Terminal Operator  |
| <b>TCG</b>      | Tactical Co-ordinating Group  |

---

|             |                                  |
|-------------|----------------------------------|
| <b>TWMA</b> | Total Waste Management Alliance  |
| <b>UHF</b>  | Ultra-High Frequency             |
| <b>UKCS</b> | United Kingdom Continental Shelf |
| <b>VHF</b>  | Very High Frequency              |
| <b>VIP</b>  | Very Important Person            |
| <b>VOO</b>  | Vessel of Opportunity            |
| <b>VTS</b>  | Vessel Traffic Service           |
| <b>WCCD</b> | Worst Credible Case Discharge    |
| <b>WCCS</b> | Worst Credible Case Scenario     |

## Section

# 1

# Actions

# 1 Checklists/Action Cards

## 1.1 Vessel Traffic Service (VTS)

| VTS POLLUTION CHECKLIST   |           |  |
|---|-----------|--|
| <b>Responsibilities:</b>  |           |  |
| <ul style="list-style-type: none"> <li>Contributes to safety of life at sea and safety of navigation within the VTS area and approaches.</li> <li>Control movement of all vessels, as necessary</li> <li>Manage communication of incident and support vessels, as appropriate</li> </ul>  |           |  |
| <b>Incident Actions:</b>   |           |  |
| <p>This checklist commences from the point the VTS control room has been alerted to the incident by harbour personnel, terminal operator personnel (through ECR) or a member of the public.</p> <p>See <a href="#">Sections 3.1 - Alert and Confirmation Procedure</a>, <a href="#">3.2 - Internal Notifications</a> and <a href="#">3.4 Statutory Notifications</a> for contact details.</p> |           |  |
| <b>DOCUMENTATION COMPLETE</b>   | <b>TO</b> | Complete - <a href="#">Spill Report - Initial Data Collection Sheet</a> (obtain as much information as possible).  |
|   |           | Start new incident log sheet (see <a href="#">A.1 - Communication Log Sheet</a> ).   |
| <b>ALERT</b>  |           | Notify the Terminal Operator Emergency Control Room (ECR), if not already informed. Request to ECR for Terminal Rep to join harbour launch/pilot boat at Sella Ness or Construction Jetty. |
|   |           | Send harbour launch/pilot boat, with Terminal Rep, to verify the incident and collect samples (where possible - Use VHF Ch10, for spill communications).                                   |
|   |           | Notify the Duty Pollution Officer.   |
|   |           | Notify the Duty Harbour Master (HM).   |
|   |           | Notify HM Coastguard   |
|   |           | Notify the Ship's Agent, if appropriate.   |
| <b>COMMUNICATION</b>  |           | Alert other vessels in the area. If required issue an "All Ships" broadcast.   |
|   |           | Liaise and assist Terminal Operators On-Scene Commander, as required, until Duty Pollution Officer arrives.  |
|   |           | Upon arrival of the Duty Pollution Officer and Duty HM pass on all relevant information.   |
|   |           | Standby to receive and pass messages, as required.   |
|   |           | Call in other managers (i.e. Engineering, Administration, SIC Safety Manager etc.), as required by the Duty HM and/or the Duty Pollution Officer.  |
| <b>RESPONSE ACTIONS</b>   |           | Consider diverting traffic or establishing an exclusion zone.  |
|   |           | Continue to support the response as required by the HM, Duty Pollution Officer.  |
| <b>FINAL ACTIONS</b>  |           | Complete and collate all relevant paperwork and logs, submit them to the HM.   |
|   |           | Attend and take part in debrief.   |
|   |           | Offer support to the incident investigation.   |

## Spill Report - Initial Data Collection Sheet

This form is to be completed by the VTS Control Room on receipt of initial notification of a release and can be used as a reference for notifications.

**Always retain a copy for potential investigative purposes.**

| Report Information  |        |                            |          |                          |
|---|--------|----------------------------|----------|--------------------------|
| Date/Time of Call   |        | Report From:               |          |                          |
| Name of Caller  |        | Position                   |          |                          |
| Contact Number  |        | Alternative Contact Number |          |                          |
| Location of Release   |        |                            |          |                          |
| Date and Time of Incident   |        |                            |          |                          |
| What has been released to sea?  | Crude  | <input type="checkbox"/>   | Other    | <input type="checkbox"/> |
|   | Diesel | <input type="checkbox"/>   | Chemical | <input type="checkbox"/> |
| Quantity Release  |        |                            | tonnes   |                          |
| Is the release ongoing?<br>If yes, release rate?  |        |                            |          | m <sup>3</sup>           |
| Incident Information  |        |                            |          |                          |
| Incident details:   |        |                            |          |                          |
| <ul style="list-style-type: none"> <li>What has happened?</li> <li>What is the current situation?</li> <li>What initial actions have been taken?</li> </ul> |        |                            |          |                          |
| Is the caller at the scene of the incident? If not, where is the information sourced?   |        |                            |          |                          |
| Is there damage? If yes, provide details.   |        |                            |          |                          |
| What is the worst-case release potential? (Maximum inventory and flowrate.)   |        |                            |          |                          |
| Pollution appearance (rainbow, sheen etc.).   |        |                            |          |                          |
| What are the dimensions of the visible release? (Length, width and coverage.)   |        |                            |          |                          |
| Is shoreline impact likely? If yes, where and when?   |        |                            |          |                          |
| Wind Speed  |        | Wind Direction             |          |                          |
| Sea State   |        | Wave Height                |          |                          |
| Response Information  |        |                            |          |                          |
| Has the Terminal Operator Response Team been mobilised? If so, where and when?  |        |                            |          |                          |
| Other Information   |        |                            |          |                          |
| What is the agreed time to receive next update and/or additional information?   |        |                            |          |                          |

## 1.2 Harbour Launch/Mooring Boat Crews

### HARBOUR LAUNCH/MOORING BOAT POLLUTION CHECKLIST

#### Responsibilities:

- To collect the Terminal Operators Representative
- To confirm and verify oil on water and report to the VTS/Duty Pollution Officer

#### Incident Actions:

This checklist commences from the point the Harbour Launch/Mooring Boat Crew has been alerted to the incident by the VTS Control Room.

See [Sections 3.1 - Alert and Confirmation Procedure](#) and [3.2 - Internal Notifications](#) for further details.

|                         |  |  |
|-------------------------|--|--|
| <b>COMMUNICATION</b>    | Select VHF Ch10 for spill communication.   |  |
|                         | Update the Duty Pollution Officer or VTS on the status of the spill, as required.  |  |
| <b>RESPONSE ACTIONS</b> | Collect the Terminal Rep. from Sella Ness or the Construction Jetty.   |  |
|                         | Go directly to the scene of the incident and report to VTS the following: <ul style="list-style-type: none"> <li>• Confirm spill location</li> <li>• Confirm if the leak is controlled or ongoing</li> <li>• Confirm oil type (if apparent)</li> <li>• Estimate size and extent (dimensions – width, length, coverage)</li> <li>• Confirm pollution appearance (black oil, metallic, rainbow)</li> <li>• Spill direction of travel</li> <li>• Confirm any shoreline impact (and location)</li> </ul> |  |
|                         | Stay on scene to continue to monitor and evaluate or perform assisted natural dispersion (i.e. prop wash), as directed by Duty Pollution Officer.  |  |
| <b>FINAL ACTIONS</b>    | Complete and collate all relevant paperwork and logs, submit them to the HM.   |  |
|                         | Attend and take part in debrief.   |  |
|                         | Offer support to the incident investigation.   |  |

### 1.3 Duty Pollution Officer

#### DUTY POLLUTION OFFICER POLLUTION CHECKLIST

##### Responsibilities:

- Take charge of the SIC on-scene activity in the clean-up effort.
- In the absence of the Duty Harbour Master, assume their role and responsibilities (see [Section 1.4 - Duty Harbour Master \(DHM\)](#)) until their arrival.
- Classify the spill incident tier level
- Manage/assist in communication with SIC managers and third party contacts, as appropriate
- Ensure clean-up personnel are aware of the hazards and precautions (see [Section 6 - Health and Safety](#))

##### Incident Actions:

This checklist commences from the point the Duty Pollution Officer has been alerted to the incident by the VTS Control Room.

See [Sections 3.1 - Alert and Confirmation Procedure](#), [3.2 - Internal Notifications](#) and [3.4 Statutory Notifications](#) for contact details.

|                               |    |  |  |
|-------------------------------|----|--|--|
| <b>DOCUMENTATION COMPLETE</b> | TO | Start new incident log sheet (see <a href="#">A.1 Communication Log Sheet</a> ).   |  |
|                               |    | Using the <a href="#">Tiered Assessment Guidance</a> Form (see <a href="#">Section 2</a> ), assess the size of the incident.   |  |
| <b>ALERT</b>                  |    | Notify the HM and Terminal Operator On-Scene Commander of the Spill Tier (1, 2 or 3).  |  |
|                               |    | Notify the Port Safety Officer as required.  |  |
|                               |    | Notify the following external contacts, as required: <ul style="list-style-type: none"> <li>• Maritime and Coastguard Agency (MCA)</li> <li>• Scottish Natural Heritage (SNH)</li> <li>• Marine Scotland (MS)</li> <li>• Scottish Environment Protection Agency (SEPA)</li> <li>• Shetland Oil Terminal Environmental Advisory Group (SOTEAG)</li> <li>• Emergency Services (Injury accident and Tier 3 response)</li> </ul> |  |
|                               |    | Agree details with SVT and complete the Pollution Report and send to HM Coastguard, SVT Duty Incident Manager, SVT-Media and ERSC (see <a href="#">Section 4 - POLREP</a> ).   |  |
| <b>COMMUNICATION</b>          |    | Upon notification, receive all relevant information and reports from the VTS Operator.   |  |
|                               |    | Contact the SIC on-scene harbour launch/pilot boat, to receive an update on the spill status – VHF Ch10.   |  |
|                               |    | Proceed to the incident and receive an update from the Terminal Operator On-Scene Commander. Continue communication and assistance, as required.   |  |
|                               |    | Provide regular information into SVT-IMT and/or SVHA-ICR (if mobilised), regarding assets (equipment and personnel) deployed and available.  |  |
|                               |    | Update internal and external contacts (above), as required.  |  |

|                         |  |  |
|-------------------------|--|--|
| <b>RESPONSE ACTIONS</b> | Discuss and agree response options with the SVTO On-Scene Commander and implement as required otherwise act as SIC On-Scene Commander and discuss response options with the Terminal Operator On-Scene Commander, if available.  |  |
|                         | If a Tier 2 or 3 Incident - The Duty HM or Duty Pollution Officer should mobilise to the SVHA-ICR at Sella Ness in the Port Administration Building or the SVT-IMT Room (the ECR) as required.<br>Either the Duty Pollution Officer or Duty HM to remain on-scene, the other to reside in the appropriate IMT / ICR and maintain communications with internal and external contacts. |  |
|                         | Continue to re-assess the size of the incident (Tier, see <a href="#">Section 2</a> ), notify the Duty HM and SVT-IMT of any changes.  |  |
|                         | Continue to provide support and oversight to the Terminal Operator On-Scene Commander as required.   |  |
|                         | Assess the situation with respect to health and safety, and discuss with the SIC Safety Manager, if mobilised.   |  |
|                         | Ensure personnel involved in the clean-up are aware of the hazards, and the precautions to be taken (see <a href="#">Section 6 - Health and Safety</a> ).  |  |
|                         | Ensure waste management (i.e. prevention, minimisation, segregation, reuse, recovery and disposal) is being accounted for by the SVT-IMT (see <a href="#">Section 8</a> ), from an early stage of the response.  |  |
|                         | Where possible, obtain 3 samples of pollutant (these should be witnessed) – see <a href="#">Appendix B.9 Sampling</a> for further details.   |  |
|                         | If required, supervise and co-ordinate Shoreline Supervisors.  |  |
|                         | For non-oil spills, support the SIC Environmental Health Officer   |  |
| <b>FINAL ACTIONS</b>    | Complete and collate all relevant paperwork and logs, submit them to the HM.   |  |
|                         | Attend and take part in debrief.   |  |
|                         | Offer support to the incident investigation.   |  |

## 1.4 Duty Harbour Master (DHM)

### DUTY HARBOUR MASTER (DHM) POLLUTION CHECKLIST

#### Responsibilities:

- Take primacy during the incident response, acting as the SIC Incident Commander (IC) until relieved by the Harbour Master or Executive Manager as appropriate.
- In the absence of the Duty Pollution Officer, also assume their role and responsibilities (see [Section 1.3 - Duty Pollution Officer](#)) until their arrival.
- If a Tier 2 or 3 Incident – establish the SVHA-ICR in the Port Administration Building and staff appropriately.
- Ensure open communications with the SVT-IMT
- Manage communication with SIC managers and third party contacts, as appropriate
- Consider if advisable to request suspension of terminal loading operations
- Provide SIC's professional presence

#### Incident Actions:

This checklist commences from the point the HM has been alerted to the incident by the VTS Control Room.

See [Sections 3.1 Alert and Confirmation Procedure](#), [3.2 Internal Notifications](#) and [3.4 Statutory Notifications](#) for contact details.

|                               |    |  |  |
|-------------------------------|----|--|--|
| <b>DOCUMENTATION COMPLETE</b> | TO | Start new incident log sheet (see <a href="#">A.1 Communication Log Sheet</a> ).   |  |
| <b>ALERT</b>                  |    | The Duty HM should notify the following SVHA internal contacts through VTS: <ul style="list-style-type: none"> <li>• Harbour Master</li> <li>• Executive Manager</li> </ul> The Duty Harbour Master should also determine the need to notify and/or mobilise other managers or personnel of the Harbour Authority to assist as required. |  |
|                               |    | If a Tier 2 or 3 Incident the Duty Harbour Master should notify the following SIC internal contacts: <ul style="list-style-type: none"> <li>• Emergency and Resilience Planning Officer</li> <li>• SIC Environmental Health Officer</li> <li>• SIC Safety Manager</li> </ul>   |  |
| <b>COMMUNICATION</b>          |    | Upon notification, receive all relevant information and reports from the VTS Operator and/or Duty Pollution Officer – including the Spill Tier level.  |  |
|                               |    | Update external and internal contacts, as required (see <a href="#">Section 3.2</a> and <a href="#">3.4</a> ).   |  |
|                               |    | Ensure communications with the SVT-IMT are maintained, and request SVT-IMT liaison to be deployed to SHVA-ICR (If SVHA-ICR mobilised)  |  |
| <b>RESPONSE ACTIONS</b>       |    | The Duty HM takes overall authority during the incident response and acts as SVHA-ICR IC, until relieved (by the Harbour Master or Executive Manager, as appropriate). Discuss response options with the SVT-IMT and Duty Pollution Officer.   |  |
|                               |    | If Tier 1 incident: Discuss response options with the SVT-IMT and Duty Pollution Officer.  |  |



|                      |   |  |
|----------------------|---|--|
|                      | <p>If Tier 2 or 3: Mobilise to SVHA-ICR at Sella Ness in the Port Administration Building or the SVT-IMT Room (the ECR) as required.</p> <p>Either the Duty HM or Duty Pollution Officer or to remain on-scene, the other to reside in the appropriate IMT / ICR and maintain communications with internal and external contacts.</p> |  |
|                      | <p>If Tier 2 or 3: Establish SVHA-ICR in the Port Administration Building at Sella Ness and staff appropriately.</p>  |  |
|                      | <p>Consider if it is advisable to suspend all cargo operations and disconnect loading arms, instruct SVT-IMT of decision.</p>   |  |
|                      | <p>Provide SIC's professional presence for media briefings and technical committees (or similar), as required.</p>  |  |
| <b>FINAL ACTIONS</b> | <p>Complete and collate all relevant paperwork and logs, ensure all are submitted to the SIC Administration Manager (or designate), for the records.</p>  |  |
|                      | <p>Run and organise the incident debrief. (in the event of the HM not being available)</p>  |  |
|                      | <p>Offer support to the incident investigation.</p>   |  |

## 1.5 Harbour Master ( Executive Manager

### HARBOUR MASTER (HM) POLLUTION CHECKLIST

#### Responsibilities:

- Take overall responsibility during the incident response as the SIC Incident Commander (IC)
- In the absence of the Executive Manager, also assume their role and responsibilities until their arrival.
- Ensure open communications with the Terminal Operator IMT
- Manage communication with SIC managers and third party contacts, as appropriate
- Consider if advisable to suspend terminal loading operations
- Provide SIC's professional presence for media briefings and committees as required

#### Incident Actions:



This checklist commences from the point the HM has been alerted to the incident by the Duty Harbour Master.

See [Sections 3.1 - Alert and Confirmation Procedure](#), [3.2 - Internal Notifications](#) and [3.4 Statutory Notifications for contact details](#).

|                               |    |   |  |
|-------------------------------|----|---|--|
| <b>DOCUMENTATION COMPLETE</b> | TO | Start new incident log sheet (see <a href="#">A.1 Communication Log Sheet</a> ).  |  |
|                               |    | For Tier 1 Spills – Complete (or delegates), approve and issue all holding statements (see <a href="#">Section 7 Media Strategy</a> ).  |  |
|                               |    | For Tier 2/3 Spills – Complete (or delegate completion) of all holding statements (see <a href="#">Section 7 Media Strategy</a> ), for approval by the Executive Manager.       |  |
| <b>ALERT</b>                  |    | The Harbour Master should notify SIC internal contacts as per Executive Manager Action Checklist as required.   |  |
|                               |    | Mobilise other managers or personnel of the Harbour Authority to assist as required.  |  |
| <b>COMMUNICATION</b>          |    | Upon notification, receive all relevant information and reports from the Duty Harbour Master and/or Duty Pollution Officer – including the Spill Tier level.                    |  |
|                               |    | Update external and internal contacts, as required (see Section 3.2 and 3.3).   |  |
|                               |    | Ensure communications with the SVT-IMT are maintained.  |  |
| <b>RESPONSE ACTIONS</b>       |    | The Harbour Master takes overall authority during the incident response as the SVHA-ICR IC. Discuss response options and develop strategies with the SVT-IMT.                   |  |
|                               |    | Follow the SIC's Major Emergency Plan if applicable.  |  |
|                               |    | Consider if it is advisable to suspend all cargo operations and disconnect loading arms, instruct SVT-IMT of decision.  |  |
|                               |    | For Tier 1 incidents the Harbour Master should complete (or delegate its completion), approve and issue all holding statements (see <a href="#">Section 7 Media Strategy</a> ). |  |
|                               |    | Provide SIC's professional presence for media briefings and committees as required.   |  |



|                      |   |  |
|----------------------|---|--|
| <b>FINAL ACTIONS</b> | Complete and collate all relevant paperwork and logs, ensure all are submitted to the SIC Administration Manager (or designate), for the records. |  |
|                      | Run and organise the incident debrief for SVHA-ICR and participate in incident debrief at the SVT-IMT   |  |
|                      | Initiate or offer support to the incident investigation.  |  |

## 1.6 Executive Manager

\*Executive Manger – Harbour Master & Executive Manger Ferry & Airport Operations & Port Infrastructure interchangeable dependant on staffing and scope of the incident

### PORTS & HARBOURS - EXECUTIVE MANAGER POLLUTION CHECKLIST

#### Responsibilities:

- Notify, discuss and communicate with additional SIC staff, as required
- Provide response support as requested by the Duty HM
- Assume incident commander role from (duty) HM, if appropriate
- Provides SIC's managerial presence for media briefings and committees as required.

#### Incident Actions:



This checklist commences from the point the Executive Manager is notified by the Duty HM.

**See Sections 3.1 Alert and Confirmation Procedure and 3.2 Internal Notifications**

|                               |           |   |  |
|-------------------------------|-----------|---|--|
| <b>DOCUMENTATION COMPLETE</b> | <b>TO</b> | Start new incident log sheet (see <a href="#">A.1 Communication Log Sheet</a> ).  |  |
|                               |           | For Tier 2/3 Spills - Approve and issue all holding statements (see <a href="#">Section 7 Media Strategy</a> ).   |  |
| <b>ALERT (as required)</b>    |           | Notify SIC Chief Executive.   |  |
|                               |           | Notify SIC Director of Infrastructure.  |  |
|                               |           | Notify Chair of Harbour Board.  |  |
|                               |           | Notify SIC Head of Finance.   |  |
|                               |           | Notify SIC Safety and Risk Insurance Section.   |  |
|                               |           | Notify SIC Legal and Administration.  |  |
| <b>COMMUNICATION</b>          |           | Notify SIC Administration Manager, if not already alerted by Duty Pollution Officer or Duty HM.   |  |
|                               |           | Provide support to the (Duty) HM and / or the SVHA-ICR (if formed).   |  |
| <b>RESPONSE ACTIONS</b>       |           | Maintain internal contacts above (see <a href="#">Section 3.2</a> ), as required.   |  |
|                               |           | Follow the Council's Major Emergency Plan.  |  |
|                               |           | Assume role of SIC IMT incident commander from HM, if appropriate.  |  |
|                               |           | For Tier 2 or 3 incidents the Executive Manager - Ports and Harbours Operations should approve and issue all holding statements (see <a href="#">D.1 Media</a> ). |  |
|                               |           | Provides SIC's Managerial presence for media briefings and committees as required.  |  |

|                             |  |  |
|-----------------------------|--|--|
|                             | <p>Ensure the Administration Manager does the following:</p> <ul style="list-style-type: none"> <li>• Setup expense account for incident expenses</li> <li>• The setup of the SVHA-ICR at Sella Ness in the Port Administration Building</li> <li>• Adequate clerical resources (personnel and equipment) are available</li> <li>• Maintain and collated copies of all incident documentation within the SVHA-ICR.</li> <li>• Maintain an incident log.</li> </ul> |  |
| <p><b>FINAL ACTIONS</b></p> | <p>Complete and collate all relevant paperwork and logs, submit for the incident records.</p>  |  |
|                             | <p>Attend and take part in debrief.</p>  |  |
|                             | <p>Offer support to the incident investigation.</p>  |  |

## 2 Tiered Assessment Guidance

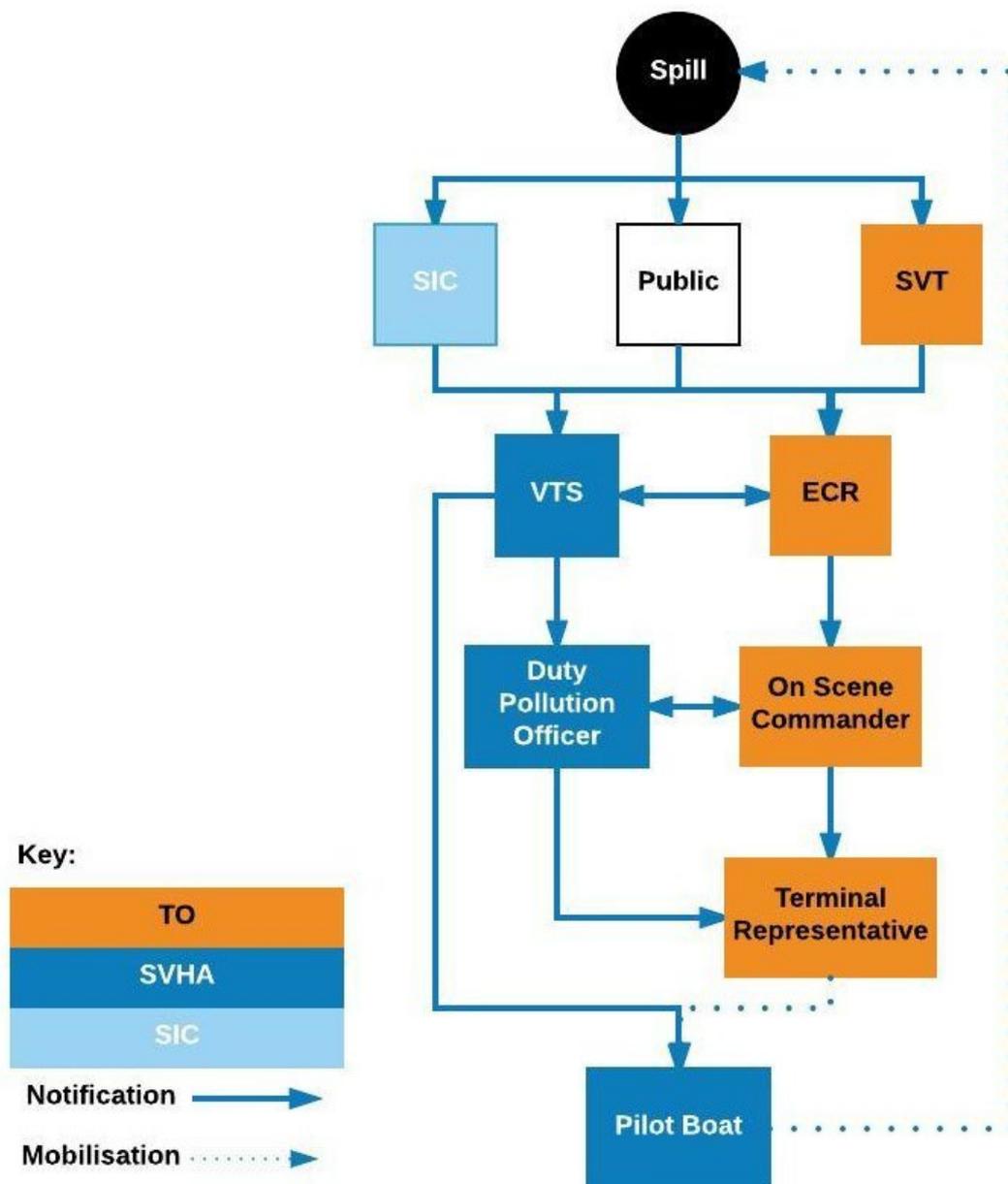
This guide supports determination of the appropriate Tier response level for a hydrocarbon release to sea and aids the decision-making process. The method of response will depend upon several factors including (but not limited to): the type incident in question, volume of hydrocarbon, hydrocarbon type, time of year, weather, sea state and resource availability. See [Section 5.4.1](#) for the definitions of tiered response.

| TIER SELECTION GUIDE  |                          |                          |
|---|--------------------------|--------------------------|
| Tick the boxes next to all the criteria that apply. Add up the total number of ticks per Tier. Report the Tier size as the one with the most ticks. If there are an equal number of ticks in two Tiers, select the higher of the Tiers. |                          |                          |
| <b>Tier 1</b>   |                          |                          |
| <b>Slick Appearance</b>   | Silver/rainbow sheen     | <input type="checkbox"/> |
| <b>Potential Release Size</b>   | Small                    | <input type="checkbox"/> |
| <b>Ongoing?</b>   | No                       | <input type="checkbox"/> |
| <b>Part of Wider Emergency?</b>   | No                       | <input type="checkbox"/> |
| <b>Shoreline Impact Likely?</b>   | No                       | <input type="checkbox"/> |
| <b>Hydrocarbon Persistent?</b>  | No                       | <input type="checkbox"/> |
| <b>Tier 2</b>   |                          |                          |
| <b>Slick Appearance</b>   | Silver/rainbow sheen     | <input type="checkbox"/> |
| <b>Potential Release Size</b>   | Medium                   | <input type="checkbox"/> |
| <b>Ongoing?</b>   | No                       | <input type="checkbox"/> |
| <b>Part of Wider Emergency?</b>   | No                       | <input type="checkbox"/> |
| <b>Shoreline Impact Likely?</b>   | Yes                      | <input type="checkbox"/> |
| <b>Hydrocarbon Persistent?</b>  | Yes                      | <input type="checkbox"/> |
| <b>Tier 3</b>   |                          |                          |
| <b>Slick Appearance</b>   | Metallic sheen/black oil | <input type="checkbox"/> |
| <b>Potential Release Size</b>   | Large and/or ongoing     | <input type="checkbox"/> |
| <b>Ongoing?</b>   | Yes                      | <input type="checkbox"/> |
| <b>Part of Wider Emergency?</b>   | Yes                      | <input type="checkbox"/> |
| <b>Shoreline Impact Likely?</b>   | Yes                      | <input type="checkbox"/> |
| <b>Hydrocarbon Persistent?</b>  | Yes                      | <input type="checkbox"/> |

### 3 Primary Notifications

#### 3.1 Alert and Confirmation Procedure

Use the flowchart below (**Figure 1**) to determine the initial alert procedures for internal reporting and confirmation of oil on water. This communication will be undertaken using any communications method available, VHF Channel 10 is to be used by Spill Response staff as required. The full notification responsibilities are outlined in the **Checklists/Action Cards**, in **Section 1**.



**Figure 1 – Initial Internal Reporting and Confirmation**

Note – the confirmation of oil on water (spill location, extent and potential impact) is performed jointly by SVHA and the SVTO – with a SVTO representative on-board a SVHA pilot boat.

### 3.2 Internal Notifications

The flowchart in Figure 2, shows the internal notification procedure within the SVHA, SIC and the SVTO organisations.

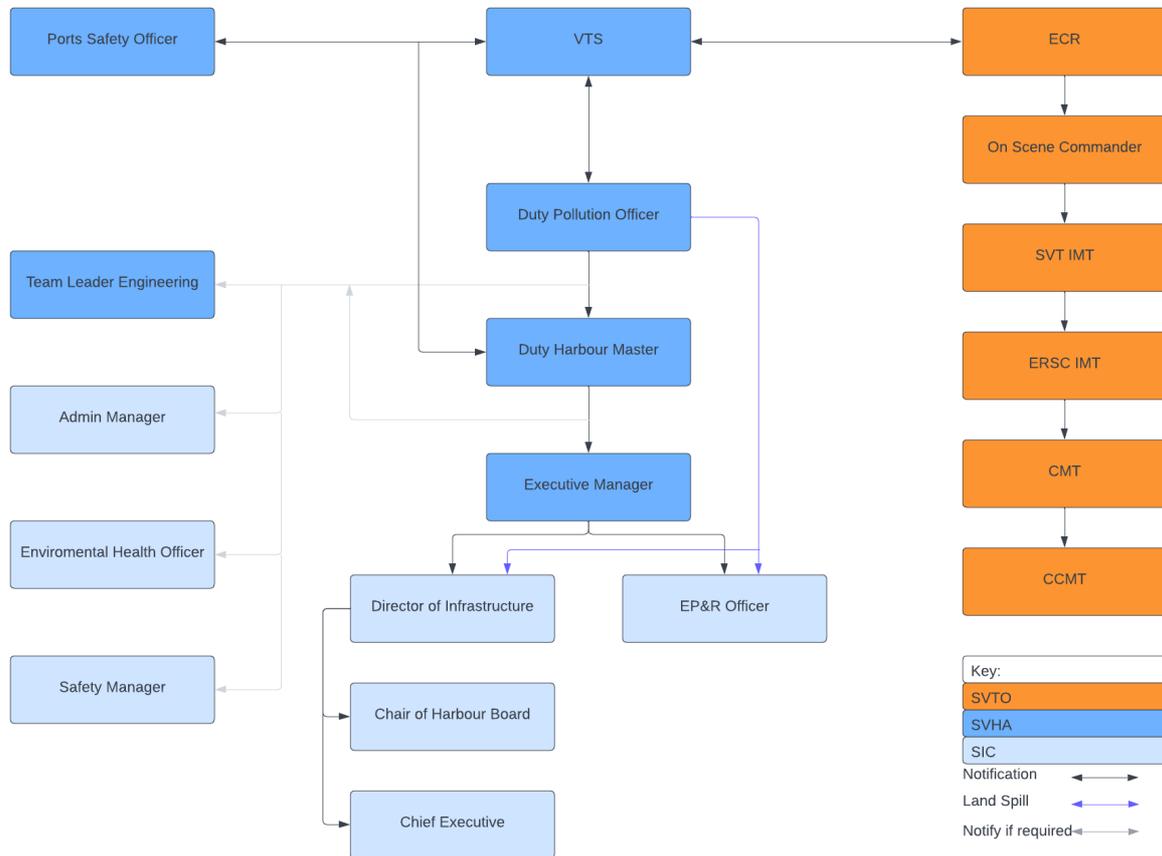


Figure 2 – Internal Notifications

### 3.3 Initial Internal Communications

Following the initial notifications described, internal incident communications will be ongoing and external communications with the authorities, media and stakeholders may also occur depending on the incident and associated circumstances.

| Contact  | Release Criteria in Tonnes  |   |  | Tel No  | VHF / Email  |
|--|---|---|--|---|--|
|  | Tier 1  | Tier 2  | Tier 3   |   |  |
| <b>Internal SVHA and SIC Notification Requirements</b> |   |   |  |   |  |
| VTS  |       |       |       | 01806 244280  | Channel 10<br><a href="mailto:sullomvoevts@shetland.gov.uk">sullomvoevts@shetland.gov.uk</a>         |
| Ports Incident Control Room (ICR)                      |       |       |       | 01595 807000  | Channel 10<br><a href="mailto:incident.control@shetland.gov.uk">incident.control@shetland.gov.uk</a> |
| Duty Pollution Officer                                 |     |     |     | Contacted through VTS                                       | Channel 10   |
| Duty HM  |   |   |   | Contacted through VTS                                       | Channel 10   |
| Executive Manager                                      |    |    |   | Contacted through VTS                                       | Channel 10   |
| <b>Internal SVTO Notification Requirement</b>          |   |   |  |   |  |
| SVT ECR  |   |   |   | 01806 243366  | Channel 10   |
| SVT IMT  |    |    |   | SVT internal notification procedure                         |  |
| EnQuest Aberdeen IMT via ERSC                          |   |   |   | SVT internal notification procedure<br>01224 348000 (24 hr) | A copy of the POLREP to ERSC<br><a href="mailto:mh-eroduty@ersc-uk.com">mh-eroduty@ersc-uk.com</a>   |
| CMT  |    |    |   | EnQuest internal notification procedure                     |  |

### 3.4 Statutory Notifications

The following notifications can to be undertaken by the Duty Pollution Officer, the Duty HM or their delegate and also be made by the SVT/ERSC IMT as required.

| Contact   | Release Criteria in Tonnes  |   |   | Tel No  | Email or Fax   |
|---|---|---|---|---|--|
|   | Tier 1  | Tier 2  | Tier 3  |   |  |
| <b>HM Coastguard, Maritime Rescue Co-ordination Centre (MRCC)</b><br>HMG will inform Pollution & Salvage Branch as Required |   |       |       | 0344 3820711 (Routine)<br>999 / 0344 3820701 (Emergency) <sup>3</sup> | Email POLREP to<br><a href="mailto:zone1@hmcg.gov.uk">zone1@hmcg.gov.uk</a>    |
| <b>Shetland Emergency Services – Ambulance</b>  | If required   | If required   | If required   | 999 /   |  |
| <b>Shetland Emergency Services – Fire and Rescue</b>  |    |    |    | 999   |  |
| <b>Shetland Emergency Services – Gilbert Bain Hospital</b>  |    |    |    | 01595 743000  |  |
| <b>Shetland Emergency Services – Police</b>   |    |    |    | 999 / 101   |  |
| <b>Marine Scotland</b>  |    |   |   | 07770 733423  | <a href="mailto:ms.spillresponse@gov.scot">ms.spillresponse@gov.scot</a>       |
| <b>Scottish Environment Protection Agency (SEPA)</b>  |    |   |   | 0800 80 70 60   | <a href="mailto:epishetland@sepa.org.uk">epishetland@sepa.org.uk</a>           |
| <b>Nature Scot</b>  |    |    |   | 0131 316 2610   | <a href="mailto:marinepollution@nature.scot">marinepollution@nature.scot</a>   |
| <b>Shetland Oil Terminal Environmental Advisory Group (SOTEAG)</b>  |    |    |    | Dr Rebecca Kinnear (Executive Officer) - 01334 463613                 | <a href="mailto:soteag@st-andrews.ac.uk">soteag@st-andrews.ac.uk</a>           |
| <b>SSPCA</b>  | In a Tier 2 or 3 incident where wildlife or birdlife are likely to be effected  | 03000 999 999.  |   | <b>SSPCA</b>  | In a Tier 2 or 3 incident where wildlife or birdlife are likely to be effected |
| <b>Health &amp; Safety Executive, Edinburgh</b>   |    |    |    | 0845 300 9923 (OH)<br>0151 922 9235 (OOH)                             |  |

<sup>3</sup> NOTE: the emergency number is for life at risk not pollution incidents

### 3.5 Additional Notifications

Additional notifications may be required depending on the location of the release and its actual/potential direction of travel and potential impact locations.

| Contact  | Notes  | Tel No   | Email or Fax   |
|--|--|--|--|
| <b>Salmon Scotland</b>   | In a Tier 1, 2 or 3 when aquaculture is at risk of being effected.       | 0131 202 6621  | <a href="mailto:enquiries@salmonsotland.co.uk">enquiries@salmonsotland.co.uk</a>     |
| <b>Royal Society for the Protection of Birds (RSPB) Shetland</b> | In a Tier 1, 2 or 3 when birds are at risk.                              | 01950 460800 (OH)<br>01950 431506 / 07721 759823 (OOH) | N/A  |
| <b>The Shetland Fishermen's Association</b>                      | In a Tier 2 or 3 when fisheries are at being risk of being effected.     | 01595 694429   | <a href="mailto:info@shetlandfishermen.com">info@shetlandfishermen.com</a>           |
| <b>Shetland Bird Club</b>  | In a Tier 2 or 3 when birds are at risk.                                 | 01595 880 450  | <a href="mailto:chairman@shetlandbirdclub.co.uk">chairman@shetlandbirdclub.co.uk</a> |
| <b>Shetland Shellfish Management Organisation</b>                | In a Tier 2 or 3 when shell fishing areas are at risk of being effected. |  |  |
|  |  |  |  |
| <b>Shetland Oiled Wildlife Network</b>                           | In a Tier 1, 2 or 3 when birds or mammals are at risk.                   | 07511 754554   | <a href="mailto:wtsm@st-andrews.ac.uk">wtsm@st-andrews.ac.uk</a>                     |

## 4 POLREP

# PolRep

Shetland Islands Council  
Ports and Harbours Operations  
Sella Ness  
Shetland  
ZE2 9QR

|   |  |
|---|--|
| <b>To:</b> ZONE 1 MRCC<br>Email: <a href="mailto:zone1@hmcg.gov.uk">zone1@hmcg.gov.uk</a><br><b>Fax:</b> 01595 693634<br><b>Alternate:</b> 01595 694810   | <b>From:</b> PORTS AND HARBOURS OPERATIONS<br><b>Tel:</b> 01806 244280/1/2<br><b>Fax:</b> 01806 242118<br>Email <a href="mailto:sullomvoevts@shetland.gov.uk">sullomvoevts@shetland.gov.uk</a> |
| <b>Cc:</b> TO SVT ICR Media Officer, SVT Duty Incident Manager & Aberdeen ERSC<br><a href="mailto:icr.mgr@enquest.com">icr.mgr@enquest.com</a> ; <a href="mailto:mh-eroduty@ersc-uk.com">mh-eroduty@ersc-uk.com</a><br><b>Email:</b> <a href="mailto:SVTICRMedia@enquest.com">SVTICRMedia@enquest.com</a> ; <a href="mailto:icr.mgr@enquest.com">icr.mgr@enquest.com</a> ; <a href="mailto:mh-eroduty@ersc-uk.com">mh-eroduty@ersc-uk.com</a><br><b>Fax:</b> 01806 243510 |  |
| Date / Time   |  |
| Number of pages including this cover sheet  |  |
| SUBJECT:  |  |
| a) CLASSIFICATION   |  |
| b) DATE / TIME & NAME OF OBSERVER   |  |
| c) POSITION & EXTENT  |  |
| d) TIDE and WIND  |  |
| e) WEATHER & SEA STATE  |  |
| f) CHARACTERISTICS  |  |
| g) SOURCE and CAUSE   |  |
| h) VESSELS IN AREA  |  |
| j) PHOTOGRAPHS / SAMPLES  | Y / N  |
| k) REMEDIAL ACTION TAKEN/ INTENDED  |  |
| l) FORECAST   |  |
| m) NAMES OF OTHERS INFORMED   |  |
| n) ANY OTHER RELEVANT INFO  |  |

## 4.1 POLREP Completion Guidance

- A. Classification – of Report:
  - i. Doubtful
  - ii. Probable
  - iii. Confirmed
- B. Date and Time – pollution observed / reported and identity of observer / reporter
- C. Position and Extent of Pollution – by latitude and longitude if possible, state range and bearing from some prominent landmark and estimated amount of pollution, e.g. size of polluted area; number of tonnes of spilled oil; or number of containers, drums etc. lost. When appropriate, give position of observer relative to pollution.
- D. Tide and Wind – speed and direction
- E. Weather – conditions and sea state
- F. Characteristics of pollution - give type of pollution, e.g. oil crude or otherwise; packaged or bulk chemicals; garbage. For chemicals, give proper name or United Nations Number, if known. For all, give appearance e.g. liquid; floating solid; liquid oil; semi-liquid sludge; tarry lumps; weathered oil; discoloration of sea; visible vapour etc.
- G. Source and Cause of Pollution – from vessels or other undertaking. If from a vessel, say whether as a result of apparent deliberate discharge or a casualty. If the latter, give a brief description. Where possible, give name, type, size, nationality and Port of Registry of polluting vessel. If vessel is proceeding on its way, give course, speed and destination, if known.
- H. Details of Vessels in the Area – to be given if the polluter cannot be identified and the spill is considered to be of recent origin.
- I. Not Used.
- J. Whether photographs have been taken, and / or samples for analysis.
- K. Remedial action taken, or intended, to deal with spillage
- L. Forecast of likely effect of pollution (e.g. arrival on beach, with estimated timing).
- M. Names of those informed other than addressees.
- N. Any other relevant information (e.g. names of other witnesses, references to other instances of pollution pointing to source).

## 5 Response Strategy Selection and Resources

### 5.1 Response Strategy Principles

The overall priority in the event of a spill, after the safety of people is to minimise damage to the environment, followed by socio-economic resources. A key objective is therefore to protect the resources at risk. The following are the principles that SVHA/SVT respects when developing response strategies:

- Seek to minimise environmental effects, either because of the hydrocarbon released or from the clean-up methods (this is referred to as Net Environmental Benefit Analysis, or NEBA).
- Consider as an appropriate response – leaving hydrocarbons to degrade naturally, while continuing to monitor and evaluate
- Obtain early and continuous advice and services of specialists and technical advisors from statutory bodies or response organisations
- Conduct early engagement and communication with the relevant authorities, at the decision-making phase and throughout operations
- Arrange for surveillance to be carried out early and for all ongoing response strategies – to assist in the monitoring of the response effectiveness
- Perform modelling predictions, as soon as possible and at regular intervals following this, using up to date information from field surveillance
- Perform safety assessment before response implementation and at regular intervals following this
- All response activities are performed by competent personnel or organisations

To assist in the decision-making process, follow the response strategy flowchart – see [Section 5.2 Response Strategy Selection](#).

## 5.2 Response Strategy Selection

The following flow chart ([Figure 3](#)) and map ([Figure 4](#)) are quick reference tools, to identify available response strategy tools. See [Section 5.4 Strategy Defined Resources](#) and [Section 15 Response Stockpiles](#) for additional details on the response strategy options and available equipment at each tier level. Further guidance on each approach can be found in [B.1 Response Strategy Guidance](#).

### The techniques chosen will also need to consider the following:

- Applicable legal and regulatory requirements (for example restrictions for different response techniques; priorities for protection; specific response performance criteria).
- Effectiveness of individual response techniques.
- Feasibility for their deployment in the prevailing operating conditions.
- Environmental and socio-economic sensitivities and their prioritisation for protection and response (see [Section 12 Environmental and Socioeconomic Sensitivities](#) and consult with SOTEAG).
- Whether in some circumstances limited intervention is the most appropriate approach supported by ongoing surveillance and monitoring.
- Consultation with any relevant stakeholders.

**On deciding a response strategy, the SVT IMT, with assistance from Aberdeen ERSC will contact and mobilise 3rd party support.**

A list of local companies and organisations is held in the logistics file in the IMT.

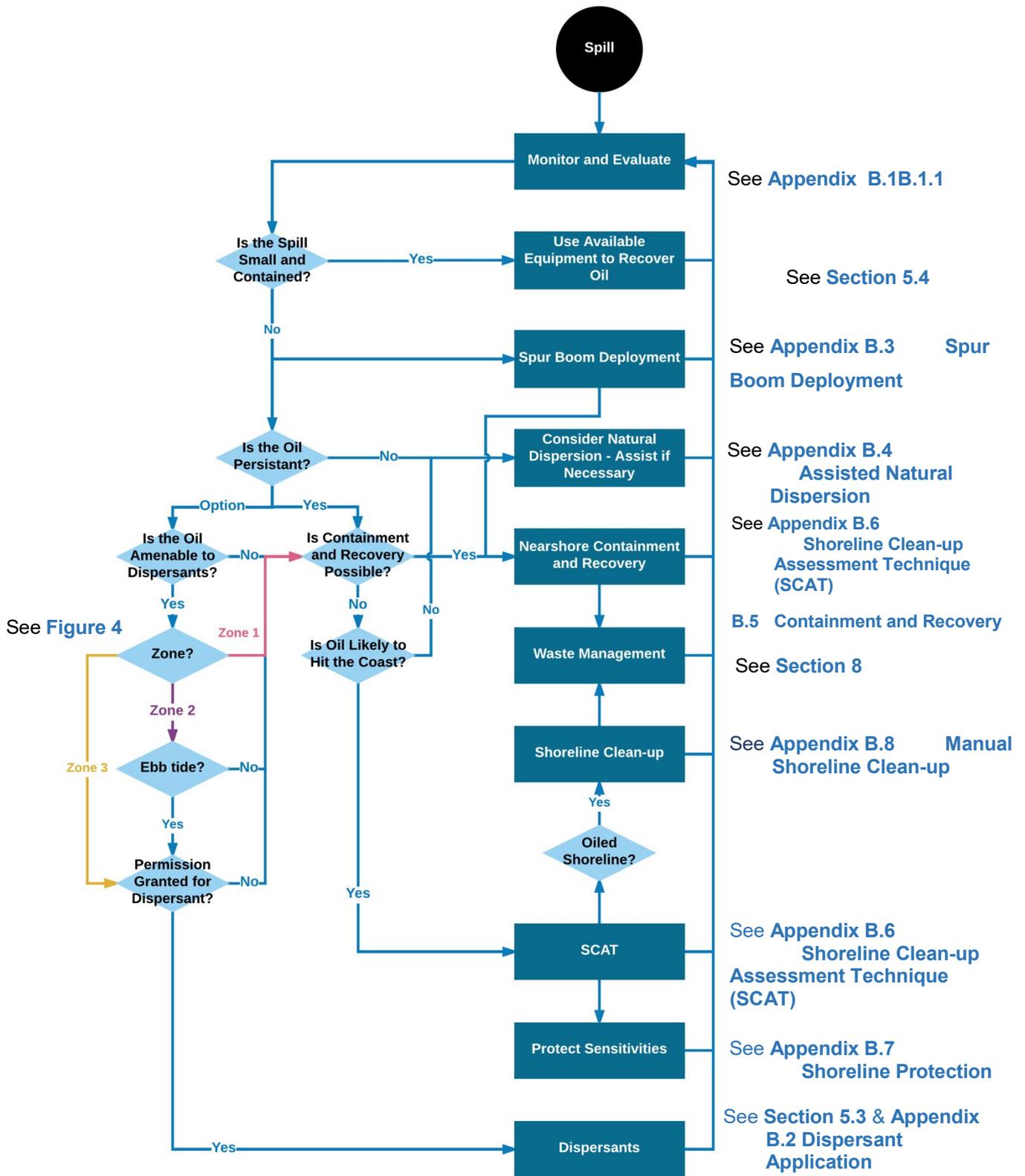
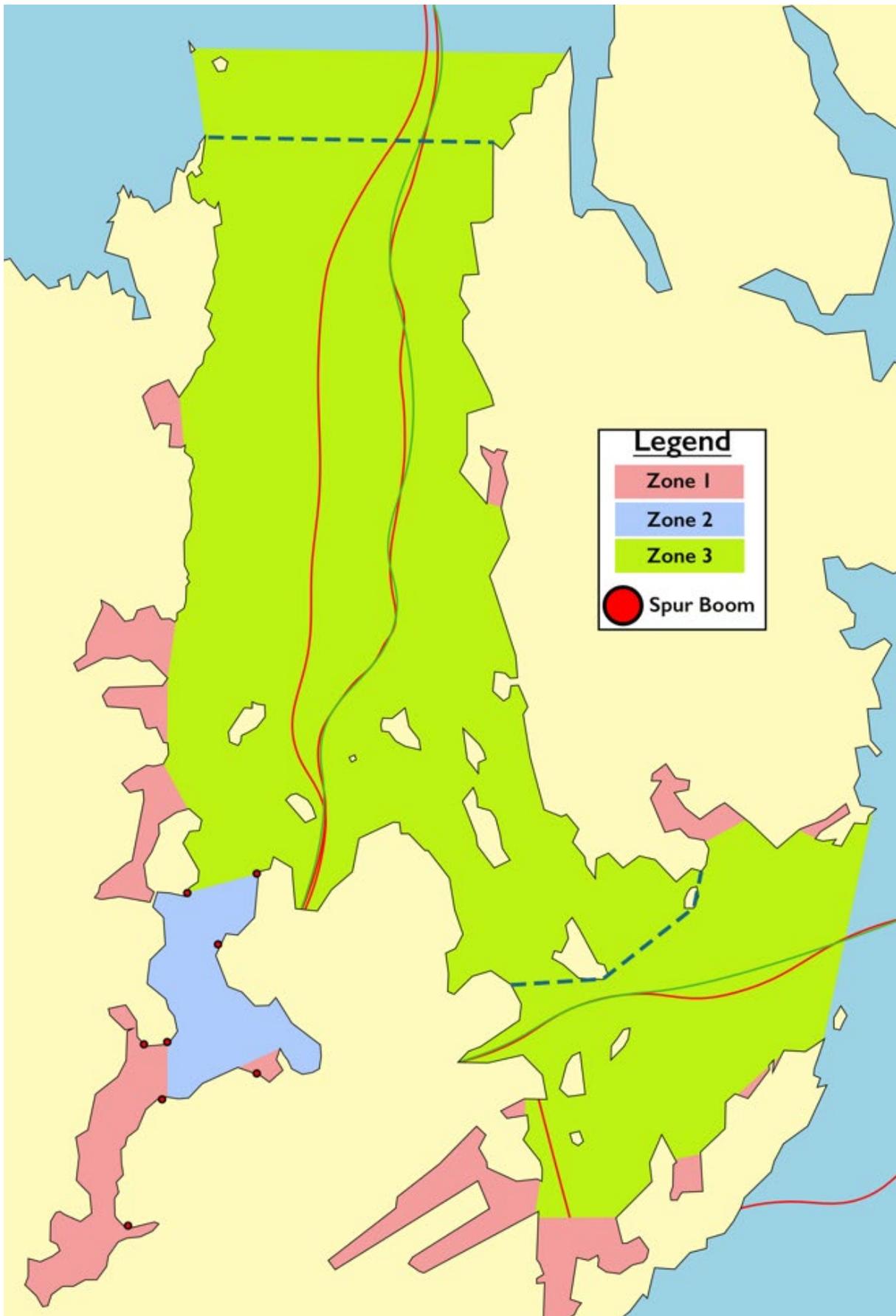


Figure 3 – Response Decision Flowchart for Sullom Voe.

Note – Sampling should also be conducted throughout a response (see B.9 Sampling ).



**Figure 4 – Oil Spill Response Strategies Zone Map**

**Figure 4**, red points indicate the location of Spur Boom Sites, the coloured areas indicate the three distinct response zones (see **Sections below**, **5.2..2** and **5.2..3**).

Assuming a spill in the inner harbour near the oil jetties, spur boom sites should be deployed in the following order of priority:

- **Oil heading out of the inner harbour and offshore** – deploy sites 1, 7 & 8. The order of deployment will depend on the condition experienced during the event.
- **Oil moving in a generally Southerly direction** - deploy sites 6, 2 and 3; sites 4 and 5 may also be deployed following this based upon the oils direction of travel.

The Table below summarises, which strategies should be used in the different zones.

| Strategies   | Reference   | Zone 1 | Zone 2 | Zone 3                     |
|--|---|--------|--------|----------------------------|
| <b>Surveillance and Monitoring, including Sampling</b> | <b>Appendix B.1</b>   | ✓      | ✓      | ✓                          |
| <b>Spur Boom Deployment</b>                            | <b>Appendix B.3</b><br>Spur Boom<br>Deployment  | ✓      | ✓      |                            |
| <b>Assisted Natural Dispersion</b>                     | <b>Appendix B.4</b><br>Assisted<br>Natural Dispersion<br><br>B.4 Assisted<br>Natural Dispersion | ✓      | ✓      | ✓                          |
| <b>Containment and Recovery</b>                        | <b>Appendix B.5</b><br>Containment<br>and Recovery  | ✓      | ✓      | In calm conditions<br>only |
| <b>Shoreline Clean-up Assessment Technique (SCAT)</b>  | <b>Appendix B.6</b><br>Shoreline<br>Clean-up Assessment<br>Technique (SCAT)                     | ✓      | ✓      | ✓                          |

|                                  |  |   |                            |   |
|----------------------------------|--|---|----------------------------|---|
| <b>Shoreline Protection</b>      | <b>Appendix B.7</b><br>Shoreline Protection            | ✓ | ✓                          | ✓ |
| <b>Manual Shoreline Clean-up</b> | <b>Appendix B.8</b><br>Manual Shoreline Clean-up       | ✓ | ✓                          | ✓ |
| <b>Dispersant Application</b>    | <b>Section 5.3 Appendix B.2</b> Dispersant Application | x | <b>On an ebb tide only</b> | ✓ |

### 5.2..1 Zone 1 – Ecologically Sensitive Areas

**Dispersant is not approved for use** in the areas covered by Zone 1. Oil should be contained and recovered.

Note – Salmon farms exist or are planned in many of the Zone 1 areas outside Sullom Voe, within Yell Sound its self (North of No1 and No 5 buoys, Sullom Voe Harbour buoyage).

### 5.2..2 Zone 2 – Sullom Voe, North

Wherever possible oil should be contained, recovered and prevented from entering Yell Sound. In some circumstances, for example to protect the shoreline, it may be acceptable to use dispersants. **Dispersant use is on the ebb tide only**. Important biological areas should be boomed if threatened, for example Houb of Scatsta.

Zone 2 applicable strategies are all those in Zone 1, plus dispersant.

### 5.2..3 Zone 3 – Yell Sound

**Yell Sound North** – This is an area of open water and moderate water movement, but the weather and sea conditions can be severe. This area is most remote from the control centres and hence communication lines and travel time are lengthened. Oil spilled in this area may, depending on the tidal cycle, either move to more open waters where natural dispersion can occur, or will move down to Yell Sound South. Generally, it is accepted that weather conditions in this area will be severe and that containment and mechanical recovery can be practised only in calm conditions. It is considered that if treatment is desirable, the main action should be applying dispersants.

**Yell Sound South** – This is an area of many islands where currents, particularly on the east side, can reach 7 knots (3.5m sec<sup>-1</sup>). There is little chance of mechanical recovery equipment being effective and

---

the strategy is to treat the spilled oil as rapidly as possible with dispersants to prevent oil beaching and spreading into ecologically sensitive areas. Speed of response is crucial and consideration should be given to the use of the Yell car ferry for dispersant application operations. Booms deployed in the deflective mode can be considered to protect sensitive coastal areas.

Zone 3 applicable strategies are all those in Zone 2, although the main strategy should be Dispersant to treat oil as rapidly as possible and Containment and Recovery should only be practiced in calm conditions. Shoreline Protection can also be used in deflective mode can to protect sensitive areas.

### 5.3 Dispersant Application

The response strategies available (see [Figure 3](#)) are detailed in [B.1 - Response Strategy Guidance](#). Dispersant is addressed specifically within the action section of this document, as its use requires some guidance due to environmental factors, such as low tidal exchange in Sullom Voe, together with the enclosing coastal setting. It is therefore crucial that special consideration be given, and advice sought on the use of dispersants within Sullom Voe.

#### Dispersant Spraying

The application of dispersant assists and accelerates the process of natural dispersion.

Standing approvals have been granted by the marine directorate (Marine Scotland) for the use of approved dispersants with proven efficacy, when responding to an oil spill within the immediate vicinity of Sullom Voe Oil Terminal and into the high tidal current regions of Yell Sound (see [Figure 4](#) – Zone 2 on an ebb tide and Zone 3).

The primary application of dispersant will be via vessels (the Harbour Tugs), following this the OSRL's aerial dispersant aircraft (Tier 2/3 response contractor) may be used, see [Strategy Defined Resources](#) in [Section 5.4](#).

Advice and further detail on this strategy, can be sought through the SVT IMT

#### Considerations

- Dispersant standing approvals are only for use in Zone 2 on an ebb tide and Zone 3 (see [Figure 4](#)), and must not be used in the intertidal zone (see [C.1 Approvals and Consultation Letters for Standing Approval Letter](#))
- The maximum quantity permitted by the marine directorate without prior notification and approval is 24 tonnes per single oil spill incident
- The use of any dispersant must be reported to the Licencing Authority (Marine Scotland) within 72 hours of use (see [Appendix B.2.4 Notification of Dispersant Usage](#))
- A full log of dispersant use should be kept (see [Appendix B.2.2 Record of Dispersant Use](#))
- Dispersant is most effective within the first few hours of the release.
- Dispersants may not be as effective on weathered crude oil once it has been at sea for a long period of time. See [Appendix B.2.1 Testing Dispersant Efficacy Procedure](#)
- for details on a field dispersant effectiveness test
- All vessels in close proximity to hydrocarbon release should conduct continuous gas monitoring and only proceed if safe to do so
- Chemical dispersants are not recommended for use on releases of condensate or diesel
- It is most effective to spray with the spray arms mounted on the vessel's bow as the bow wave will assist in agitating the dispersant and hydrocarbon mix
- Upper wind speed limit for spraying is 25 to 30 knots. Any stronger and the dispersant will be blown off target by the wind
- See general response strategies selection considerations in [Section 5.2](#).

#### Application

- Hydrocarbon to Dispersant ratio should be 20:1 (i.e. 20 tonnes of hydrocarbon should be dispersed by 1 tonne of dispersant). Depending upon the hydrocarbon type and dispersant being used, this ratio may need to be revised.
- Ensure correct use of dispersant such as neat application or dilution with water. This will depend upon dispersant (Type 2 or 3) and application equipment on board the vessel
- If a dispersant strategy is to be utilised, commence operations targeting the thickest portions of the slick
- Application of dispersant should be conducted in parallel runs to optimise delivery across the slick
- As dispersion is achieved it will produce a 'smoke plume' in the water. The dispersion will vary in colour between dark and light brown
- If dispersion is ineffective, a milky white plume will appear in the water close to the surface which indicates the dispersant is not being effective and spraying should stop and its application reassessed.
- The primary dispersant response application will be using the local Harbour Tugs, following this the OSRL Aerial Dispersant aircraft may be used.
- The effects should be continually monitored and any observations reported to the IMT, as this may influence subsequent response strategies

## 5.4 Strategy Defined Resources

The SVHA has in place the resources necessary to provide a commensurate level of response proportionate to the size and type of hydrocarbon release that may be encountered and are compliant with the requirements as detailed within the MCA guidance.

### 5.4.1 Definitions of Tiered Response

The response is based upon the standard three-tiered system and is defined as follows:

- Tier 1 (Local)** A spill that can be handled by resources onsite (Sella Ness) or releases that will disperse naturally. Tier 1 releases do not require additional support.
- Tier 2 (Regional)** Larger releases that cannot be managed by the resources and personnel onsite and requires call-out of regional resources and response staff.
- Tier 3 (National)** A spill of major or significant ongoing release which requires outside assistance of both manpower and equipment from third parties or government agencies.

The identified resources (below) were assembled based on the tiered concept above, the environmental sensitivities (see [Section 12](#)) and the defined level of risk (see [Section 18](#)). Therefore, the SVHA on-site resources are more than sufficient to deal with a Tier 1 spill. Detailed matrixes containing the specific tiered response resources can be found in the following pages.

### 5.4.2 Identified Tier 1 Resources

#### Tier 1 Onsite Resources (0 – 1 hrs) – Sella Ness

The first Table in this section details the resources that could be deployed in the first hour of a response.

| Resource   | Personnel  | Reporting Location | Strategy and Capability  | Response Time | Mobilised by |
|--|--|--------------------|--|---------------|--------------|
| <b>Tier 1 Onsite – Sella Ness (0 – 1 hrs.)</b>   |  |                    |  |               |              |
| <b>Response Base Coordination</b>  |  |                    |  |               |              |
| <ul style="list-style-type: none"> <li>Forklift</li> <li>Equipment required</li> </ul>   | <ul style="list-style-type: none"> <li>1 x SVT Pollution Tech</li> </ul> | Sella Ness         | To coordinate response – prepare equipment, assist in loading and arrange logistics as directed. | 0 – 1 hr.     | SVT IMT      |
| <b>SIC Coordination</b>  |  |                    |  |               |              |
| <ul style="list-style-type: none"> <li>Pollution Pickup kits</li> <li>DHM Van Spill kits</li> <li>Skimmer Kit (Scalloway)</li> </ul> | <ul style="list-style-type: none"> <li>2 x SIC Staff</li> </ul>          | Sella Ness         | To coordinate response and respond with available pollution response equipment                   | 0 – 1 hr.     | VTS          |

| Oil Water Confirmation/Monitor & Evaluate   |  |                                 |  |           |               |
|---|--|---------------------------------|--|-----------|---------------|
| <ul style="list-style-type: none"> <li>SIC Pilot Boat</li> </ul>  | <ul style="list-style-type: none"> <li>SIC Crew</li> <li>1 x SVT Pollution Tech</li> </ul>         | Sella Ness / Construction Jetty | SIC Pilot Boat mobilised with SVT Representative (picked up from construction jetty) to confirm oil on water and advise IMT.               | 0 – 1 hr. | VTS / SVT IMT |
| Shoreline Protection (Spur Boom Sites) – one team   |  |                                 |  |           |               |
| <ul style="list-style-type: none"> <li>SIC Mooring Boat</li> <li>Permanent Spur Booms</li> <li>Or NOFI Boom Bags, for sites without permanent boom</li> </ul> | <ul style="list-style-type: none"> <li>SIC Crew</li> <li>SVT ERA</li> <li>3 x SVT Techs</li> </ul> | Sella Ness / Construction Jetty | One crew deploy two spur boom sites, dependent on oils direction of travel. The same crew can then be utilised on more sites, as required. | 0 – 1 hr. | VTS / SVT IMT |

### 5.4.3 Tier 1 Onsite Resources (1 – 6 hrs) – Sella Ness

The following Table details the response resources that can be deployed between 1 and 6 hours of the initial response. These are not necessarily additional resources, but the same resources being used in the second phase of a deployment

| Resource  | Personnel   | Reporting Location              | Strategy and Capability  | Response Time | Mobilised by |
|---|---|---------------------------------|--|---------------|--------------|
| Tier 1 Onsite – Sella Ness (1 – 6 hrs.)   |   |                                 |  |               |              |
| Continued Response Base Coordination  |   |                                 |  |               |              |
| <ul style="list-style-type: none"> <li>Forklift as required</li> </ul>  | <ul style="list-style-type: none"> <li>1 x SVT Pollution Tech</li> </ul>                              | Sella Ness                      | To coordinate response – prepare equipment, assist in loading and arrange logistics as directed.                             | 1 – 6 hr.     | SVT IMT      |
| Continued SIC Coordination  |   |                                 |  |               |              |
| <ul style="list-style-type: none"> <li>Pollution Pickup</li> <li>DHM Van Spill kits</li> <li>Skimmer Kit (Scalloway)</li> </ul>   | <ul style="list-style-type: none"> <li>2 x SIC Staff</li> </ul>                                       | Sella Ness                      | To coordinate response and respond with available pollution response equipment   | 0 – 1 hr.     | VTS          |
| Continued Monitor & Evaluation  |   |                                 |  |               |              |
| <ul style="list-style-type: none"> <li>SIC Pilot Boat</li> </ul>  | <ul style="list-style-type: none"> <li>SIC Pilot Boat Crew</li> <li>1 x SVT Pollution Tech</li> </ul> | Sella Ness / Construction Jetty | SIC Pilot Boat mobilised with SVT Representative (picked up from construction jetty) to confirm oil on water and advise IMT. | 1 – 6 hr.     | SVT IMT      |
| Additional Shoreline Protection (Spur Boom Sites) – two teams at two sites, if required   |   |                                 |  |               |              |
| <b>Team 1</b> <ul style="list-style-type: none"> <li>SIC Mooring Boat</li> <li>Permanent Spur Booms</li> <li>Or NOFI Boom Bags, for sites without permanent boom</li> </ul> | <ul style="list-style-type: none"> <li>SIC Crew</li> <li>SVT ERA</li> <li>3 x SVT Techs</li> </ul>    | Sella Ness / Construction Jetty | Crew deploy spur boom sites, dependent on oils direction of travel.<br>Note, now utilising called in SIC crews.              | 1 – 6 hr.     | SVT IMT      |

| Recovery from Spur Boom Sites – Two teams working at two spur boom sites, if required   |  |                                 |  |           |         |
|---|--|---------------------------------|--|-----------|---------|
| <b>Team 1</b> <ul style="list-style-type: none"> <li>• Vac Trucks (Waste Contractor)</li> <li>• Skimmer, ancillaries with</li> <li>• Temporary storage (if required)</li> </ul>   | <ul style="list-style-type: none"> <li>• Contractor Drivers</li> <li>• 2 x SVT ERA's / Techs</li> </ul>                    | Sella Ness / Construction Jetty | Two sites, dependent on oils direction of travel   | 1 – 6 hr. | SVT IMT |
| <b>Team 2</b> <ul style="list-style-type: none"> <li>• Vac Trucks (Waste Contractor)</li> <li>• Skimmer, ancillaries with</li> <li>• Temporary storage (if required)</li> </ul>   | <ul style="list-style-type: none"> <li>• Contractor Drivers</li> <li>• 2 x SVT ERA's / Techs</li> </ul>                    |                                 |  |           |         |
| <p>In addition to the above, <u>either</u> Dispersant Application <u>OR</u> Containment and Recovery can be undertaken in the first 6 hrs. The Operations will be determined by the SVT IMT and should be based on oil direction and oil properties (i.e. amenability).</p> |  |                                 |  |           |         |
| Dispersant Application – Two vessels within Zone 3 or Zone 2 on ebb tide  |  |                                 |  |           |         |
| <b>Team 1</b> <ul style="list-style-type: none"> <li>• SIC Tug</li> <li>• Dispersant</li> </ul>   | <ul style="list-style-type: none"> <li>• 1 x SIC Crew</li> <li>• 1 x SVT Pollution Techs</li> </ul>                        | Sullom Voe                      | SIC crew, manning tug and SVT crew manning the SVT Vessel<br><br>Only if applicable (i.e. oil direction of travel and type).<br><br>All equipment and dispersant on-board tugs; dispersant and associated equipment needs to be loaded onto the SVT vessel<br><br>Please follow guidance in Appendix C1 which includes contact details for approvals | 1 – 6 hr. | SVT IMT |
| <b>Team 2</b> <ul style="list-style-type: none"> <li>• SVT Vessel Dispersant</li> </ul>   | <ul style="list-style-type: none"> <li>• 1x SVT Crew</li> <li>• 1 x SVT Pollution Techs</li> </ul>                         |                                 |  |           |         |
| Containment and Recovery – Single System Operation  |  |                                 |  |           |         |
| <ul style="list-style-type: none"> <li>• SIC Tug</li> <li>• SVT Vessel Nearshore C&amp;R boom package</li> <li>• Skimmer Package</li> </ul>   | <ul style="list-style-type: none"> <li>• 1 x SIC Crew</li> <li>• 1x SVT Crew</li> <li>• 2 x SVT Pollution Techs</li> </ul> | Sella Ness                      | SIC crew, manning tug and SVT crew manning SVT Vessel  | 1 – 6 hr. | SVT IMT |

#### 5.4.4 Identified Tier 2 Resources

The following Table details Tier 2 resources available in a response.

| Resource  | Personnel   | Reporting Location                             | Strategy and Capability  | Response Time                       | Mobilised by       |
|---|---|--|--|-------------------------------------|--------------------|
| <b>Tier 2 Regional – Additional Sella Ness resources and UKCS aerial surveillance (mobilised and co-ordinated by SVT IMT)</b>   |   |  |  |                                     |                    |
| <b>Monitor and Evaluate / Surveillance Options</b>  |   |  |  |                                     |                    |
| <ul style="list-style-type: none"> <li>SIC Pilot Boat or similar</li> </ul>   | <ul style="list-style-type: none"> <li>SIC Crew</li> </ul>  | Sella Ness                                     | Continued on-water surveillance, as required   | 6 – 24 hrs.'                        | SVT IMT            |
| <ul style="list-style-type: none"> <li>Satellite Surveillance &amp; Modelling</li> </ul>  | <ul style="list-style-type: none"> <li>OSRL personnel</li> </ul>  | N/A  | Satellite Surveillance and modelling, as required  | Up to 24 hrs.'                      | SVT IMT / ERSC IMT |
| <ul style="list-style-type: none"> <li>OSRL Surveillance Aircraft PA-31 Navajo</li> </ul>   | <ul style="list-style-type: none"> <li>Aircraft crew</li> <li>OSRL personnel</li> </ul>   | Mobilised from Humberside. Reports to Sumburgh | Aerial Surveillance  | Approx. 4 hrs.' to Sumburgh Airport | SVT IMT / ERSC IMT |
| <b>SCAT</b>   |   |  |  |                                     |                    |
| <ul style="list-style-type: none"> <li>4WD vehicle and/or vessel location dependent</li> <li>Beach packs</li> </ul>   | Per team <ul style="list-style-type: none"> <li>1 x SIC personnel</li> <li>1 x SVT personnel</li> <li>1 x OSRL</li> <li>Additional Conservation Organisation personnel</li> </ul> | SVT IMT  | SCAT surveys conducted, as determined by oil direction of travel and environmental priorities. This would be scaled up, as required. | 6 – 24 hrs.'                        | SVT IMT            |
| <b>Additional Shoreline Protection and Recovery Options from Sella Ness</b>   |   |  |  |                                     |                    |
| <ul style="list-style-type: none"> <li>SIC Mooring Boat</li> <li>Permanent spur booms or NOFI Boom Bags, for sites without permanent boom</li> </ul>  | Per Team <ul style="list-style-type: none"> <li>SIC Crew</li> <li>SVT ERA</li> <li>3 x SVT Techs</li> </ul>   | Sella Ness / Construction Jetty                | Additional spur boom sites, as required by oils direction of travel.   | 6 – 24 hrs.'                        | SVT IMT            |
| <ul style="list-style-type: none"> <li>Vac Trucks (Waste Contractor)</li> <li>Skimmer packages, with ancillaries</li> <li>Temporary storage packages (for sites with no storage)</li> </ul> | Per Team <ul style="list-style-type: none"> <li>Contractor Drivers</li> <li>2 x SVT ERA's/Techs</li> </ul>  | TBD in an incident                             | Additional shoreline recovery, at locations as required  | 6 – 24 hrs.'                        | SVT IMT            |
| <ul style="list-style-type: none"> <li>Mobile boom packages and ancillaries</li> <li>Temporary storage packages</li> <li>Vehicles or ribs as required</li> </ul>                            | Per Team <ul style="list-style-type: none"> <li>4 x SVT Techs</li> </ul>  | TBD in an incident                             | Mobile boom packages, at sites as required by oils direction of travel and environmental priorities                                  | 6 – 24 hrs.'                        | SVT IMT            |

| <b>Dispersant Spraying – outside Voe, in Zone 3 only or Zone 2 on ebb tide</b>   |   |   |   |              |         |
|--|---|---|---|--------------|---------|
| <ul style="list-style-type: none"> <li>• Additional SIC Tugs</li> <li>• Dispersant</li> </ul>  | Per Team <ul style="list-style-type: none"> <li>• SIC Crew</li> <li>• 1 x SVT Pollution Tech</li> </ul>   | Sella Ness  | Additional dispersant, as required, loaded on-board Tugs at Sella Ness.   | 6 – 24 hrs.' | SVT IMT |
| <b>Containment and Recovery</b>  |   |   |   |              |         |
| <ul style="list-style-type: none"> <li>• SIC Tugs and/or Vessel of opportunity (VOO)</li> <li>• Ocean buster</li> <li>• Skimmer Package</li> <li>• Temporary floating storage packages, as required</li> </ul> | Per Team <ul style="list-style-type: none"> <li>• Vessel Crew</li> <li>• 2 x SVT Pollution Techs</li> </ul>   | TBD in an incident / Ocean Buster at Construction Jetty | Tugs or VOO as available (and required). Loaded at a local harbour and C&R operations conducted under SVT Pollution Tech supervision. Waste stored in on-board tanks or in temporary floating storage (as required) | 6 – 24 hrs.' | SVT IMT |
| <b>Shoreline Response – Manual Clean-up</b>  |   |   |   |              |         |
| <ul style="list-style-type: none"> <li>• Shoreline Response Equipment Packages</li> <li>• Temporary storage</li> <li>• 4WD vehicles and/or ribs</li> </ul>   | Per Team <ul style="list-style-type: none"> <li>• 1 x SVT Beachmaster (qualified)</li> <li>• Manual workers (supervision ratio, max 1:7)</li> </ul> | TBD in an incident                                      | Deploy/utilise shoreline and inshore response equipment at locations, as required by shoreline impact and environmental sensitivities   | 6 – 24 hrs.' | SVT IMT |

Note - other oil spill response equipment may be available for use on the island, Companies will be contacted on a case by case basis either from SVT IMT / ERSC IMT.

### 5.4.5 Identified Tier 3 Resources

The following Tables details the identified Tier 3 resources for a response.

| Resource  | Personnel   | Reporting Location                            | Strategy and Capability  | Response Time  | Mobilised by   |
|---|---|---|--|--|--|
| <b>Tier 3 National (mobilised and co-ordinated by the SVT IMT / ERSC IMT)</b>   |   |   |  |  |  |
| <b>Oil Spill Response Contractor Capability</b>   |   |   |  |  |  |
| <p>Tier 2 and 3 response services such as the United Kingdom Continental Shelf (UKCS) aerial surveillance service and aerial dispersant capability is provided by OSRL. For more details on these services including specific response times please follow the link below. The link also contains some of the information which MCA may require should the SVT be considering a request for the 'Standing Approval' to use the Tier 2 aerial dispersant application system. This statement does not grant approval to spray dispersant and separate Standing Approval must be granted.</p> <p>Response time for aerial surveillance is 4 to 6 hours.(daylight only)</p> <p>Response time for Tier 2 aerial dispersant spraying is a maximum of 6 hours, dependant on regulatory approval. For further details refer to <a href="http://www.oilspillresponse.com/activate-us/ukcs-capability-statement">www.oilspillresponse.com/activate-us/ukcs-capability-statement</a></p> |   |   |  |  | <p>Incident Commander authorisation at SVT IMT / Duty Director authorisation at ERSC IMT</p> |
| <b>Dispersant Spraying</b>  |   |   |  |  |  |
| <ul style="list-style-type: none"> <li>VOO within the North Sea</li> <li>OSRL vessel mounted spray systems</li> <li>OSRL Dispersant</li> </ul>  | <ul style="list-style-type: none"> <li>Vessel Crew</li> </ul>   | <p>Loading of dispersant at local Harbour</p> | <p>VOO to be fitted with Dispersant type to be confirmed, dependent on oil type.</p>   | <p>24 to 48 hours dependent on vessel availability</p> | <p>SVT IMT / ERSC IMT</p>  |
| <ul style="list-style-type: none"> <li>OSRL Spotter Plane</li> <li>OSRL Dispersant</li> </ul>   | <ul style="list-style-type: none"> <li>Aircraft crew for each plane</li> <li>OSRL personnel for spotter plane and dispersant loading</li> </ul>                 |   | <p>Aerial dispersant spray system. Dispersant type to be confirmed, dependent on oil type.</p>   | <p>Approx. 6 hrs</p>                                   | <p>SVT IMT / ERSC IMT</p>  |
| <b>Containment and Recovery – two offshore systems</b>  |   |   |  |  |  |
| <ul style="list-style-type: none"> <li>VOO within the North Sea</li> <li>OSRL offshore Containment and Recovery systems (boom and skimmers)</li> <li>Anchor Handlers (VOO)</li> <li>DP recovered oil tanker(s)</li> </ul>   | <p>Per Team</p> <ul style="list-style-type: none"> <li>Vessel crew</li> <li>Contractor personnel</li> </ul>   | <p>Loaded at a local harbour</p>              | <p>Offshore booms and skimmers. Various types depending upon conditions and oil condition</p>  | <p>24 to 48 hours dependent on vessel availability</p> | <p>SVT IMT / ERSC IMT</p>  |
| <ul style="list-style-type: none"> <li>Surveillance aircraft (spotter)</li> </ul>   | <ul style="list-style-type: none"> <li>Aircraft crew</li> <li>OSRL personnel</li> </ul>   | <p>Local Airports</p>                         | <p>To provide surveillance and direction to offshore operations.</p>   | <p>4 hrs to Scatsta Airport</p>                        | <p>SVT IMT / ERSC IMT</p>  |
| <b>Shoreline Response – Manual Clean-up</b>   |   |   |  |  |  |
| <ul style="list-style-type: none"> <li>OSRL / SVT Shoreline Response Package(s)</li> <li>Temp Storage</li> <li>4WD vehicles and/or ribs</li> </ul>  | <ul style="list-style-type: none"> <li>Beachmaster qualified individual(s), one per team</li> <li>Manual workers</li> <li>Supervision ratio, max 1:7</li> </ul> | <p>OSRL / SVT Base</p>                        | <p>Deploy/utilise shoreline and inshore response equipment at locations, as required by shoreline impact and environmental sensitivities</p> | <p>45 Mobilisation</p>                                 | <p>SVT IMT / ERSC IMT</p>  |

## 6 Health and Safety

### 6.1 SIC Health, Safety and Welfare Policy

The safety of personnel will always take priority and the provisions of the Health and Safety at Work Etc. Act 1974 should always be observed, to the extent that response to an incident may be delayed whilst measures are taken to ensure personnel safety.

All emergency work executed is subject to the provisions in either the SIC Health, Safety and Welfare Policy and or the EnQuest Health, Safety and Welfare Policy. When contractors are required to undertake work on behalf of SIC, Supervisors of that work must consider the SIC's responsibilities, as laid down in this policy and like wise if Contractors are working on behalf of EnQuest they should follow EnQuest's policies.

**See the SIC Health, Safety and Welfare Policy for further details; SheAssure for SIC Health and Safety Risk Assessments, SIC Marine Risk Assessments; and the SVT HSE&A Policy and applicable control of work procedures.**

### 6.2 Risk Assessment

It is part of the SIC's policy to undertake risk assessments, to determine what precautions are required, including the appropriate personal protective equipment (PPE). Responsibility for ensuring personnel involved in the clean-up are aware of the hazards, and the precautions to be taken, is with the PSO (or deputy).

The initial information gathered about the spill will determine on a preliminary basis if it is safe to commence the response. Factors to consider include but are not limited to:

- The type of product (refer to the Severon database for SDS) See [Appendix I.1](#)
- The operating environment
- Weather conditions
- Marine conditions

The PSO should consider these factors, together with information gathered by first responders to assess the feasibility of operations. Other factors which should be considered are:

- Fire/explosion risk
- Presence of Hydrogen sulphide or other harmful gases
- Toxicity
- Slips trips and falls
- Manual handling of equipment
- Weather
- Natural environment – access, egress, tidal patterns, currents

### 6.2.1 Personal Protective Equipment (PPE)

Personnel must wear their personal protective clothing to avoid skin/eye contact with pollutants, which could result in dermatitis and other related diseases. PPE could include, but is not limited to:

- Fire retardant overalls
- Steel toe cap boots
- Gloves
- Eye protection
- Tyvex suits
- Masks/respirators

The level of PPE required should be determined and documented by the risk assessment, and re-evaluated as operations advance.

### 6.2.2 Vapours/Gases

Inhalation of the vapour/gases may cause respiratory problems if suitable masks are not used – masks should be fitted and tested. Gas monitors should also be used in the vicinity of all clean-up operations (on and offshore).

Vapour/gases may also cause a fire/explosion hazard, so the frequent use of Gas Monitors (which can be accessed through the SVT), will help to prevent an accident. Be aware that cigarettes, engine exhausts, electrical sparks and sparks produced when using basic hand tools are also sources of ignition. Gas Monitors may be accessed from the SVT.

The level of monitoring required should be determined and documented by the risk assessment, and re-evaluated as operations advance.

## 7 Media Strategy

For small **Tier 1** incidents the Executive Manager Ports and Harbours Operations and/or the HM will issue all press statements in connection with oil spill incidents.

In the event of a **Tier 2/3** incident the SIC Major Emergency Plan (MEP) will be activated including the mobilisation of a Strategic Communications Lead (the SIC Executive Manager – Executive Services). The Strategic Communications Lead main duties are:

- Act as overall communications lead for the SIC
- Sets up the Emergency Communications Team (ECT), as required
- Provide communications advice to the Strategic Response Team (SRT)
- Ensures the SRT actions are relayed to the ECT
- Feed situation reports from the scene to the ECT

Press conferences, venues, press releases, press passes and other similar administrative services, including arrangements for VIP visits, will be subsequently organised by the ECT.

See the SIC Major Emergency Plan for further details.

### 7.1 Holding Statement and Press Releases

An initial Holding Statement should be agreed with the SVT/ERSC IMT and issued (through the media and Twitter). This could, in the first instance, simply give information on where to get further updates (e.g. website, Twitter, radio stations).

Key considerations are as follows:

- What are the key messages? – these will change from incident to incident
- Who needs to know what? – e.g. residents will need different information from businesses and other stakeholders in the area
- How do we put that message out? – e.g. the key audience may not be online
- When are these issued? – e.g. do we need to meet media deadlines
- How are we speaking to our most vulnerable audiences?
- How close are our audience to any incident, and how will that affect the message?
- We must also bear in mind the requirement to avoid alarming the public unnecessarily

**Any press releases drafted, should be agreed by both parties (SIC and the SVT /ERSC IMT) prior to issue.**

An example Holding Statement can be found in **D.1**. This Holding Statement will still need to be agreed by the SVT IC and copied to SIC Ports & Harbours for approval; and the ERSC IMT's Media team for review.

### 7.1.1 Terminal/Pipeline Incidents

For incidents associated with the terminal and associate pipelines, responsibility for media will be handed over to the SVT IMT. Following handover, the SVT IMT will send Press Releases for approval of by SIC. See the SVT Emergency Media Information Plan for further details.

## 7.2 Media Briefing Centre

A venue for media briefing sessions (if needed), should be established by the ECT early in the response. The location will depend on the proximity and nature of the incident. Potential locations for a media briefing centre are:

- Isleburgh Community Centre, Lerwick
- Brae Hall or Community Centre
- Brae Hotel function room

## 7.3 Public Enquiries

Where the SIC MEP has been activated (Tier 2/3), public inquiries will be handled by the ECT. In all other instances (Tier 1), Ports and Harbours Operations at Sella Ness will address queries from the public. The SIC Media Liaison Office will:

- Liaise with the media, through channels identified by the Incident Control Centre
- Initiate media appeals for volunteer assistance
- Brief field teams on appropriate responses to approaches from the media
- Maintain a file of media coverage
- Ensure a photographic record of the incident is maintained and archived
- Assist the Scientific Co-ordinator with synopses of field activities and casualty lists

Note – Any information regarding casualties, cause of incident and security issues must NOT be commented on by SIC. This information is strictly within the remit of the Police. Any such enquiries from the media should be redirected back to the Police.

## 8 Waste Management

A major factor to be considered in the event of a major pollution incident is that of disposal of waste arising from an incident – which can lead to a response bottle neck. Waste minimisation will therefore be given a high priority when responding to a pollution incident.

The response strategies that will give rise to waste are – containment and recovery, recovery from Spur Boom sites and/or shoreline protection sites and shoreline clean-up (see [Figure 3](#)). The type and quantity of waste will depend on the following:

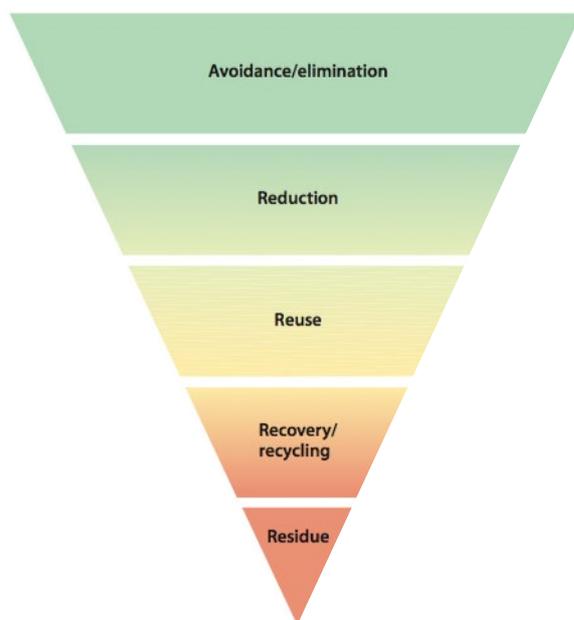
- Volume spilled
- Hydrocarbon type
- Shoreline impact – location, length and shoreline type
- Specific clean-up methods utilised
- Effective waste segregation

The Local Authority is responsible for the affected shoreline, however the SVT would support the management of waste.

**See the SVT Oil Spill Waste Minimisation and Management Plan (Document Ref – ENQ-SVT-HS-PLA-90001) for further details.**

### 8.1 Waste Minimisation

The waste hierarchy refers to the 3R's – reduce (eliminate), reuse and recycle. The aim is to achieve the Best Practicable Environmental Option. Waste can be minimised as follows:



IPIECA-OGP, 2014

- Segregation at source by the different types of polluted wastes (liquid, soil PPE etc.)
- Pre-clean shoreline before it's oiled
- Cover containment sites to prevent rainwater adding to volume
- Clean and re-use equipment rather than discarding
- Handle waste *in-situ*, e.g. bioremediation, surf washing, sand sieving – this reduces the amount of waste
- Minimise the use of sorbents
- Re-use PPE, if possible

## 8.2 Considerations for types of oily waste

| Oiled Waste                                | Considerations   |
|--|--|
| <b>Liquid</b>                              | Asses the feasibility of using recovered oil as a raw material or low grade fuel<br>Prevent water or debris entering waste containers (i.e. consider decanting).<br>Use cleaners and wash with water sparingly |
| <b>Contaminated oil</b>                    | Discharge into lined lagoons, pits or large tanks<br>Separate oil, water and oiled debris as much as possible  |
| <b>Solid waste (includes oiled debris)</b> | Do not mix oiled waste with non-oiled waste<br>Prevent oily wastes from contaminating soil, by using liners<br>Minimise the amount of un-oiled sediment collected  |
| <b>Oiled wildlife</b>                      | Keep dead animals separate from other waste types to prevent potential spread of disease.<br>The SSPCA have responsibility for oiled wildlife  |

## 8.3 Waste Storage Locations

### 8.3.1 Temporary Storage

Liquid hydrocarbons can be stored in various types of temporary tanks and vessels such as ISO tanks, Intermediate Bulk Container (IBC), Fast tanks and 45gal drums on the SVT site.

Solid waste can be stored in a range of containers such as various tanks, barges, 45gal drums, skips, Fast tanks, lined ditches and containers on the SVT site.

This temporary storage should be set up with the full permission and guidance from SEPA.

On Shetland, Temporary Storage (ISO's, IBC's Drums, Fast tanks, Skips, Tipper Trailers, Excavators and/or Tracked Dumpers) can be obtained from:

- SVT Pollution Base (Sella Ness)
- Total Waste Management Alliance (TWMA) Ltd
- EMN Plant Ltd
- Altrad
- Garriock Brothers Ltd

### 8.3.2 Intermediate Storage

Oily waste may be temporarily stored at sites agreed to by the local office of SEPA. Any such temporary storage will only occur if deemed necessary because of the scale of the operation, and at sites where due consideration has been given to accessibility, containment and security.

On Shetland, intermediate storage can be sourced from the companies detailed in [Section 8.3.1 Temporary Storage](#).

## 8.4 Waste Transfer

On Shetland, liquid waste can be transferred in Vacuum tankers and solid waste in lined containers or skips. Transfer can be arranged by:

- TWMA Ltd
- Altrad

## **8.5 Waste Disposal Options**

### **Sullom Voe Terminal**

Sullom Voe Terminal can accept hydrocarbon water/hydrocarbon for disposal. For example, liquid oily waste could be discharged into temporary tanks on the Construction Jetty, and then taken by Vacuum tanker to the solid slops ROP.

Solid wastes cannot be disposed of onsite, but use of local waste facilities can be arranged. Early notification to the SVT of any potential requirements is essential for planning and for obtaining the necessary authorisations.

### **TWMA Vatster**

TWMA Vatster has a facility for liquid and solid storage, sorting and will arrange onward transport to the mainland for disposal, where required.

### **Hazardous Material**

Disposal of hazardous material, including chemicals, should be in accordance with expert advice received from bodies such as the National Chemicals Emergency Centre, SEPA and the SIC Safety Manager.

### **Wildlife**

The SSPCA or the Environmental Group has responsibility for oiled wildlife. See [Section 9](#) .



---

**Contact Directory – All** Contacts, for company/organisation contact details.

---

## 9 Wildlife Response

In the event that wildlife is affected by a pollution incident it is important that there is a mechanism to take contaminated animals into captivity for cleaning and rehabilitation. It is imperative that actions taken in pursuit of wildlife welfare be compatible with wider environmental safeguard requirements.

For the purposes of this plan the SSPCA will be the lead authority when dealing with oiled wildlife. As an organisation they have procedures in place for dealing with oiled wildlife.

Where activated the SSPCA will coordinate their response with the Environment Group. The Environment Group will direct the welfare efforts of third-parties toward the recognised welfare bodies to ensure the maximum benefit for wildlife conservation.

Where a significant wildlife response is required or in the event of a Tier 2 or Tier 3 category oil spill it is likely that Sea Alarm will be activated in order to provide additional competent response.

Shetland Oiled Wildlife Network is a local forum for information sharing, shared awareness and cooperation, and is not responsible for delivering the oil spill or oiled wildlife response. The knowledge, resources and capacity of the organisations in SOWN could be used in a response though, pending agreement from said individual organisations, to aid in the response at a local level.

## Section

# 2

# Data

## 10 Ongoing Communications

Following the initial notifications described in [Section 3 Primary Notifications](#), internal incident communications will be ongoing and external communications with the authorities, media and stakeholders will also occur depending on the incident and associated circumstances.

### 10.1 Internal Incident Communications

Efficient communication between the SVHA and the SVT during an incident are crucial if both are to discharge their responsibilities effectively and efficiently. [Figure 5](#) shows the communication pathways for ongoing internal incident communication between SIC (SVHA) and the SVT.

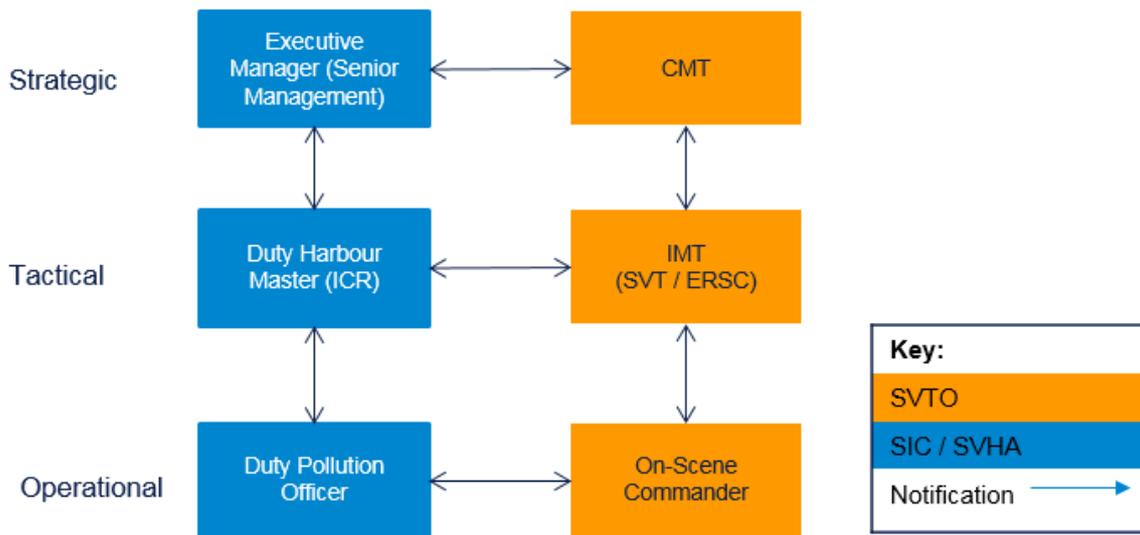


Figure 5 – Ongoing Internal Communications

#### 10.1.1 Operational Communications

As soon as a report of an oil spill is received by the VTS Operator, and vessels have been assigned to oil spill response duties, they will be asked to select and monitor Channel 10. Channel 10 will be used for all communications between Marine craft and shore. A second radio channel is available during specific duties such as boom deployment (for VTS Authority radio's this channel is 108 at position 8 on the channel selector and for the Terminal radio's it is the channel marked "Private"). Any stations not connected with the incident will be requested by the VTS Operator to cease transmission or shift to another channel.

Intrinsically safe VHF and UHF handheld radios are available, to personnel in the field, for direct access to Sullom Voe VTS and the Harbour's Incident Control Room (ICR) or the designated communications room on the Terminal's Private channels

Communications with work parties requires adequate communications - a comprehensive reporting procedure must be worked out before work parties are deployed.

As soon as the Sella Ness Incident Control Room has been established and sufficient staffing resources are available all incident telephone communications, should be through the Incident Control Room. Staff should be designated to take, log and pass on all relevant information for the SIC Incident Commander.

## **10.2 External Incident Communications**

Following an incident, the HM and/or their deputy will, at least initially, be the primary point of contact for external communications with government authorities, the media and stakeholders. This will be the case for both very minor incidents and those where the Tier 1 is activated to manage incidents with potentially greater consequences.

For ongoing Tier 2 and 3 incidents, the Strategic Communications Lead will setup the ECT who will be responsible for external communications (see [Section 7 Media Strategy](#) and the SIC MEP for further details).

Figure 6 shows how the ongoing external communications would be structured, with communication from the statutory bodies to the SVHA/SIC and then to the SVT IMT. Specialist support can be sought from the oil spill response contractor and the Environment Group, which would include SOTEAG. The SVT IMT organisation has been structured to allow additional internal support resources to be employed should the need arise.

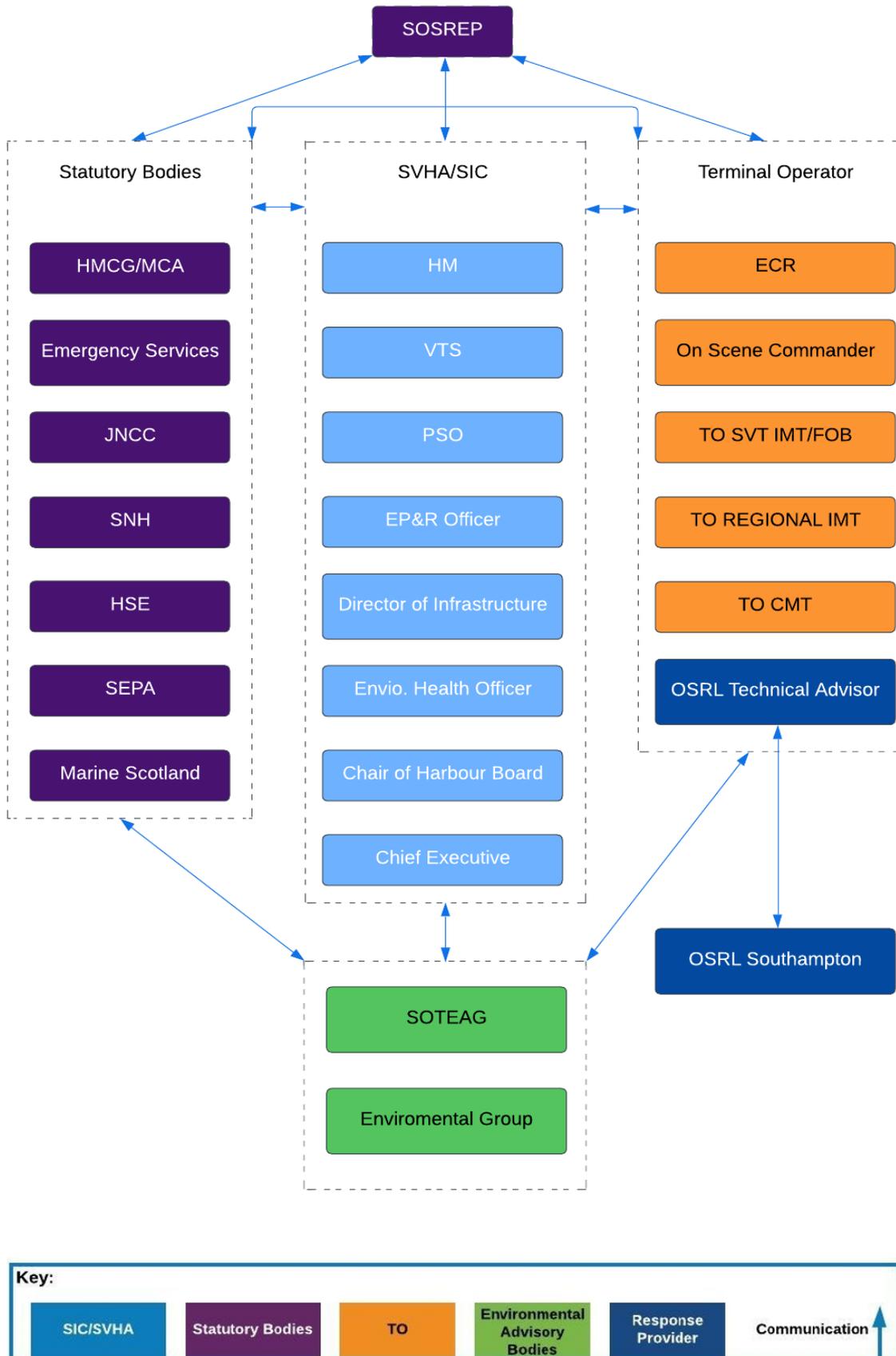


Figure 6 – Ongoing External Communications

## 11 Oil Spill Modelling

Indicative release volumes of 10 m<sup>3</sup> and 100 m<sup>3</sup> were simulated using SINTEFS Oil Spill Contingency and Response (OSCAR) model. This was to provide indicative shoreline arrival times, due to the nature of the location, all models run show beaching in a short space of time.

The simulations were ran in SINTEF's OSCAR model, version 8.0. Each simulation ran long enough to show initial shoreline impact.

Two release quantities (10 m<sup>3</sup> and 100 m<sup>3</sup>) were used and in total, 32 individual simulations were ran in a range of tidal and wind conditions.

### 11.1 Modelling Inputs

The oil type modelled was a representative Group 3 oil, with the characteristics below:

|                  |                  |
|------------------|------------------|
| Specific Gravity | 0.913 (API 23.5) |
| Viscosity        | 100 Cp           |
| Pour Point       | 15°C             |
| Wax Content      | 4.7%             |
| Asphaltenes      | 0.9%             |

Spring and neap tidal currents were estimated from the available tidal information (chart tidal diamonds), capturing the general flow in around SVT.

Wind was set at a constant speed of 10 knots or 30 knots, from either the East or South-West - the dominant wind directions.

The habitat grid used had a 10-m spatial resolution derived from a global high-resolution coastline dataset. The shoreline location was adjusted to capture the low water level from chart data.

### 11.2 Modelling Outputs

#### 11.2.1 Initial impact time and location given various oil spill scenarios (10 knots)

| Modelling Conditions: 10 knots |                   |               |  |                        |
|--------------------------------|-------------------|---------------|--|------------------------|
| Spill Volume                   | Direction of Wind | Tide          | Location of Initial Impact                   | Time to Initial Impact |
| 10 m <sup>3</sup>              | East              | Spring, Ebb   | Dale Voe - Dale Burn to Maggie Kettle's Loch | 2 hrs                  |
|                                |                   | Spring, Flood | Fugla Ness - The Stabans to Sel Helliacks    | 2 hrs                  |
|                                |                   | Neap, Ebb     | Dale Voe – South Shore                       | 2 hrs                  |
|                                |                   | Neap, Flood   | Fugla Ness - The Stabans to Sel Helliacks    | 2 hrs                  |
|                                | South-West        | Spring, Ebb   | Sullom Voe – Jetty Number 3                  | < 1hr                  |
|                                |                   | Spring, Flood | Sullom Voe – Jetty Number 3                  | < 1hr                  |

| Modelling Conditions: 10 knots |                   |               |  |                        |
|--------------------------------|-------------------|---------------|--|------------------------|
| Spill Volume                   | Direction of Wind | Tide          | Location of Initial Impact                   | Time to Initial Impact |
| 100 m <sup>3</sup>             |                   | Neap, Ebb     | Sullom Voe – Jetty Number 3                  | < 1hr                  |
|                                |                   | Neap, Flood   | Sullom Voe – Jetty Number 3                  | < 1hr                  |
|                                | East              | Spring, Ebb   | Dale Voe - Dale Burn to Maggie Kettle's Loch | 2 hrs                  |
|                                |                   | Spring, Flood | Fugla Ness - The Stabans to Sel Helliacks    | 2 hrs                  |
|                                |                   | Neap, Ebb     | Dale Voe – South Shore                       | 2 hrs                  |
|                                |                   | Neap, Flood   | Fugla Ness - The Stabans to Sel Helliacks    | 2 hrs                  |
|                                | South-West        | Spring, Ebb   | Sullom Voe – Jetty Number 3                  | < 1hr                  |
|                                |                   | Spring, Flood | Sullom Voe – Jetty Number 3                  | < 1hr                  |
|                                |                   | Neap, Ebb     | Sullom Voe – Jetty Number 3                  | < 1hr                  |
|                                |                   | Neap, Flood   | Sullom Voe – Jetty Number 3                  | < 1hr                  |

### 11.2.2 Initial impact time and location given various oil spill scenarios (30 knots)

| Modelling Conditions: 30 knots |                   |               |   |                        |
|--------------------------------|-------------------|---------------|---|------------------------|
| Spill Volume                   | Direction of Wind | Tide          | Location of Initial Impact                | Time to Initial Impact |
| 10 m <sup>3</sup>              | East              | Spring, Ebb   | Dale Voe – South Shore                    | < 1hr                  |
|                                |                   | Spring, Flood | Fugla Ness - The Stabans to Sel Helliacks | < 1hr                  |
|                                |                   | Neap, Ebb     | Dale Voe – South Shore                    | < 1hr                  |
|                                |                   | Neap, Flood   | Fugla Ness - The Stabans to Sel Helliacks | < 1hr                  |
|                                | South-West        | Spring, Ebb   | Sullom Voe – Jetty Number 3               | < 1hr                  |
|                                |                   | Spring, Flood | Sullom Voe – Jetty Number 3               | < 1hr                  |
|                                |                   | Neap, Ebb     | Sullom Voe – Jetty Number 3               | < 1hr                  |
|                                |                   | Neap, Flood   | Sullom Voe – Jetty Number 3               | < 1hr                  |
| 100 m <sup>3</sup>             | East              | Spring, Ebb   | Dale Voe – South Shore                    | < 1hr                  |
|                                |                   | Spring, Flood | Fugla Ness - The Stabans to Sel Helliacks | < 1hr                  |
|                                |                   | Neap, Ebb     | Dale Voe – South Shore                    | < 1hr                  |
|                                |                   | Neap, Flood   | Fugla Ness - The Stabans to Sel Helliacks | < 1hr                  |
|                                | South-West        | Spring, Ebb   | Sullom Voe – Jetty Number 3               | < 1hr                  |
|                                |                   | Spring, Flood | Sullom Voe – Jetty Number 3               | < 1hr                  |
|                                |                   | Neap, Ebb     | Sullom Voe – Jetty Number 3               | < 1hr                  |
|                                |                   | Neap, Flood   | Sullom Voe – Jetty Number 3               | < 1hr                  |

## 12 Environmental and Socioeconomic Sensitivities

The effects of oil on marine species and birds will vary depending on the type of oil spill, the extent of weathering and the degree and duration of exposure. A detailed Environmental Impact Assessment (EIA) has been undertaken for the project.

The environmental and socioeconomic sensitivities information within this section should be assessed in conjunction with [Section 5 Response Strategy](#), SOTEAG and relevant technical experts, when determining the oil pollution response.

### 12.1 Sullom Voe Special Area of Conservation and Designated Areas

Sullom Voe is the longest Voe in Shetland and is partially sheltered by the island of Yell. It has been identified as a Special Area of Conservation (SAC) under the EC Habitats Directive (92/43/EEC). Sullom Voe is representative of the most northerly of the geographical range and ecological variation of 'large shallow inlets and bays' within the UK. It encompasses a variety of reef habitats and boreal-arctic species that are characteristic of Shetland Voers and found nowhere else in the UK. Other interesting features include 'reefs', in particular the biogenic reefs formed by the horse mussel *Modiolus modiolus*. The site also includes 'lagoons', which are a nationally rare habitat and priority habitat type under the EC Habitats Directive. The Sullom Voe SAC was taken into consideration when developing the – [Oil Spill Response Strategies Zone Map](#) (shown in [Figure 4](#)). Conservation areas within the vicinity of SVT have been mapped and can be found in [E.1](#).

### 12.2 Shoreline Types

The shoreline types within Sullom Voe and Yell Sound<sup>4</sup> have been mapped and can be found in [E.1](#) ([Figure 23](#), [Figure 24](#) and [Figure 25](#)). They are predominantly:

- Sheltered rock, manmade, gravel or rock armour (rip rap) – ESI 8
- Sheltered tidal flats or saltmarshes (ESI 9 & 10)

ESI (Environmental Sensitivity Index) are ranked 1 to 10 - listed in order from least sensitive to damage from spilled oil and clean-up methods (lowest numbers) to most sensitive (highest numbers). When an oil spill occurs, ESI types can help to reduce environmental consequences of the spill, identify vulnerable locations, establish protection priorities and identify clean up methods. The ESI rankings were taken into consideration when developing [Figure 4 – Oil Spill Response Strategies Zone Map](#) and spur boom site determination.

### 12.3 Biological Sensitivities

The biological sensitivities within the area covered by this plan have been mapped and can be found in [E.1](#) ([Figure 26](#), [Figure 27](#) and [Figure 28](#)). In addition to Sullom Voe being identified as an SAC, there

---

<sup>4</sup> Greater detail on the geographical area within the scope of this plan can be found in Section 17.1 Geographical Boundary

are a number of areas in Yell Sound East and the northern parts of Sullom Voe designated SAC's for Seals, Otters and Bottle Nose Dolphins. Other key biological sensitivities identified are:

- A number of designated Seal haul-outs.
- Seasonal (Mar – Sep) Seabird and Mixed bird coastal colonies.
- Coastal Sites of Special Scientific Interest

## 12.4 Socioeconomic Sensitivities

The socioeconomic sensitivities within the area covered by this plan have been mapped and can be found in **E.1 (Figure 33, Figure 34 and Figure 35)**. From these figures, it can be seen that the dominant socioeconomic sensitivities are:

- Inshore fisheries (particularly within Yell Sound)
- Coastal historic sites
- Ports and harbours
- Aquaculture (particularly within Yell Sound East)

## 12.5 Priorities for Protection

The SOTEAG (Shetland Oil Terminal Environmental Advisory Group) oil spill sensitivity maps provide an effective visualisation of a wide array of data available, highlighting areas that are environmentally sensitive in the event of an oil spill and how best to protect them. The maps are only used to inform oil spill response strategies and are updated annually for use within the SVHOSCP and the Shetland Marine Pollution Contingency Plan.

A summary of these are displayed in the following section. These maps are also available to download from: <https://synergy.st-andrews.ac.uk/stginternal/oil-spill-sensitivity-maps-downloads/>

## 12.6 Species Sensitivities

Shetland supports significant populations of cetaceans, seals, otters, birds and marine reptiles (turtles), as well important fisheries and shellfish. Many of these species are present at nationally significant numbers, in that they represent >1% of the total UK population.

More detail on particular species (and others) detailed in summary below can be found within the monitoring reports on the SOTEAG website - see <https://www.soteag.org.uk/>

### 12.6.1 Cetaceans

The waters offshore Shetland are important to cetacean populations. Harbour porpoise, killer whale and minke whale, white-beaked dolphin, Atlantic white-sided dolphin, Risso's dolphin, long-finned pilot whale, fin whale, humpback and sperm whale have all been sighted - however, the seasonal distribution and regularity that these Whales visit Shetland waters is not well understood

Cetaceans (particularly minke whales and killer whales) have been observed regularly in Yell Sound, although they are rarely encountered in Sullom Voe. Harbour porpoises are recorded regularly off Orka Voe and around Little Roe, often in groups of twenty or more.

In general cetaceans are less sensitive to oil spills than some species (i.e. birds), as they will tend to detect the area around a surface oil slick and avoid breaching or feeding behaviours that may bring them into direct contact with oil. However, they are still sensitive to impacts from oil spills, and in particular from hydrocarbons and chemicals that evaporate from the oil, particularly in the first few days following a spill event. It is rare for cetacean species to be affected by oil; however, if it occurs direct contact with oil may cause irritation of the skin and mucous membranes.

### 12.6.2 Seals and Otters

Only common (or harbour) seals and grey seals occur on a regular basis around the Shetland Isles, these seal populations tend to frequent coastal waters or waters close to haul-out sites and are particularly sensitive during the pupping season in June and July.

Yell Sound is the most noteworthy common seal haul-out site in the Shetland Isles, supporting approximately 1000 adults (>1% of the UK's population), and for this reason (and Yell Sound's otter population), sections of this coast have been designated as a SAC. Key haul-out sites in the north of Yell Sound are on Little Holm, Little Roe, Brother Isle and Lamba. Haul outs at the southern end of Yell Sound near SVT occur in Orka Voe at Ay Wick and Calback Ness. The Isle of Ungam is described as a well-known seal breeding ground (see maps in [E.1 - Figure 29](#) to [Figure 31](#)).

The Shetland Isles supports approximately 12% of the UK's otter population and has possibly the densest otter population in Europe, with approximately one adult per kilometre of coastline. Internationally important numbers of otters inhabit certain sections of Yell Sound, including Mio Ness and Calback Ness encompassing Orka Voe (0.5 km north of SVT), and for this reason (and Yell Sound's common seal population) these areas have been identified as a SAC (see map in [E.1 - Figure 32](#)). Numerous Otter holts have also been recorded to occur in the peatlands bordering the cliffs, on Gluss Isle and south to Fugla Ness: vehicles should not be used in these areas and material should not be removed from any part of Gluss Ayre.

Seals and Otters are particularly susceptible to oiling and the contamination of food sources, especially in coastal areas, near to breeding colonies. Although seals continue to forage at sea during their pupping season, it is during these periods that seal populations are most susceptible to oiling.

Symptoms of acute exposure to volatile hydrocarbons include irritation to the eyes and lungs, lethargy, poor coordination and difficulty with breathing. Individuals may then drown as a result of these symptoms.

Studies conducted following the Exxon Valdez tanker oil spill identified direct mortality of seals, with increased pup mortality reported in areas of heavy oil contamination compared to un-oiled areas resulting from exposure to oil.

### 12.6.3 Birds

Throughout the summer months Shetland hosts over a million breeding seabirds (more than a tenth of the British total). With regard to the areas of Sullom Voe and Yell Sound; the coasts, islands, holms and skerries at the southern end of Yell Sound, including Linga, Fish Holm, Samphrey, Bigga, Uynarey, Little Roe and Lamba, support a variety of breeding seabirds. Breeding birds identified within the SVT boundary and the adjacent Calback Ness are detailed below.

#### Shetland Breeding Bird Survey Data\* and Estimates Provided by Shetland Amenity Trust

| Name                       | Shetland breeding population <sup>5</sup> | Shetland Breeding Population Estimate 2023 | Remarks   |
|----------------------------|---|--|---|
| Greylag Goose              | Approx. 125                               | 1000                                       | Listed on Schedule 1 of the Wildlife and Countryside Act (1981)                             |
| Teal                       | 75 – 100                                  | 50   | Uncertain. Maybe fewer than 50.   |
| Mallard                    | 150 – 300                                 | 1500                                       |   |
| Red-throated Diver         | 424                                       | 425  | Reported to have bred on Calback Ness, but no birds observed during the survey              |
| Oystercatcher              | 3350                                      | 3350                                       |   |
| Ringer Plover              | 800 – 1000                                | 900  |   |
| Golden Plover              | 1450                                      | 1450                                       | Protected species under Annex 1 of the EU Birds Directive on the Conservation of Wild Birds |
| Lapwing                    | 1740                                      | 1750                                       |   |
| Dunlin                     | 1700                                      | 1700                                       |   |
| Snipe                      | 3450                                      | 3500                                       |   |
| Curlew                     | 2300                                      | 2300                                       |   |
| Redshank                   | 1170                                      | 1200                                       |   |
| Great Skua                 | 6874                                      | 7000                                       |   |
| Arctic Skua                | 1128                                      | 600  |   |
| Common Gull                | Approx. 3000                              | 3000                                       |   |
| Herring Gull               | 3000 - 3500                               | 3000                                       |   |
| Great Black-backed Gull    | 2000 - 2200                               | 2000                                       |   |
| Skylark                    | 24000 - 32000                             | 28,000                                     | Breeding in very high numbers   |
| Rock Pipit                 | 2000 - 4000                               | 3000                                       |   |
| Meadow Pipit               | 8000 – 12500                              | 10,000                                     |   |
| Wren (Shetland subspecies) | 1500 – 3000                               | 2250                                       |   |
| Northern Wheatear          | 7000 - 10000                              | 8500                                       |   |
| Hooded Crow                | 600 – 800                                 | 650  |   |
| Raven                      | 200 – 210                                 | 200  |   |

<sup>5</sup> Pennington M, Ellis P, Harvey P, Heubeck M, Okhill D, Osborn K, Riddington R (2004) - The Birds of Shetland



---

Outside of the breeding season the waters around Sullom Voe and Yell Sound support concentrations of moulting (July to October) and wintering (November to March) migrating seabirds and wildfowl, these are monitored on a regular basis by SOTEAG.

**SOTEAG Bird Count Data for Sullom Voe and Callback Ness Area**

| Species                | COUNT<br>(Individuals) | YEAR | Winter<br>/Summer/Breeding | Remarks   |
|------------------------|------------------------|------|----------------------------|---|
| Red-throated Diver     | 11                     | 2023 | Winter                     | High conservation importance - Significant, high numbers winter in the area         |
| Black-throated Diver   | 1                      | 2021 | Winter                     |   |
| Great Northern Diver   | 10                     | 2023 | Winter                     | High conservation importance - Significant, high numbers winter in the area         |
| Slavonian Grebe        | 35                     | 2023 | Winter                     | High conservation importance - Significant, high numbers winter in the area         |
| Cormorant              | 12                     | 2023 | Winter                     |   |
| Shag                   | 257                    | 2023 | Winter                     | High conservation importance - Significant, high numbers winter in the area         |
| Common Eider           | 228                    | 2023 | Summer                     | High conservation importance - Significant, high numbers moult in the area          |
| Common Scoter          | 6                      | 2023 | Winter                     |   |
| Velvet Scoter          | 8                      | 2021 | Winter                     |   |
| Long-tailed Duck       | 11                     | 2023 | Winter                     | High conservation importance - Significant, high numbers winter in the area         |
| Goldeneye              | 19                     | 2023 | Winter                     | High conservation importance - Significant, high numbers winter in the area         |
| Red-breasted Merganser | 145                    | 2023 | Winter                     | High conservation importance - Significant, high numbers winter in the area         |
| Guillemot              | 7                      | 2023 | Winter                     |   |
| Razorbill              | 1                      | 2023 | Winter                     |   |
| Tystie                 | 152                    | 2023 | Winter                     | High conservation importance - Significant, high numbers winter in the area         |
| Tystie                 | 65                     | 2022 | Breeding                   | High conservation importance - Significant, large and unusual colony on SVT jetties |
| Puffin                 | 1                      | 2023 | Winter                     |   |

The most abundant species in Sullom Voe and Yell Sound in winter are cormorant, shag, red-breasted merganser, black guillemot and guillemot. Notable populations of waders occur around the Houb of Fugla Ness and Scatsca. Large numbers of long-tailed duck have also been counted wintering at the southern end of Yell Sound. Whilst eider have been reported previously in significant numbers on Yell Sound, a

2006 SOTEAG survey found no eiders within 10 km of SVT. Eiders are reported to be particularly vulnerable to inshore pollution incidents, possibly because of their locating near aquaculture.

Direct mortality of birds is often the most widely perceived risk from oil spills, with the more pronounced impacts experienced in coastal waters. Spills near major bird colonies during the breeding season can be particularly severe since birds are feeding intensively and often dive through the surface oil to feed on fish. Birds are affected by oil pollution in the following key ways:

- Stains of oil on the plumage may destroy the insulating and water repelling properties which may ultimately cause the death of the bird.
- Toxic effects after the ingestion of oil during preening, ingestion of oiled prey, inhalation of oil fumes or absorption of oil through skin or eggs may also lead to death.

The SOTEAG Ornithological monitoring programme in Shetland, 2016<sup>6</sup> concluded that there was no evidence that the operation of the Sullom Voe Terminal, or its associated tanker traffic, had any detrimental impact on Shetland's seabird populations during 2016.

#### 12.6..4 Marine Reptiles

Five species of marine turtle have been recorded in UK waters although only the leatherback turtle (Schedule 5; UK BAP Priority species) is a regular visitor to Scottish waters, and is occasionally recorded around the Shetland Isles, usually between August and September.

Turtles are highly sensitive to chemicals, such as oil, as they have a lack of avoidance behaviour, indiscriminate feeding and perform large pre-dive inhalations. Oil affects turtles by direct mortality due to oiling; negative impacts to the skin, blood, digestive, immune system and salt glands; and decreasing fecundity.

#### 12.6..5 Fish and Commercial Shellfish

Within Yell Sound creel fishing is undertaken along the shoreline and scallop fishing in deeper water. Dog whelks are also fished around Orka Voe. Brown trout are present in the majority of lochans and burns in Shetland, while close to SVT sea trout occur in Burreland, Lunnister and Trondavoe, and associated burns, between August and mid-March inclusive. Sea trout are also present in waters surrounding Shetland outside of this period. With regard to the areas within 15 km of the SVT site, SEPA identifies the areas of Dales Voe (to the south east), parts of Busta Voe (to the south west) and Ronas Voe (to the north west) as important shellfish waters (See [Figure 7](#)). Herring are also known to spawn just beyond the northern end of Yell Sound, with whitefish being fished in open water just north and south-east of Yell Sound.

Typically, adult fish are not considered highly sensitive to impacts from oil spills. Adults are mobile and generally able to detect heavily contaminated areas or areas of low water quality. In open waters, fish have the ability to move away from an area of pollution, and are therefore either unaffected or affected

---

6 <https://www.soteag.org.uk/files/2017/03/2016-SOTEAG-seabird-Monitoring-Report.pdf>

only briefly from a change in distribution. Oil contamination in open waters below an oil slick is generally low (only a few ppm or below), therefore adult fish are not thought to be significantly affected by this.

Fish kills however, may occur as a result of high exposure to emulsified oil/freshly spilled diesel in shallow waters and oil pollution may clog fish gills causing asphyxiation. However, oil concentrations in open water rarely reach levels required to result in mortality of adult fish, as these conditions tend to be confined to the short term and the immediate area of the spill.

Fish and shellfish exposed long-term to elevated concentrations of hydrocarbons absorb contaminants through their gills, accumulating it within their internal organs which can lead to long-term, sub-lethal effects. In addition, spilled oil in confined and shallow waters, such as bays and inlets around Sullom Voe, poses a threat to eggs and larvae for spawning in coastal locations which cannot actively avoid oil – i.e. within fisheries and aquaculture sites.

Fisheries and aquaculture sites are not permitted within the Sullom Voe Harbour area, however both Salmon and Mussel farming does occurring in the eastern sector of Yell Sound outside the harbour limit.

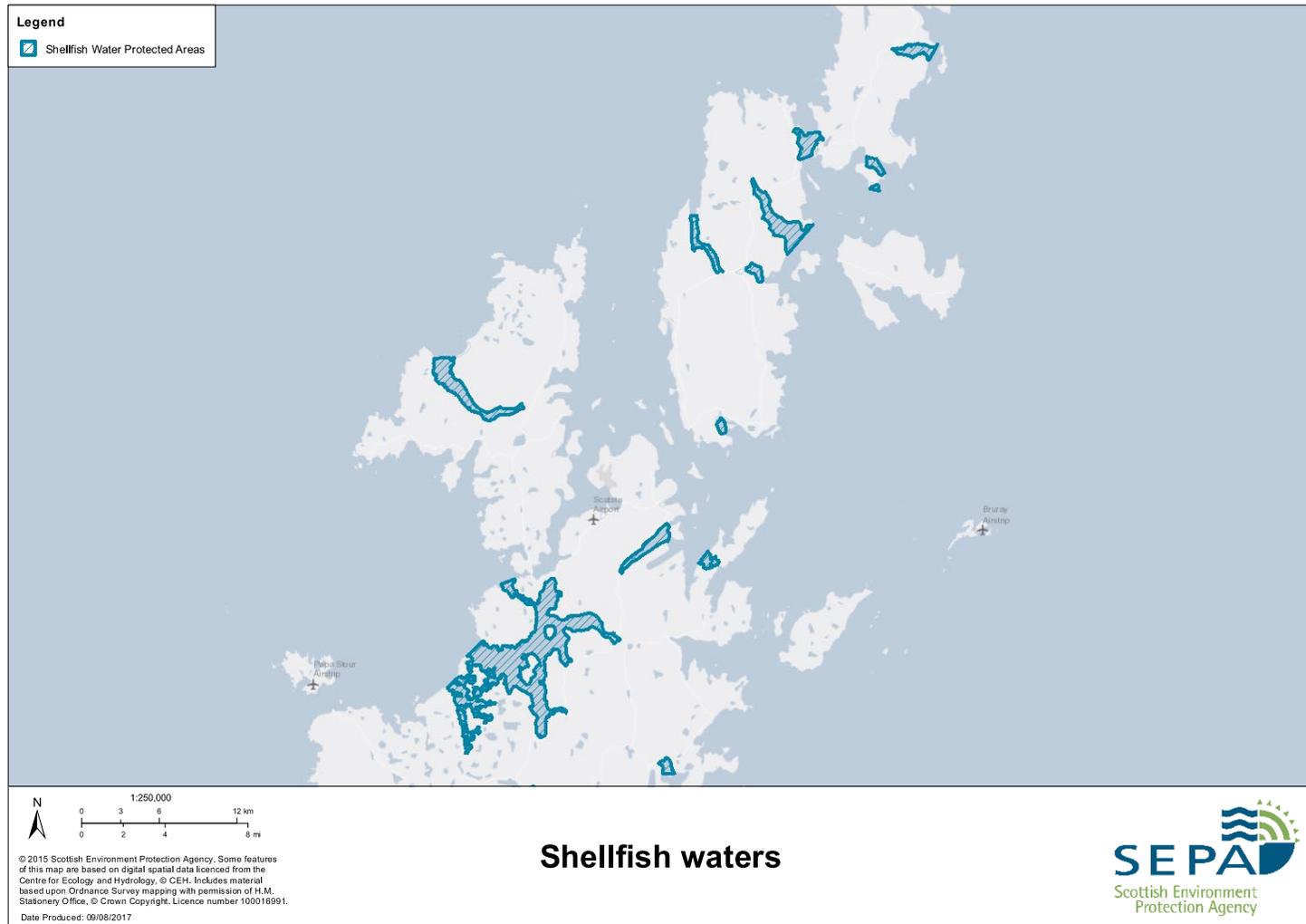


Figure 7 – Designated Shellfish Water Protected Areas Map

### 12.6.6 Sensitive Flora

Much of the area within SVT was altered during the construction of the terminal. However, some areas have reverted towards almost pre-construction habitats. The most significant habitat from a botanical perspective is the area of blanket bog on Calback Ness, particularly the large flat area in the middle of the peninsula, which has many sphagnum rich pools and runnels. Shetlands only resident member of the dragon fly family (the Common Blue Damselfly - *Enallagma cyathigerum*) has also been observed in there.

The reclaimed areas of Orka Voe, now also host extensive patches of rushes and wet pools. These although of low botanical value, are viewed as being of considerable value to breeding birds, notably wildfowl and waders.

### 12.6.7 Benthos and Plankton

Impacts to local benthos include acute toxicity and possible organic enrichment of sediment habitats; however, these impacts are likely to be minimal in offshore locations because oil rises to the surface and will be unlikely to penetrate in significant quantities to sediments at depth. The shoreline and shallow inshore areas are susceptible to being coated in oil leading to the mortality of some benthic organisms (e.g. polychaetes, annelids, echinoderms, crustaceans, molluscs) by blocking respiratory function and toxicity. There is evidence that some groups of invertebrates are more resilient to the presence of oil, including some barnacle and mollusc species. Recovery times are variable, depending on environmental factors such as wave action, and may be in the region of 1 to 10 years.

Oil is also toxic to a wide range of planktonic organisms particularly to those living near the sea surface where water-soluble components leach from the floating slick. Although the toxicity of oil may kill individuals, the effects on plankton communities generally appear to be short-term. Following an oil spill planktonic biomass is locally expected to decrease dramatically, however, after only a few weeks' populations often return to previous levels through a combination of high productive rates and immigration from outside the affected area.

---

## 13 Beach Workpacks

Beach Workpacks are available at the Sella Ness base. The pack contents are laminated and ready for use. Each pack contains the following for a specific location (see [Figure 8](#)):

- Shoreline sensitivities
- Operational detail (shoreline access, load bearing, distances to road etc.)
- Blank forms to fill in, during an incident.

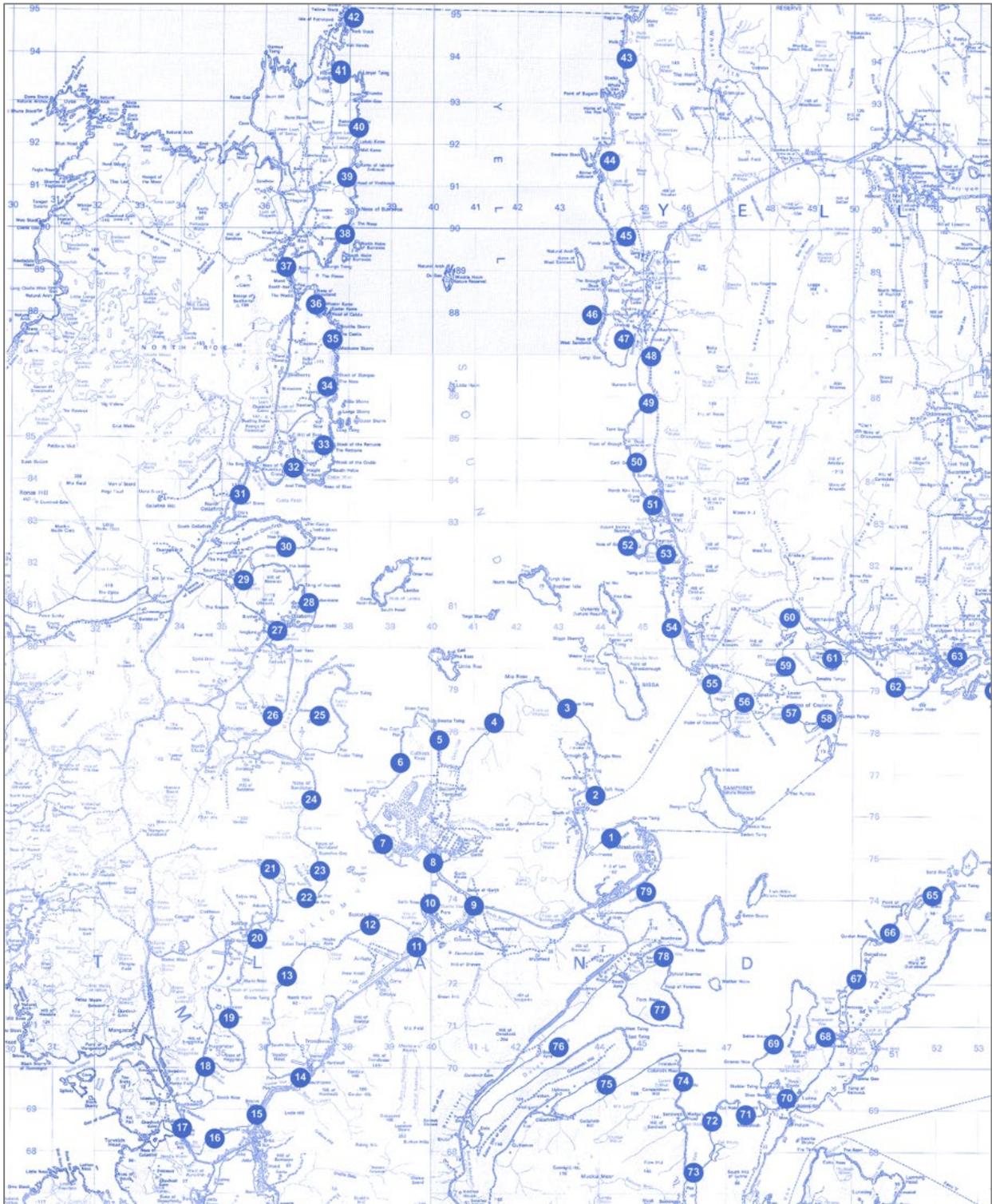


Figure 8 - Map of Oil Spill Beach Workpacks<sup>7</sup>

<sup>7</sup> Beach packs can be downloaded from [Oil Spill Beach Maps – Shetland Islands Council](#)

## 14 Contact Directory – All Contacts

| Organisation/Agency  | Contact  |
|--|--|
| <b>Sullom Voe Harbour Authority (SVHA) / Ports &amp; Harbours Operations</b> | <b>01806 244200 (OH) /</b>   |
| Administration Manager   | 01806 244208 (OH)  |
| Executive Manager  | 01806 244264 (OH)  |
| Harbour Master (HM)  | 01806 244209 (OH)  |
| Port Safety Officer (PSO)  | 01806 244277 (OH) or 01806 244278  |
| Team Leader - Deputy HM  | 01806 244202 (OH) or 01806 244245  |
| Team Leader – Tug Engineering Superintendent                                 | 01806 244205 (OH)  |
| Team Leader – Port and Marine Operations                                     | 01806 244297 (OH)  |
| Team Leader Engineering – Ports  | 01806 244264 (OH)  |
| VTS (24 hr)  | 01806 244280 / 81 / 82<br>01806 242344<br>Outside of OOH contact those above through VTS |
| <b>Shetland Island Council (SIC) - all OH</b>                                |  |
| Chief Executive, SIC   | 01595 744500 (OH)  |
| Council Emergency Planning & Resilience Officer                              | 01595 744740 (OH)  |
| Health and Safety Manager  | 01595 744567 (OH)  |
| <b>SIC - Infrastructure Services – all OH</b>                                |  |
| Executive Director   | 01595 744273   |
| Environmental Health Manager   | 01595 744250   |
| Environmental Health Officer   | 01595 744250   |
| Executive Manager, Environment and Estate Operations                         | 01595 4184   |
| Executive Manager, Roads   | 01595 744104   |
| <b>Terminal Operator (EnQuest)</b>   |  |
| Brent Pipeline System Contact  | via Terminal Operator  |
| Emergency Control Room (24hrs)   | 01806 243366   |
| Ninian Pipeline System Contact   | via Terminal Operator  |
| Operations Team Leader   | 01806 243110<br>01806 243991   |
| Pollution Response Base  | 01806 243359   |
| Production Supervisor  | 01806 243352   |

| Organisation/Agency   | Contact                      |
|---|------------------------------|
| Switchboard   | 01806 243000                 |
| Terminal Manager  | 01806 243289                 |
| <b>Air Services</b>   |                              |
| Air Task Group  | 01595 840246                 |
|   |                              |
| Loganair  | 01950 460970                 |
| Sumburgh Airport  | 01950 461000                 |
| <b>British Trust for Ornithology (BTO)</b>  |                              |
| National HQ   | 01842 750050                 |
| BTO Scotland  | 01786 458021                 |
| <b>Centre for Ecology and Hydrology (CEH)</b>   |                              |
| Penicuik Office   | 0131 445 4343                |
| <b>Health and Safety Executive (HSE)</b>  |                              |
| Duty Officer OOH  | 0151 922 9235                |
| Mon-Fri, 0830-1700  | 0845 300 9923                |
| <b>HM Coastguard Guard (HMCG), through Coastguard Maritime Rescue Co-ordination Centre (MRCC)<sup>8</sup></b> |                              |
| Emergency (Zone 1)  | 0344 3820701                 |
| Routine (Zone 1)  | 0344 3820711                 |
| <b>International Tanker Owners Pollution Federation (ITOPF)</b>   |                              |
| Head Office   | 020 7566 6999                |
|   |                              |
| Emergency (24hr)  | 020 7566 6998                |
| <b>Joint Nature Conservation Committee (JNCC)</b>   |                              |
| Aberdeen  | 030 124 2162                 |
| Pollution - Emergency contact numbe (24hr)  | 07974 257464                 |
| E-mail  | Pollution.advice@jncc.gov.uk |

<sup>8</sup> The HMCG will also notify the Maritime and Coastguard Agency

| <b>Lerwick Port Authority</b>                                |  |
|--|--|
| HM / Harbour Control Room, 24 hours                          | 01595 692991   |
| Fax  | 01595 693452   |
| <b>Marine Scotland (MS), Aberdeen</b>                        |  |
| Mobile Phone (Duty Officer 24hr) for dispersant notification | 07770 733423   |
|  |  |
| Email (for dispersant notification)                          | <a href="mailto:ms.spillresponse@gov.scot">ms.spillresponse@gov.scot</a> |
| <b>North Atlantic Fisheries College (NAFC) Marine Centre</b> |  |
| Administration   | 01595 772000   |
|  |  |
| <b>National Museums of Scotland</b>                          |  |
| Natural Sciences Department                                  | 0131 247 4228  |
| <b>Police Scotland</b>                                       |  |
| Non-emergency  | 101  |
| Emergency  | 999  |
| <b>Procurator Fiscal</b>                                     |  |
| Lerwick  | 0300 020 3000  |
| <b>Radio Shetland</b>  |  |
| Lerwick number   | 01595 694747   |
|  |  |
| <b>Royal Society for the Protection of Birds (RSPB)</b>      |  |
| Northern Isles Manager                                       | 01950 460800   |
| Local Representative   | 01957 733246   |
| Regional Headquarters, Aberdeen                              | 01224 624824   |
|  |  |
| <b>Scottish Environment Protection Agency (SEPA)</b>         |  |
| Emergency Pollution Number                                   | 0800 807060  |
| Lerwick Office   | 01595 696926   |
|  |  |



| <b>Scottish National Heritage (SNH)</b>                                  |  |
|--|--|
| 24 Hr duty   | 0131 316 2610                              |
| E-mail   | marinepollution@nature.scot                |
|  |  |
|  |  |
| <b>Scottish Society for the Prevention of Cruelty to Animals (SSPCA)</b> |  |
| Headquarters   | 03000 999999                               |
| <b>Scottish Water</b>  |  |
| Area Office, Lerwick. (24Hr)   | <a href="tel:08456018855">08456 018855</a> |
|  |  |
| <b>Sea Alarm Foundation</b>  |  |
| Action Line  | 0032 2278 8744                             |
| <b>Serco NorthLink Ferries</b>   |  |
| Stromness Ferry Terminal office  | 0845 6000 449                              |
|  |  |
| <b>Salmon Scotland</b>   |  |
| Headquarters   | 0131 2026621                               |
| Scottish Sea Farms   | <a href="tel:01595881005">01595 881005</a> |
| Cooke Aquaculture  | 01698 534630                               |
| <b>Shetland Biological Records Centre / Shetland Amenity Trust</b>       |  |
| Project Manager  | 01595 694688                               |
| <b>Shetland Bird Club</b>  |  |
| Lerwick Number   | 01595 880 450                              |
| <b>Shetland News Agency</b>  |  |
| Editorial  | 07775 564513                               |
| Email  | news@shetnews.co.uk                        |
| <b>Shetland Times</b>  |  |
| Editorial  | 01595-693622                               |
| Email  | editorial@shetlandtimes.co.uk              |

| <b>Shetland Oil Terminal Environmental Advisory Group (SOTEAG)</b> |                                   |
|--|-----------------------------------|
| Executive Officer  | Dr Rebecca Kinnear - 01334 463613 |
| Email  | soteag@st-andrews.ac.uk           |
| <b>SIC Ferry Services</b>  |                                   |
| Booking Office, Ulsta, Yell  | 01595 745804 / 745805             |
| Ferry Operations Manager   | 01806 244200                      |
| <b>Waste Management (transfer, storage, disposal)</b>              |                                   |
| Altrad   | 01806 242622                      |
| EMN Plant Ltd  | 01806 242882                      |
| Garriocks Brothers Ltd   | 01595 694765                      |
| Total Waste Management Alliance (TWMA), Shetland Manager           | 01595 840431                      |
| <b>Shetland Vets</b>   |                                   |
| Partner (24hrs)  | 01595 810456                      |

## 15 Response Stockpiles

This section details the equipment available at the Sella Ness Pollution Base, for up to date equipment availability during an incident contact the SVT IMT as some equipment may change or be out of service (e.g. for maintenance).

| Source/Location                        | Equipment Description                          | Available Total | Authority to Mobilise  |
|--|--|-----------------|--|
| <b>Pollution Response Marine Craft</b> |  |                 |  |
| Sella Ness Jetties                     | Fugla Response Vessel                          | 1               | The SVHA has access to this SVT enhanced stockpile, through the SVT IMT. |
| Sella Ness Jetties                     | Kyrre Response Vessel                          | 1               |  |
| Sella Ness Jetties                     | Voe Clean Response Vessel                      | 1               |  |
| Sella Ness Jetties                     | Swarback II Response Vessel                    | 1               |  |
| Sella Ness Base                        | 4m Aluminium workboat                          | 1               |  |
| <b>Vehicles</b>                        |  |                 |  |
| Sella Ness Base                        | Polaris Ranger 6x6                             | 2               | The SVHA has access to this SVT enhanced stockpile, through the SVT IMT. |
| Sella Ness Base                        | Vacuum Tanker (2000 Gal)                       | 3               |  |
| Sella Ness Base                        | 17.5T Flatbed HGV with Hiab                    | 1               |  |
| Sella Ness Base                        | 4x4 Pickup                                     | 2               |  |
| Sella Ness Base                        | Road Trailer                                   | 2               |  |
| Sella Ness Base                        | 3.75T Forklift                                 | 1               |  |
| Sella Ness Base                        | 12T Forklift                                   | 1               |  |
| Sella Ness Base                        | ATV Trailer                                    | 3               |  |
| Sella Ness Base                        | Fugla Trailer                                  | 1               |  |
| Sella Ness Base                        | Tinny Trailer                                  | 1               |  |
| <b>Boom Sites and Containment Boom</b> |  |                 |  |
| Boom Site 1                            | Vikoma Hi-Sprint Boom 325m                     | 1               | The SVHA has access to this SVT enhanced stockpile, through the SVT IMT. |
| Boom Site 2                            | Norlense NO-350-F Solid Floatation Boom – 464m | 1               |  |
| Sella Ness Base                        | Site 3 NOFI 350 EP Boom Bag - 160m             | 2               |  |
| Sella Ness Base                        | Site 4 NOFI 350 EP Boom Bag – 160m + 180m      | 2               |  |
| Sella Ness Base                        | Site 5 NOFI 350 EP Boom Bag – 232m             | 1               |  |
| Boom Site 6                            | NOFI 350 Solid Floatation Boom                 | 2               |  |
| Boom Site 7                            | Norlense NO-600-S Inflation Boom – 400m        | 1               |  |
| Boom Site 8                            | 246m Hi-Sprint Boom                            | 1               |  |
| Sullom Voe Construction Pier           | Ocean Buster Containment System                | 2               |  |
| Sella Ness Base                        | 10m 750 Sea Sentinel Boom                      | 30              |  |
| Sella Ness Base                        | 10m 500 Shore Guardian Boom                    | 30              |  |
| Sella Ness Base                        | NOFI 350 EP Boom Bag – General Purpose         | 2               |  |
| Sella Ness Base                        | NOFI 350 EP Boom Bag – Training                | 1               |  |
| Jetty Head Area                        | Box Trailer with Fence Boom                    | 2               |  |

| <b>Oil Skimming Systems</b>        |   |     |  |
|------------------------------------|---|-----|--|
| Sella Ness Base                    | Lamor LMS 150 Multipurpose Skimming System  | 2   | The SVHA has access to this SVT enhanced stockpile, through the SVT IMT. |
| Sella Ness Base                    | Komara 12k Skimmer                          | 8   |  |
| Sella Ness Base                    | Komara Star Skimmer                         | 4   |  |
| Sella Ness Base                    | Vikoma Sea Devil Skimming System            | 1   |  |
| Sella Ness Base                    | Delta Head Skimming Adaptor                 | 4   |  |
| Sella Ness Base                    | OM4D Oil Mops                               | 2   |  |
| Sella Ness Base                    | Ro-Vac System                               | 2   |  |
| <b>Pumps</b>                       |   |     |  |
| Sella Ness Base                    | Mini-Pipeline System                        | 1   | The SVHA has access to this SVT enhanced stockpile, through the SVT IMT. |
| Sella Ness Base                    | Framo Pumping System                        | 1   |  |
| Sella Ness Base                    | Honda Water Pump                            | 4   |  |
| Sella Ness Base                    | Godiva Fire Pumps                           | 2   |  |
| Sella Ness Base                    | Spate Pump                                  | 2   |  |
| <b>Dispersant Resources</b>        |   |     |  |
| Sella Ness Base                    | ATV Mounted Spray System                    | 1   | The SVHA has access to this SVT enhanced stockpile, through the SVT IMT. |
| Sella Ness Base                    | Honda Dispersant Pump                       | 1   |  |
| Sella Ness Base                    | Mini-Widespray Dispersant Pumps             | 3   |  |
| <b>Temporary Storage</b>           |   |     |  |
| Sella Ness Base                    | Fastank 2000                                | 13  | The SVHA has access to this SVT enhanced stockpile, through the SVT IMT. |
| Sella Ness Base                    | Pollutank Floating Storage 25m <sup>3</sup> | 4   |  |
| Sella Ness Base                    | Raceway Tank 3m                             | 2   |  |
| Sella Ness Base                    | Raceway Tank 6m                             | 2   |  |
| Sella Ness Base                    | GRP Bunded Containers                       | 3   |  |
| <b>Ancillary/Support Equipment</b> |   |     |  |
| Sella Ness Base                    | Back Pack Air Blower                        | 8   | The SVHA has access to this SVT enhanced stockpile, through the SVT IMT. |
| Sella Ness Base                    | Generator                                   | 2   |  |
| Sella Ness Base                    | Cold Water Pressure Washer                  | 2   |  |
| Sella Ness Base                    | Floor Standing Air Blower                   | 1   |  |
| Sella Ness Base                    | Diesel Air Blower                           | 2   |  |
| Sella Ness Base                    | Danforth Anchors                            | 40  |  |
| <b>Dispersant Inventory</b>        |   |     |  |
| Scalloway Harbour                  | Slickgone NS (OSRL)                         | 300 | The SVHA has access to this SVT enhanced stockpile, through the SVT IMT. |
| SIC Tugs                           | 12 m <sup>3</sup> Dispersant                | 2   |  |



| Additional Equipment |  |  |   |
|----------------------|--|--|---|
| OSRL                 | <p>A summary of the OSRL equipment stockpile and status can be found at</p> <p><a href="http://www.oilspillresponse.com/activate-us/equipment-stockpile-status-report">http://www.oilspillresponse.com/activate-us/equipment-stockpile-status-report</a></p> |  | <p>The SVHA has access to the Tier 2/3 OSRL equipment stockpile through the SVT, OSRL is mobilised through the SVT IC / ERSC Duty Director.</p> |



---

[Page Intentionally Left Blank]

## Section

# 3

# Strategy

## 16 Statutory Requirements

This plan has been prepared in accordance with the Merchant Shipping (Oil Pollution Preparedness, Response and Co-operation Convention) Regulations 1998 (SI 1998/1056), which requires ports, harbours and oil handling facilities which fall within the below criteria to prepare and maintain an effective oil spill response:

- Any harbour for which there is a statutory harbour authority having an annual turnover of more than £1 million
- Any other harbour or oil handling facility offering berths alongside, on buoys or at anchor, ships of over 400 GT or oil tankers of over 150 GT
- Any other harbour or oil handling facility in respect of which the Secretary of State has served the harbour authority or operator, a notice stating that they are of opinion that maritime activities undertaken at that harbour or facility involve a significant risk of spillage over 10 tonnes of oil
- Any harbour or oil handling facility on which the Secretary of State has served the harbour authority or operator a notice stating that they believe it is in an area of significant environmental sensitivity, or in an area where a discharge of oil or other substance could cause significant economic damage

These regulations implement the UK Government's obligations under the International Convention on Oil Pollution Preparedness, Response and Co-operation 1990 (OPRC 90). This plan has been developed using the MCA guidelines - OPRC Guidelines for Ports Contingency Planning for Marine Pollution Preparedness and Response (September 2016) and dovetails into the National Contingency Plan - NCP (implemented under OPRC 90).

### 16.1 Plan and Readiness Responsibilities

#### 16.1.1 Responsibility for the Sullom Voe Harbour Oil Spill Contingency Plan (SVHOSCP)

The SVHOSCP is owned by SVHA, but supported by the SVTO as the responsible party. The HM is responsible for the maintenance and review of this plan. The SVHOSCP is a controlled document and will be distributed as shown in the Distribution List.

The plan shall be reviewed following an incident or exercise, in addition to a full review one year before the due review date (plans must be reviewed every 5 years or earlier if operational risk changes). Major plan reviews will be submitted for approval to the MCA. Amendments will, if necessary, be subject to consultation with the appropriate local bodies.

#### 16.1.2 Responsibility for the Sullom Voe Readiness

Under the Sullom Voe Ports and Harbours Agreement (Clause 12 (f)), the SVT Partners have accepted to continuously maintain in a state of readiness, adequate equipment and materials for dealing effectively with an oil pollution incident within the Sullom Voe Harbour limits. The SVTO is required to consult the SVHA HM about equipment and materials to be provided.

The oil pollution equipment maintained in Sullom Voe (with the exception of OSRL) is also available for use elsewhere in Shetland (under the Shetland Marine Pollution Contingency Plan). This is provided that, unless otherwise agreed between the SVHA and the SVT IMT, the SVTOs' ability to meet their obligations under Clause 12 (f) of the Sullom Voe Ports and Harbours Agreement is not reduced.

## 16.2 Lead Authorities

The NCP, gives guidance on the responsibilities that have been imposed or accepted for the clean-up of pollution within the jurisdiction of a harbour authority as follows:

| Where                         | Location of pollution   | Responsibility for clean-up   |
|-------------------------------|---|---|
| <b>Outside harbour limits</b> | On the water  | MCA   |
|                               | Shoreline (including land exposed by falling tide) and other structures | Local authority (SIC, the SVHA)   |
| <b>Within harbour limits</b>  | On the water  | SVHA  |
|                               | Jetties, wharves and structures owned by the harbour authorities        | SVHA  |
|                               | Beach and shoreline owned by the harbour authority                      | SVHA  |
|                               | Foreshore owned by a private individual or group                        | SVTO (the foreshore owners) and other Forshore owned by other Parties (Crofters etc.) |

The lead authority for this plan is therefore the SVHA of the SIC. Other Council Departments in accordance with the SIC MEP will provide support. However, under the Sullom Voe Ports and Harbours Agreement (Clause 12 (f)), action to deal with any spillage of oil within Sullom Voe Harbour and any pollution resulting therefrom shall be taken by the SVTO, but without prejudice to the SVHA's functions in that behalf. Therefore, the SVHA have delegated such actions to the SVTO - as such the SVTO will work with the relevant authorities as required, establishing a unified approach.

The foregoing does not necessarily mean that the SVTO's staff will always carry out the physical operation themselves. The SVTO may contract the physical action on the water and the co-ordination thereof to the SVHA or Third Parties, if the SVHA so agrees. Therefore, by agreement the SVTO or the SVHA may use Contractors. The SVHA may also act on its own behalf under which circumstances, the SVTO will be advised of the action.

The SVTO and the SVHA are both free to act in their own interests, and to satisfy themselves that an adequate job is done, irrespective of who physically performs the task, or who initiated action.

The NCP also sets out the circumstance in which the MCA deploys the UK's national assets to respond to a marine pollution incident. Within the NCP the Government has appointed the Secretary of State's Representative (SOSREP) to provide overall direction for all marine pollution incidents involving the salvage of ships or offshore installations that require a national response. Further details on SOSREP's

role are available in the MCA's Guidelines<sup>9</sup>. However, until those powers have been invoked, responsibility and authority for the incident remains with the SVHA HM.

See [Section 20 Authorities Roles and Responsibilities](#) for further details.

### 16.3 Consultation

The preparation of this plan has been produced after consultation with SVHA and the SVTO, to ensure integration within the Sullom Voe Harbour. Formal consultation has also been sought from:

- Shetland Island Council (SIC), SOTEAG – through the SVHA
- The Emergency Services (Fire, Ambulance and Police)
- Maritime and Coastguard Agency (MCA)
- Marine Scotland (MS) – Marine Laboratory
- Scottish Environment Protection Agency (SEPA)
- Scottish Natural Heritage (SNH)
- The Terminal Operator

The requirements of these authorities and organisations have been considered, and they have confirmed their general agreement to the plan details or taken no exception.

See [C.1.1 Standing Approval Letter](#)

---

<sup>9</sup>[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/557947/OPRC\\_Guidelines\\_for\\_Ports\\_-\\_final\\_Sep\\_16.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/557947/OPRC_Guidelines_for_Ports_-_final_Sep_16.pdf)

## 17 Scope

The plan covers the organisation and procedures for containment and clearance of Oil pollution within the SVHOSCP response limits. (from the sea surface and coast of the area bounded by a line drawn from Ramna Stacks [60°39'50"N, 001°18'41"W] to Point of Fethaland [60°38'19"N, 001°18'24"W], thence southward along the east coast of Mainland to Lunna Ness [60°27'00"N, 001°03'06"W] thence northward to Heoga Ness [60°29'49"N, 001°01'44"W], thence northwards along the west coast of Yell to the Nev of Stuis [60°39'28"N, 001°09'13"W] and thence west to Ramna Stacks. See [Figure 13](#)). (It is recognised that the standing approval for dispersant application (Appendix C) extends outwith the Sullom Voe Harbour limits).

The plan is based upon the need to minimise the impact of marine pollution on the environment, property and amenities. It has been developed for response to oil spills from any one of the sources of oil import/export. These are shown in to

[Figure 12](#) and listed below:

- Import of Brent and Ninian crude oils from the East Shetland Basin by pipeline
- Import of Clair Crude oil from the West Shetland Basin by pipeline
- Export of the above crude oils by tanker; export details over the previous two years were as follows:

| Year | Number of Vessels | Size of Vessels     |
|------|-------------------|---------------------|
| 2016 | 75                | Average 108,864 DWT |
| 2017 | 64                | Average 109,332 DWT |

In the future there is the potential for increased vessel numbers / size due to an increase in oil production / exploration from the offshore fields.

- Condensate transfer through an overland pipeline to Sullom Voe from the Shetland Gas Plant
- Ship to ship transfers of hydrocarbon cargos (liquid-bulks) within the Sullom Voe Harbour limits approved under license Dated 21 September 2012 ([Appendix J](#)) typical vessel sizes range between 140m and 365M LOA (accepted as a matter of routine and vessels out with this range will be considered on an individual basis)
- In addition to liquid bulk cargo the port can handle quarried rock and general, dry, bulk, ro-ro and containerised cargo in relatively small vessels of up to 120 metres working at shallow draft jetties.
- Bunkering of fuel oil within the Sullom Voe Harbour limits, There is the potential for activities to occur in future years.

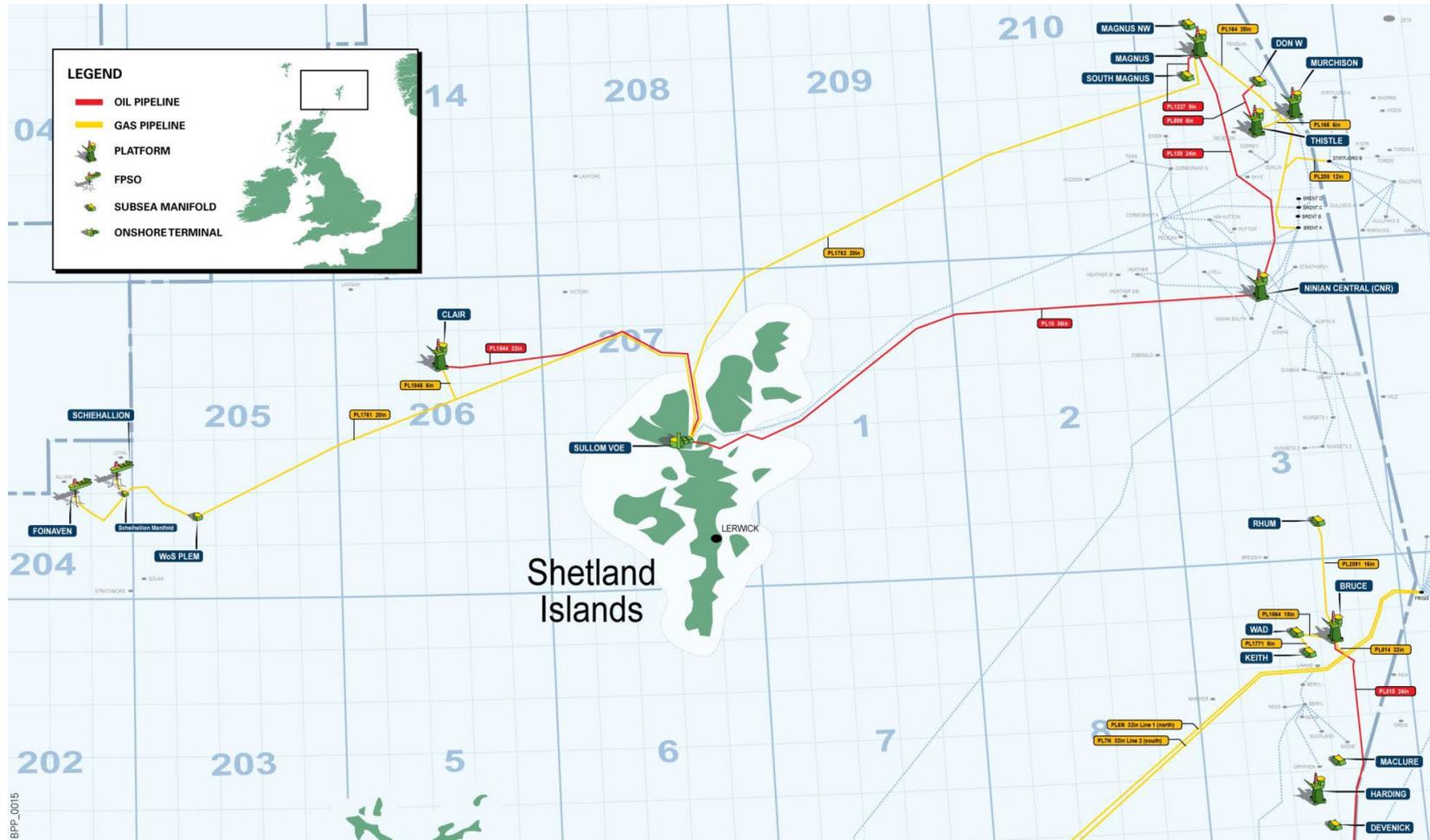


Figure 9 – Widescale Pipeline Overview

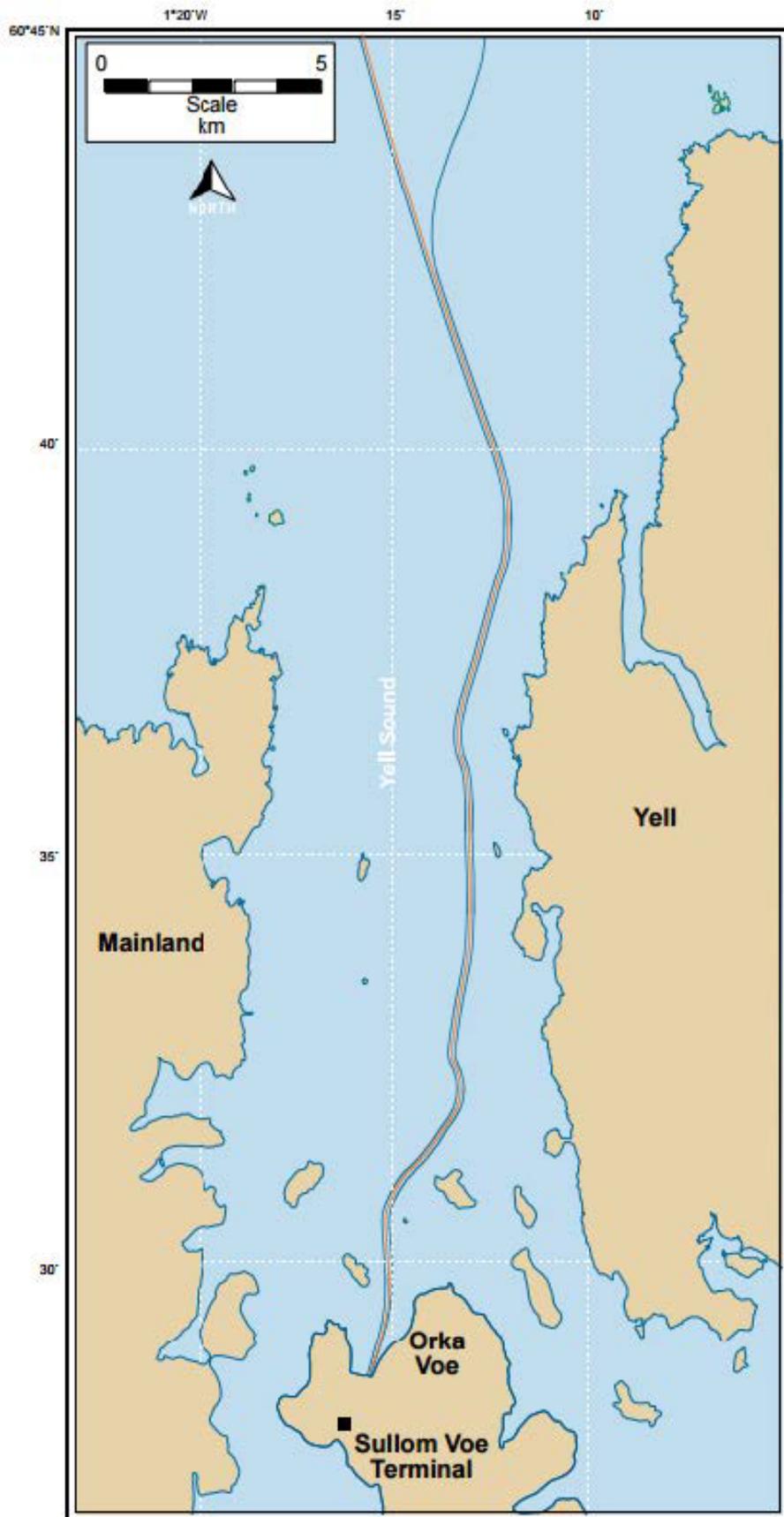


Figure 10 - Clair Pipeline

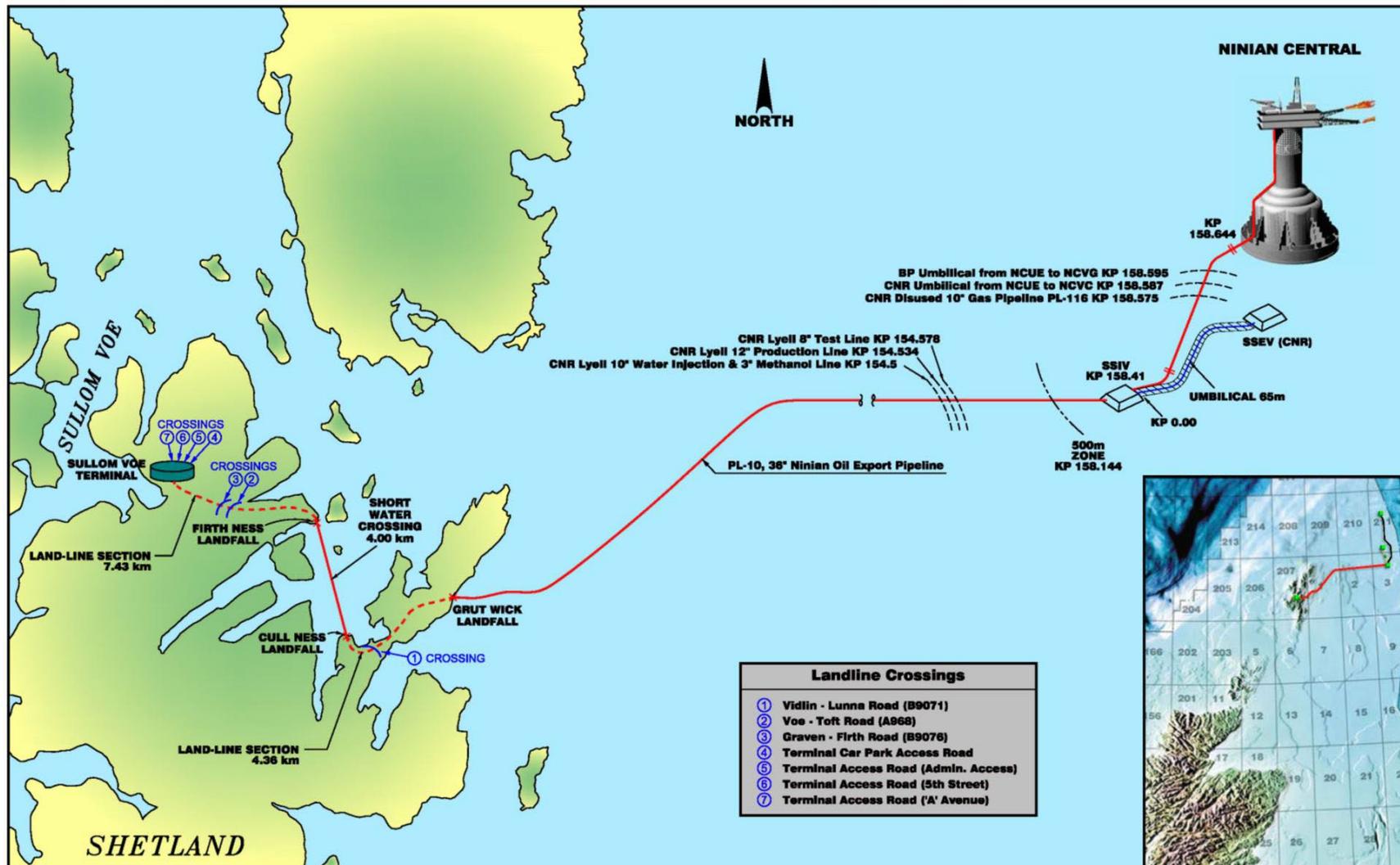


Figure 11 – Ninian Pipeline

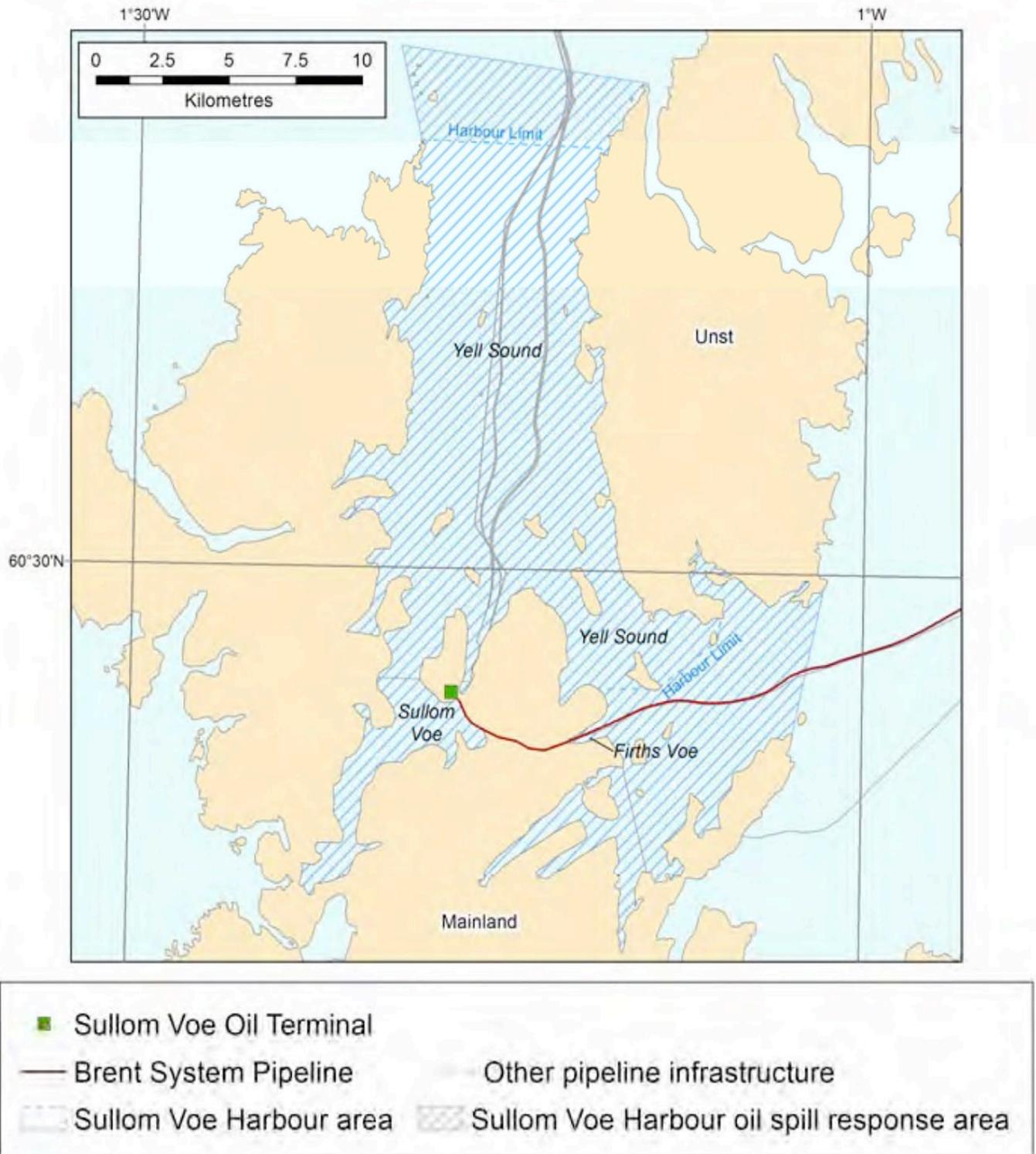
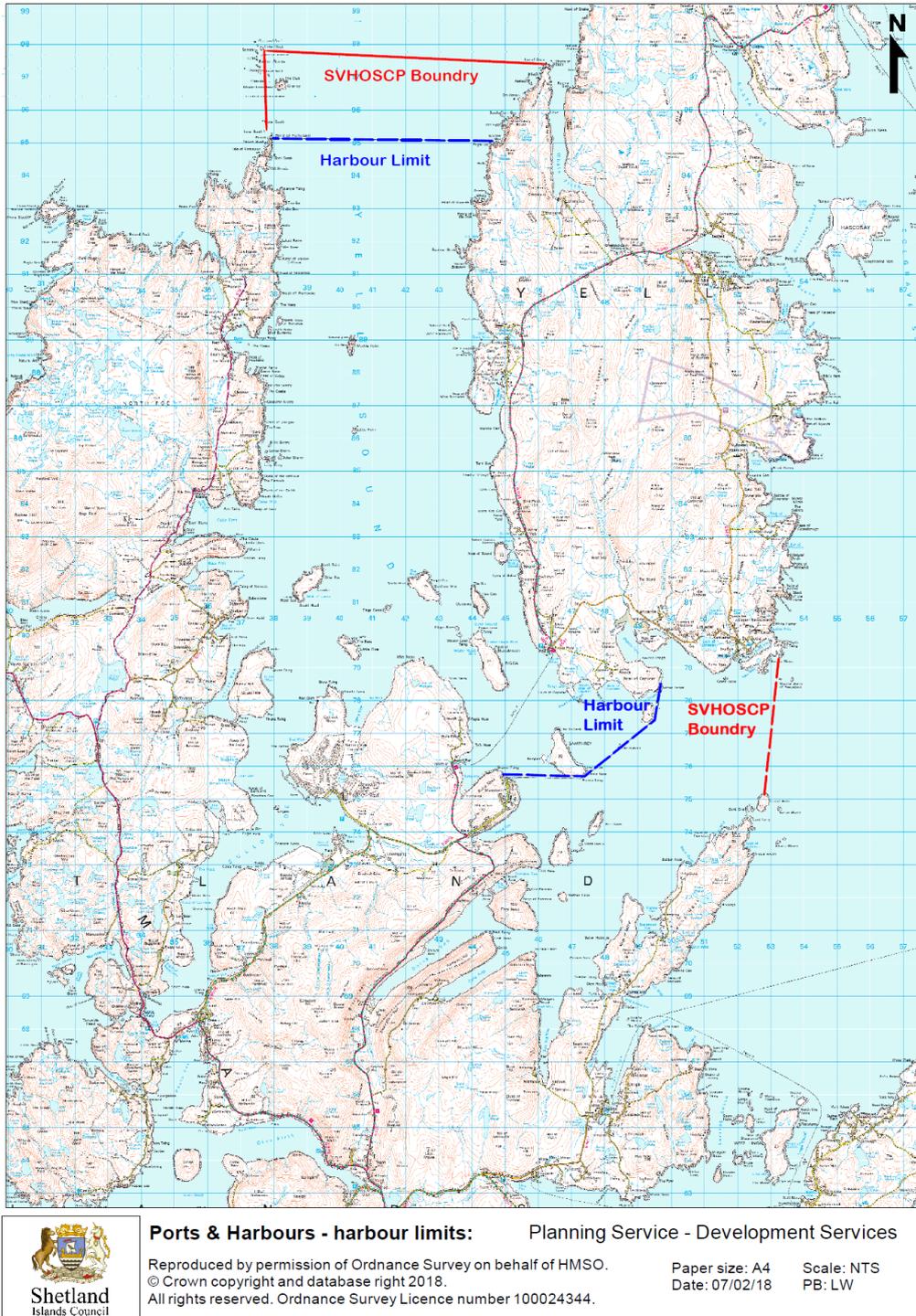


Figure 12 – Brent Pipeline

## 17.1 Geographical Boundary

This plan applies to the following areas (**Figure 13 - Plan Geographic Boundary**).

From the sea surface and coast of the area bounded by a line drawn from Ramna Stacks [60°39'50"N, 001°18'41"W] to Point of Fethaland [60°38'19"N, 001°18'24"W], thence southward along the east coast of Mainland to Lunna Ness [60°27'00"N, 001°03'06"W] thence northward to Heoga Ness [60°29'49"N, 001°01'44"W], thence northwards along the west coast of Yell to the Nev of Stuis [60°39'28"N, 001°09'13"W] and thence west to Ramna Stacks.



**Figure 13 - Plan Geographic Boundary**

## 17.2 Interfacing Plans

| Title  | Description   |
|--|---|
| <b>SIC/SVHA Plans</b>  |   |
| Shetlands Marine Pollution Contingency Plan (MPCP)                                     | This is the Shetland Islands Council Tier 2 oil spill emergency plan for a Shetland wide response to a marine oil spill incident under the Merchant Shipping (OPRC 98) regulations as approved by the UK competent authority, MCA Counter Pollution Branch.   |
| SIC Major Emergency Plan (SIC MEP)   | This plan defines the Council's expected central response and decision-making arrangements in a major emergency and guides staff involved through the process of supporting the emergency services  |
| SVHA Emergency Plan  | This is the Harbour Authority's emergency plan for the port of Sullom Voe, based on an evaluation of the risks and hazards which may result in emergency situations within the area. It has been developed as an integral part of emergency planning for Shetland in general, and Sullom Voe in particular, and should therefore be studied not in isolation but in conjunction with the various other plans listed here. |
| SIC Pipeline Safety Plan Total E&P<br>Shetland Island Regional Gas Export Line (SIRGE) | This plan is in the event of a major incident/accident involving the landward sections of the SIRGE pipeline, was created to cover a period of time 'as amended'. This pig train shall be returned to Shetland Gas Plant during start-up of Shetland Gas Plant and a further plan shall supersede this plan at that time.   |
| SIC Pipeline Safety Plan<br>Brent, Ninian and Clair Pipelines                          | This plan identifies roles, responsibilities and procedures to minimise the consequences to the health and safety of both the community and the environment, in the event of a major incident/accident involving the landward sections of the Clair, Ninian, and Brent pipelines. This plan is to be read in association with the various other plans listed here.  |
| <b>Terminal Operator Plans</b>   |   |
| SVT Oil Spill Waste Minimisation and Management Plan                                   | This plan has been developed to highlight waste management issues related to an oil spill clean-up. It outlines the source of waste, how the waste will be collected, the storage considerations and disposal options to be used. It follows the progress of the waste through each stage and includes detail of disposal options which will be used for the area covered by the plan.                                    |
| SVT Incident Management Plan   | This is the SVT Incident Management Plan. It describes the SVT arrangements in place for managing emergency incidents and liaising with the relevant authorities  |
| SVT Plan Oil spill tactical operations   | This document describes the procedures that the SVT will use to respond to an oil spill emergency within the Company's area of responsibility in Sullom Voe Harbour and the onshore pipeline routes. It describes the facilities, organisation, responsibilities and function of the oil spill emergency response for incidents that escalate or have the potential to escalate beyond a Tier 1 or Level 1 response.      |

| Title   | Description  |
|---|--|
| Onshore Oil Pollution Emergency Plan (OPEP)                             | <p>The Onshore OPEP has been prepared to guide offshore assets and the pipeline operator through the actions required to manage a hydrocarbon release to sea relating to operated offshore assets in the UKCS.</p> <p>In accordance with UK Regulatory requirements and relevant Guidance<sup>8</sup>, the OPEP details a three-tiered response capability based on the following key factors: hydrocarbon types; hydrocarbon properties; potential quantities; metocean data (metrological and oceanographic); environmental and economic sensitivities and the response capabilities of both the SVTO and the oil and gas industry's response contractor - OSRL.</p> |
| SVT COMAH Report (Control of major accident hazards)                    | <p>The report describes the SVT risk and many safety measures in place to counteract this. It also identifies areas where latest developments in process safety could be implemented to further improve systems, demonstrating how the SVTO keeps and continually improves high standards.</p>   |
| Ninian Offshore Oil Pollution Emergency Plan and Justification Document | <p>This is the Ninian Pipeline Oil Pollution Emergency Plan (OPEP). It describes the TO arrangements in place for managing emergency incidents and liaising with the relevant authorities.</p>   |
| Clair Offshore OPEP   | <p>This is the Clair Offshore OPEP. It describes the arrangements in place for managing emergency incidents and liaising with the relevant authorities.</p>  |
| Brent System Pipeline OPEP  | <p>This is the Brent Pipeline OPEP. It describes the arrangements in place for managing emergency incidents and liaising with the relevant authorities on behalf of the pipeline operator.</p>   |
| <b>Other Plans</b>  |  |
| Shipboard Oil Pollution and Emergency Plan (SOPEP)                      | <p>A SOPEP, is a prevention plan carried on board all tankers &gt;150 GT and other vessels &gt;400 GT. Within each SOPEP they'll be an overview of procedures in case of an oil spill. This should be consulted in a vessel pollution incident.</p>  |
| UK National Contingency Plan (NCP)                                      | <p>The NCP is a framework document detailing the response units, roles and responsibilities of Agencies involved in any national response. It describes how the role of the SOSREP fits into the overall response to an incident. Major incidents (Tier 3) can be regarded as those incidents that involve the activation of the NCP.</p>  |

## 18 Operational Oil Spill Risk Assessment

This oil spill plan will be implemented for all oil spills within Sullom Voe regardless of the type of oil. Presently this consists primarily of Brent, Clair and Ninian crude oils and condensate. The incident could arise from pipelines, ship-to-ship transfers of oil ranging from light crude to fuel oil and bunker transfers.

An environmental risk assessment has been undertaken in line with CDOIF<sup>10</sup> and OGP<sup>11</sup> guidance. This section provides a summary of the analysis within the SVT COMAH Report and those risks identified by the SVHA.

### 18.1 Assessment Approach

#### 18.1..1 COMAH Report

The COMAH Report describes how potential major accident scenarios that could occur at SVT and have been subjected to an assessment of the potential to generate a Major Accident to the Environment (MATTE). A MATTE, is an event with the potential to cause severe, widespread, long term or even permanent damage to a range of environmental receptors. The MATTE principles, require that the potential hazard identified contains the following components:

- A source (that is a polluting substance)
- A pathway (means of release to the environment)
- A receptor (part of the environment which may be damaged)

A MATTE is defined in the European Union 'Seveso III' directive, which was transposed into United Kingdom Regulation under the Control of Major Accident Hazards (COMAH) Regulations 2015. The COMAH report identifies whether there may be scenarios onsite whereby MATTE potential exists, both in terms of unmitigated and mitigated risk and, if it does, whether it falls under a Broadly Acceptable, Tolerable if 'As Low As Reasonable Practical' (ALARP) or 'Intolerable' risk rating.

#### 18.1..2 SVHA Assessment

The SVHA also conducted a review of oil spill risks within Sullom Voe Harbour, based on the ALARP principles. The COMAH outputs been mapped across to the SVHA Risk Assessment Matrix (see [Section 18.2](#)) and Risk Register ([Section 18.3](#)).

---

<sup>10</sup> Chemical and Downstream Oil Industries Forum Guideline on Environmental Risk Tolerability for COMAH Establishments, v1.0, September 2013.

<sup>11</sup> OGP IPIECA (2013) JIP 6 Oil Spill Risk Assessment and Response Planning for Offshore Installations

### 18.1..3 Oil Spill Risk Assessment Methodology

|   |   |
|---|---|
| <b>Step 1 - Context and Inputs</b>                        | <p>The following sources were used, as part of the risk assessment to assess the level of potential risk:</p> <ul style="list-style-type: none"> <li>• Current and historical SVT documentation (i.e. spill history)</li> <li>• Literature data on failure frequencies</li> <li>• Guidance provided by CDOIF on assessing MATTE risks</li> <li>• Regulatory guidance documentation on the approach to assessing environmental risks</li> </ul> <p>The following was considered when undertaking the risk assessment:</p> <ul style="list-style-type: none"> <li>• Site Operations</li> <li>• Key Receptors</li> </ul> |
| <b>Step 2 - Hazard Identification</b>                     | <p>A hazard identification (HAZID) exercise was conducted as part of the SVHOSCP process, within which the SVT COMAH scenarios were taken into consideration.</p> <p>The identified relevant scenarios, are detailed in <a href="#">Section 18.3</a>.</p>   |
| <b>Step 3 - Oil Spill Modelling</b>                       | <p>The relevant oil spill Worst Case Credible Discharge (WCCD) was identified (through the SVT HAZID and discussions with the SVT and SVHA), as the <b>Release of stabilised crude oil during tanker unloading/loading</b> (for details see <a href="#">Section 18.3..1</a>).</p> <p>This WCCD was then modelled, a summary of the results is shown in <a href="#">Section 11</a>.</p>  |
| <b>Step 4 - Ecological and socioeconomic consequences</b> | <p><a href="#">Section 12</a>, provides a summary of the <a href="#">Environmental and Socioeconomic Sensitivities</a>, the maps for which can be found in <a href="#">E.1</a>.</p>   |
| <b>Step 5 - Risks</b>                                     | <p>The OSRA results are presented in <a href="#">Section 18.3</a>. Where mitigation measures have been applied, the residual risk is also show.</p> <p>Factors affecting risk include: type of oil/product, geographic location, weather, sea conditions, coastline, vigilance, volume of traffic, time of day, navigation hazards, condition of facilities, legislation, quality of shipping/vessel types, types of operation, quantities handled, frequency of handling, emergency response plans and exercise and training programmes.</p>   |
| <b>Step 6 - Updates</b>                                   | <p>Consultation has taken place on this risk assessment, between the SVTO and the SVHA. The OSRA will be updated once consultation has taken place with stakeholders or following any revision to the scope or scale of operations.</p>   |

## 18.2 Risk Assessment Matrix

Below is the Risk Assessment Matrix (RAM), used by the SVHA for the HAZID (see [Section 18.3](#))

|   |   |                    |                   |                 |
|---|---|--------------------|-------------------|-----------------|
| <b>Environmental Damage – Hazard Rating</b> | A – Total loss of containment   | 8                  | 12                | 15              |
|   | B – Significant loss of containment – uncontained                         | 7                  | 11                | 14              |
|   | C – Significant loss of containment – contained in the immediate vicinity | 6                  | 10                | 13              |
|   | D – Minor loss of containment – contained in immediate vicinity           | 2                  | 5                 | 9               |
|   | E – Slight loss of containment  | 1                  | 3                 | 4               |
| <b>Risk Rating</b>                          |   | <b>L - Low</b>     | <b>M - Medium</b> | <b>H - High</b> |
|   |   | <b>Probability</b> |                   |                 |

### 18.3 Risk Register (HAZID)

| SCENARIOS |   |   |                                |   | PROBABILITY ANALYSIS |                  |              |  |                   |                |               |
|-----------|---|---|--------------------------------|---|----------------------|------------------|--------------|--|-------------------|----------------|---------------|
| #         | Hazard Event  | Oil Type  | Spill Volume (m <sup>3</sup> ) | Impact on   | Initial Probability  | Initial Severity | Initial Risk | Mitigation Measures  | Final Probability | Final Severity | Residual Risk |
| 1         | Release of stabilised crude oil during tanker unloading/loading   | Ninian/Brent, Clair or other crude oil              | 1500 (see Section 18.3..1)     | Sea surface<br>Water column<br>Shoreline<br>Plants<br>Animals (including birds and cetaceans)<br>Protected Areas<br>Fishing | M                    | A                | 12           | ESD valves, tested every 6 – 24 months<br>Pipeline inspection programmes<br>Surge relievers preventing over-pressurising of the loading pipelines in the event of closure of tank valves<br>Loading is supervised by two personnel<br>Drainage of loading arms in to slop tanks<br>Max operating wind parameters in force for loading operations<br>Tanker mooring analysis undertaken. Maximum ships lines deployed on first visit<br>Tug assistance available at short notice<br>Emergency Response Plans in place<br>Regular emergency pollution training and exercises | L                 | B              | 7 - WCCD      |
| 2         | Loss of main engine power or steering failure on a vessel. Resulting in grounding or collision with another tanker or dolphin | Ninian/Brent, Clair or other crude oil, or Fuel Oil | > 1000                         |   | M                    | A                | 12           | Tanker under VTS control and competent pilotage<br>Sufficient tugs in attendance to escort and berth tankers<br>Ships are vetted for quality standards<br>Berthing wind parameters are in force<br>Vessels are not allowed to pass each other within the pilotage area.<br>Transshipment berthing's are conducted under the supervision of a trained pilot.<br>Yokohama fenders in place.<br>Emergency Response Plans in place<br>Regular emergency pollution training and exercises   | L                 | C              | 6             |
| 3         | De-ballasting from cargo tanks  | Oily water  | < 10                           |   | M                    | D                | 5            | Cargo tank de-ballasting is prohibited<br>Valves are sealed  | L                 | E              | 1             |
| 4         | Segregated ballast discharge  | Oily water  | < 5                            |   | M                    | D                | 5            | Segregated ballast is analysed prior to discharge  | L                 | E              | 1             |
| 5         | Ship to ship bunkering - hose failure or tank overflow  | Fuel oil  | < 20                           |   | M                    | D                | 5            | Bunkering company is vetted<br>Tanks not filled < 95%<br>Agreed operating procedures are in place<br>Pre-bunkering checks conducted  | L                 | E              | 1             |
| 6         | Ship to Ship crude oil transshipment hose failure or tank overflow  | Ninian/Brent, Clair or other crude oil              | < 150                          |   | M                    | C                | 10           | Manifold area manned at all times<br>Hoses tested and inspected before loading<br>Agreed operating procedures and loading plan in place  | L                 | D              | 2             |

### 18.3.1 WCCD Details – Release of Stabilised Crude Oil during Tanker Loading

Jetty 2 is used to load stabilise Ninian/Brent or Clair crude oil (note Jetties 1, and 4 are not currently in use and Jetty 3 is in use temporarily until maintenance activities on Jetty 2 are completed).

Loading for the Ninian/Brent Blend occurs at approximately 2000 m<sup>3</sup>/hr, but can be increased to around 8000 m<sup>3</sup>/hr when loading via a pump. The Ninian/Brent crude is usually around 15 to 18°C and at approximately 3 barg. Similarly, the Clair crude loading flow rate is around 1500 to 2000 m<sup>3</sup>/hr, increased to 3250 m<sup>3</sup>/hr when loading through a pump. The temperature of the crude is between 6 to 8°C, with a pressure of 3 barg.

Two worst case possibilities were identified for this scenario:

- A full-bore rupture of the 48-inch jetty pipework on Jetty 2 at the maximum loading rate of 7,000 tonnes per hour. On failure, crude oil would be released on to the jetty head and into Sullom Voe until the Emergency Shutdown (ESD) valves are closed. Crude oil could be partially trapped by the ship's hull and the shore. This was calculated conservatively as 5 minutes detection and 5 minutes isolation, plus the gravity base loss from the main header. This equates to a release of approximately 1500 tonnes of crude oil.
- Marine Loading Arm (MLA) failure – Spurious rupture of the loading arm. This was calculated based on the maximum loading rate of 7,000 tonnes per hour, 5 minutes detection and 5 minutes for isolation (in that period the flow rate reduces in a linear fashion, from 7,000 to 0 tonnes). This equates to a release of approximately 886 tonnes of crude oil.

In the event of full bore failure of the jetty pipework or failure of the MLA, stabilised crude oil could be released at the full pumping rate of some 7,000 tonnes per hour. It is assumed that the time for the rupture to be detected and response initiated would be five minutes (response is likely to be rapid as loading is always supervised by two personnel). The ESD valves would take a further two minutes to close (although this has been conservatively taken as 5 minutes for the purpose of the assessment); however, the loading pumps would be immediately tripped and the resultant gravity flow would continuously decrease as the valves shut. Therefore, a **total WCCD release of 1,500 tonnes** has been estimated, given the detection and isolation times discussed.

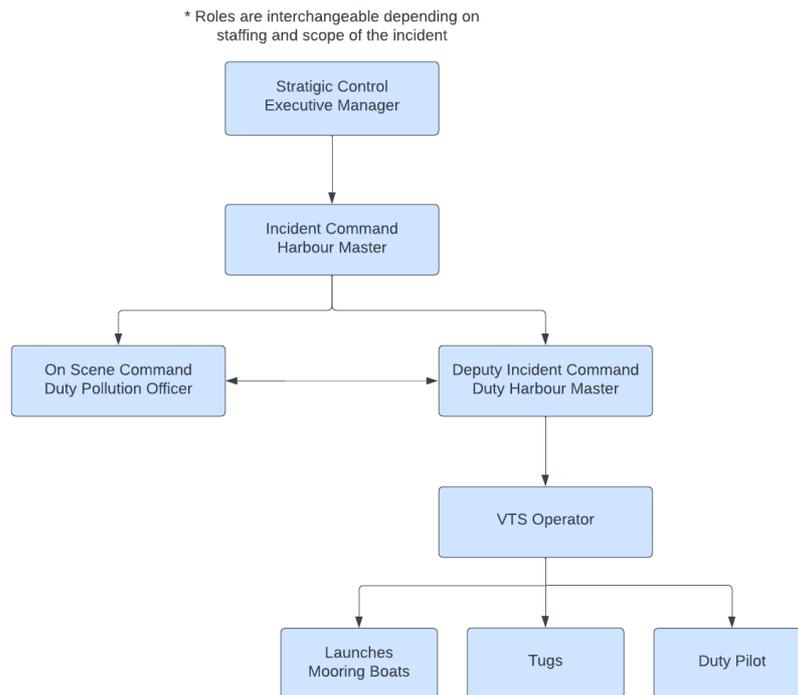
The frequency of these failure scenarios are as follows:

- Full bore rupture –  $1.90 \times 10^{-8}$  per m of pipeline per year
- Loading arm failure –  $9.00 \times 10^{-8}$  per hour of operation, multiplied by 3 to account for the use of three arms

## 19 Incident Response Organisation

For planning purposes, Tiers are used to categorise pollution incidents (see [Section 5.4.1 Definitions of Tiered Response](#)).

For spills within Sullom Voe, the incident will be managed by the SVHA, with the support of SVT, with the HM (or their Deputies) controlling the incident response (see [Figure 14](#)). This incident response organisation will expand or contract depending on the incident type, size, duration and location of impact.



**Figure 14 – Example SVT SVHA Oil Spill Incident Management Organisation**

The SVT incident management organisation is shown in [Figure 16](#). This is for the response to a major oil spill incident and include the links with relevant third-party organisations where appropriate. In most circumstance the ERSC IMT, and if necessary Mutual Response Team (MRT) will support the SVT IMT as defined in the SVT Incident Management Plan. [Figure 15](#) shows the call-in links with other SVHA/SIC departments/management, to the Incident Control Room, from VTS, the DHM and the HM.

Details of response personnel are detailed in [Section 5.4](#).

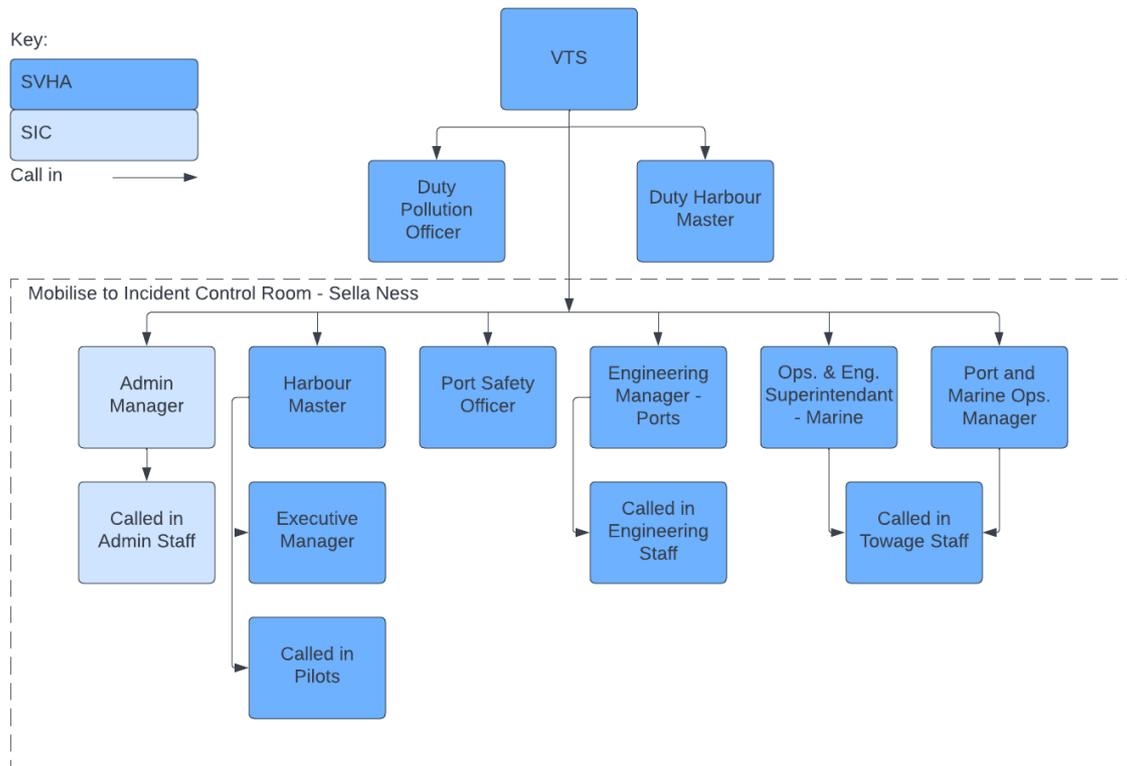
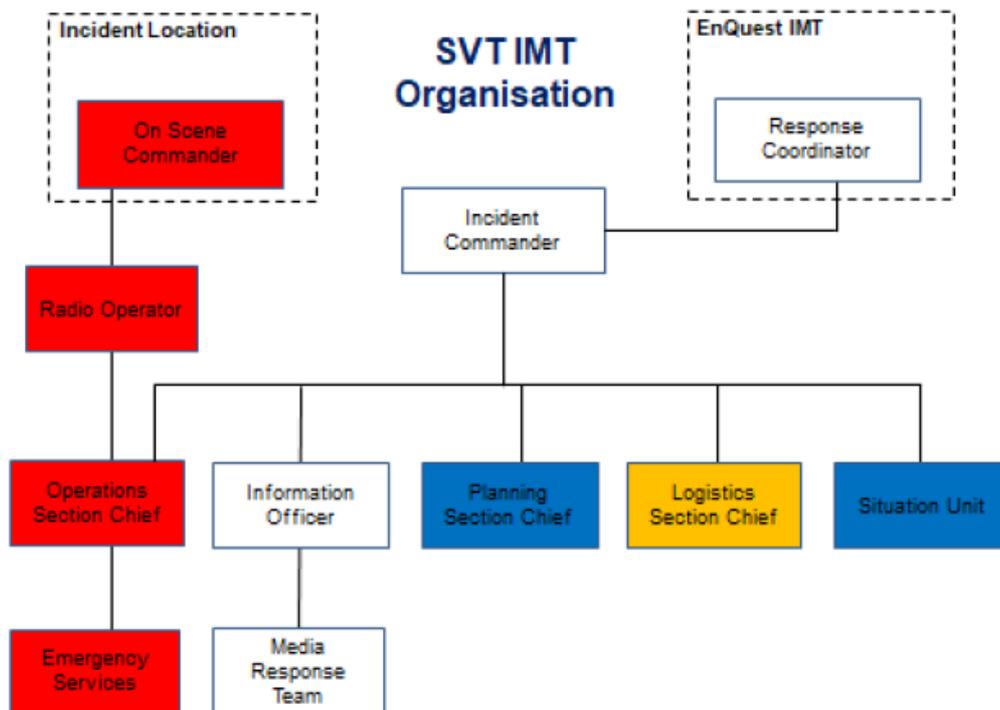


Figure 15 – Call in Cascade



---

Figure 16 – Example SVTO Oil Spill Incident Management Organisation<sup>12</sup>

## 19.1 Incident Management Response

### 19.1.1 SVHA Incident Control Room (ICR)

The Sullom Voe VTS is manned 24/7. Any initial incident calls will be answered immediately however it comes in (VHF, Telephone or electronically). The on duty VTSO will advise the Duty Pollution Officer and the Duty Harbour Master as required and either of them will decide on the mobilisation of the SVHA ICR. If the SVHA ICR is mobilised the extra staff would be expected to react within 1 hour. The SVHA ICR is located within the Ports and Harbours Administration Building at Sella Ness.

For Tier 2 or 3 incidents, the designated (ICR) is immediately available.

Further office space also available, in the Port Administration Building, if an SRC is required to be set up during these major spillages.

The ICR has all necessary communications equipment required for it to operate effectively.

With the declaring of a Tier 2/3 incident the SVHA Executive Manager in association with SIC Emergency Planning and declaring Officer would activate the SIC's MEP with this plan having provision to assist with manning, accommodation, welfare and also press issues through provision of an SIC Communications Cell, if the incident was a protracted one.

### 19.1.2 SVT Emergency Response Centre (ERC)

The Emergency Response Centre at SVT is manned 24/7. The initial incident call will be answered immediately. The Onscene Commander and Duty Manager will advise on the mobilisation of the IMT. If this occurs, the mobilisation time for the team is 1 hour. The SVT IMT is located within the Emergency Response Centre (ERC), in the Sullom Voe Terminal.

The SVT IMT is supplemented by the IMT in Aberdeen via the Petrofac Emergency Response Service Centre (ERSC). Once activated the mobilisation time is 1 hour.

The SVT Duty Manager or the ERSC Duty Director has authority to mobilise EnQuest oil spill response contractor OSRL. An initial call will be returned within ten minutes, once authorisation has been provided for activation, mobilisation will occur within 1 hour. Note different resources have different mobilisation times.

A role within the IMT is to manage a protracted long running incident, as required this might be a task passed to the CMT located in Aberdeen for execution this would include looking at backfilling roles, logistical and welfare support.

---

<sup>12</sup> This organisation is expanded from the initial standing IMT to managing the increasing complexity and scale of the oil spill situation. To facilitate IMT expansion, early mobilisation of additional resources from the SVT IMT, ERSC IMT and the Mutual Response Team is an essential consideration of the initial IMT. As required, there will also be adequate representation from the SIC/SVTO at external groups

### 19.1.3 SVT Sella Ness Response Base (in extended operations)

A designated communications room, located at the Pollution Response Base Sella Ness, is established for use during extended clean-up operations. This room is equipped with UHF and VHF radio equipment, telephone and fax facilities.

## 19.2 Regional or National Incident Organisation

In the event of a larger regional or national (Tier 2 or Tier 3) incident, support will additionally be sought by SVHA from each of the principle authorities involved (see [Section 20 Authorities Roles and Responsibilities](#) for further details):

- Shetland Islands Council
- Terminal Operator
  - Contracted Responder (OSRL)
- Maritime Coastguard Agency
- Scottish Natural Heritage
- Scottish Environment Protection Agency
- Marine Scotland

Consideration for the involvement of the above agencies will be given at an early stage, by liaison with the appropriate authorities to integrate the response.

### 19.2.1 Tier 3 Response Cells

In all cases involving a national response (Tier 3), there is a need to establish response cells to deal with the incident (see [Figure 17](#)). These cells may include:

| Tier 3 Response Cells               | Description  | Location   |
|-------------------------------------|--|--|
| <b>Marine Response Centre (MRC)</b> | The MRC considers and implements the most appropriate means to contain, disperse and remove pollutants. In most cases involving a national (Tier 3) response the MCA establishes a MRC. The Head of the Counter Pollution and Salvage (CPS) Branch determines this need. | Co-located at the Coast Guard Operations Centre - Shetland EPR Room, Lerwick |
| <b>Salvage Control Unit (SCU)</b>   | The SCU role is to monitor salvage operations and actions and/or proposed activity, to ensure actions do not negatively affect safety and the environment. The SOSREP determines the requirement for a SCU, with consideration of the nature and scale of the incident.  |  |

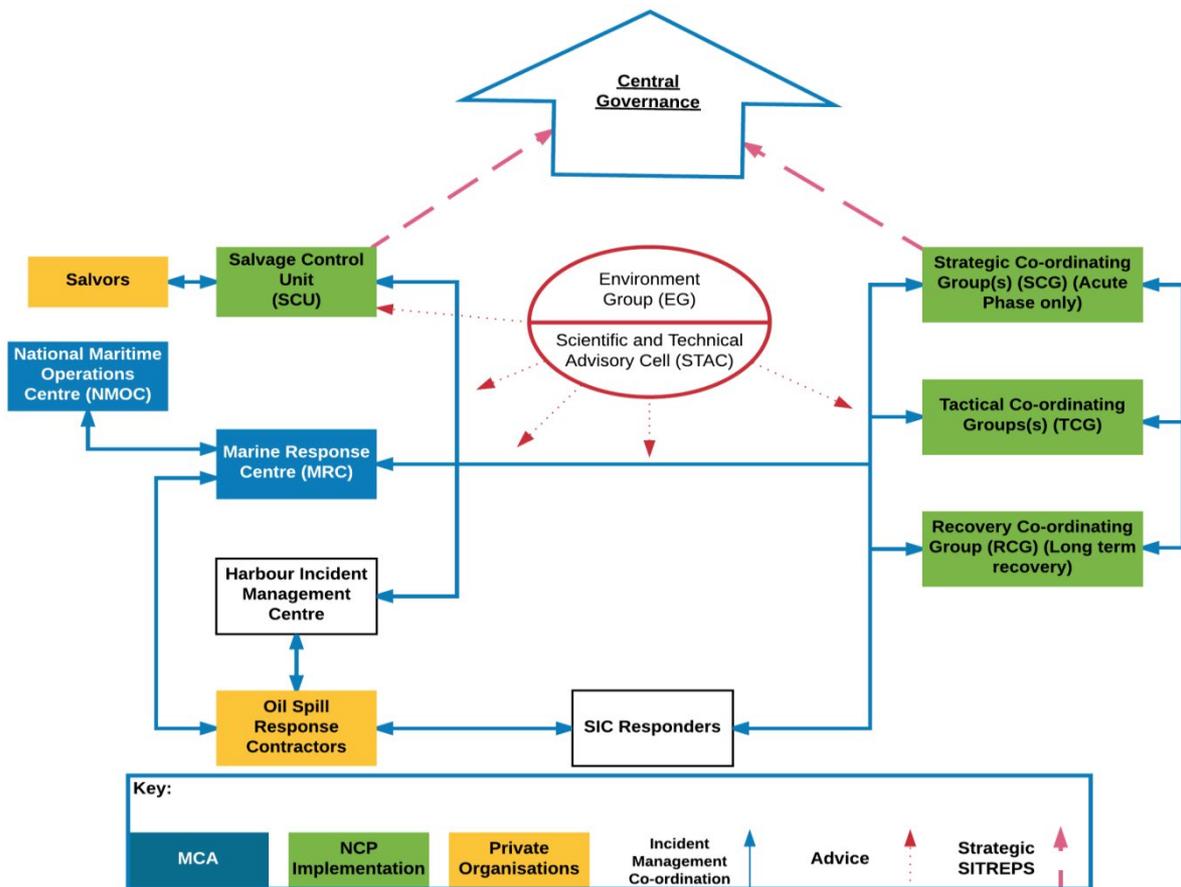


Figure 17 – Regional and/or National Incidents Management Organisation

19.2.2 Tier 2 or 3 Shoreline Response; The Local Resilience Partnership

When the pollution **threatens the shoreline** (in Tier 2 or 3 incidents) the Local Resilience Partnership will be established (see Figure 17) interaction includes:

| Local Resilience Partnership   |  | Description  | Location   |
|--|--|--|--|
| Strategic ordinating (SCG) Co-Group  |  | Civil Contingency (Gold Level, equivalent to Tier 3) – in the acute incident phase the SCG is activated. It is chaired by a senior Police Officer, or if there is no risk to life a Senior member of the SIC. When established, manages the overall onshore response strategy, dovetailing with the offshore response, developing a long-term plan, policy and response direction. | If criminal activity or Fatality:<br>Incident Room, Lerwick Police Station |
|  |  | Civil Contingency (Silver and/or Bronze Level, equivalent to Tier 2 and/or 1) – develops and coordinate the onshore operational response plan. The TCG comprises of the most senior officers of each agency involved, assuming tactical command of the incident.   | Otherwise:<br>SIC emergency Response Centre, 20 Commercial St, Lerwick.    |
| The SCG and TCG cover many of the functions previously carried out by the Shoreline Response Centre (SRC). |  |  |  |
| Recovery ordinating (RCG) Co-Group   |  | After the acute phase of an incident, recovery may be co-ordinated by the RCG - for longer term recovery management.   | Brae Hall  |

### 19.2.3 Other advisory groups

Other advisory groups may also be established by the SCG in response to any maritime incident.

| Advisory Group                                  | Description   |
|---|---|
| <b>Environment Group (EG)</b>                   | <p>At the outset of an incident the MCA triggers the EG. They provide a single advisory line on public health and environmental issues at sea to all response cells. A Standing Environment Group covers the Shetlands, and the MCA co-ordinated their contact details and call out arrangements.</p> <p>The EG remit is purely advisory, with no powers of direction or enforcement. The scale of the incident and response and their constituent phases are likely to evolve over time and the functions of the EG will need to be graduated to meet changing requirements, escalating or diminishing in the input to each phase over time</p> <p>Marine Scotland chairs the EG, Core members of the EG will comprise as a minimum, representatives from NHS Scotland, SNH, SEPA, Marine Scotland and MCA. Key Roles in the EG will be filled by individuals most suited to the job and purpose.</p> <p>The EG may activate the Scottish Evidence Group (SERG) to take forward post spill monitoring.</p> |
| <b>Science and Technical Advice Cell (STAC)</b> | <p>The role of the STAC is to provide a common source of scientific and technical advice to the SCG, where the incident poses a significant threat to health or the environment on land. The STAC may be integrated with the Environment Group.</p>   |
| <b>Environmental Monitoring</b>                 | <p>An Environmental Monitoring Group may be established by the SCG to initiate, conduct and coordinate post spill environmental monitoring and impact assessment. In coordination with Marine Scotland.</p>   |

See the UK National Contingency Plan and SIC Major Emergency Plan for further details

### 19.3 Port of Refuge

Under exceptional circumstances and dependant on the operational availability of berths to accept a vessel and providing operations allow, SVT may be used as a Port of Refuge. Oil tankers/combination carriers in the range of 18,000 DWT to 350,000DWT can be accepted at SVT within the following parameters:

| Jetty No.       | LOA          | Max. Draught |
|-----------------|--------------|--------------|
| 1 <sup>13</sup> | 140m to 286m | 16.8m        |
| 2               | 210m to 365m | 22.1m        |
| 3               | 210m to 365m | 24.0m        |
| 4 <sup>14</sup> | 210m to 365m | 22.6m        |

Within the National Contingency Plan the Government has appointed the Secretary of State's Representative (SOSREP) to provide overall direction for all marine pollution incidents involving the

---

<sup>13</sup> Jetties 1 and 4 are currently out of service (2018)

---

salvage of ships or offshore installations that require a national response. 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. These powers extend to UK territorial waters (12 nautical miles from the coast/baseline) for safety issues and to the UK Pollution Control Zone (200 miles or the median line with neighbouring states) for pollution.

SOSREP may direct Sullom Voe to provide refuge for a stricken vessel. Additional Information which may be required by SOSREP regarding the port's facilities is available on the Harbour Authorities website at <http://www.shetland.gov.uk/ports/>.

## 20 Authorities Roles and Responsibilities

A summary of the roles and responsibilities of authorities, agencies and organisations involved in hydrocarbon release response strategy and their jurisdictions is set out below.

| Authority / Agency / Organisation                      | Role and Responsibility   |
|--|---|
| <b>Sullom Harbour Voe Authority (SVHA)</b>             | <p>The SVHA is responsible for the initial reporting of a spill incident to HM Coastguard.</p> <p>The SVHA has the responsibility for the clean-up pollution within the harbour limits, with the exception of the foreshore owned by the SVTO. However, under the Sullom Voe Ports and Harbours Agreement (Clause 12 (f)), the SVHA have delegated such actions to the SVTO - as such the SVTO will work with the relevant authorities as required, establishing a unified approach. The SVHA may act on its own behalf under which circumstances the SVTO will be advised of the action.</p> <p>The SVHA and SVTO are free to act in their own interests, to ensure an adequate clean-up is undertaken, irrespective of who performs the task, or initiated the action.</p> <p>The SVHA is responsible for the implementation of the approved harbour oil spill contingency plan as well as the maintenance of the document and for ensuring the availability of resources for response.</p>   |
| <b>Local Authority – Shetland Island Council (SIC)</b> | <p>The SIC have the responsibility of the clean-up of pollution on the shorelines outside the harbour limits, at the expenses of the polluter – by implementation of the Shetland Marine Pollution Contingency Plan.</p> <p>The local authority also have the responsibility for the implementation of the SIC Major Emergency Plan (MEP).</p>  |
| <b>SVT Terminal Operator</b>                           | <p>Under the Sullom Voe Ports and Harbours Agreement (Clause 12 (f)), action to deal with any spillage of oil within Sullom Voe and any Pollution resulting therefrom should be taken by the SVTO, on the SVHA behalf. The SVTO staff will not always carry out the physical operation, they may contract this to the SVHA or a third party.</p> <p>The SVTO has agreed to maintain at all time readiness in adequate equipment and materials for dealing effectively with a pollution incident within Sullom Voe resulting from the SVTO operations. The SVTO is required to consult the HM regarding changes in equipment and materials.</p> <p>The SVTO and SVHA are free to act in their own interests, to ensure an adequate clean-up is undertaken, irrespective of who performs the task, or initiated the action.</p> <p>The equipment maintained at Sullom Voe is also available for use elsewhere in Shetland, under the Shetland Marine Pollution Contingency Plan for pollution not arising from an incident within the Voe. This is provided that, unless otherwise agreed between the SVHA and SVTO, the SVTO obligations under Clause 12(f) of the Sullom Voe Ports and Harbours Agreement is not at risk.</p> |
| <b>HM Coastguard (HMCG)</b>                            | <p>HMCG are the first point of contact for reporting a pollution incident. They coordinate the maritime Search and Rescue and mobilise the MCA's Counter Pollution and Salvage Officer (CPSO).</p>  |

| Authority / Agency / Organisation  | Role and Responsibility  |
|--|--|
| <p><b>Maritime and Coastguard Agency (MCA) – Counter Pollution and Salvage (CPS)</b></p> | <p>The MCA is the executive agency of the Department for Transport (DFT), as such they will co-ordinate the government’s response to Tier 3 incidents and the implementation of the NCP. The MCA also provides advice and expertise, in addition to access to government equipment and resources, as well as the receiving and distribution of oil pollution reports from ships and aircraft in the affected area.</p> <p>The MCA is the lead agency for response at sea, including dealing with a casualty. Within the port limits the SVHA is responsible for the clean-up and have designated the SVTO to deal with any pollution, however the MCA will support the SVHA in the event of major spills within their area of jurisdiction (see <a href="#">Section 16.2</a>). Depending on the nature of the incident the MCA will setup a Marine Response Centre (MRC).</p> <p>The CPS Branch has specific responsibility for counter pollution preparedness and response at sea and the management of the UK Government’s stockpiles of equipment and dispersant.</p>   |
| <p><b>Marine Scotland (MS)</b></p>   | <p>MS are the licensing authorities for the use of chemical dispersants in Sullom Voe. The use of dispersants is strictly controlled by Government legislation (Food and Environment Protection Act - Under the provisions of Part IV of The Marine (Scotland) Act 2010, as read with the Marine Licensing Exempted Activities Orders, no deposit may be made in the sea of any marine chemical treatment substance, marine oil treatment substance or marine surface fouling cleaner in an area unless with prior approval of the Licensing Authority).</p> <p>The SVHA however, have Standing Approval for certain areas within the Voe (see <a href="#">Section 5.3</a> and <a href="#">C.1.1 Standing Approval Letter</a>), however for additional permissions – MS must be contacted for any request for approval to spray dispersant, if the water depth is less than 20 metres or within one nautical mile of any such area (i.e. the 20 metres rule).</p> <p>For other areas outside of shallow waters, there is no such statutory obligation. However, it is Government policy that they should be consulted in advance of any proposals to use chemical dispersants except under ‘force majeure’ conditions, e.g. where people’s health is at risk. It is therefore essential to consult MS for advice on the implications for fisheries and the marine environment of using dispersants.</p> <p>MS also have a wider general responsibility for protecting fisheries and the marine environment in an incident, handling any local fisheries or aquaculture concerns.</p> <p>MS will chair the EG if established.</p> |
| <p><b>Secretary of State’s Representative (SOSREP)</b></p>                               | <p>The Secretary of States Representatives (SOSREP) represents the overriding interests of the state, preventing or reducing pollution in the event of an incident where there is, or may be, a risk of significant pollution. However, the responsibility of the pollution clean-up remains with the polluter.</p> <p>Salvage operations are controlled by the SOSREP. They have ultimate control and are held responsible for the outcome of the plan and decisions. The SOSREP has the decisive voice in the decision-making process in a marine salvage operation that involves the threat of significant pollution. Legislation is in place that states that non-compliance with a SOSREP direction is a criminal offense.</p> <p>In the event of an incident requiring salvage operations the SOSREP will decide whether it is necessary to set up a Salvage Control Unit (SCU) or Operational Control unit (OCU). If the size of the incident merits the establishment of a SCU / OCU, the SOSREP will travel to the scene at the appropriate time. Upon establishment of a SCU / OCU, the HM will become an active member of the SCU / OCU team liaising with the SOSREP throughout the course of the incident.</p>  |

| Authority / Agency / Organisation                              | Role and Responsibility   |
|--|---|
| <b>Scottish Environment Protection Agency (SEPA)</b>           | <p>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. It is accountable to the Scottish Executive.</p> <p>In responding to an incident SEPA will:</p> <ul style="list-style-type: none"> <li>• Deploy its comprehensive scientific capability to give support and advice to mitigate or prevent further pollution where practicable</li> <li>• Be consulted on, regulate and licence the storage, transport and disposal of liquid or solid waste, as result of the oil spill recovery operations</li> <li>• Provide links with Scottish Water, local authorities, Environmental Health Departments and the Health and Safety Executive</li> <li>• Take evidential samples for possible later legal actions</li> </ul> <p>SEPA will become part of the EG, if it is formed</p> |
| <b>Scottish Natural Heritage (SNH)</b>                         | <p>SNH is the government body, which advises on policies relating to and affecting the natural heritage of Scotland (biodiversity, landscape and access issues to the 12nm limit). SNH is responsible for administering and implementing a range of natural heritage designations (such as Sites of Special Scientific Interest – SSSIs), the Bird Directive and the Habitats Directive.</p> <p>In an oil spill incident, SNH is the lead conservation body to provide advice on hazards to wildlife, coastal habitat and the sea area within territorial waters. They also assist in surveying the affected areas to determine the potential for damage and advise on the preferred actions to avoid or minimise damage.</p> <p>Provide consultation on to MS, with respect to dispersant use in restricted areas.</p> <p>SNH will become part of the EG, if it is formed.</p>                                       |
| <b>Joint Nature Conservation Committee (JNCC)</b>              | <p>The JNCC is the government's advisors on wildlife affairs and nature conservation &gt;12nm from the shoreline, they are the official agency to be consulted by the local authorities and the SVTO at the planning stage and prior to any pollution clean-up.</p> <p>JNCC will become part of the EG, if it is formed.</p>  |
| <b>Shetland Terminal Environmental Advisory Group (SOTEAG)</b> | <p>SOTEAG monitors the environment and advises on relevant environmental implications surrounding the Sullom Voe terminal during construction, commissioning and operations (including ad hoc reconstruction, site rehabilitation and new developments), through to eventual site decommissioning.</p>  |
| <b>Contracted Responders (OSRL)</b>                            | <p>Contracted agency can provide oil spill response equipment, as well as experienced and qualified personnel to aid the management and coordination of an ongoing pollution incident. They are contracted by and under the direction of the polluter (with regards to this plan - the SVTO), unless otherwise agreed between the SVTO and the SVHA.</p>  |

## 21 Training and Exercise

The SVHA and SVTO are committed to coordinating and carrying out a series of oil spill training courses and exercises (desktop and in-field) designed to meet the needs and requirements of operations. The training, drills, and exercises described in this section aim to familiarise response personnel with their duties and responsibilities in the event of a spill.

### 21.1 Oil Spill Training

The key posts for responding to an oil pollution incident, with identified required levels of accredited training, are as follows

| Post  | No. of Trained Persons | MCA/NI Accreditation Level Required | IMO Equivalent (if available) |
|---|------------------------|-------------------------------------|-------------------------------|
| SVT Incident Manager(s)                     | 5                      | 4p/5p                               | IMO 2                         |
| Executive and HM(s) Manger(s)               | 4                      | 4p/5p                               | IMO 2                         |
| PSO   | 2                      | 4p                                  | IMO 2                         |
| Small Ports Supervisor / Officers           | 4                      | 3p                                  | IMO 1                         |
| SVTO Shoreline Supervisors                  | 4                      | 3p                                  | IMO 1                         |
| SIC Shoreline Supervisors (OPRC accredited) | 25                     | LA2                                 | None                          |
| Terminal Operatives ???                     | 30                     | 1p/2p                               | None                          |

A centre accredited under the MCA/Nautical Institute (NI) will carry out these courses.

To remain valid, refresher training will be required at intervals, not exceeding three years from date of issue of the previous certificate.

All operatives also receive training in the operation of all relevant oil spill response equipment held by the SVTO at the Sella Ness Response Base. In addition to this, Operating Instructions Manuals (work instructions) for all equipment is held.

### 21.2 Oil Spill Exercises

Oil spill response exercises are undertaken to ensure all incident response personnel are clear on their functions and responsibilities. As well as improving the oil spill incident response team's skills and maintaining their awareness, exercises provide management with an opportunity to assess equipment, measure performance, obtain feedback from participants, update and correct the contingency plans, and give a clear message about the commitment to oil spill prevention and response.

Regular exercises with varying scenarios will be held to familiarise the team members with the different techniques that may be employed to combat a pollution incident.

| Tier/Type  | Equipment used   | Frequency                  | Personnel   |
|--|--|----------------------------|---|
| Internal Exercise<br><b>Notification Table Top Exercise</b>  | Incident Control room facilities, call out and communications equipment  | Bi-Annually                | SVTO and SVHA On-Call Team                              |
| Tier 1/ 2– Internal Exercise<br><b>Practical Mobilisation Exercise</b>                             | <ul style="list-style-type: none"> <li>• Spur Boom</li> <li>• Various Containment and Recovery (skimmers) Equipment</li> <li>• Dispersant Application Equipment</li> <li>• Various Shoreline Response Equipment</li> <li>• Various vessels, as required</li> </ul> | Bi-Annually for each shift | SVTO and SVHA Shift Teams                               |
| Tier 2 / 3 – Internal Exercise<br><b>Practical Mobilisation, Deployment and Table Top Exercise</b> | Equipment dictated by the exercise scenario – determined by the SVHA and the SVTO  | Annually                   | SVTO Staff, SVHA Staff/Crew, relevant external agencies |

It is very important that each exercise is monitored and a report written detailing the lessons learned, identifying any potentials for improvements and recommending changes to the SVHOSCP. Contingency planning is a cyclical process, which relies on exercises (or spill response) to identify necessary revisions.

All exercises (and incidents) will be documented and using [G.1 Post Exercise/Incident Report Form](#), as required exercise / incident reports will be forwarded to the MCA.



---

[Page Intentionally Left Blank]

# Appendices



## B.1 Response Strategy Guidance

This section describes and provides general guidance on the various strategies and should be considered in conjunction with [Figure 3](#) (Response Decision Flowchart) and [Figure 4](#) (Mapped Oil Spill Response Strategy Zones).

### B.1.1 Surveillance and Monitoring

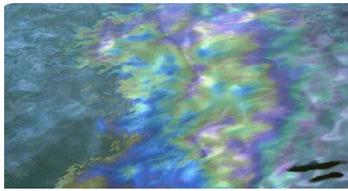
#### Surveillance and Monitoring Response

- For small hydrocarbon releases, an SIC Pilot Vessel (or similar) should be used (see [Strategy Defined Resources](#) in [Section 5.4](#)) to:
  - Help identify heaviest concentrations of oil using the
  - [B.1.2 Bonn Agreement Oil Appearance Code \(BAOAC\)](#),
  - Follow patches of heaviest oil concentration and watch and report on breakup of the slick.
  - Determine progress of natural dispersion or emulsion formation.
  - Determine and report direction of movement of other oil patches; note and report to the movement of oil towards sensitive environmental resources.
  - Watch for and report any large flocks of birds or marine mammals on the sea surface.
- For monitoring of large releases, a dedicated surveillance aircraft is required. If a surveillance aircraft is required, this will be mobilised by the SVT / ERSC IMT.
- Advice and further detail on this strategy, can be sought through the SVT IMT

#### Considerations

- Condensate may naturally disperse rapidly, within hours.
- Diesel and base oil will rapidly spread out to form a sheen and it is probable that releases will naturally disperse over time.
- Light crude oils will take approximately 1 to 3 days to naturally disperse, depending on the amount spilt and sea state conditions.
- Heavier crude oils will take longer to disperse; depending on the type of hydrocarbon, amount released and sea state conditions.
- Vessels in close proximity should conduct continuous gas monitoring and only proceed if safe to do so.

## B.1.2 Bonn Agreement Oil Appearance Code (BAOAC)

| Image   | Code   | Description   |                    |
|---|--|---|--------------------|
|    | <b>Code 1</b><br>Oil Sheen<br>Silvery<br>( $<0.3\mu\text{m}$ )                 | <p>The very thin films of oil reflect the incoming light better than the surrounding water and can be seen as a silvery or grey sheen. Above a certain height or angle of view the observed film may disappear.</p>   |                    |
|   |  | <table border="1"> <tr> <td style="text-align: center;">% of Area Affected</td> <td style="width: 50px;"></td> <td style="text-align: center;">%</td> </tr> </table>  | % of Area Affected |
| % of Area Affected  |  | %   |                    |
|    | <b>Code 2</b><br>Oil Sheen<br>Rainbow<br>(0.3 to $5.0\mu\text{m}$ )            | <p>Rainbow oil appearance 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. 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.</p> |                    |
|   |  | <table border="1"> <tr> <td style="text-align: center;">% of Area Affected</td> <td style="width: 50px;"></td> <td style="text-align: center;">%</td> </tr> </table>  | % of Area Affected |
| % of Area Affected  |  | %   |                    |
|   | <b>Code 3</b><br>Oil Sheen<br>Metallic<br>(5.0 to $50\mu\text{m}$ )            | <p>Although a range of colours can be observed (eg blue, purple, red and greenish) the colours will not be similar to 'rainbow'. Metallic will appear as a quite homogeneous colour that can be 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.</p>                                |                    |
|   |  | <table border="1"> <tr> <td style="text-align: center;">% of Area Affected</td> <td style="width: 50px;"></td> <td style="text-align: center;">%</td> </tr> </table>  | % of Area Affected |
| % of Area Affected  |  | %   |                    |
|  | <b>Code 4</b><br>Discontinuous<br>True<br>Colours<br>(50 to $200\mu\text{m}$ ) | <p>For oil slicks, thicker than <math>50\mu\text{m}</math> 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. Discontinuous should not be mistaken for 'coverage'. Discontinuous implies true colour variations and not non-polluted areas.</p>                                  |                    |
|   |  | <table border="1"> <tr> <td style="text-align: center;">% of Area Affected</td> <td style="width: 50px;"></td> <td style="text-align: center;">%</td> </tr> </table>  | % of Area Affected |
| % of Area Affected  |  | %   |                    |
|  | <b>Code 5</b><br>True<br>Colours<br>( $>200\mu\text{m}$ )                      | <p>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.</p>   |                    |
|   |  | <table border="1"> <tr> <td style="text-align: center;">% of Area Affected</td> <td style="width: 50px;"></td> <td style="text-align: center;">%</td> </tr> </table>  | % of Area Affected |
| % of Area Affected  |  | %   |                    |

### B.1.3 Release Size Estimate Guide

| Release Size Estimate Guide   |   |         |                                  |                                       |                                 |           |
|---|---|---------|----------------------------------|---------------------------------------|---------------------------------|-----------|
| If the source/quantity is unknown then a visual estimation can be attained based on the relationship between observed hydrocarbon colour and its thickness using <b>B.1.2 Bonn Agreement Oil Appearance Code (BAOAC)</b> . Observations can be taken from the jetty, vessels or aerial surveillance aircraft. Note: OSRL can provide a spreadsheet to help with quantification. |   |         |                                  |                                       |                                 |           |
| <b>Step 1:</b>  | <b>Total Area: Estimate total size of the area as a square or a rectangle. (In km<sup>2</sup>)</b>  |         |                                  |                                       |                                 |           |
| <b>Total Area =</b>   | <b>Average Width (km)</b>   |         | <b>X</b>                         | <b>Average Length (km)</b>            | <b>=</b>                        | <b>km</b> |
| <b>Step 2:</b>  | <b>Hydrocarbon release area: Assess the area affected by the slick in km<sup>2</sup> calculated as a % of the total area (e.g. 90% of 20km<sup>2</sup> = 18km<sup>2</sup>).</b>   |         |                                  |                                       |                                 |           |
| <b>Hydrocarbon Release Area (Estimated)</b>   |   |         |                                  |                                       | <b>km</b>                       |           |
| <b>Step 3:</b>  | <b>Calculate area by colour: Estimate the area covered by each colour of hydrocarbon as a % of area affected (e.g. 60% Silvery = 10.8km<sup>2</sup> and 40% Metallic = 7.2km<sup>2</sup>)</b>   |         |                                  |                                       |                                 |           |
| Colour  | Code  | Minimum | Maximum                          | Step 3                                |                                 |           |
|   |   |         |                                  | % of Area Affected                    | Area Covered (km <sup>2</sup> ) |           |
| Oil Sheen Silvery   | 1   | 0.04    | 0.3                              |                                       |                                 |           |
| Oil Sheen Rainbow   | 2   | 0.3     | 5.0                              |                                       |                                 |           |
| Oil Sheen Metallic  | 3   | 5.0     | 50                               |                                       |                                 |           |
| Discontinuous True  | 4   | 50      | 200                              |                                       |                                 |           |
| Continuous True   | 5   | 200     | >200                             |                                       |                                 |           |
| Calculation for Area Covered: This should be calculated for each code to give Area Covered by Colour km <sup>2</sup> = Area/100 x % of Area Covered.  |   |         |                                  |                                       |                                 |           |
| <b>Step 4:</b>  | <b>Calculate quantity by colour: Multiply the area covered by each colour (Min and Max) by the appropriate quantity of hydrocarbon in the table (e.g. 10.8km<sup>2</sup> x 0.04 and 0.3 for Silvery and 7.2km<sup>2</sup> x 5 and 50 for Metallic).</b> |         |                                  |                                       |                                 |           |
| Colour  | Step 3 (as above)   |         | Step 4                           |                                       |                                 |           |
|   | Area Covered (km <sup>2</sup> )   |         | Minimum Volume (m <sup>3</sup> ) | Maximum Volume (m <sup>3</sup> )      |                                 |           |
| Oil Sheen Silvery   |   |         |                                  |                                       |                                 |           |
| Oil Sheen Rainbow   |   |         |                                  |                                       |                                 |           |
| Oil Sheen Metallic  |   |         |                                  |                                       |                                 |           |
| Discontinuous True  |   |         |                                  |                                       |                                 |           |
| Continuous True   |   |         |                                  |                                       |                                 |           |
| <b>Step 5:</b>  | <b>Total Volume: Add all the volumes for each colour figures to get total volume.</b>   |         |                                  |                                       |                                 |           |
| <b>Minimum Volume (m<sup>3</sup>)</b>   |   |         |                                  | <b>Maximum Volume (m<sup>3</sup>)</b> |                                 |           |
| <b>Step 6:</b>  | <b>Conversion: If necessary you can convert m<sup>3</sup> to tonnes by multiplying total quantity in m<sup>3</sup> by the Specific Gravity (SG) of the released hydrocarbon.</b>  |         |                                  |                                       |                                 |           |
| <b>Minimum Volume (t)</b>   |   |         |                                  | <b>Maximum Volume (t)</b>             |                                 |           |

## B.2 Dispersant Application

Description and considerations of dispersant use is detailed in [Section 5.3 Dispersant Application](#) and references to this.

### B.2.1 Testing Dispersant Efficacy Procedure

Testing dispersant efficacy procedure can be undertaken by the SIC pilot vessel or tugs. This test ensures that dispersant is applied only on oils that are amenable to dispersant. Dispersant application is not recommended for releases of condensate or diesel.

| Step            | Action   |
|-----------------|--|
| <p><b>1</b></p> | <p><b>Conduct basic field dispersant effectiveness test</b> – Test the amenability of the released hydrocarbon to dispersants following the sampling of the slick. This should be done as quickly as possible after taking the sample.</p> <p><b>Tools required:</b></p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>2 x clear glass containers (with lids)</p> </div> <div style="text-align: center;">  <p>Seawater</p> </div> <div style="text-align: center;">  <p>Oil (same that has been released, or potentially released)</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 10px;"> <div style="text-align: center;">  <p>Plastic bottles are not adequate as the oil will adhere to the plastic and affect your results.</p> </div> <div style="text-align: center;">  <p>Dispersant (small quantity)</p> </div> <div style="text-align: center;">  <p>Pipette (optional)</p> </div> </div> <p>The test should be carried out as follows (instructions below cover one control sample for comparison and one test sample):</p> <ol style="list-style-type: none"> <li>1. Take one glass jar and fill 3/4 with seawater.</li> <li>2. Add 20 drops of oil to the water using the pipette, or if not available gently pour a small amount to cover the water surface to about 1 mm thickness.</li> <li>3. Cap the jar and shake the oil and water mixture lightly about 10 times.</li> <li>4. The oil and water should not mix very well and the droplets should rise to the surface quickly leaving the water fairly clear. This is your comparison mixture.</li> <li>5. Take the second clean jar and repeat Steps 1 to 3, but also add one drop of your dispersant to the mixture before shaking. This is your test sample.</li> <li>6. The oil and water mixture should now mix to form a cloudy mixture in the jar, with very small droplets that rise to the surface very slowly (longer than an hour) if left undisturbed.</li> <li>7. Compare your comparison mixture with the test sample. If the dispersant is effective you should see a marked increase in water cloudiness and less surface oiling. The greater the difference the more effective the dispersant has not been effective and alternative strategies should be explored.</li> </ol> <div style="margin-top: 20px;"> <p><b>Comparison Mixture: Physically dispersed</b></p>  <p><b>Test Sample: Chemically dispersed</b></p>  </div> <p><small>Pictures and text courtesy of Oil Spill Response Limited, Vessel Dispersant Application Field Guide, Version 1, 2011</small></p> |
| <p><b>2</b></p> | <p><b>Identify spray parameters</b> – Undertake calculations to select correct pumping rate and vessel speed in relation to nozzle size (delivery rate) and effective swath width of the equipment. Commence spraying operations with a ratio of 20:1 hydrocarbon to dispersant.</p>   |

| Step | Action   |
|------|--|
| 3    | <p><b>Conduct a test spray</b> – Identify a patch of continuous true coloured hydrocarbon as defined in the BAOAC. Prepare vessel for spraying operations, enter the slick at the recommended speed and commence spraying at a consistent rate.</p> <p>Observe hydrocarbon/dispersant interaction – During spraying operations look for evidence of dispersion. If dispersion is achieved it will produce a grey or coffee coloured plume in the water. There may also be noticeable movement of oil from the surface into the water column.</p> |
| 4    | <p><b>Further observation</b> – Once the test spray run is complete, shut off the dispersant application system and manoeuvre vessel to return back along the test spray path to further evaluate effectiveness.</p>   |
| 5    | <p><b>Report findings</b> – Document findings and report to the OIM and Onshore Regional IMT for discussion with regulatory authorities. Only commence spraying once further approval has been sanctioned through Regional IMT.</p>  |

**Dispersant Application Photographs**

|   |  |
|---|--|
| <p><b>Example of where dispersion has been achieved (grey or coffee coloured):</b></p>  | <p><b>Example of where dispersant application has been ineffective (milky white coloured):</b></p>  |
|---|--|

## B.2.2 Record of Dispersant Use

This form should be used to record the use of, and the effectiveness of dispersant.

All dispersant runs should be recorded in the Spray Log (on the following page) and all records retained for the MCA, if requested.

| Record of Dispersant Use   |  |                                     |        |
|--|--|-------------------------------------|--------|
| Reportee name  |  | Reportee contact details            |        |
| Location of Incident (Lat/Long)  |  |                                     |        |
| Name of vessel applying dispersant                                     |  | Type of vessel applying dispersant  |        |
| Vessel IMO Reg No  |  | Aerial surveillance used?           | Yes No |
| Location of application (Lat/Long)                                     |  | Visibility                          |        |
| Weather at time of use:<br>Wind speed<br>Wind direction<br>Wave height |  | Other conditions                    |        |
| Dispersant and Hydrocarbon Information                                 |  |                                     |        |
| Type of oil being treated  |  | Est volume of oil (m <sup>3</sup> ) |        |
| Name/type of dispersant  |  | Date of manufacture                 |        |
| Last efficacy test date  |  | Volume used (m <sup>3</sup> )       |        |
| Spray times<br>– Start<br>– Finish                                     |  | Method(s) of application            |        |
| Location of application (Lat/Long)                                     |  |                                     |        |
| Reason for use   |  |                                     |        |
| Was approval or advice obtained prior to use?                          |  | Est quantity of oil treated         |        |
| Comments on effectiveness of treatment                                 |  |                                     |        |
| Other relevant observations/comments on use                            |  |                                     |        |
| Date/time report was completed   |  |                                     |        |

**B.2.3 Dispersant Spray Operators Log**

| Spray Operators Log                         |   |   |   |   |   |
|---|---|---|---|---|---|
| Run Number                                  | 1 | 2 | 3 | 4 | 5 |
| Start Time                                  |   |   |   |   |   |
| Finish Time                                 |   |   |   |   |   |
| Start Position (Lat/Long)                   |   |   |   |   |   |
| Finish Position (Lat/Long)                  |   |   |   |   |   |
| Course Bearing                              |   |   |   |   |   |
| Volume of dispersant used (m <sup>3</sup> ) |   |   |   |   |   |
| Dispersant to Oil Ratio                     |   |   |   |   |   |

Note – add more columns as required.



### B.2.4 Notification of Dispersant Usage

| DISPERSANT USE REPORT - To Marine Scotland  |  |
|---|--|
| Email to - ms.spillresponse@gov.scot and Marine_Scotland_Mailbox@gov.scot tel – 07770 733 423   |  |
| From <b>Shetland Island Council</b>   | Tel: 01806 244280/1/2<br>Fax: 01806 242118 |
| Incident No.  | Date:                                      |
| <p>Our Ref: JBE/AJB S/5</p> <p>Please be advised that under the terms of the request dated ..... for use, of dispersants at (name of area), this fax/email serves as notification that dispersant has been used for the control of an oil spill. The dispersant used is MMO approved.</p> <p>Harbour Master .....</p> |  |
| Nature of Spill (oil type, origin of spill)   |  |
| Location (lat and long co-ordinates)  |  |
| Remedial Action Taken   |  |
| Dispersant Make   | Quantity Used                              |
| Date of Manufacture   | Efficacy last tested on (if applicable)    |
| Comments of Effectiveness   |  |
| Date of report  | Time of report                             |
| Report prepared by  |  |
| Other Remarks   |  |

## B.3 Spur Boom Deployment

### Spur Boom Deployment

Spur boom sites positioned in key positions around the Voe, enable responders to rapidly deploy lengths of boom across the opening of bays or water mouths, from these pre-designated coastal locations (see [Figure 4](#) –).

Spur boom should be deployed at the first instance of a spill, using a small vessel and trained responders (See in [Section 5.4.](#)).

Advice and further detail on this strategy, can be sought through the SVT IMT.

### Considerations

The following aspects should be immediately considered, to determine which spur locations take priority for deployment:

- The location of the incident
- The directions of the oil (taking into account current and wind)

Importance should be given to preventing oil from entering Zone 1 areas as response within these areas is more limited, particularly regarding the use of dispersants.

**If oil is heading offshore priority should be given to deploying sites 1, 8, & 7 in that order. For oil heading onshore sites 6, 2, 3, & 4 should be prioritised in that order, with the priority of deploying site 5, dependant on the direction of the flow.**

## B.4 Assisted Natural Dispersion

### Assisted Natural Dispersion

Oil naturally disperses as part of the weathering process, with microbial degradation taking place as the hydrocarbon disperses into the water column.

This natural dispersion can be promoted by agitating the water column in and around the slick. This enhanced 'mixing' is achieved by propeller wash to agitate the water and/or spraying water from fire-fighting systems.

Assisted natural dispersion is suitable for oil spills of low to medium viscosity. It is not suitable for heavier oils, as it may increase emulsification rates.

See [Error! Reference source not found.](#) in [Section 5.4](#). Advice and further detail on this strategy, can be sought through the SVT IMT.

### Considerations

Assisted Natural dispersion should be considered given the following conditions:

- Hydrocarbon is a light oil (approx. API>35), such as diesel and light engine oils
- There is a low risk to environment, community and assets
- Surface sheen is too thin for effective use of chemical dispersants

Assisted natural dispersion should not be considered given the following circumstances:

- Heavier oils (approx. API<17.5), such as intermediate fuel oils
- In shallow waters (<10m) where there is a risk of grounding and disturbance of the sediment
- Presence of light volatile components presenting a risk of explosion
- In rough seas when dispersion, is naturally enhanced

## B.5 Containment and Recovery

### Containment and Recovery

Mechanical containment and recovery removes oil from the sea surface, by corralling the oil using a boom, while skimmers are used to recover the concentrated oil. Containment and recovery at sea is statistically very inefficient, although it is environmentally friendly. Therefore, the authorities are likely to request this type of operation if a release is ongoing and the weather conditions allow.

See [Error! Reference source not found.](#) in [Section 5.4](#). Advice and further detail on this strategy, can be sought through the SVT IMT.

### Considerations

- Surveillance is required to monitor the clean-up and to help guide any vessels to the thickest parts of the hydrocarbon release
- Vessels in close proximity should conduct continuous gas monitoring and only proceed if safe to do so
- Containment and recovery operations are typically most suitable in calm conditions (wave height < 1 m; wind <20 knots; current; <1 knot)
- Containment and recovery operations are ineffective on light hydrocarbons, condensates and diesel
- Skimmer type should be based on hydrocarbon properties and prevailing conditions
- Suitable types and quantities of temporary storage will be required. **Storage could be a limiting factor for containment and recovery operations**
- The ongoing management of waste needs to be considered immediately if hydrocarbon is being recovered (see [Section 8](#))

## B.6 Shoreline Clean-up Assessment Technique (SCAT)

### Shoreline Clean-up Assessment Technique (SCAT)

Acquiring information on shoreline conditions at the time of a spill is crucial to inform decisions concerning the type of response techniques that may be implemented. SCAT surveys provide data and/or technical advice for use in planning shoreline protection and clean-up.

The SCAT team identifies operational constraints (i.e. ecological sites, cultural resources, or access/logistical considerations), shoreline types, residual oiling and makes recommendations where appropriate. These Shoreline Oiling Survey (SOS's, which may be done pre- or post-impact), then provide the basis for the Shoreline Treatment Recommendations (STR's) developed by the IMT.

Oil spill modelling can be used to focus the SCAT survey team's effort directing them to the beach most likely to be impacted (see [Section 11](#)). Priorities for shoreline assessment surveys may also be pre-determined using information from aerial surveys and the SOTEAG Oil Spill Sensitivity maps (see [Section 12](#)). See Strategy Defined Resources in [Section 5.4](#).

Advice and further detail on this strategy, can be sought through the SVT IMT.

## B.7 Shoreline Protection

### Shoreline Protection

Shoreline protection is used to prevent oil from impacting sensitive shorelines or to reduce the impact/amount of oil. This often involves the use of exclusion booming to enclose a sensitive/priority area or to deflect the oil away from an area of shoreline.

Information from SOTEAG Oil Spill Sensitivity Maps (see [Section 12](#)) and collected on SCAT Surveys (see [Appendix B.6](#)), that utilise Beach Packs (see [Section 13](#)) can be used by the IMT to determine priorities for protection. See Strategy Defined Resources in [Section 5.4](#)

Advice and further detail on this strategy, can be sought through the SVT IMT.

### Considerations

Protection response objectives, strategies and tactics will change for each area depending on the resources at risk (sensitivity), the risk of oiling (vulnerability), and on feasibility considerations.

When developing a shoreline response strategy, it is necessary to consider:

- Proximity of oil to identified sensitive areas,
- Weather conditions and forecast
- Shoreline contour and type
- Water movement (erosion or deposition, current/rip speed and direction, tides, waves)
- Accessibility and logistics

## B.8 Manual Shoreline Clean-up

### Manual Shoreline Clean-up

The objective of a shoreline clean-up is to remove as much of the oil as possible, while causing minimal extra damage to environmental communities and resources. The steps in clean-up are:

- Identify the extent of the problem (usually accomplished by SCAT surveys post-oiling)
- Plan the clean-up in conjunction with SVTO – using STR's
- Conduct and monitor the clean-up

See **Strategy Defined Resources** in 5.4 Advice and further detail on this strategy, can be sought through the SVT IMT.

### Considerations

- Clean-up of the affected areas should be implemented as rapidly as possible to reduce the potential for remobilisation of stranded oil, and the potential subsequent migration to clean shorelines.
- Personnel should conduct continuous gas monitoring during clean-up and only proceed if safe to do so
- Suitable types and quantities of temporary, intermediate and permanent storage will be required (the SVT can assist with this). **Storage could be a limiting factor.**
- The ongoing management of waste needs to be considered immediately if hydrocarbon is being collected (see **Section 8**)

## B.9 Sampling

If possible, obtain 3 samples of pollutant – have these samples witnessed. Sampling should be in accordance with the MCA’s STOp 4/2001. For Sampling Labels and the Sample Form refer to [B.9.2 Sampling Labels and Sample Form](#).

### B.9.1 Release Sampling Guide

It is advisable to take a sample of the release hydrocarbon if it is safe and practicable to do so. Any sampling should be in accordance with the [MCA Sampling Guidance STOp 4/2001](#). The SIC must, if sea state and vessel operating restrictions allow, comply with any request from the MCA to obtain sea surface samples of oil.

The SIC should request from a vessel in the vicinity of the incident to collect a sample of the hydrocarbon using the sampling kit at Sella Ness. Advice on the collection and handling of hydrocarbon samples is given in the table below.

| Sampling Guidance  |
|--|
| <ul style="list-style-type: none"> <li>Refer to the Oil Spill Sampling Guidelines in the sampling kit</li> <li>Avoid contamination of the sampling equipment with other sources of hydrocarbons</li> <li>Use gloves supplied when undertaking sampling</li> </ul>  |
| Number of Samples Required   |
| <p>The MCA recommends taking three sealed samples for the following purposes:</p> <ul style="list-style-type: none"> <li>For analysis specified by the MCA</li> <li>To be handed to the owner of the suspect vessel/installation for retention and any appropriate action</li> <li>For production in court</li> </ul>  |
| Frequency of Sampling  |
| <p><b>Offshore</b> – A minimum of one set of samples per slick per day where possible</p> <p><b>Onshore</b> – Representative samples from the shoreline, in discussion with MCA’s Counter Pollution Branch</p>   |
| Size of Sample   |
| <ul style="list-style-type: none"> <li>Fresh hydrocarbon free from water: 10ml</li> <li>Hydrocarbons exposed to sea surface and forming water-in-oil emulsion: 10ml</li> <li>Over side water discharge (where contravention of &gt;15ppm is suspected): 1 litre of discharge</li> <li>Tarry lumps as found on beaches: 10 grammes</li> </ul> <p>If such quantities cannot be collected, sampling should still be attempted. In some cases, larger volumes may be required for further testing of the slick</p> |

### Collecting Method

- Skim the hydrocarbon off the surface of the water, ensuring maximum hydrocarbon content and minimum water (a bucket with a hole may be required to collect the sample initially to drain excess water).
- Any collection of lumpy tar/waxy pollutant should be placed directly into sample containers, with no attempt to heat or melt these samples.
- Hydrocarbon collected which is attached to floating debris and seaweed should be placed along with the debris/seaweed, directly in to the sampling container.
- Sample containers should be sealed as soon as possible to minimise the evaporation of the hydrocarbon's higher fractions.

### Container Sealing, Packaging and Transporting

- Sample containers should be glass with a large neck, a screw cover and a seal that cannot be affected by hydrocarbon, e.g. no waxed cap seals
- Plastic/metal containers should be avoided as they can react with the sample and interfere with analysis
- All sample containers should be sealed with a tamper-proof seal
- Where possible, all samples should be securely packed and sealed. UN-approved fibreboard boxes should be used to ensure safe carriage of the samples
- Samples should be stored in a refrigerator/cold room at less than 5°C in the dark
- When transporting the materials, vermiculite should be used to surround the samples in the box for protection and to absorb any seepage
- Arrange for transportation of the samples to the laboratory as soon as possible

### Labelling

Each sample should be clearly labelled with:

- An identifying number consisting of the date (yy/mm/dd) and the initials of the official in charge of taking the samples e.g. 02/04/12/JS = sample taken on 12 April 2002
- A description of the sample
- Location that the sample was taken from
- Date and time of sampling
- Purpose for which the sample was taken
- If known, the suspected source, e.g. name of drilling rig
- Whether or not dispersants have been used and, if known, their type and make
- The method of sampling used
- Name, address and telephone number of person taking sample and of anyone witnessing the sampling being done
- Additional information that would be useful include:
- Wind direction and velocity

- Air and water temperature
- Sample descriptions i.e. viscosity, colour and contaminants
- Description of the hydrocarbon release i.e. distribution and consistency

#### Analysis

- The first sample should be retained and stored in accordance with MCA Sampling Guidance STOp 4/2001 until advised by MCA.
- The second sample should be retained by SIC and stored for evidential purposes
- The third sample should be sent to the following address for analysis:
  - Fugro ERT, Gait 8, Research Park South, Heriot-Watt University, Edinburgh, EH14 4AP  
Tel: +44 (0) 131 449 5030
  - Or other as advised by SVTO

**Note the SVT, will likely collect samples for their own records. SIC samples should be collected concurrently, unless mutually agreed otherwise.**



| Collection of oil samples – This form to be complete by person taking sample  |   |  |
|---|---|--|
| If in doubt please refer to MCA STOp notice on sampling. Remember to complete sample jar label and sign   |   |  |
| <b>A</b>  | ID Number – YY/MM/DD – with initials of person taking sample                          |  |
| <b>B</b>  | Sample Description  |  |
| <b>C</b>  | Location of Sample – OS grid Ref. or Lat/Long if possible                             |  |
| <b>D</b>  | Date and Time of sample collection  |  |
| <b>E</b>  | Purpose for which sample was taken  |  |
| <b>F</b>  | If known, suspected source  |  |
| <b>G</b>  | Were dispersants used?  |  |
| <b>H</b>  | Method of sampling  |  |
| <b>I</b>  | Name, Address, e-mail address, and Tel. No. of person taking sample and any witnesses |  |
| If possible the following information would also be helpful   |   |  |
| <b>J</b>  | Wind speed and direction  |  |
| <b>K</b>  | Air and Sea Temperature   |  |
| <b>L</b>  | Sample description, viscosity, colour, any contaminants?                              |  |
| <b>M</b>  | 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<br>Tel: 023 8032 9485 |   |  |

## C.1 Approvals and Consultation Letters

### C.1.1 Standing Approval Letter

marine scotland

T: +44 (0)131 244 4434  
E: daniel.pendrey@gov.scot



Captain Roger Moore  
Marine Team Leader  
EnQuest PLC  
Sullom Voe Terminal  
Mossbank  
Shetland  
ZE2 9TU

4<sup>th</sup> December 2017

Dear Captain Moore,

#### **SULLOM VOE TERMINAL - STANDING APPROVAL FOR USE OF CHEMICAL DISPERSANTS**

I refer to an e-mail of 30<sup>th</sup> November 2017 (sent by Rob Bly of BP) seeking an amendment to the recent renewal of the 'Standing Approval' for the use of chemical dispersants in response to an oil spill within the area adjacent to the Sullom Voe Marine Terminal ('Sullom Voe'). I have amended the renewal as requested, substituting EnQuest PLC for BP, and I have amended dates as appropriate.

Under the provisions of Part IV of the Marine (Scotland) Act 2010, as read with the Marine Licensing Exempted Activities Orders<sup>1</sup>, no deposit may be made in the sea of any marine chemical treatment substance, marine oil treatment substance or marine surface fouling cleaner in an area where the depth of water is less than 20 metres or within one nautical mile of any such area save with the prior approval of the Licensing Authority. This includes any area submerged at mean high water springs (e.g. beaches and other inter-tidal zones). The Licensing Authority for UK territorial waters and UK controlled waters adjacent to Scotland is the Scottish Ministers acting through Marine Scotland, a Directorate of Scottish Government. Marine Scotland is the first point of contact within the Scottish Government in the event of an oil or chemical spill at sea. A copy of the current contact arrangements for the Marine Scotland Duty Officer is attached at **Annex 1** to this letter.

On behalf of the Scottish Ministers Marine Scotland confirms that EnQuest PLC, as operators of the Sullom Voe, may use a limited quantity of chemical dispersant to respond to an oil spill in Sullom Voe **without prior notification**. This Standing Approval covers a maximum per single oil spill incident of 24 tonnes of approved dispersant.

<sup>1</sup> The Marine Licensing (Exempted Activities) (Scottish Inshore Region) Order 2011  
The Marine Licensing (Exempted Activities) (Scottish Offshore region) Order 2011  
The Marine Licensing (Exempted Activities) (Scottish Inshore and Offshore Regions) Amendment Order 2012.

This agreement commences on the 4<sup>th</sup> December 2017 and operates for the duration of the current Oil Spill Contingency Plan (OSCP) and is subject to the exclusions, conditions and exemptions outlined below:

#### **DESIGNATED AREA IN WHICH THE STANDING APPROVAL APPLIES:**

The Standing Approval covers areas of sea stipulated in the OSCP that are either within (i.e. Sullom Voe), or immediately adjacent to (i.e. Yell Sound) internationally important natural heritage sites, namely the Sullom Voe marine Special Area of Conservation and the Yell Sound Coast Special Area of Conservation. Full consideration of the features of interest within these sites and the implications of using dispersants within the area(s) for which their use is approved must be taken into account prior to their application. Additionally advice must have been obtained from Scottish Natural Heritage in the first instance.

#### **EXCLUSIONS:**

1. Dispersants must not be used to treat spills of diesel, gas oil, or similar light oil types which normally disperse readily by evaporation, nor to treat heavy oils which have a viscosity beyond the maximum specified by the manufacturers of the dispersant used. **Approval must be sought on a case by case basis** from Marine Scotland to the use of chemical dispersants on these types of oils.
2. Dispersants must not be used directly on any intertidal shoreline areas. Advice on handling oil spill impact on these sensitive wildlife habitats should be sought from Scottish Natural Heritage in the first instance and Marine Scotland approval must be sought and obtained if it is exceptionally considered that dispersant use in these sensitive areas is appropriate.

#### **CONDITIONS:**

3. This Standing Approval is subject to the Maritime and Coastguard Agency (MCA) approving the revised Oil Spill Contingency Plan (OSCP) for Sullom Voe and dispersant use must be in accordance with the procedures set out in the OSCP. It is also issued having been discussed with colleagues within the Scottish Government and Scottish Natural Heritage (SNH).
4. A report using the form at **Annex 2** must be provided, by e-mail, to Marine Scotland as soon as possible following the use of dispersant at Sullom Voe under the authority of this Standing Approval. If the intended use of dispersants falls outside the terms of the standing approval no dispersant treatment should commence until the approval of Marine Scotland has been obtained for areas where such approval is required.
5. Only products approved by the Marine Management Organisation (MMO) at the time of manufacture, and which have been re-tested as specified for efficacy, may be used under the terms of this Standing Approval. The up to date list of currently approved dispersants can be viewed at <https://www.gov.uk/government/publications/how-to-use-oil-spill-treatment-products-and-equipment>.
6. Marine Scotland may withdraw this Standing Approval without redress at any time but must provide an explanation for such action.
7. EnQuest PLC must take full responsibility for the actions of others who are either contracted or delegated by them to undertake oil treatment within the terms of the Standing Approval.

**EXEMPTIONS:**

8. The use of dispersants outside the terms of this Standing Approval is exceptionally allowed in force majeure instances where an oil spill poses an immediate threat to human health or the safety of a vessel or wharf etc. subject to notification as soon as practicable thereafter.
9. Formal approval is not required by statute for the use of products to treat oil present in areas of deeper water (the 20m rule) as long as the products were approved by the Marine Management Organisation/Marine Scotland at the time of manufacture, and have been re-tested as specified for efficacy. However, Marine Scotland must be consulted about any proposed use of products in such deeper waters in UK controlled waters adjacent to Scotland so that fisheries and environmental sensitivities can be fully taken into account.
10. Approval is not needed for the use of equipment to control, contain or recover oil. EnQuest PLC need not approach Marine Scotland before using items of equipment such as recoverable absorbent booms and absorbent cushions. However, chemicals or loose absorbent granules which would be classified as substances (rather than equipment) and their use does require specific approval where not covered by this Standing Approval.
11. The content of this letter has been agreed in consultation with Scottish Natural Heritage and takes account of their advice in respect of possible impacts on any adjacent areas of nature conservation interest, for example, Natura 2000 sites.

I have sent a copy of this letter to John Baxter (SNH) and Lisa McAuliffe (MCA).

Yours sincerely

**DANIEL J PENDREY**  
Marine Scotland Licensing Operations Team

**ANNEX 1**

**marine scotland**

**CONTACT ARRANGEMENTS FOR MARINE SCOTLAND**

To request approval to dispersant spraying please contact the Marine Scotland Duty Officer as detailed below:

**Duty officer**

|   |                  |  |
|---|------------------|--|
| 1 | Mobile Telephone | <b>07770 733423</b> (24-hour contact number)   |
| 2 | E-mail           | <a href="mailto:ms.spillresponse@gov.scot">ms.spillresponse@gov.scot</a><br>(Should normally only be used once initial contact has been established by phone). |

In the event that a call to the mobile phone fails to connect with the duty officer, a message, including a contact name and return phone number, should be sent via the SMS system to the phone.

Should these routes fail to receive a response then a call should be made to the Marine Scotland, Marine Laboratory Switchboard: 0131 244 2500.

**ANNEX 2**

**Port Authority / Oil Company** .....

**OIL SPILL REPORT TO BE SENT BY E-mail to:**

- a. [ms.spillresponse@gov.scot](mailto:ms.spillresponse@gov.scot), and
- b. [MarinePlanning@gov.scot](mailto:MarinePlanning@gov.scot)

|  |  |  |  |
|--|--|--|--|
| <b>Date</b>  |  | <b>Incident Ref</b>                            |  |
| <b>Nature of Spill</b>   |  |  |  |
| <b>Location (if remote from land by Lat and Long co-ordinates)</b> |  |  |  |
| <b>Remedial action taken</b>                                       |  |  |  |
| <b>Dispersant make</b>   |  |  |  |
| <b>Date of manufacture</b>   |  | <b>Efficacy last tested on (if applicable)</b> |  |
| <b>Comments on effectiveness</b>                                   |  |  |  |
| <b>Date of report</b>  |  | <b>Time of report</b>                          |  |
| <b>Report prepared by</b>  |  |  |  |
| <b>Other remarks</b>   |  |  |  |

### C.1.2 Consultation Statements



**Statement for MCA**

I confirm that the Sullom Voe Harbour 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: *D. PENDREY, BUSINESS MANAGER*

Representing: *MARINE SCOTLAND LICENSING OPERATIONS TEAM*

Date: *2/11/2017*



**Statement for MCA**

I confirm that the Sullom Voe Harbour 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: *Kirsty North*

Name and Position: Kirsty North, Operations Officer

Representing: Scottish Natural Heritage

Date: 31/10/17



**Statement for MCA**

I confirm that the Sullom Voe Harbour 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:



EILIDH JOHNSTON

Name and Position: Unit Manager, Northern Isles

Representing: Scottish Environment Protection Agency (SEPA)

Date: 2 November 2017



**Statement for MCA**

I confirm that the Sullom Voe Harbour 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: Rebecca Kinnear (Executive Officer – SOTEAG)

Representing: SOTEAG (Shetland Oil Terminal Environmental Advisory Group)

Date: 30.10.2017



**Statement for MCA**

I confirm that the Sullom Voe Harbour 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: *John R Smith*

.....

Name and Position: *John Smith, EXECUTIVE MGR*

Representing: *SHETLAND ISLANDS COUNCIL*

Date: *7/11/2017*



**Statement for MCA**

I confirm that the Sullom Voe Harbour 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: *Roger Moore*

.....

Name and Position: Roger Moore (OSM)

Representing: Sullom Voe Terminal

Date: 14/11/17

## D.1 Media Holding Statement



# HOLDING STATEMENT - XX

Produced by Sullom Voe Terminal on behalf of the SVT  
Owners and the Shetland Islands Council

**Sullom Voe (01806) 243632**

**Fax (01806) 243322**

Date:XXXXXX

Time:xxxxxxx

At approximately **xxxxxx (time from POLREP)** hours today (**xxxxxx add in date from POLREP**) an oil spill occurred within the Sullom Voe Port area. (**Add in position & extent, characteristics, source and cause from POLREP**)

The Sullom Voe Harbour Oil Spill Plan has been activated, and the terminal's emergency response teams, together with Shetland Islands Council Ports & Harbours Operations, are responding.

Cargo loading activities are (**unaffected or have been suspended**). Production from XXXX is (**unaffected or reduced/suspended**).

Additional information is available from **xxxxxx**

## E.1 Sensitivity Maps

Page intentionally left blank

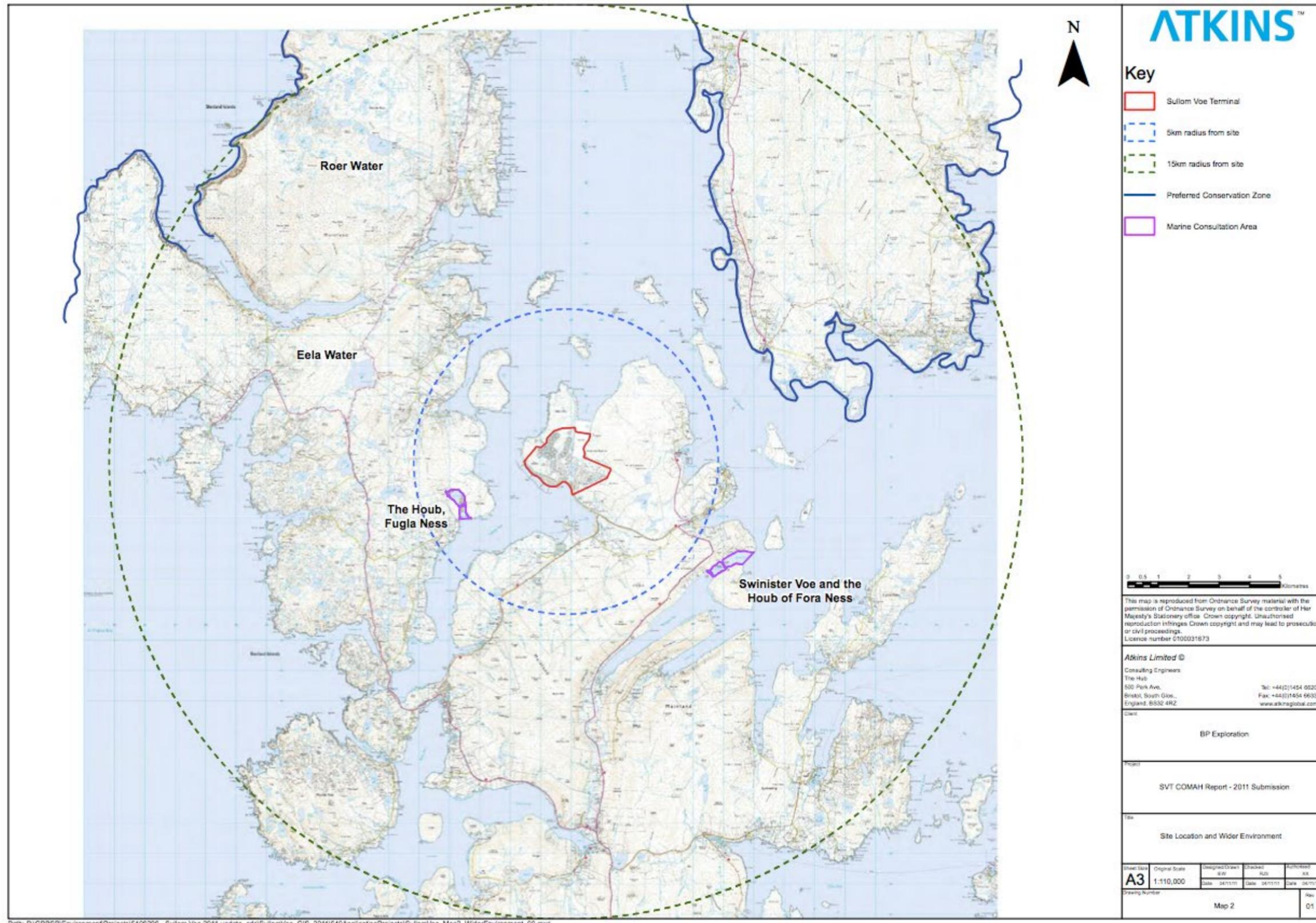


Figure 18 – Conservation Zone and Marine Consultation Area within 15 km radius of the Site



Figure 19 – Nationally Designated Environmental Receptors within 5 km radius of the Site

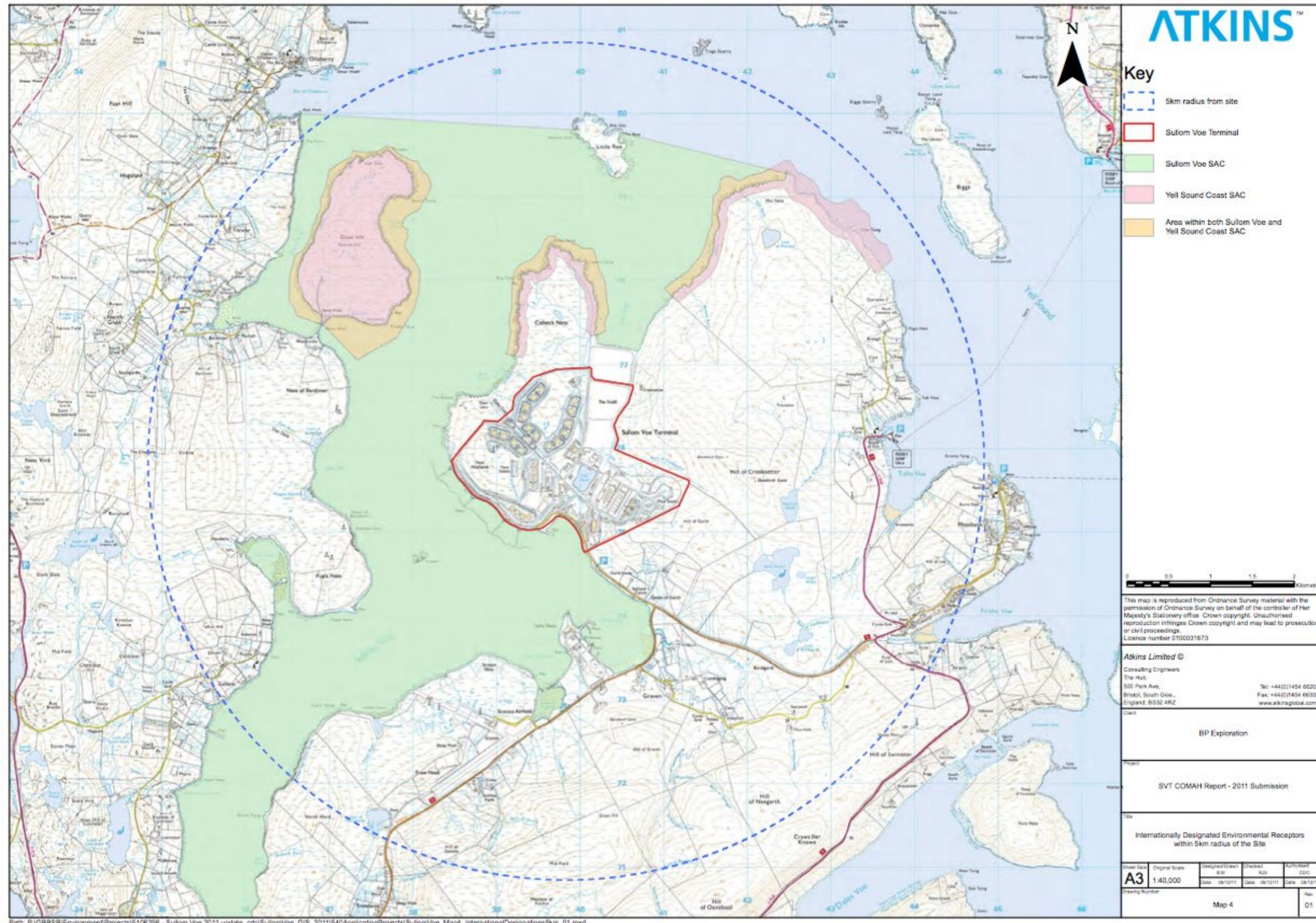
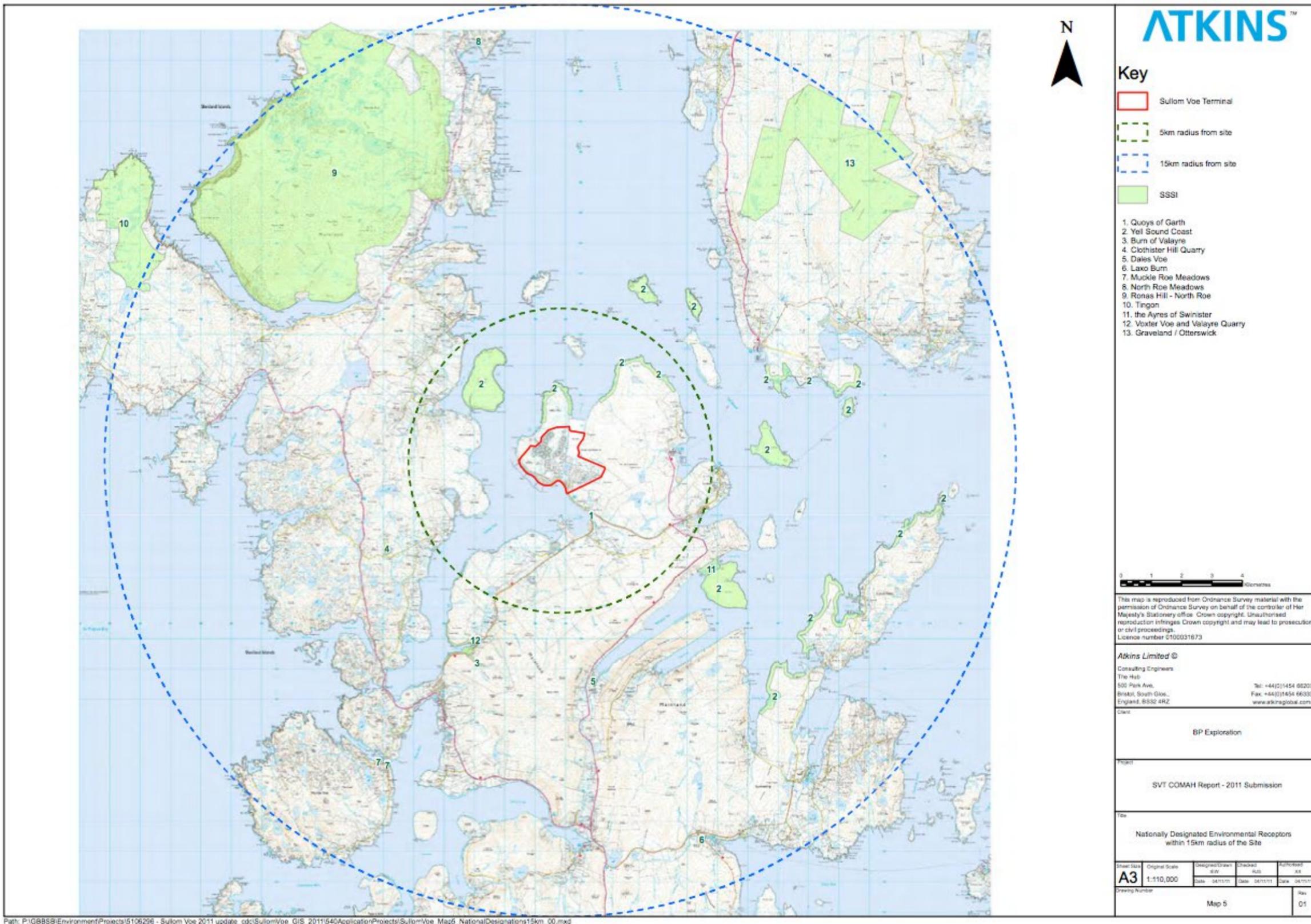


Figure 20 – Internationally Designated Environmental Receptors within 5 km radius of the Site



Path: P:\GBBS9\Environment\Projects\5106256 - Sullom Voe 2011 update\_cdc\SullomVoe\_GIS\_2011\540Applicator\Projects\SullomVoe\_Map5\_NationalDesignations15km\_00.mxd

Figure 21 – Nationally Designated Environmental Receptors within 15 km radius of the Site

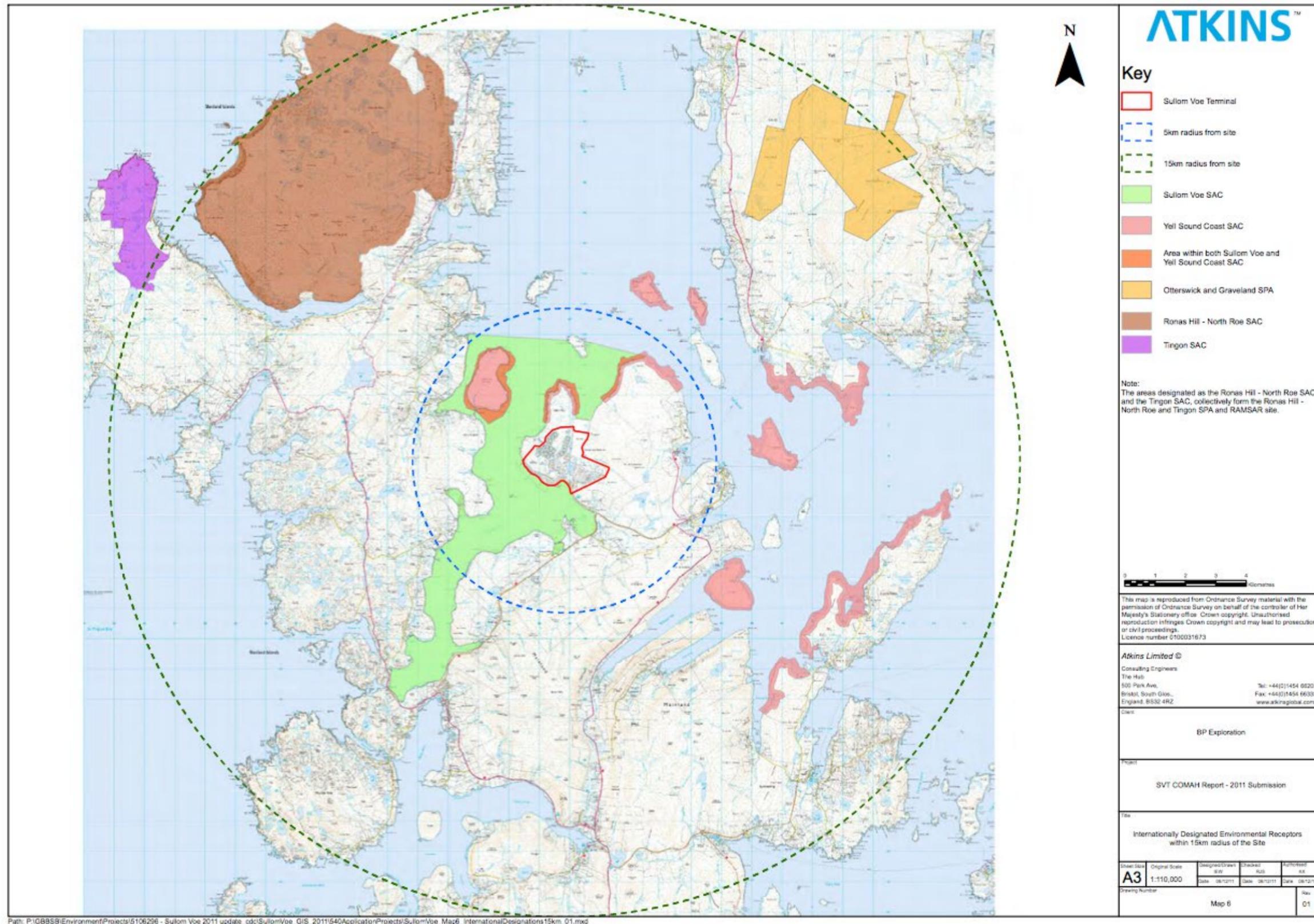


Figure 22 – Internationally Designated Environmental Receptors within 15 km radius of the Site

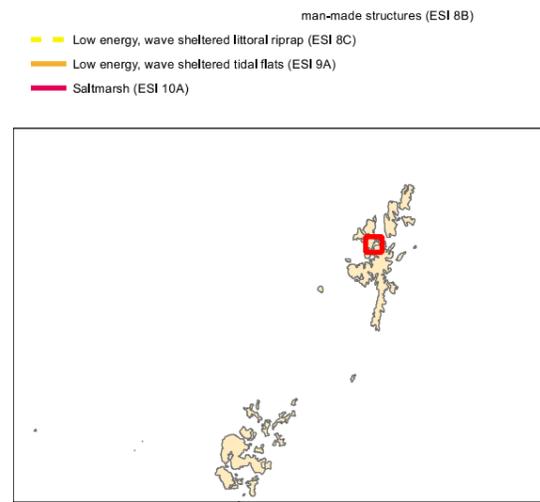


Figure 23 - Sullom Voe Shoreline Types

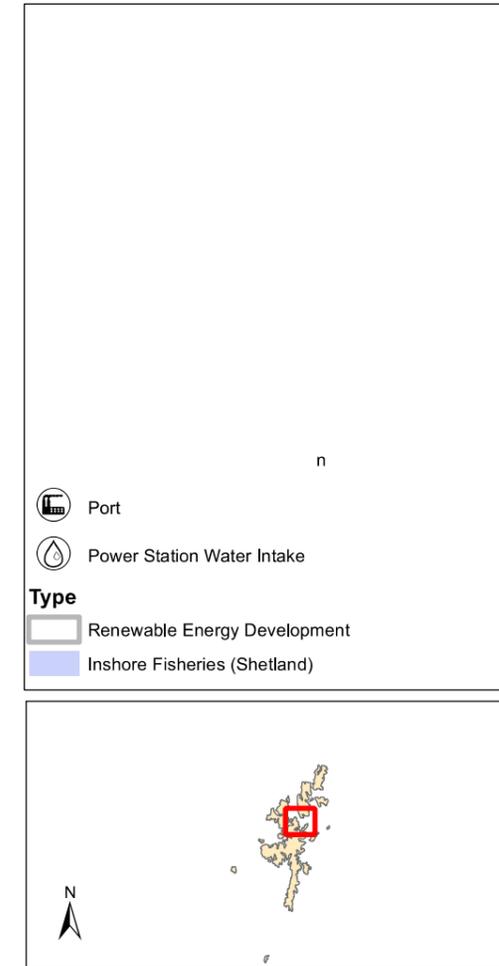


Figure 24 – Yell Sound East Shoreline Types

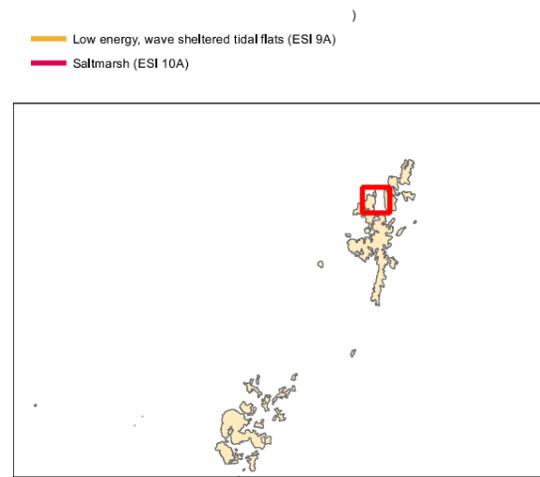
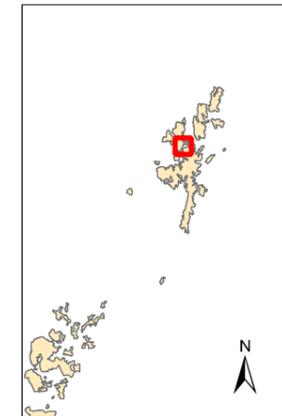
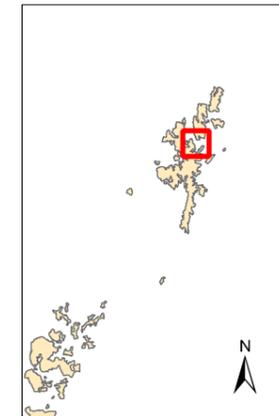


Figure 25 – Yell Sound North Shoreline Types

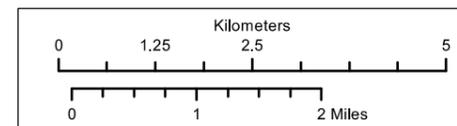


oe

**Figure 26 – Sullom Voe Biological Sensitivities**

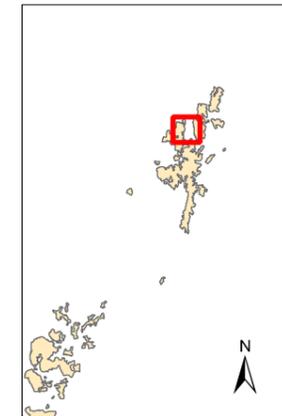


Yell Sound East

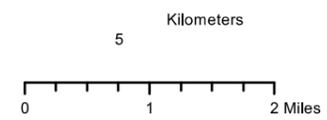


 Nature Conservation Marine Protected Areas (MPAs)

**Figure 27 – Yell Sound East Biological Sensitivities**



Yell Sound North



**Figure 28 – Yell Sound North Biological Sensitivities**

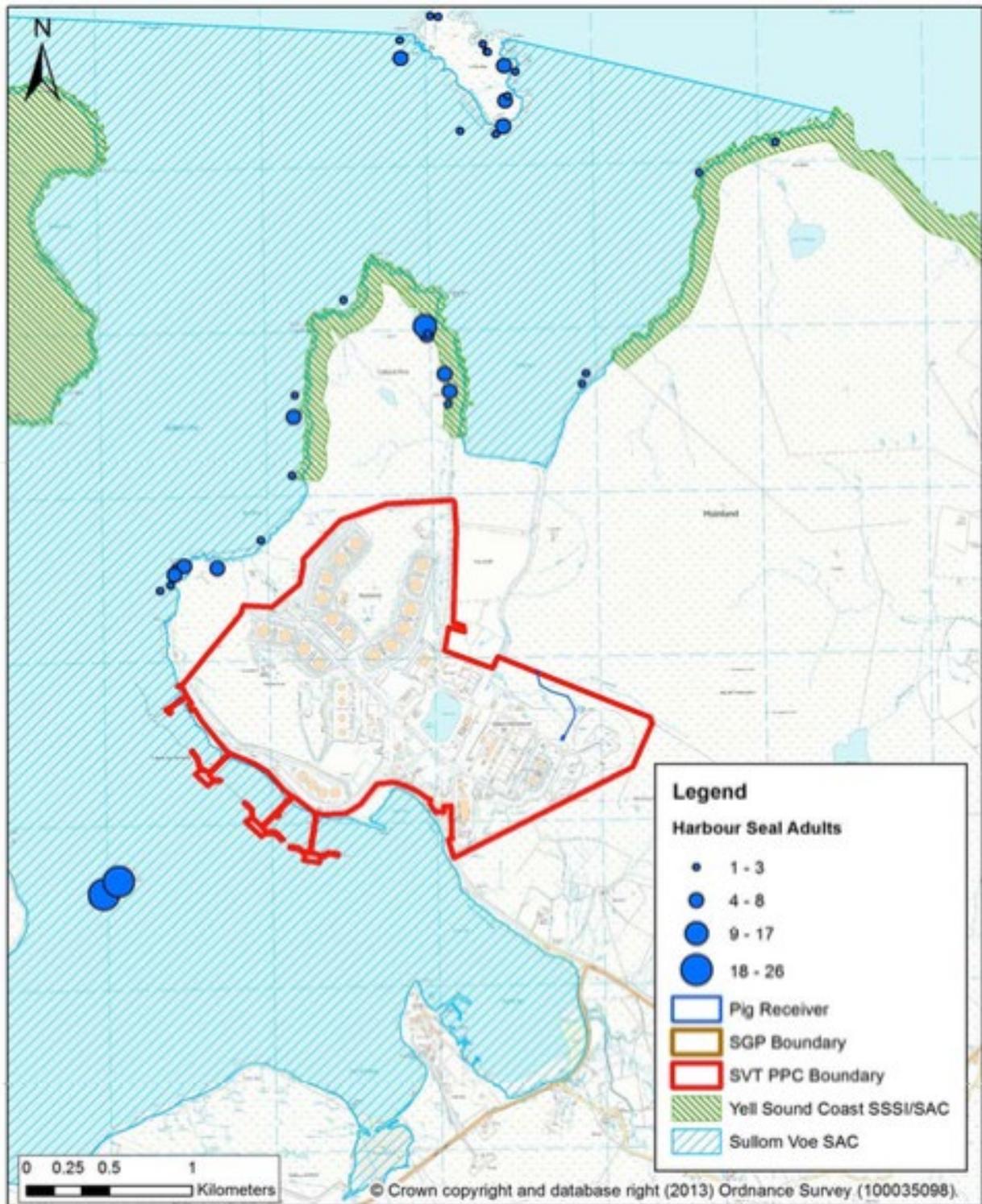


Figure 29 – Total Adult Common (Harbour) Seal Count for all Survey Days during Breeding, 2013 (see COMAH Report 2017 for details)

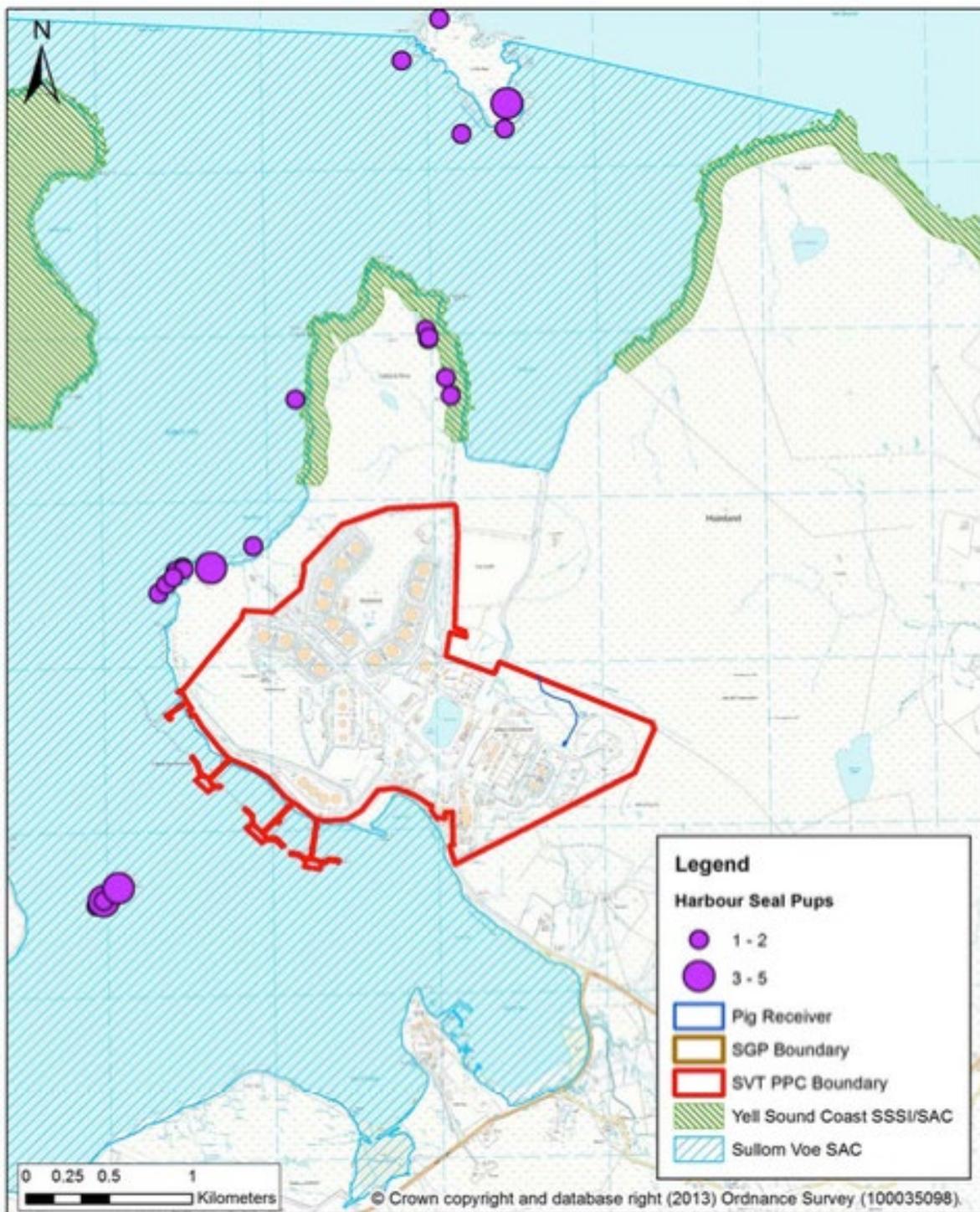


Figure 30 – Total Common (Harbour) Seal Pup Count for all Survey Days during Pupping Period, 2013 (see COMAH Report 2017 for details)

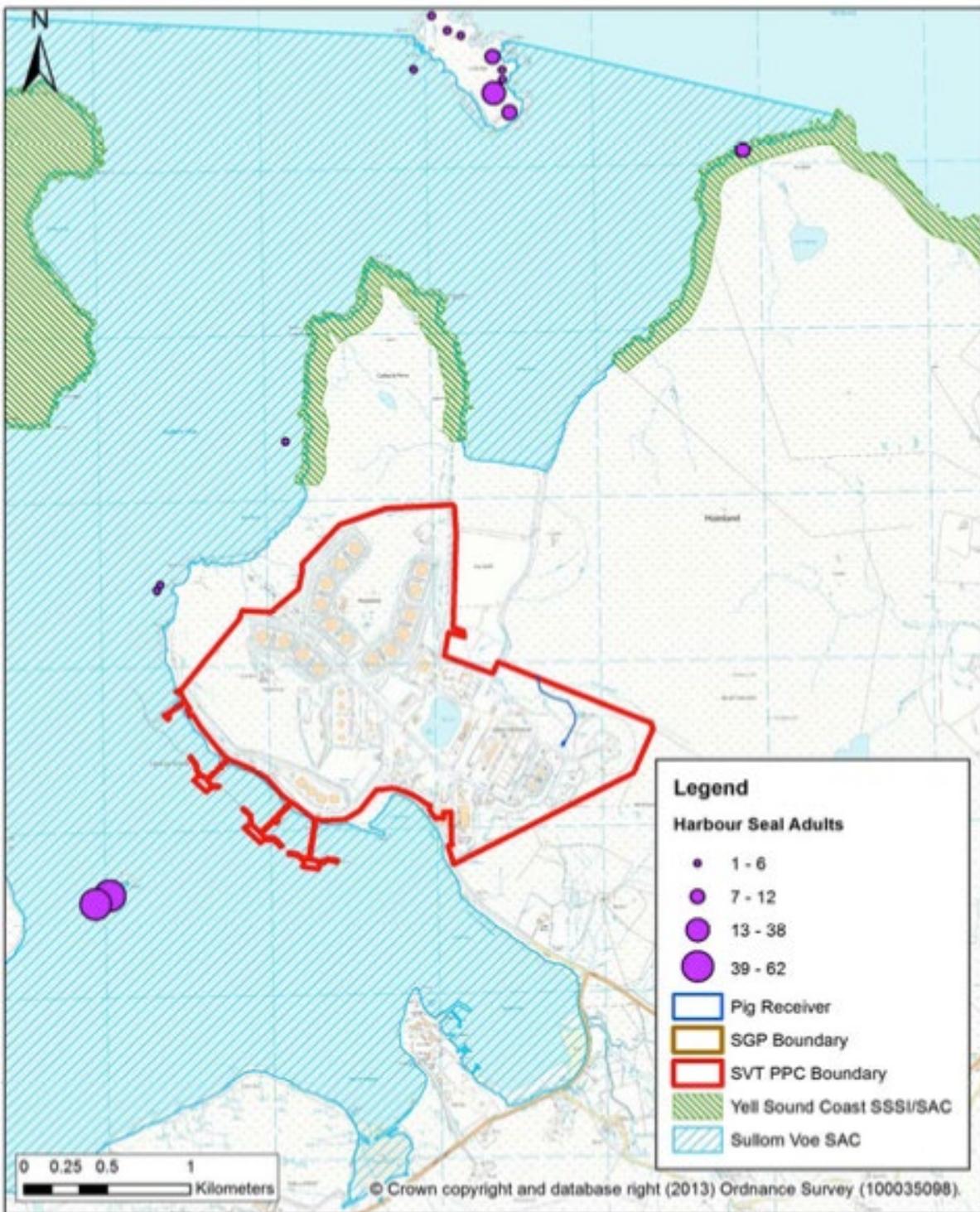


Figure 31 – Total Common (Harbour) Seal Count for all Survey Days during Moulting Period, 2013 (see COMAH Report 2017 for details)

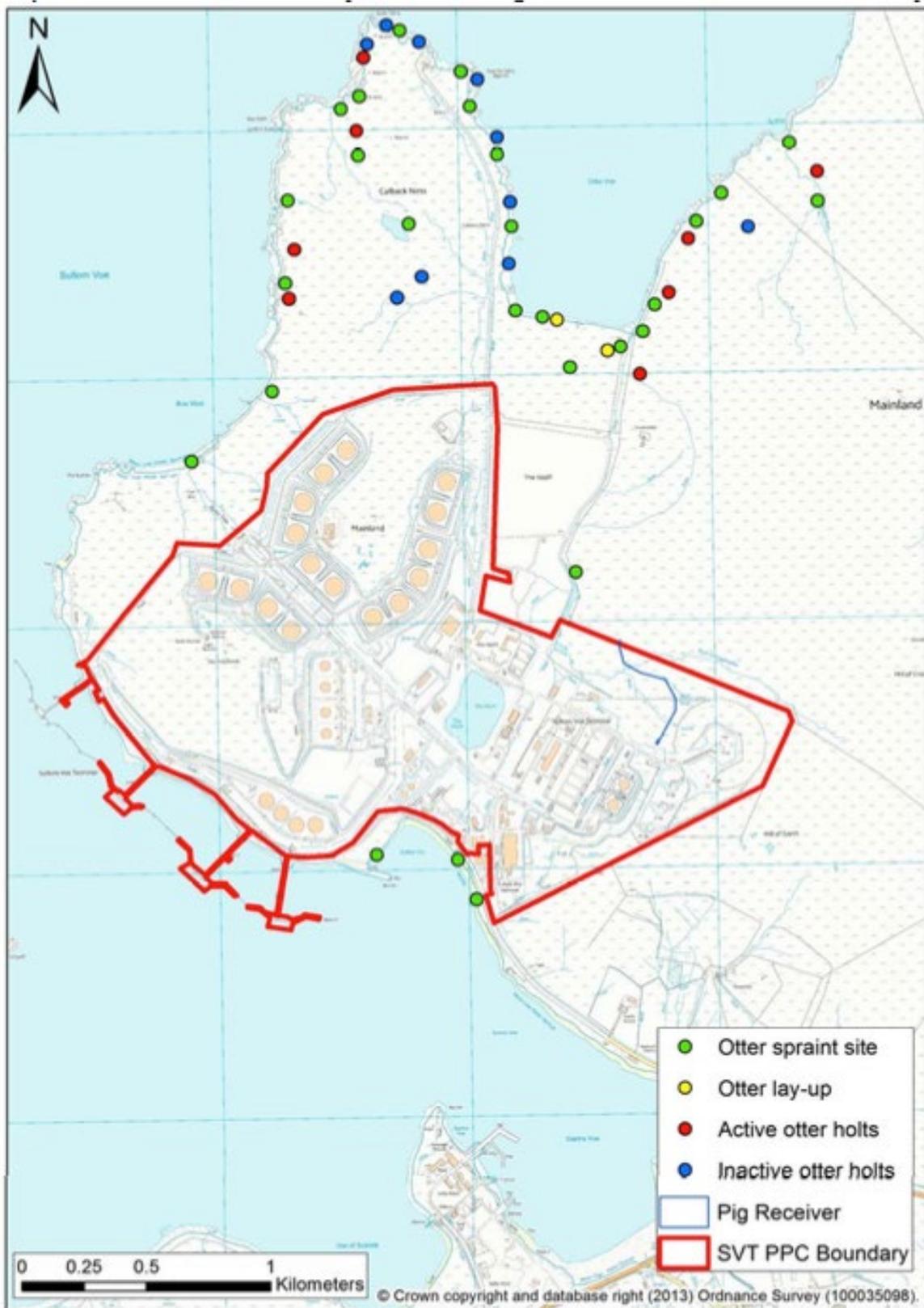


Figure 32 – Locations of Otter Activity Identified during October and December 2013 Surveys (see COMAH Report 2017 for details)

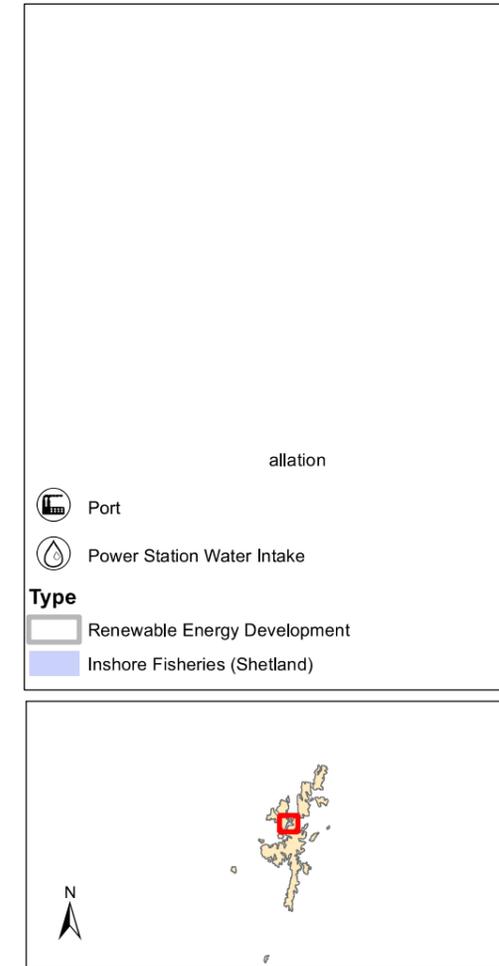


Figure 33 – Sullom Voe Socioeconomic Sensitivities

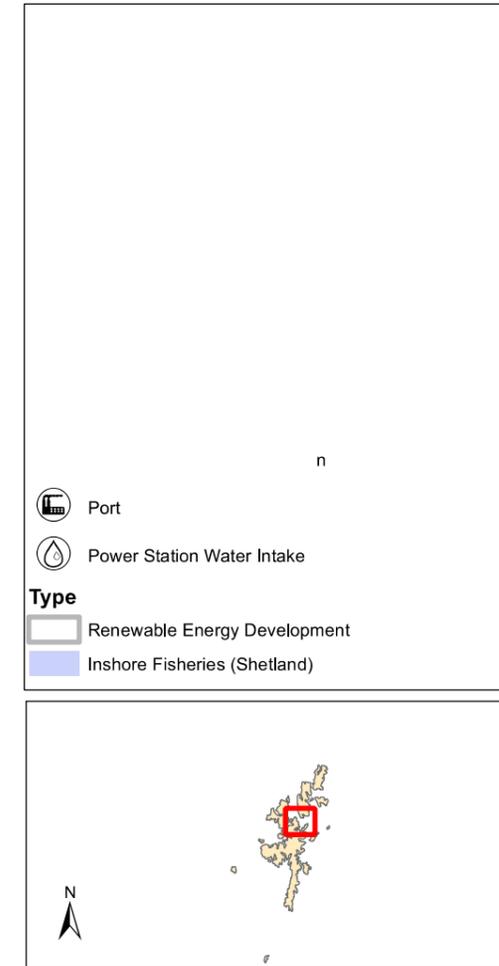


Figure 34 – Yell Sound East Socioeconomic Sensitivities

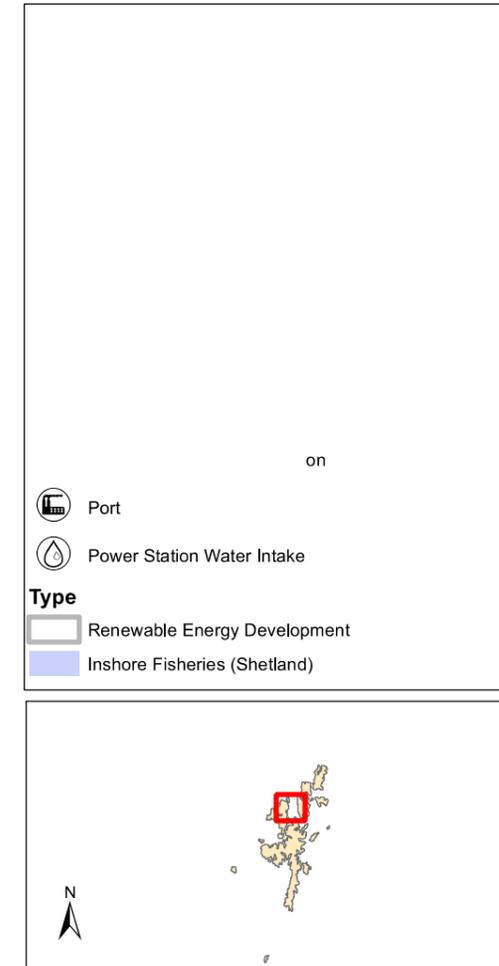


Figure 35 – Yell Sound North Socioeconomic Sensitivities

---

## **F.1 Sellaness UKSpill Accreditation**

“EnQuest NNS are accredited Tier 2 contractor through UK Spill.

UKSpill certificates are issued on a yearly basis with a 3 yearly audit. Therefore certificates are only valid for one year.

EnQuest do not have to go through the process every year to keep the certification which is automatically re-issued, so to save on sending amendments out each year Just to insert a new certificate please see the information link below .

For details of the membership refer to UK Spill, <https://www.ukspill.org/members-list.php>.”





**POST EXERCISE/INCIDENT REPORT - SULLOM VOE**

**List of equipment deployed:**

|  |
|--|
|  |
|--|

**Name of other Organisations/Authorities participating:**

|  |
|--|
|  |
|--|

**Details of amendments made to Contingency Plan resulting from exercise/incident:**

|  |
|--|
|  |
|--|

**I can Confirm that the details on this form provide a realistic summary of the exercise/incident. Any action points resulting have been dealt with accordingly, the relevant documents updated, and copies provided to the appropriate bodies for their attention.**

|                                   |  |
|-----------------------------------|--|
| <b>Authorised by (Print name)</b> |  |
| <b>Position/ Job title</b>        |  |
| <b>Signature and date</b>         |  |

## H.1 Port/Harbour Fast Facts

| SULLOM VOE HARBOUR FAST FACTS  |  |                 |                             |                 |                                   |            |              |         |                                |           |
|--|--|-----------------|-----------------------------|-----------------|-----------------------------------|------------|--------------|---------|--------------------------------|-----------|
|  |  |                 |                             |                 |                                   |            |              |         |                                |           |
| <b>Harbour Master</b>  | Greg Maitland  |                 |                             |                 |                                   |            |              |         |                                |           |
| <b>Harbour Office contact details</b>  | Shetland Islands Council<br>Ports & Harbours Operations<br>Port Administration Building<br>Sella Ness<br>Sullom Voe<br>Shetland<br>ZE2 9QR   |                 |                             |                 |                                   |            |              |         |                                |           |
|  | <table border="0"> <tr> <td style="padding-right: 20px;">Telephone (OH):</td> <td>01806 244200 (01595 744200)</td> </tr> <tr> <td>Telephone (OOH)</td> <td>01806 244280/1/2 (Sullom Voe VTS)</td> </tr> <tr> <td>Facsimile:</td> <td>01806 242237</td> </tr> <tr> <td>e-mail:</td> <td>port.reception@shetland.gov.uk</td> </tr> <tr> <td>web site:</td> <td>www.shetland.gov.uk/ports</td> </tr> </table>   | Telephone (OH): | 01806 244200 (01595 744200) | Telephone (OOH) | 01806 244280/1/2 (Sullom Voe VTS) | Facsimile: | 01806 242237 | e-mail: | port.reception@shetland.gov.uk | web site: |
| Telephone (OH):  | 01806 244200 (01595 744200)  |                 |                             |                 |                                   |            |              |         |                                |           |
| Telephone (OOH)  | 01806 244280/1/2 (Sullom Voe VTS)  |                 |                             |                 |                                   |            |              |         |                                |           |
| Facsimile:   | 01806 242237   |                 |                             |                 |                                   |            |              |         |                                |           |
| e-mail:  | port.reception@shetland.gov.uk   |                 |                             |                 |                                   |            |              |         |                                |           |
| web site:  | www.shetland.gov.uk/ports  |                 |                             |                 |                                   |            |              |         |                                |           |
| <b>Latitude &amp; Longitude – harbour entrance (Harbour Limits)</b>                | <p>Latitude 60° 38' 18" N, longitude 01° 18' 18" W, at the northern extremity of the Point of Fethaland, thence in an easterly direction following a straight line to a point in latitude 60° 38' 14" N, longitude 01° 11' 08" W, at the northern extremity of Fogla Lee on the Island of Yell,</p> <p>Latitude 60° 29' 09" N, longitude 01° 05' 48" W, at the south-eastern extremity of the Ness of Copister, thence in a southerly direction to a point in latitude 60° 28' 41" N, longitude 01° 05' 58" W, on the line of low water mark at the south-eastern extremity of the Island of Orfasay thence in a south-westerly direction following a straight line to a point in latitude 60° 27' 44" N, longitude 01° 08' 22" W, at the southern extremity of Samphrey Island, thence in a westerly direction following a straight line to a point in latitude 60° 27' 45" N, longitude 01° 10' 49" W, at the root of Mossbank Pier.</p> |                 |                             |                 |                                   |            |              |         |                                |           |
| <b>Admiralty chart numbers</b>   | 3297, 3298, 3282   |                 |                             |                 |                                   |            |              |         |                                |           |
| <b>Maximum available draft</b>   | Tankers can load to a maximum draft of: <ul style="list-style-type: none"> <li>• 16.8 metres at Jetty 1;</li> <li>• 22.1 metres at Jetty 2;</li> <li>• 24 metres at Jetty 3; and</li> <li>• 22.6 metres at Jetty 4</li> </ul>  |                 |                             |                 |                                   |            |              |         |                                |           |

| SULLOM VOE HARBOUR FAST FACTS                                 |  |
|---|--|
| <b>Maximum available length</b>                               | Sullom Voe will accept vessels between 140 metres LOA and 365 metres LOA as a matter of routine and vessels out with this range will be considered on an individual basis.   |
| <b>Maximum beam – if applicable</b>                           | N/A  |
| <b>Navigational access – ie. leading lights, buoyage</b>      | Yes with Compulsory Pilotage and VTS control   |
| <b>Environmental Sensitivities</b>                            | Sullom Voe Special Area Conservation<br>The Houb, Fuga Ness Marine Protected Area<br>Swinister Voe and the Houb of For a Ness Marine Protected Area<br>Yell Sound Coast Site Special Scientific Interest<br>Yell Sound Coast Special Area Conservation<br>Ronas Hill – North Roe Special Area Conservation   |
| <b>Tugs</b>   | Tystie, Dunter Shalder and Tirrick   |
| <b>Pilotage</b>   | <p>The following vessels shall be exempt from compulsory Pilotage unless otherwise directed by the Harbour Master:</p> <ul style="list-style-type: none"> <li>• All ships of not more than 300 tons gross registered tonnage which do not have onboard dangerous substances to which the provisions of the Dangerous Substances in Harbour Areas 1987 regulations apply.</li> <li>• All fishing vessels.</li> <li>• All tugboats operating exclusively within the harbour area.</li> <li>• All ships in transit through the harbour area which do not pass south of a line joining the most northerly point of Gluss Isle and the most northerly point of Calback Ness.</li> <li>• All ships belonging to Her Majesty.</li> </ul> <p>All ships engaged in hydrographic survey work, pipelaying, trenching, inspection or similar operations.</p> |
| <b>Anchorage</b>  | 2 Emergency Anchorages only  |
| <b>Repair facilities – ie. dry docks and slipways</b>         | Small boat hoist and laydown area available  |
| <b>Cargo handling facilities – ie. bulk, fuel, containers</b> | There are four oil jetties located in deep water on the northern shores of Sullom Voe and a concrete pier suitable for coastal traffic is located in Garths Voe, east of No.1 tanker jetty.  |
| <b>Local authority</b>  | Shetland Islands Council   |
| <b>Hazards – pipelines, overhead cables</b>                   | Brent Oil Pipeline (TAQA) (is not routed at sea within the harbour limits)<br>Clair Oil Pipeline (BP) (is routed at sea within the harbour limits)<br>Ninian Oil Pipeline (EnQuest) (is not routed at sea within the harbour limits)   |
| <b>Tidal Range</b>  | 2m   |
| <b>ISPS compliant</b>   | Yes  |

---

## **I.1 Material Safety Data Sheets (MSDS)**

MSDS sheets for the hydrocarbons handled within Sullom Voe Harbour can be found in Sevron <https://www.sevron.co.uk/>.

Access to this database during an incident will be via SVHA or the SVT IMT.

## J.1 Ship to Ship Transfer Authority



Maritime and Coastguard Agency

Stan Woznicki  
Counter Pollution and Salvage Branch  
Bay 2/11  
Spring Place  
105 Commercial Road  
Southampton  
SO15 1EG

Roger Moore  
Executive Manager -Ports/Harbour Master  
Ports and Harbours Operations  
Infrastructure Services Department  
Port Administration Building  
Sella Ness  
Sullom Voe  
Shateland  
ZE2 9QR

Tel: +44 (0)2380 329525  
Fax: +44 (0)2380 329407  
E-mail: Stan.Woznicki@mcga.gov.uk

Your ref: Your RM/EJ HMO letter –  
'Ship to Ship Oil Transfer  
Licence – Sullom Voe dated 2  
April 2012.

Our ref: The Merchant Shipping (Ship-  
to-Ship Transfers) Regulations  
2010/2012

21 September 2012

**APPLICATION FOR OIL TRANSFER LICENCE**

Your application for an Oil Transfer Licence to maintain ship to ship transfer services at Sullom Voe has been assessed as fully compliant with the requirements noted in The Merchant Shipping (Ship-to-Ship Transfers) Regulations 2010/2012 paragraph 5s and 8, and in accordance with Schedule 1 and 2 of the same.

**Your application for an Oil Transfer Licence is approved in accordance with Schedule 2 paragraph 5 of the Regulation.**

You are to note the requirement at paragraph 5, sub paragraph 2 through 5 of the Regulation that requires you to inform the Maritime and Coastguard Agency should any of the circumstances noted in this application change, such that a re-assessment of this licence approval may need to be undertaken.

Yours sincerely





Stan Woznicki  
Head of Counter Pollution and Salvage  
Maritime and Coastguard Agency

PORTS AND HARBOURS  
RECEIVED

**28 SEP 2012**  
12:50/10/12

File No. 23231 Rec By BA

File Ref Amog to An








An executive agency of the  
Department for  
**Transport**

## K.1 MCA – Approval of Spill Contingency Plan Certificate

ID: 6cce4849-f9d0-4419-98eb-60b50220183e

**Maritime & Coastguard Agency**

### APPROVAL OF OIL SPILL CONTINGENCY PLAN

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

**PARTICULARS OF COMPANY**

|                  |  |         |                |
|------------------|--|---------|----------------|
| Name of Port     | Sullom Voe Harbour   |         |                |
| Category of Port | A&B  |         |                |
| Address          | Shetland Islands Council Sullom<br>Ports and Harbours Operations<br>Port Administration Building<br>Sella Ness, Sullom Voe<br>Shetland |         |                |
| Postcode         | ZE2 9QR  | Country | United Kingdom |

**APPROVAL**

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

Date of Plan

Plan Version

This Plan is valid until 17 August 2028.

Place

Date

Signed 
 Signature of authorised official issuing the certificate"/>

Name

Verify