**Appendix 3**

30th November 2017

**ISSUE 16**

# TOR BAY HARBOUR COMMITTEE

# SAFETY MANAGEMENT SYSTEM

## in compliance with

## The Port Marine Safety Code

## THE TOR BAY HARBOUR COMMITTEE (TBHC) :-

- **Councillor Nick Bye (Chairman)**
- **Councillor Vic Ellery (Vice Chairman)**
- **Councillor Christine Carter**
- **Councillor James O'Dwyer**
- **Councillor Nicole Amil**
- **Councillor Nick Pentney**
- **Councillor Ray Hill**
- **Councillor Chris Robson**
- **Councillor Terry Manning**

## ADVISORS :-

- **Mr David Buckpitt**
- **Mr Michael Stewart**
- **Mr Michael Ellis**

## OFFICERS :-

- **Capt. Kevin Mowat - Executive Head – Assets & Business Services and Tor Bay Harbour Master**

## DESIGNATED PERSON :-

- **Verna Barnes – Devon Audit Partnership**

# SAFETY MANAGEMENT SYSTEM

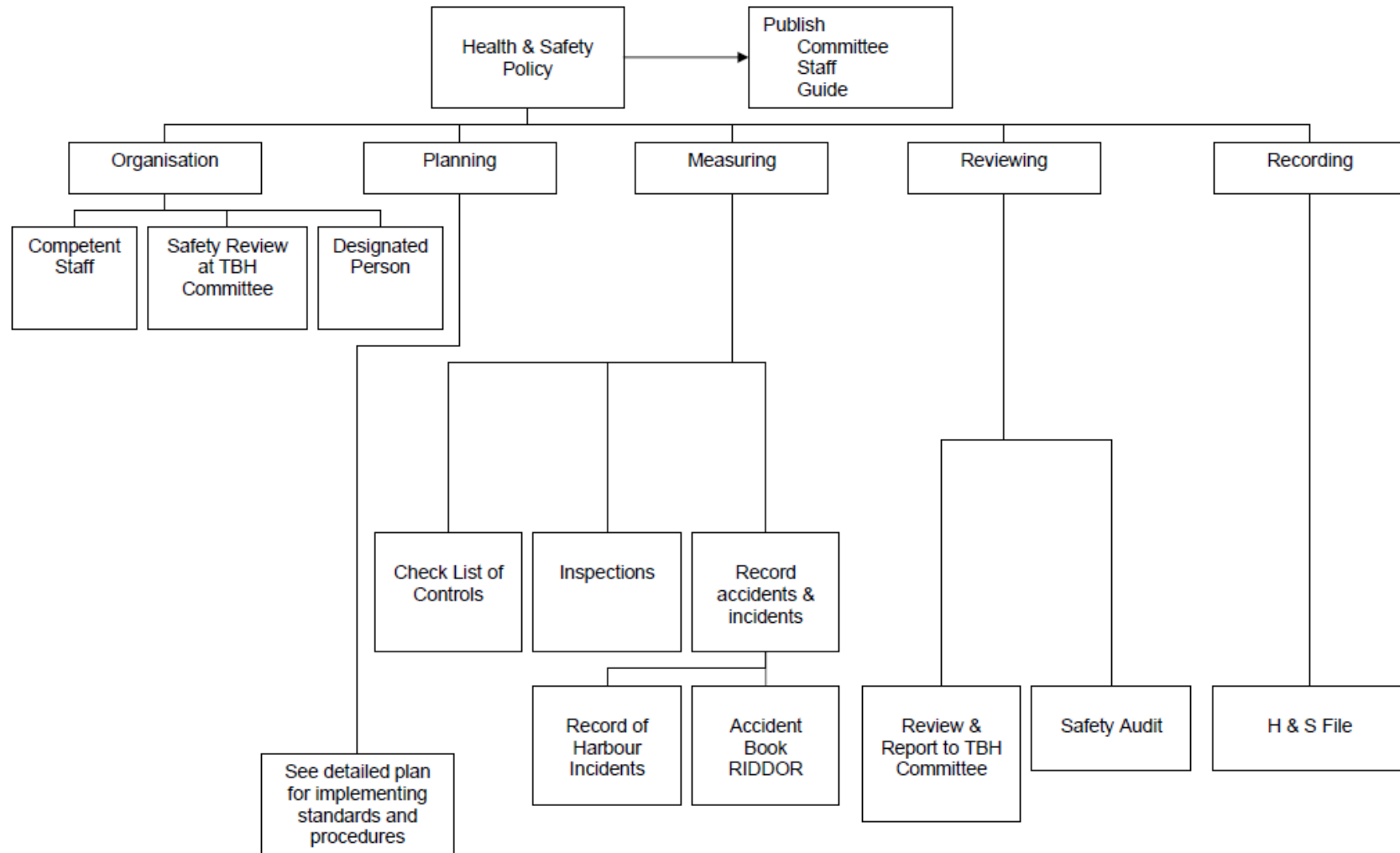**OVERVIEW**                                                          **PAGE**

Tor Bay Harbour Committee (TBHC) have, after consultation with harbour users, drafted risk assessments and adopted a Safety Management System comprising the following 6 elements:-

Torbay Council, through the Tor Bay Harbour Committee, is responsible for policy.
The Harbour Master is responsible for the organisation and the facilities.  The staff implement the policy.  Together these three categories form the system that puts policy into effective practice.

# TOR BAY PMSC SAFETY MANAGEMENT SYSTEM

```
                    ┌─────────────────┐          ┌─────────────────┐
                    │ Health & Safety │─────────>│ Publish         │
                    │ Policy          │          │ Committee       │
                    │                 │          │ Staff           │
                    └─────────────────┘          │ Guide           │
                             │                    └─────────────────┘
     ┌───────────────┬───────┴───────┬───────────────┬───────────────┐
┌──────────┐   ┌──────────┐   ┌──────────┐   ┌──────────┐   ┌──────────┐
│Organisation│  │ Planning │   │Measuring │   │Reviewing │   │Recording │
└──────────┘   └──────────┘   └──────────┘   └──────────┘   └──────────┘
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| Competent Staff | Safety Review at TBH Committee | Designated Person |
| --- | --- | --- |

| Check List of Controls | Inspections | Record accidents & incidents |
| --- | --- | --- |

| Record of Harbour Incidents | Accident Book RIDDOR |
| --- | --- |

| See detailed plan for implementing standards and procedures |
| --- |

| Review & Report to TBH Committee | Safety Audit |
| --- | --- |

| H & S File |
| --- |

OUTLINE CHART OF SAFETY MANAGEMENT SYSTEM

# TOR BAY HARBOUR PLANNING FOR PMSC

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Planning
├── Consultation ──→ Risk Assessment
                          │
    ┌──────────────┬──────┴────────┬──────────────┬──────────────┬──────────────┐
Emergency      Conservancy   Environmental   Management      Pilotage      Marine Services
Plans                        Management      of Navigation
```

**Emergency Plans:**
- Harbour Emergency Plan
  - Fire Plan
- Council Emergency Plan
  - Hydrography
- Oil Spill & Contingency Plan
  - Works & Dredging
- National Contingency Plan for Maritime Pollution
  - Buoyage & Navigation Aids

**Conservancy:**
- Wreck Removal
- Licensing Works

**Environmental Management:**
- Environmental Management Policy
- Port Waste Management Plan

- Commercial Shipping Procedures
  - Passage Plan
  - Monitor
  - Reporting (Voluntary)
  - Control
  - Access to VTMS data
  - Patrols
  - Commercial Anchorages

- Leisure Management Procedures
  - Zones
  - Events
  - Moorings
  - Marinas & Harbours
  - Leisure Anchorages

- Regulation & Enforcement Procedures
  - Directions
  - Regulations
  - Authorisation
  - Contracts
  - Training
  - Manning by Contractor
  - PECs
  - Contractor's Boat Procedures

**Marine Services:**
- Bunkering
- Passenger Craft Regulated by MCA Etc
- Towage
- 4 Workboats
- Permit for Commercial Diving
- Dredging Contractor
- Buoy Maintenance
- Salvage
- Management of Leisure Craft

# 1. Tor Bay Harbour Safety Policy

**Health and Safety Management System;**

Torbay Council, through its Tor Bay Harbour Committee (TBHC), has adopted a health and safety management system in compliance with the principles set out in the Port Marine Safety Code. The health and safety management system includes policies for emergency plans, conservancy, environment, management of navigation, pilotage and marine services.

Tor Bay Harbour Committee will on behalf of Torbay Council provide a safe harbour within the limits of their jurisdiction, which is open to the public for recreation and the transportation of passengers and goods.  It will ensure the safety of Tor Bay by exercising its statutory functions to a high standard.  The TBHC will regulate the use of the harbour by maintaining appropriate byelaws and ensuring that these and other statutory regulations are enforced. The TBHC will ensure that an efficient pilotage service is available and that pilotage directions are maintained and reviewed regularly.  The TBHC will ensure such marine services as are required for the safe use of their harbour are available and are well maintained and operated.  Tor Bay Harbour Committee will ensure that up to date plans are available to deal with emergency situations and that the resources required to implement these plans are maintained and exercised.

Existing powers shall be reviewed on a periodic basis, to avoid a failure in discharging duties or risk exceeding powers.

The Policy incorporates input from officers, from staff and from harbour users as high standards of safety can only be achieved through dialogue and co-operation.

Plans and reports will be published as a means of improving the transparency and accountability of the harbour authority, as well as providing reassurance to the harbour users. TBHC will consider past events and incidents so as to recognise potential dangers and identify the means of avoiding them.


**The Aims of the Safety Management System of Tor Bay Harbour Committee;**

1. To identify, quantify and manage the significant marine risks associated with the waters and harbour activities of Tor Bay. This will ensure there is proper control of ship movements by, where necessary, regulating the safe arrival, departure and movement within the harbour of all vessels.

2. To maintain, protect, improve and regulate the safe navigation of all vessels in Tor Bay.

   - To ensure that Tor Bay and its enclosed harbours remain safe areas for all harbour users to undertake their business and activities, with the risk of injury as low as reasonably practical

   - To have an effective system for promulgating navigation warnings affecting the Harbour.

   - To consider the effect of weather on harbour safety and see that the broadcast warnings are accessible.

   - To designate suitable anchorages.

   - To monitor lights and marks used for navigation.

   - To keep the need for pilotage under review and authorise suitably trained and experienced pilots to provide an efficient pilotage service.

   - To provide resources to deliver marine services, such as the provision of harbour patrol craft.

3. To ensure that suitable plans for emergency situations are maintained, regularly updated and exercised, so that TBHC will respond rapidly and effectively to emergency incidents to minimise the impact.

4. To carry out all its functions with special regard to the possible environmental impact, protecting from damage and pollution the marine environment and the landscape, heritage, amenity and tourism attractions of the Tor Bay coastline.

5. To maintain an up to date set of byelaws in consultation with harbour users and enforce them so as to regulate harbour use effectively.

6. To set up controls for personal safety.

   - To safeguard Harbour users', employees, those working in harbours, port users and the public whilst within areas under the TBHC's control.

   - To control the risk of exposure to criminal and civil liability.

   - To involve all stakeholders in management of marine safety and raise awareness of marine safety risks and prevention, control and management of risks.

   - To consider the effects on harbour safety of proposed changes in use or harbour works.

   - To operate within policies developed specifically to address marine issues in addition to the corporate policies and procedures agreed by the Council.

   - confirm the roles and responsibilities of key personnel at the harbour authority

   - outline present procedures for marine safety within the harbour and its approaches

   - measure performance against targets, after building a database recording incidents, including near misses

   - refer to emergency plans that would need to be exercised

   - be audited on an annual basis

7. To keep the duties and powers under review.

**All employees have a duty to:**

- Take care regarding their own health and safety and that of other harbour users and of those who might be affected by their acts or omissions.

- Comply with all harbour safety procedures laid down by Tor Bay Harbour Committee.

- Ensure that marine operations are undertaken in a safe manner.

- To report hazard, risk, accident, incident or near miss to their Safety Officer.

**Harbour users operating commercially and the general public using the Harbour for pleasure are responsible for:**

- Their own health and safety and that of other harbour users and the general public who may be affected by their acts or omissions.

- Complying with byelaws, directions and other regulations aimed at ensuring the safe use of the Harbour.

**Nominated Harbour Safety Officers**

Mr Dave Bartlett at Brixham, Mr Nick Burns at Torquay and Mr Simon Pinder at Paignton are the safety officers for these areas. In their absence urgent harbour safety matters shall be referred to the Harbour Master. The Safety Officers are also the "competent persons responsible" for fire safety.

**Emergencies in the Harbour**

Emergencies where life is in danger must be notified at once to the emergency services by dialling 999 or through VHF channel 16. Other emergencies shall be notified to the Duty Harbour Master by the quickest available means.

**Reporting of Accidents Incidents and Near Misses**

The public are asked to bring matters of safety - all accidents, incidents and near misses – promptly to the attention of the Harbour Master or the Harbour Safety Officer at the nearest Harbour Office or by completing an online form on the Harbour Authority website.
The Harbour staff are obliged to record on the Maritime Navigation and Information Services (MarNIS) computer system; Marine Safety incidents/accidents/near misses. The reports will be used to review accidents and incidents, for assessing whether any action is necessary to reduce the risk of recurrence. It shall be recorded that the Executive Head has conducted this review and that the necessary actions have been taken. This will be an assessment of the effectiveness of the harbour safety management system.

Adopted by Torbay Council's Harbour Committee - December, 2017

# 2. Tor Bay Harbour Authority (TBHA) Organisation

Torbay Council is the statutory harbour authority for Tor Bay Harbour. The Council has set up a sub-committee, Tor Bay Harbour Committee (TBHC), to advise on all matters relating to strategic management of the Council's function as harbour authority. The TBHC performs the Council's role of Duty Holder as required under the Port Marine Safety Code. Members of the Tor Bay Harbour Committee are, jointly, the Duty Holder in accordance with the PMSC. They are collectively and individually responsible for the safe management of the harbour and they cannot assign or delegate their accountability for compliance with the Code on the grounds they do not have particular skills.

The current members of the TBHC are listed on page 1. This committee is the Duty Holder.

The Tor Bay Harbour Committee considers that current legislation gives them adequate authority to exercise their responsibilities as described in this document and in accordance with the Port Marine Safety Code. The organisation is bound by the Harbour, Docks and Piers Clauses Act 1847, The Harbours Act 1964, The Tor Bay Harbour Act 1970, which confirms the harbour limits, the Tor Bay Harbour (Torquay Marina &c) Act 1983, the Health and Safety at Work Act 1974, the Workplace (Health, Safety and Welfare) Regulations 1992, and all the other harbour related and safety laws and regulations.

Torbay Council and the Harbour Committee set the policy and the officers and staff provide the means of implementing the Policy. Any decisions taken or policy set must take into account any issues related to harbour safety.  The consideration of such issues is to be minuted.

The Executive Head of Business Services is responsible for the day to day management of marine safety risks and for reporting to the duty holder, the TBHC. He is responsible for ensuring that the staff put the Harbour Safety Policy into practice.  He is responsible for maintaining insurance policies, obtaining any required licences, publication and display of such notices and instructions as the Tor Bay Harbour Committee consider necessary.

He must also ensure that facilities are provided up to the standards set in the policy.  Such facilities include the harbour infrastructure, harbour craft, pilotage and equipment to be used in the event of emergencies.

The Duty Harbour Master has the role of Emergency Planning Officer for the harbour and is the co-ordinating officer, responsible for marine incidents planning and response. He is also the officer responsible under their Oil Spill Contingency Plan for maintenance of the plan and response to incidents. Torbay Council also has an emergency planning officer who is responsible for planning and response to major incidents.
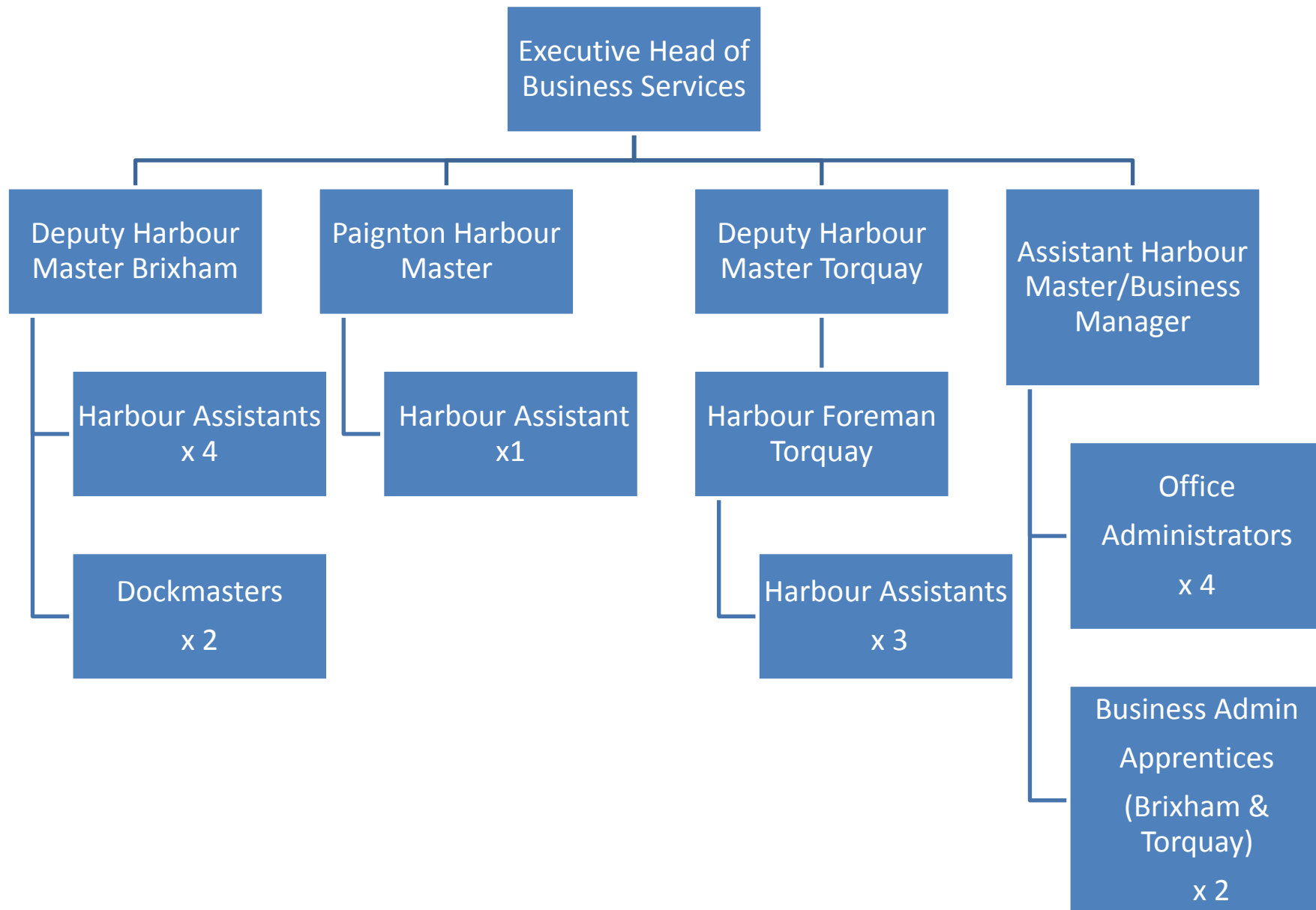
The pilots, contracted through Marine & Towage Services Group Ltd, are responsible for safe pilotage of large vessels within the waters of Tor Bay Harbour and for reporting marine risks, incidents and near misses to the Harbour Master.

TBHC shall assess the fitness and competence of all persons appointed to positions with responsibility for safe navigation.

The 'Designated Person' as defined in the Port Marine Safety Code is responsible for auditing the marine safety system and providing assurance to the 'Duty Holder' of the effectiveness and performance of the system. Corporate Services audit team has been appointed the designated person to provide this function and annual reviews and reports on Tor Bay Harbour Authority's compliance with the Port Marine Safety Code. The Designated Person has direct access to the Harbour Committee.

All staff are suitably qualified, have job titles and descriptions. A Tor Bay Harbour Authority staff Structure Chart is set out on the next page.

# Tor Bay Harbour Authority – Structure Chart November 2017

- **Executive Head of Business Services**
  - **Deputy Harbour Master Brixham**
    - Harbour Assistants x 4
    - Dockmasters x 2
  - **Paignton Harbour Master**
    - Harbour Assistant x1
  - **Deputy Harbour Master Torquay**
    - Harbour Foreman Torquay
      - Harbour Assistants x 3
  - **Assistant Harbour Master/Business Manager**
    - Office Administrators x 4
    - Business Admin Apprentices (Brixham & Torquay) x 2

# Training

**It is policy that officers and staff are to be suitably trained to be competent and qualified up to a minimum national standard to fulfil their roles within the organisation and can demonstrate competence in critical areas of harbour safety.**

**Training and education are implicit as part of good safety management.**

- New staff receive induction training.

- Every year the training requirements of each member of staff will be assessed and a training programme planned.

- Training needs will be considered during the annual appraisal process.

- An in house training programme will be implemented to reinforce the importance of harbour safety and of maintaining best working practice.

- All staff receive emergency training and practices.

## Training Records

The Harbour Authority holds a Training Record for all staff and the respective line managers are responsible for its upkeep. Staff are trained in the Standard Safe Operating Procedures listed in Appendix 3.

## Training Plan Responsibilities

| Post | Training Responsibility |
|------|------------------------|
| Deputy & Assistant Harbour Masters | Executive Head of Business Services |
| Assistant Harbour Master/Business Manager | Executive Head of Business Services |
| Harbour Master, Paignton | Executive Head of Business Services |
| Office Administrators | Assistant Harbour Master/Business Manager |
| Business Administration Apprentices | Assistant Harbour Master/Business Manager |
| Torquay Staff | Deputy Harbour Master, Torquay |
| Brixham Staff | Deputy Harbour Master, Brixham |
| Paignton Staff | Harbour Master, Paignton |
| Pilots | Marine & Towage Services Group Ltd |
| Pilot Boat crews & technical staff | Marine & Towage Services Group Ltd |
| Launch crews Technical staff | Marine & Towage Services Group Ltd |

# 3. Tor Bay Harbour Safety Planning

**Planning Policy**

**It is the policy of the Torbay Council to have powers, policies, plans and procedures based on a formal assessment of hazards and risks, and TBHC shall have a formal marine safety management system.**

**The marine safety management system shall be in place to ensure that all risks are controlled – the more severe ones must either be eliminated or kept ''as low as reasonably practicable'' (ALARP).**

Once a year the THBC will receive from the Executive Head of Business Services his review of the risk assessments. The Harbour Safety Management System with the Harbour Safety Policy will also be tabled for review.  The Committee will undertake a review and their findings will be recorded in the minutes.

An independent audit of the Harbour Safety Management System will be commissioned once a year from the Designated Person. The audit report will be considered by the TBHC and the outcome of this consideration will also be minuted.

The TBHC will remind the officers every year that harbour safety issues must always be taken into account in their decisions and recorded appropriately.

The Officers will annually bring to the attention of each employee the Harbour Safety Policy and specifically their roles in an emergency.

**Organisation of Annual Reviews**

| | |
|---|---|
| Safety Policy | Tor Bay Harbour Committee |
| Safety Management System | Designated Person & Tor Bay Harbour Committee |
| Harbour use | Executive Head of Business Services & Harbour Master |
| Commercial shipping | Executive Head of Business Services & Harbour Master |
| Operation of all other craft | Executive Head of Business Services & Harbour Master |
| Premises & Quays | Executive Head of Business Services & Harbour Master |
| Workshops | Deputy Harbour Masters |
| Offices | Harbour Masters & Business Manager |

# 3.1 Tor Bay Harbour Committee Risk Assessments

**Risk Assessment Policy:**

**It is the policy of Torbay Council that its powers, policies and procedures will be based on a formal assessment of hazards and risks and it will have a formal safety management system.**

The aim of this process is to eliminate the risk or, failing that, to reduce risks to as low as reasonably practicable.

The formal risk assessments incorporating the Risk Register are listed in Appendix 1 and shall be used to :-

- identify hazards and analyse risks;
- assess those risks against an appropriate standard of acceptability; and
- where appropriate, consider a cost-benefit assessment of risk reducing measures.

Tor Bay Harbour Committee has undertaken a formal safety assessment of its harbour operations to insure that a systematic approach was taken to the identification and the management of risks.
The level of risk was determined after considering the risk to Life, to the Environment, to Port Operations and to Port Users.

There is a preferred hierarchy of risk control principles :-

- eliminate risks - by avoiding a hazardous procedure, or substituting a less dangerous one;
- combat risks - by taking protective measures to prevent risk;
- minimise risk - by suitable systems of working.

A set of risk assessments, Appendix 1, has been reviewed and signed off on various dates during 2015 and there is a ranked hazard list. The control measures emanating from the risk assessments are listed in Appendix 2 and the Standard Safe Operating Procedures used by staff to minimise their risks are listed in Appendix 3.

These are the checks to identify new hazards, review risks and see that controls are implemented to bring the risks down to 'As low as reasonably practicable' (ALARP), as defined in the following diagram.

**MarNIS Risk Assessment Matrix Grid and Calculation**

The matrix grid allows the user to select a grid cell matching frequency and consequence descriptors.

Symbol showing the level of each hazard:

- High Risk
- Significant Risk
- ALARP*
- Low Risk
- Negligible Risk
  or Unassessed



Risk matrix for the consequences to PROPERTY resulting from a PORT EFFICIENCY incident

| Consequences | | Frequency | | | | |
|---|---|---|---|---|---|---|
| Major ( > €10,000,000) | Cat 4 | | | | | |
| Serious ( €500,000 - 10,000,000) | Cat 3 | | | | | |
| Moderate ( €50,000 - 500,000) | Cat 2 | | | | | |
| Minor ( €3000 - 50,000) | Cat 1 | | | | | |
| Negligible ( < €3000) | Cat 0 | Once every 10 years | Every year | Every month | Every week | Every day |

* ALARP stands for :-
'As low as reasonably practicable'.

The following matrix values are loaded into the MarNIS software.

| Category | People | Property | Planet | Port Business |
|----------|--------|----------|--------|---------------|
| 0 | None | Negligible (£0 - £2,000) | None | None |
| 1 | Minor (Single slight injury) | Minor (£2,000 - £10,000) | Tier 1 (No outside assistance, no Harbour Authority response necessary) | Minor (£0 - £2,000 - Little local publicity. Minor damage to reputation. Minor loss of revenue) |
| 2 | Moderate (Multiple slight or single major injury) | Moderate (£10,000 - £100,000) | Tier 1 (Limited outside assistance, oil spill manageable with own means) | Moderate (£2,000 - £20,000 - Negative local publicity. Moderate damage to reputation. Moderate loss of revenue) |
| 3 | Serious (Multiple major injuries) | Serious (£100,000 - £1,000,000) | Tier 2 (Regional assistance needed, large oil spill, several amenities impaired) | Serious (£20,000 - £200,000 - Negative national publicity. Serious damage to reputation. Serious loss of revenue) |
| 4 | Major (One or more fatalities) | Major (> £1,000,000) | Tier 3 (National disaster, massive oil spill, widespread and/or extensive damage to amenities) | Major (> £2,000,000 - Negative national and international publicity. Major damage to reputation. Major loss of revenue) |

Using the matrix, values for Frequency of Occurrence and Consequence can be selected for each of the four groups in both the Worst Credible and Most Likely scenarios. Each group has three cells associated with it, the first shows the selected frequency of occurrence, the second shows the consequence and the third is the matrix score. The values from the matrix are then used to arrive at the Overall Risk Score.

The following calculation is used to determine the Overall Score.

- Matrix Score from Worst Credible: People + Property + Planet + Port ÷ 4 = Average Worst Credible Value;
- Matrix Score from Most Likely: People + Property + Planet + Port ÷ 4 = Average Most Likely Value;
- Maximum score from the Worst Credible Scenario;
- Maximum score from the Most Likely Scenario;
- = Average Worst Credible + Average Most Likely + Max Worst Credible + Max Most Likely ÷ 4 = Overall Score.

Arising out of the risk assessments and as part of the policy of continuous improvement, the following actions have commenced and/or are ongoing :-

1.  Complete a comprehensive set of harbour specific Standard Operating Procedures. These would consolidate the existing 19 procedures, 3 codes of practice and 3 SMS guidelines and the various Standing Orders –Completed.

2.  Revise, sign off and re-issue a full set of risk assessments, including ones for fire risk. - Completed

3.  Update the training records and plans on completion of the Standard Operating Procedures, so each employee is sure to be instructed in the procedures relevant to his/her work.

4.  Consider amending the MarNIS risk assessment software to :-
    - Display the matrix that shows clearly that the risk is as low as reasonably practical.
    - Change the descriptions of the controls to those listed in Appendix 2 of the SMS, linking them to the Standard Operating Procedures and the specific controls set out in the SMS.

5.  Endeavour to have the MarNIS accident reporting software modified to :-
    - Clarify the need for any further controls and the rule that each report is shown to the Harbour Master and he is the only one able to close off a report.
    - Have a short form report where there is no ship involved.

6.  Promotion of safe seamanship:
    There is forever a need to maintain, refresh, improve and emphasise the advice already being given through notices, brochures, emails of Notices to Mariners, the website, in person by harbour staff and through sea schools.

7.  Regularly review how IT developments can improve communications with customers. Consider ways to promote the identity of Tor Bay Harbour Authority, possibly by expanding the Tor Bay Harbour Visitor Guide and by using social media, by improving the web site and providing a clear link to the Safety Management System and compliance with the Port Marine Safety Code. One specific improvement would be to make it clearer on the web how to subscribe to the distribution by email of Notices to Mariners. Links to weather information could readily be improved.

8.  Review security measures in place at the Brixham Fish Market.

9.  Pilotage:
    - Finalise the contract between Marine & Towage Services Group Ltd and T B H A
    - Pilotage Review Working Party to meet annually.
    - Consider pilot training needs i.e. Bridge Management and ECDIS.

10. Structural improvement plans are in hand for :-
    - Haldon Pier
    - Princess Pier
    - Northern Arm Breakwater at Brixham

11. Review and update where necessary :-
    - Tor Bay Harbour Emergency Plan
    - Local Port Services Policy
    - Harbour Legislation

12. Consider using Torbay Council's remote learning platform, 'i-Learn', to provide a link to the new Standard Operating Procedures currently being drafted.

13. Undertake a detailed review of the Safety Management System, cross referenced to the Maritime and Coastguard Agency's aide memoire for inspection, and amend the wording as required.

# 3.2 Tor Bay Harbour Committee Risk Control Procedures

**3.2.1   Emergency plans**

**3.2.2   Conservancy**

**3.2.3   Environment**

**3.2.4   Management of Navigation**

**3.2.5   Pilotage**

**3.2.6   Marine Services**
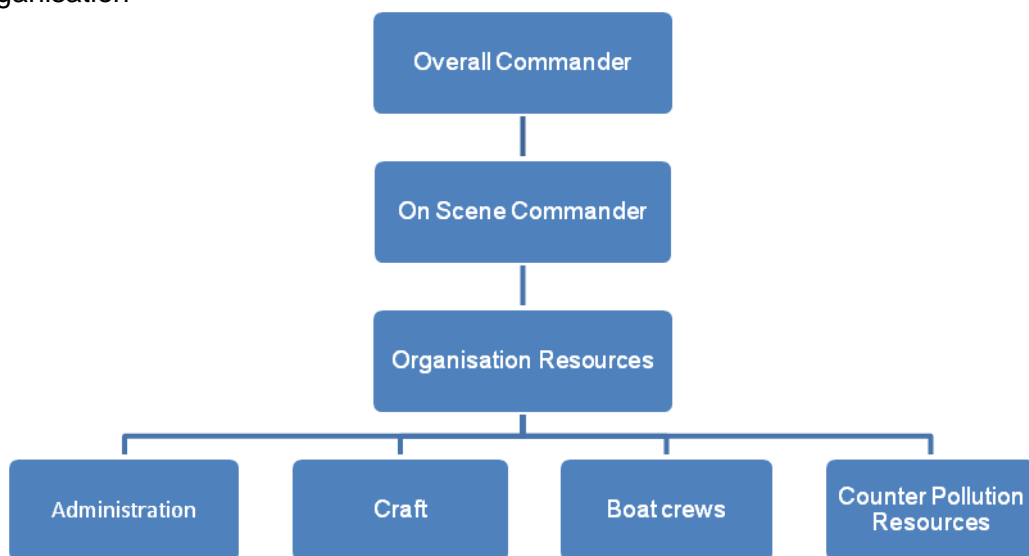
# 3.2.1 Emergency plans

**Emergency Policy:**

**The safety management system shall include preparations for emergencies – and these should be identified as far as practicable from the formal risk assessment. Emergency plans need to be published and exercised.**

**Emergency Organisation and Management Responsibility**

Review of Emergency and Oil Pollution Plans

Harbour Master

Emergency Organisation



**Emergency Plans and Procedures**

Tor Bay Harbour Emergency Plan – December 2015

The Tor Bay Oil Spill and Contingency Plan – redrafted in January 2016

National Contingency Plan for Marine Pollution

Standard Operating Procedure 22 – Harbour Emergency

All officers trained to Tier 2 Response

Planning exercises are undertaken to see that the procedures would be followed.

The MAIB web site is used to see if lessons can be learnt from accidents investigated at other harbours.
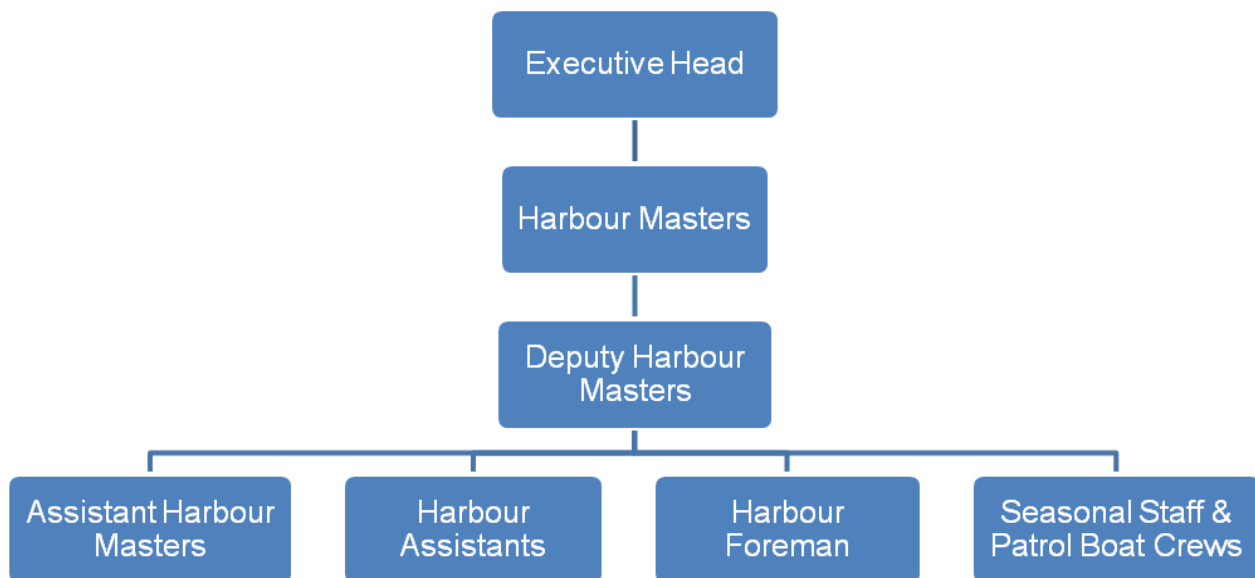
## 3.2.2 Conservancy

**Conservancy Policy:**

**Torbay Council recognises it's a duty of conservancy the harbour so that it is fit for use as a harbour, and a duty of reasonable care to see that the harbour is in a fit condition for a vessel to use it.**

**The aim to provide users with adequate information about conditions in the harbour.**

**Torbay Council recognises the extent of its duty and powers as local lighthouse authority; and specific powers in relation to wrecks.**

**Conservancy Organisation and Management Responsibility**



**Conservancy Procedures**

Hydrography
TBHC follows the code of practice for UK ports and harbours, developed by the Hydrographic Office.

Dredging
Tor Bay Harbour Committee does not maintain a maintenance dredging disposal licence.
Any capital dredging that might take place is subject to statutory consent and TBHC is a priority consultee when such applications are considered.

Buoyage and Navigational Aids
The provision of aids to navigation is based on risk assessment.
Trinity House has issued standards for reliability and maintenance of navigation aids and reserves the right to undertake inspections to ensure that these are met.
PANAR reports are submitted quarterly.

Wreck Removal
The procedure is to buoy and/or light a wreck as appropriate, issue a notice to mariners and, if necessary, use TBHC's authority to remove the wreck.

Licensing of Work
TBHC is a statutory consultee for proposed work affecting navigation or the environment within the harbour limits.
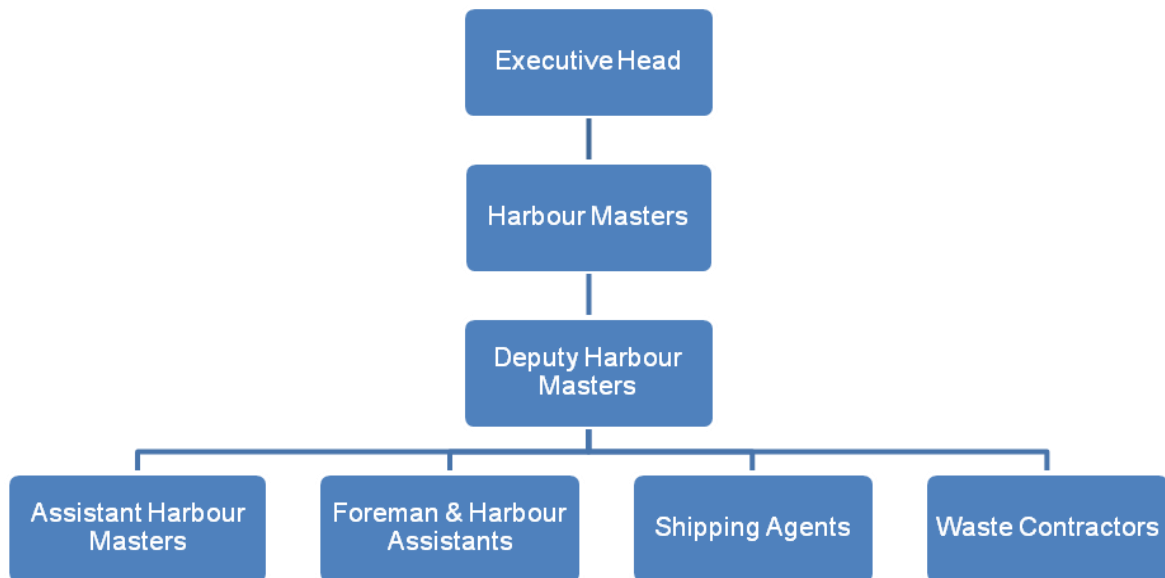
## 3.2.3 Environment

**Environment Policy:**

**Torbay Council has a general duty to exercise its functions with regard to nature conservation and other related environmental considerations.**

**A Marine Conservation Zone and part of a Special Area of Conservation are located within the limits of Tor Bay Harbour.**

**Environment and Port Waste Management Plan**
**Organisation and Responsibility**

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                    ┌─────────────────┐
                    │ Executive Head  │
                    └────────┬────────┘
                             │
                    ┌────────┴────────┐
                    │ Harbour Masters │
                    └────────┬────────┘
                             │
                    ┌────────┴────────┐
                    │ Deputy Harbour  │
                    │     Masters     │
                    └────────┬────────┘
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| Assistant Harbour Masters | Foreman & Harbour Assistants | Shipping Agents | Waste Contractors |

**Environment Policies, Plans & Procedures**

Tor Bay Harbour Environmental Policy Statement – July 2017

Port Waste Management Plan – November 2016

Port Marine Safety Code – A Guide to Good Practice on Port Marine Operations

Natural England's Advice

SeaTorbay Membership (Coastal Partnership)

Standard Operating Procedure 46 – Oil Pollution

Standard Operating Procedure 30 – Surge Barriers & Flood Defence

# 3.2.4 Management of Navigation

**Policy for Management of Navigation:**

**Torbay Council, through its TBHC, has rules in byelaws and directions, which every user must obey as a condition of his or her right to use the harbour.**

**Torbay Council and its Harbour Master recognise their duty to assess risk and make proper use of powers to make byelaws, and to give directions (including pilotage directions), to regulate all vessel movements in their waters.**

**These powers shall be exercised in support of the policies and procedures developed in this safety management system, and should be used to manage the navigation of all vessels.**

**TBHC has clear policies on the enforcement of directions, and should monitor compliance.**

**Powers of direction shall be used to require the use of port passage plans in appropriate cases – whether vessels are piloted or not.**

**Management of Navigation Organisation and Management Responsibility**
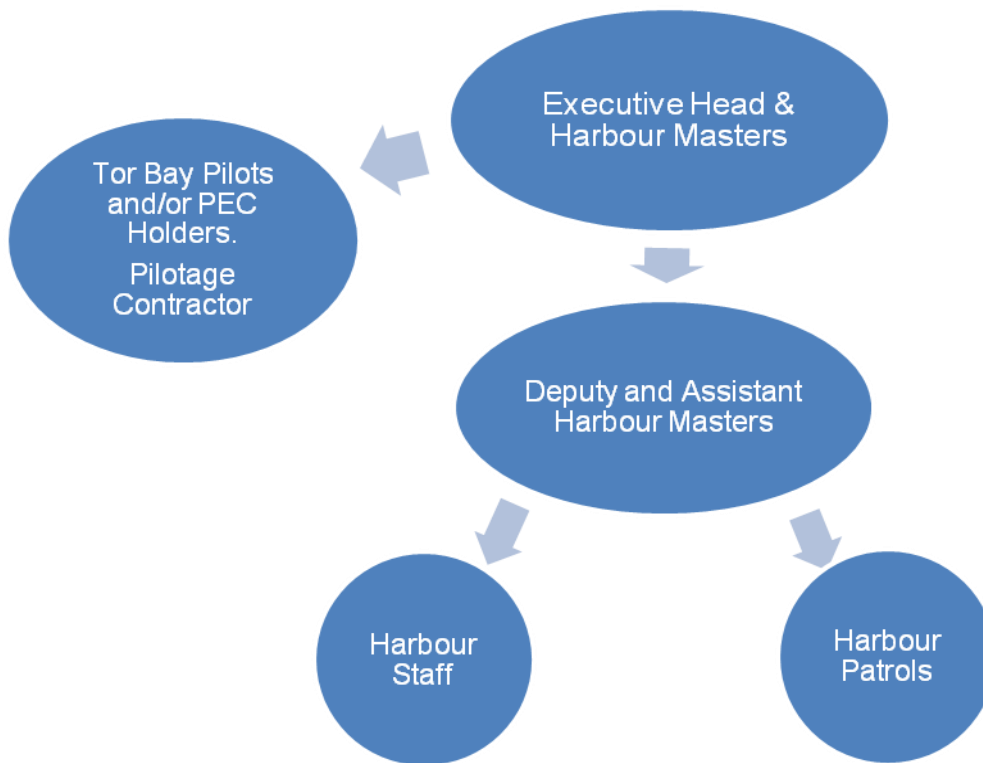


**Procedures for Management of Commercial Navigation**

Passage Plans
The passage plan is prepared on a standard form by the pilot and agreed with the master of the vessel. A copy is to be filed at the offices of the shipping agents.

Monitor
24-hour VHF cover is provided by the combined efforts of the Harbour Offices and the Pilot Station.

Reporting
Reporting is mandatory, as per Tor Bay Harbour Pilotage Directions.

Control

Pilotage requirements are set in the Tor Bay Harbour Pilotage Directions and Pilotage Manual. SOP 28 – Pilotage & Defective Vessel Notification also applies.

Access to Vessel Traffic Management System (VTS) data

After the assessment of risk it has not been considered necessary to have a VTS system & Local Port Services (LPS) are provided. The harbour authority has AIS monitoring software. To the extent that there are Local Port Services these include information in the Admiralty Sailing Directions, Channel Pilot, in Reeds Almanac, in the Local Notices to Mariners and on the Tor Bay Harbour web site.

Patrols

Standard instructions are issued to staff running patrol boats. Patrol boats enforce bye-laws and assist visitors

Bunkering

Other than at an approved harbour fuel station, the Harbour Master's approval is required before bunkering operations take place. The Harbour Authority issues procedures for bunkering. For any bunkering at anchor or cargo vessels alongside, or vessels taking bunkers direct from road tankers - there is a checklist.

Cargo Transfer

The Harbour Authority has various procedures in the Oil Spill Response Plan to control any oil cargo transhipment, following submission of a risk assessment.

Commercial Anchorages

Anchorages are specified for large vessels.


**Procedures for Leisure Management**

Zones

Controlled areas with a 5 knot speed limit are provided for swimmers.
Water ski approach lanes have been established at Elberry Cove and Livermead Sands

Events

Notices to Mariners and special directions are issued for events as required.

Moorings

Moorings are allocated by TBHC.

Marinas

There are 2 marinas in Tor Bay Harbour operated by MDL. It is considered that both these marinas are managed safely.

Enclosed Harbours

The Harbour Masters and the Harbour Master manage the enclosed harbours of Torquay, Brixham and Paignton.

Leisure Anchorages

Anchorages are specified for large vessels. Controlled areas with a 5 knot speed limit are provided to safeguard swimmers. Water ski approach lanes have been established at Elberry Cove and Livermead Sands.

**Procedures & Plans**

Standard Operating Procedures - Appendix 3

Tor Bay Harbour Authority Emergency Plan – Dec 2015
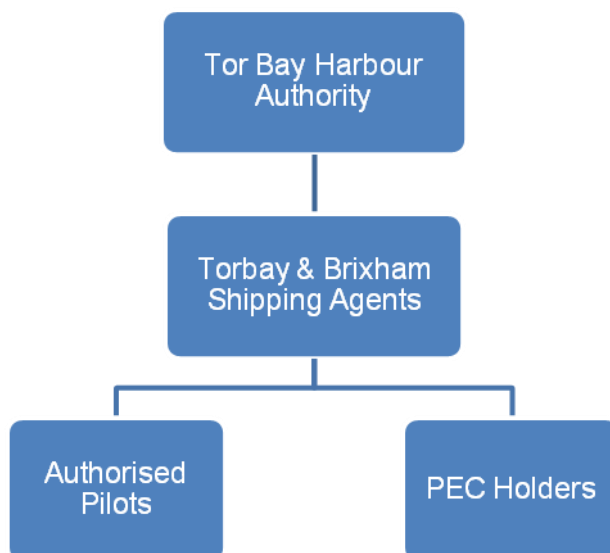
# 3.2.5 Pilotage

**Policy for Pilotage:**

**Torbay council, through its TBHC, is the competent harbour authority and accountable for the duty to provide a pilotage service; and for keeping the need for pilotage and the service provided under constant and formal review.**

**TBHC will therefore exercise control over the provision of the service, including the use of pilotage directions, and the recruitment, authorisation, examination, employment status, and training of pilots.**

**Pilotage shall be fully integrated with other harbour safety services under harbour Committee control.**

**Authorised pilots are accountable to their authorising authority for the use they make of their authorisations: TBHC shall have contracts with authorised pilots, regulating the conditions under which they work – including procedures for resolving disputes.**

**Pilotage Organisation and Management Responsibility**

```
        ┌─────────────────────┐
        │  Tor Bay Harbour    │
        │     Authority       │
        └─────────┬───────────┘
                  │
        ┌─────────┴───────────┐
        │  Torbay & Brixham   │
        │   Shipping Agents   │
        └─────────┬───────────┘
             ┌────┴─────┐
   ┌─────────┴──┐   ┌───┴────────┐
   │ Authorised │   │ PEC Holders│
   │   Pilots   │   │            │
   └────────────┘   └────────────┘
```

**Procedures, Plans, Codes and Guides for Pilotage**

Standard Operating Procedure 22 – Harbour Emergency

Standard Operating Procedure 28 – Pilotage & Defective Vessel Notification

Standard Operating Procedure 23 – Harbour Master's Directions

Standard Operating Procedure 47 – Security

Standard Operating Procedure 33 – Visiting Ships, Fishing Vessels, etc.

Tor Bay Harbour Emergency Plan – Dec 2015

The Port Marine Safety Code - A Guide to Good Practice on Port Marine Operations

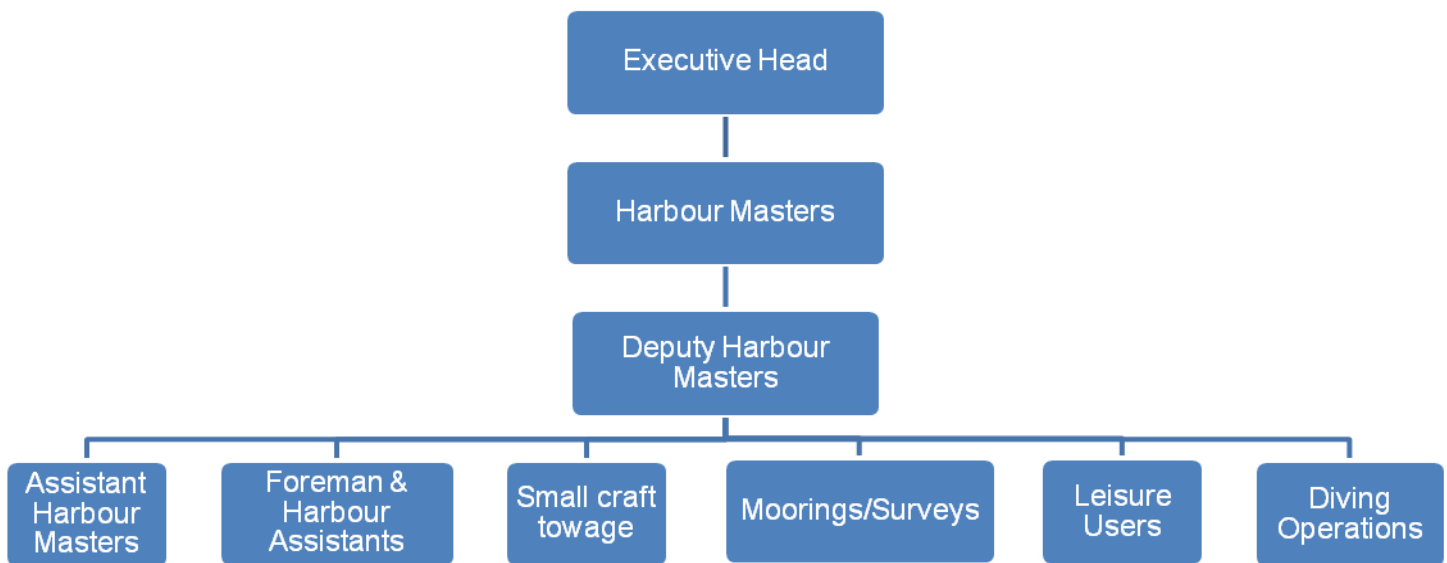# 3.2.6 Marine Services – Harbour Operations

**Policy for Marine Services:**

**TBHC's safety management system shall cover the use of harbour craft and the provision of moorings.**

**The formal safety assessment shall be used to identify the need for, and potential benefits of use of harbour craft for safety management,**

**TBHC shall ensure that harbour vessels or craft which are used in the harbour are fit for purpose and that crew are appropriately trained and qualified for the tasks they are likely to perform.**

**Byelaws and the power to give directions are available for these purposes.**

**Harbour Operations Organisation and Management Responsibility**



## Marine Services Procedures

Bunkering
Other than at an approved harbour fuel station, the Harbour Master's approval is required before bunkering operations take place.
The Harbour Authority issues procedures for bunkering.
For any bunkering at anchor or cargo vessels alongside, or vessels taking bunkers direct from road tankers - there is a checklist.

Cargo Transfer
The Harbour Authority has various procedures in the Oil Spill Response Plan to control any oil cargo transhipment, following submission of a risk assessment.

Craft Regulation
For boats not subject to MCA licensing or coding conditions of operation are issued in accordance with the South West Regional Standing Committee on Safety of Small Craft.
Craft have to be surveyed, carry specific safety equipment and the boatman must be suitably qualified.

Towage
The staff operating harbour boats and pilot boats are experienced and suitably qualified to tow where and when necessary. Towage Guidelines were published in December 2016.

Work Boats
Operating Code of Practice for relevant TBHC harbour craft.
MCA and other relevant certification.


Commercial Diving
TBHC contracts commercial divers to inspect moorings and provide maintenance as needed.
A diving permit is required for all commercial diving operations - the operators' registration and safety policy are checked.


Dredging
TBHC has inconsequential levels of maintenance dredging. Capital dredging is the responsibility of approved contractors.
MFA licences are required for the disposal of dredged spoil. [See also Harbour Licences for Work]


Moorings/Buoy Maintenance
Moorings/Buoys are inspected annually by divers and there is a maintenance programme.
The adequacy of buoyage is regularly reviewed.
Navigational buoy casualties are reported to Trinity House, who still undertake annual inspections / audits.


Salvage
It is left to the owner to organise salvage of small craft except where safe navigation may be affected.
In such cases TBHC may use its powers to take possession of the vessel and arrange salvage.  For large commercial vessels stranding or sinking within the harbour recovery measures will be supervised and approved as necessary.
The necessary consultation with the owners and public interests would be undertaken.

**Procedures**

Standard Operating Procedures - Appendix 3

# 4. MEASURING OF PERFORMANCE

## Measuring Policy

**TBHC will measure health and safety performance against predetermined standards.**

**Performance in complying with the TBHC safety management system will be required to meet the national standards as laid down in the Port Marine Safety Code.**

**Appropriate performance indicators will be set.**

**All accidents, incidents and near misses will be recorded and used to assist in assessment of the effectiveness of the Harbour Safety Management System.**

## Management of Standard Setting

**Standards will be set for operations in the following areas :-**

| AREA | SET BY | REMARKS |
|---|---|---|
| Harbour Procedures & Operational Standards | Executive Head & Harbour Masters | PMSC Guide to Good Practice refers Internal Procedures |
| Pilot Boat Operations | Pilotage Contract | MCA Code of Practice. Torbay & Brixham Shipping Agents are the current service provider. |
| Harbour Launch Operations | Harbour Master | MCA Code of Practice. Internal Procedures |
| Maintenance of Infrastructure | Harbour Master | Internal Procedures |
| Hydrographic Surveys | Harbour Master | UKHO |
| Procedures | Executive Head | Part of Safety Management System |
| Financial Procedures | Torbay Council | Subject to Internal Audit |

**Performance indicators are to include the following :-**

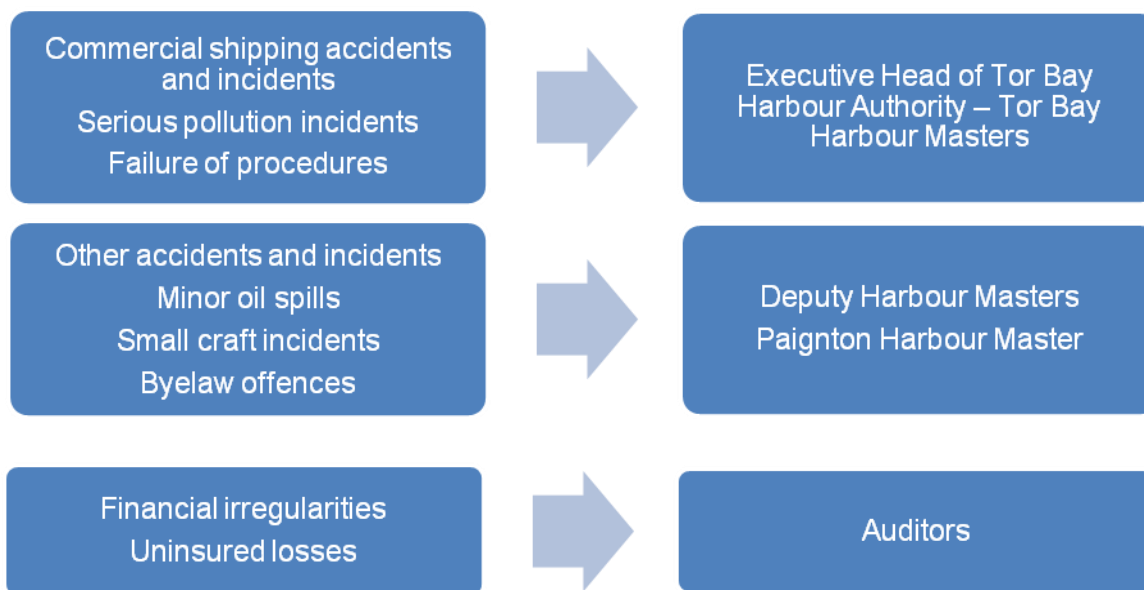| AREA | SET BY | REMARKS |
|---|---|---|
| Navigation Lights Availability | Trinity House | Records kept on the Trinity House software "PANAR" system. Also, on "SPAR.Net" – Torbay Council's Performance Management System ~ reviewed quarterly |
| Harbour Users Survey | Executive Head | On "SPAR.Net" – Torbay Council's Performance Management System ~ reviewed annually |
| Reduce the number of reportable accidents including RIDDOR | Executive Head | On "SPAR.Net" – Torbay Council's Performance Management System ~ reviewed quarterly |
| Implement the Safety Management System Improvement Plan | Harbour Committee | On "SPAR.Net" – Torbay Council's Performance Management System ~ reviewed annually |
| Incident Investigation | Executive Head | Data recorded and details reviewed bi-monthly |
| Response to Complaints | Torbay Council | Corporate complaints procedure |
| Enforcement Activity | Executive Head | Data recorded and details reviewed bi-monthly – no targets currently set |

# 5. REVIEWING

**Reviewing Policy**

**TBHC will monitor, review and audit the marine safety management system on a regular basis so that lessons are learned from all the relevant experience and such lessons are effectively applied.**

**Performance of the system shall be assessed against internal performance indicators and where appropriate, by benchmarking against other ports that have adopted good practice.**

**In light of these reports the Executive Head of Business Services and the TBHC will consider whether their rules or working practices require amendment and will submit recommendations to Torbay Council.**

**The responsibility for investigations and reports is assigned as follows;**

| | |
|---|---|
| Commercial shipping accidents and incidents / Serious pollution incidents / Failure of procedures | Executive Head of Tor Bay Harbour Authority – Tor Bay Harbour Masters |
| Other accidents and incidents / Minor oil spills / Small craft incidents / Byelaw offences | Deputy Harbour Masters / Paignton Harbour Master |
| Financial irregularities / Uninsured losses | Auditors |

**Procedure for Reviews**

The Executive Head of Business Services will include in his bimonthly meeting of Harbour Masters a review of any accidents, incidents or near misses.

Investigations by the Harbour Master of marine incidents have two essential purposes :-
a) to determine the cause of the incident, with a view to preventing a recurrence of that incident (or similar); and
b) to determine if an offence has been committed: if so, there may be the need on the part of the harbour authority to initiate enforcement action that may lead to prosecution in our own right or through an agency of another authority such as the Police or the MCA.

By ensuring that a robust, rigorous, independent investigation has been carried out, the TBHC and the duty holder can be assured that their obligations for compliance have been addressed.

Any conclusions from investigations or lessons learned will be included in the minutes together with measures being taken to prevent a recurrence.  If appropriate a more detailed report will be submitted to the Harbour Committee, the Councils Health and Safety Officer and/or the MAIB, to the Chief Police Inspector and any other appropriate authorities, by the quickest means available.

Where necessary the MCA may undertake a verification visit. These verification visits are usually arranged following an MAIB investigation into an incident, but could also be triggered by other indicators of non-compliance.

Further reviews are undertaken in the meetings of the Harbour Liaison Forums.

Once every three years, the MCA will ask the "duty holder" to confirm in writing if their harbour authority is complying with the Code.

# 6. RECORDING

**Recording Policy**

**TBHC will maintain records of what has been done**

- Safety controls and responsibilities

- Maintaining a record of due diligence

**Publication of Plans and Reports**

To demonstrate the authority's commitment to maritime safety and ensure the involvement of harbour users, the safety plan for marine operations shall be published every year at a TBHC meeting open to the press and the public and be available from the Harbour's web site. The plan shall illustrate how the policies and procedures will be developed to satisfy the requirements under the Code. It shall commit the authority to undertake and regulate marine operations in a way that safeguards the harbour, its users, the public and the environment. It shall refer to commercial activities in the harbour; the efficient provision of specified services and the effective regulation of shipping. It shall also explain how commercial pressures would be managed without undermining the safe provision of services and the efficient discharge of its duties.

The duty holder will also publish an assessment of the harbour authority's performance against the plan. Information gathered from the monitoring and auditing of the marine safety management system, shall be used to support the analysis and conclusions.

# Appendix 1    RISK ASSESSMENTS - MarNIS Hazard (Scenario) List

| ID | Scenario Name | Risk Score |
|---|---|---|
| NS0067 | Other nautical safety: Diving commercial | 2.5 |
| PE0031 | Road traffic congestion | 3.13 |
| NS0003 | Fire/Explosion: Anchored or Underway | 3.44 |
| NS0063 | Fire/Explosion: Berthed | 3.56 |
| NS0008 | Collision - Multiple underway: Large Vessels - Underway and-or Anchor | 3.63 |
| NS0006 | Capsizing/Listing: Large Vessels | 3.94 |
| NS0064 | Vessel Wash: In harbours and shoreline | 4.06 |
| NS0062 | Other nautical safety: Winter lift - towage and lifting | 4.13 |
| NS0012 | Contact - Floating object: Buoyage or Debry | 4.19 |
| NS0069 | Other nautical safety: Towage | 4.31 |
| NS0071 | Flooding/Foundering: Large vessel | 4.5 |
| NS0009 | Collision - Multiple underway: Small Vessels - Under 36m - Underway and-or Anchor | 4.5 |
| NS0001 | Grounding/Stranding: Large vessels | 4.56 |
| NS0015 | Equipment failure (Port): Cill Failure | 4.63 |
| NS0007 | Capsizing/Listing: Small Vessels - under 36m | 4.69 |
| NS0065 | Other nautical safety: Swimmers - In harbour and shoreline | 4.81 |
| NS0014 | Contact - Fixed object: Heavy berthing - All vessel types | 5.06 |
| NS0024 | Salvage: Large and small vessels | 5.06 |
| CM0044 | Natural Emergency: Storm event - surge and wave | 5.5 |
| NS0002 | Grounding/Stranding: Small vessels - under 36m | 5.56 |
| NS0070 | Flooding/Foundering: Small Vessels - under 36m | 5.69 |
| NS0066 | Other nautical safety: Diving recreation | 5.75 |
| NS0068 | Other nautical safety: Event management - maritime | 6.25 |

**Number of Scenarios listed = 23        Average Risk Assessment Score = 4.50**

# RISK ASSESSMENTS - not listed on MarNIS

| ID | Name | Status | Department |
|---|---|---|---|
| 2 | Angling | Active | Marine |
| 3 | Boatyard Working | Active | Marine |
| 4 | Car Parks & Boat Parks | Active | Marine |
| 5 | Cranes (Mobile, Static & Hoists) | Active | Marine |
| 6 | Harbour Events | Active | Marine |
| 7 | Harbour Office | Active | Admin |
| 8 | Harbour Workboats | Active | Marine |
| 9 | Licensed Works (e.g. Dredging, Sea Defences) | Active | Marine |
| 10 | Marina Working | Active | Marine |
| 11 | Mooring Maintenance | Active | Marine |
| 12 | Mooring & Unberthing | Active | Marine |
| 13 | Public Access to Quays | Active | Marine |
| 14 | Public Slipways & Launching Hards | Active | Marine |
| 15 | Scrubbing Grids | Active | Marine |
| 16 | Workshops | Active | Marine |
| 125 | Expectant Mothers RA Torquay Office | Active | Marine |
| 145 | Inspection and Maintenance of Aids to Navigation | Active | Maintenance |

# Appendix 2

## RISK CONTROLS

1) Accurate tidal information - published & on internet

2) Aids to navigation, provision & maintenance - Trinity House inspected & audited, SMS 3.2.4

3) AIS coverage - public, on internet

4) Anchorage positions, designated - as per chart

5) Arrival/Departure, advance notice - AIS, CERS - SSOP 33

6) Availability of latest hydrographic information - Hydrographic Office, SMS 3.2.2

7) Availability of pollution response equipment - Tier 1 onsite, Tier 2 contracted - SSOP 46

8) Availability of suitably qualified workboat skippers - as recorded training

9) BSAC & PADI training schemes - public, SSOP 50 Diving Permit

10) Bunkering areas, restricted - directions

11) Bunkering vessel checklist - SSOP 31

12) Byelaws - 1994, and General Directions, SMS 2 - SSOP 52

13) CCTV coverage - Council policy and guidance

14) Codes of practice - use of gill nets

15) Codes of practice - Yacht Harbours Association

16) COLREGS, applied within port/harbour - public

17) Communications - Dock/Jetty and all traffic - voice & VHF

18) Communications - Port and Agents - phone & email

19) Communications - Stakeholder - consultancy, SMS 5

20) Communications equipment - radios, walky-talky, VHF and emails

21) Contingency plan exercises - Emergency, Oil Spill & Resuscitation , SMS 3.2.1

22) Contractors Pass - provides access to work on the harbour estate

23) Diving at work regulations, HSE - public

24) Diving permit - SSOP 50

25) Draught, accurate declared and within max limits - passage plans - SSOP 33

26) Dredging programme - 3 yearly surveys, SMS 3.2.6

27) Emergency Plan (Council/Regional) - Torbay Council & Devon County Council

28) Emergency power supply - for Cill - SSOP 17

29) Emergency services/ shoreside equipment - SMS 3.2.1

30) Environmental policy - SMS 3.2.3

31) Fatigue & health monitoring - as per Torbay Council Policy

32) General directions - Tor Bay Harbour Act 1970

33) Guidance for small craft - Stay Safe leaflet & Maritime Guide

34) Harbour Emergency Plan (local) - SMS 3.2.1

35) Harbour Master's powers of direction (Special Direction) - Tor Bay Harbour Act 1970

36) Hazardous cargoes, advance notice - CERS - SSOP 53

37) Health & Safety policy - SMS 1

38) Hot works permit - SSOP 24

39) Hydrocarbon tankers certified gas free - via ship's Agents

40) Hydrographic surveying program - SMS 3.2.2

41) Illness on board ship - SSOP 25

42) Injurious vessel notice (Sec.23 Tor Bay Harbour Act)

43) Lifting operations & lifting equipment Regs 1998 (LOLA) - SSOPs 19 & 42

44) Local authority petroleum licence - required for South Pier, Torquay

45) Local Port Services - SMS 3.2.4 - SSOP 33

46) LPS broadcast - VHF Radio Ch 14

47) Marine engineering support - public

48) Marine guidance notes (MCA MGNs) - public

49) Marine Safety Management System - SMS

50) MCA certificates of competency - training/manning requirement

51) MCA harmonised code of practice for commercial vessels - public document

52) MCA passenger vessel certification

53) Merchant shipping notices (MCA MSNs)

54) Monthly safety equipment checklist - internal control

55) Mooring plans - charted and as directed

56) Notices to Mariners - emailed & social media - SSOP 51

57) Official warning - Enforcement Policy and SSOP

58) Oil spill contingency plans - SMS 3.2.1 - SSOP 46

59) PANAR Trinity House reports - online

60) Passage planning (Pilot/PEC) - Pilotage Manual, SMS 3.2.5

61) Passenger numbers declared - ferry operator MCA requirement

62) Patrol vessel - reactive, SSOP 53

63) PECs, authorisation and control of - Pilotage Manual, SMS 3.2.5

64) Personal protective equipment - SSOP 27

65) Personal safety risk assessment - Safety Policy SMS 1

66) Personal watercraft registration

67) Pilot boarding point, designated - marked on Chart 26

68) Pilot launch - licensed to contractor

69) Pilotage & Navigation procedure - Pilotage Manual, SMS 3.2.5

70) Pilotage directions - SMS 3.2.5

71) Pilotage service - SMS 3.2.5

72) PMSC compliance - Safety Management System (SMS) throughout.

73) Policy - Conservancy - SMS 3.2.2

74) Policy - Operational Moorings and Facilities - published annually

75) Port Equipment - SSOPS 17 & 19

76) Port state control inspection by MCA

77) Port waste management plan - SMS 3.2.3

78) Portable appliance testing records - covered by SLA with the TDA

79) Prohibited anchorage areas - as Byelaws and directions

80) Proof of third party liability insurance - Contractors pass/competence, SSOP 21

81) Provision & use of work equipment Regs 1998 (PUWER)

82) Public access to working quays procedure - SSOP 29

83) Requirement for notification of vessel defects - CERS - SSOP 33

84) Risk based monitoring and assessment - SMS 3.1

85) Safe allocation of berths (depth, available, suitable) - SSOP 33

86) Scrubbing grid/repair berth booking form - at Brixham, SSOP 51

87) Shoreside facility maintenance programme - planned maintenance

88) Standard Safe Operating Procedures - covering a range of activities

89) Tor Bay Harbour website - useful information & external links

90) Towage guidelines - SSOP 53

91) Towage, appropriate and available - by coded boats - SSOP 53

92) Towage SMS - third party operators

93) Training & authorisation of harbour personnel - SMS 2

94) Training & authorisation of pilots - Pilotage Manual, SMS 3.2.5

95) Training of pollution response personnel - SSOP 46

96) Weather forecast - public, on internet & posted in window

97) Weekly lifebuoy inspection - internal control

98) Workboats - maintained to certification standard - SSOP 53

## 99) Appendix 3

## STANDARD SAFE OPERATING PROCEURES

| ID | Name |
|---|---|
| 17 | Bridge & Cill |
| 18 | Control of Substances Hazardous to Health (COSHH) |
| 19 | Crane and Davit Operations |
| 20 | Facility Audits |
| 21 | Contractors & Construction |
| 22 | Harbour Emergency |
| 23 | Harbour Master's Directions |
| 24 | Hot Work |
| 25 | Illness On Board Ship |
| 26 | Lone Working |
| 27 | Personal Protective Equipment (PPE) |
| 28 | Pilotage Directions (Defective Vessel Notification) |
| 29 | Public Access in Adverse Weather Conditions |
| 30 | Surge Barriers & Flood Defence |
| 31 | Taking on Fuel |
| 32 | Vehicles on Harbour Estates |
| 33 | Visiting Ships, Fishing Vessels etc. |
| 34 | Working at Height |
| 42 | Manual Handling |
| 43 | Abrasive Wheels |
| 44 | Induction |
| 45 | Harbour Events |
| 46 | Oil Pollution |
| 47 | Security |
| 49 | Mooring Maintenance |
| 50 | Diving Permit |
| 52 | Bye Law Enforcement |
| 53 | Working on Workboats |
| 54 | Boat Haul Out and Storage |
| 55 | Unexploded Ordinance |
| 62 | Accident and Incident Reporting |
| 134 | Laying Seasonal Marks |
| 143 | Inner Harbour and Town Dock Pontoon Maintenance |
| 154 | Dealing with Language Barriers |
| 155 | Navigational Aids -  Inspection and Maintenance |