Appendix 3

30th November 2016

ISSUE 15

TOR BAY HARBOUR COMMITTEE

SAFETY MANAGEMENT SYSTEM

in compliance with

The Port Marine Safety Code



TORQUAY · PAIGNTON · BRIXHAM

Delivering harbour services for Torbay Council

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 Lynn Sykes
- Councillor Roger Stringer
- Councillor Chris Robson
- Councillor Terry Manning

ADVISORS :-

- Mr David Buckpitt
- Mr Michael Stewart
- Capt. Paul Lloyd
- Mr Michael Ellis

OFFICERS :-

• Capt. Kevin Mowat - Executive Head, Business Services and Harbour Master

DESIGNATED PERSON :-

• Verna Barnes – Devon Audit Partnership

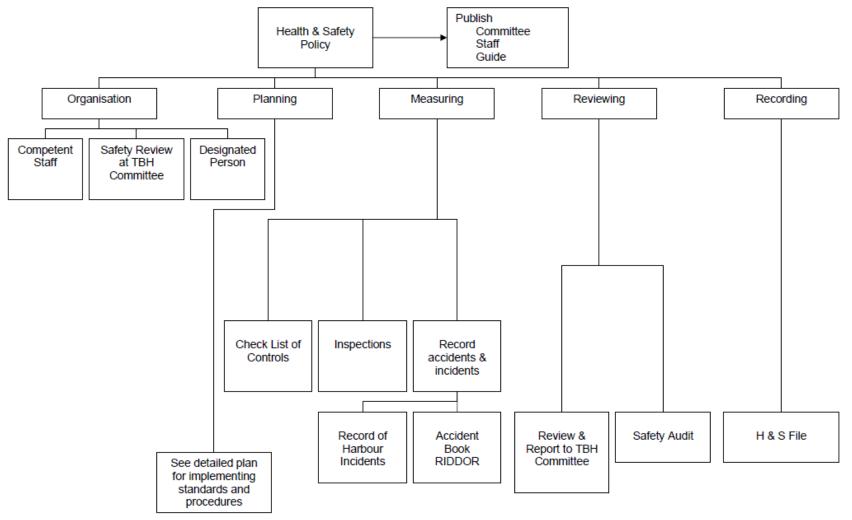
SAFETY MANAGEMENT SYSTEM

OVERVIEW		PAGE
Diagram of Safety Management System		
Diagram of Planning and Procedures		
•	Committee (TBHC) have, after consultation with harbour users, drafted and adopted a Safety Management System comprising the following 6	
1) Policy	Adopting a health and safety policy which contributes to business performance while meeting responsibilities to people and the environment in a way which fulfils both the spirit and the letter of the	6 – 8
2) Organisation	law. Establishing a positive organisation and culture which puts the policies into effective practice.	9
	Structure/Organisation Chart	10
	Training	11
3) Planning	Assessing risk and then adopting a planned and systematic approach to policy implementation. Risk assessments will be the key to judge what safety plans are needed.	12
	3.1 Risk Assessments and Risk Register	13-15
	 3.2 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 	16 17 18 19 20 – 21 22 23 – 24
4) Measuring	Measuring health and safety performance against predetermined standards.	25
5) Reviewing	Auditing, monitoring and reviewing the performance so that lessons are learned from all the relevant experience and are effectively applied. Training and education are implicit as part of good safety management. Consultation is a continuing process through the Harbour Liaison Forums.	26 – 27
6) Recording	What has been done? Safety controls and responsibilities Maintaining a record of due diligence	28

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.



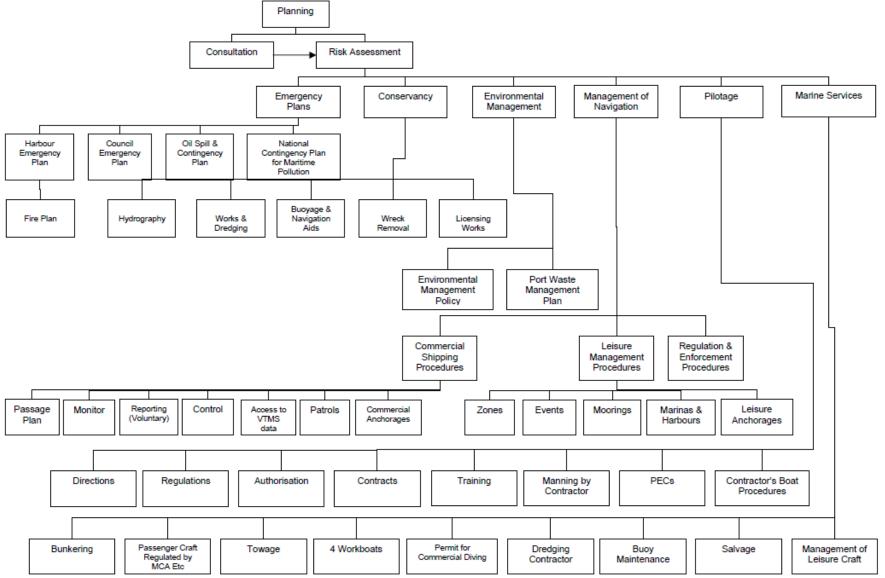
TOR BAY PMSC SAFETY MANAGEMENT SYSTEM



OUTLINE CHART OF SAFETY MANAGEMENT SYSTEM



TOR BAY HARBOUR PLANNING FOR PMSC



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.

- 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, 2016

2. Tor Bay Harbour Authority (TBHA) Organisation

Torbay Council is the statutory harbour authority for Tor Bay Harbour. The Council has set up a subcommittee, 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 coordinating 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.

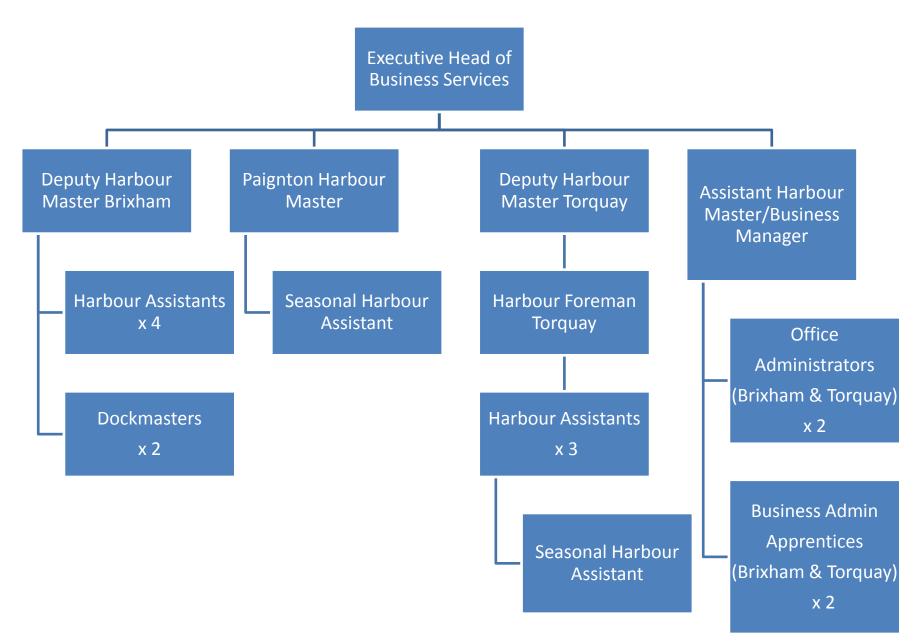
The pilots, contracted through Marine & Towage Services Group Ltd, are responsible for safe pilotage of large vessels within the waters of Tor Bay Harbour and for reporting marine risks, incidents and near misses to the Harbour Master.

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 October 2014



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 (seasonal only)	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.

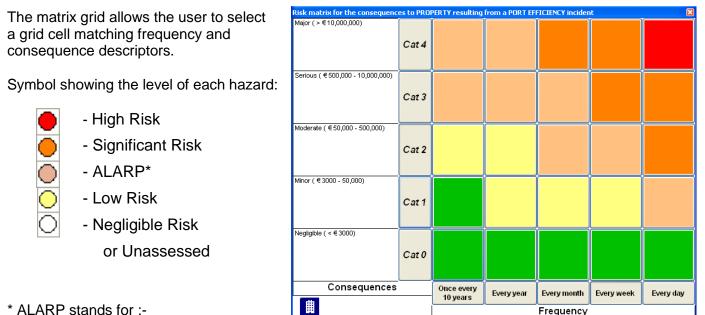
There is a preferred hierarchy of risk control principles :-

- 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', as defined in the following diagram.

MarNIS Risk Assessment Matrix Grid and Calculation



'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.

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.

- 7. Review security measures in place at the Brixham Fish Market.
- 8. 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.
- 9. Structural improvement plans are in hand for :-
 - Haldon Pier
 - Princess Pier
 - Northern Arm Breakwater at Brixham
- 10. Review and update where necessary :-
 - Tor Bay Harbour Emergency Plan
 - Local Port Services Policy
 - Harbour Legislation
- 11. Consider using Torbay Council's remote learning platform, 'i-Learn', to provide a link to the new Standard Operating Procedures currently being drafted.
- 12. 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

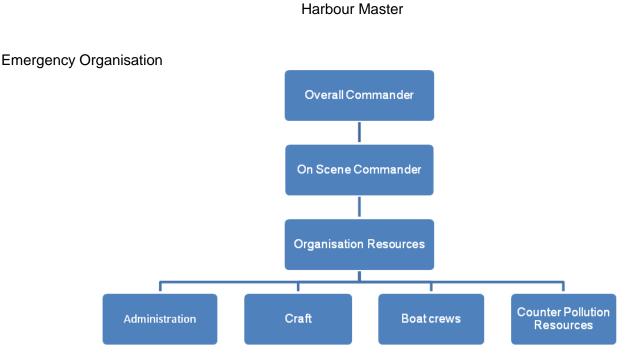
3.2.1 Emergency plans

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



Emergency Plans and Procedures

Tor Bay Harbour Emergency Plan – Oct 2015

The Tor Bay Oil Spill and Contingency Plan – redrafted in June 2015

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

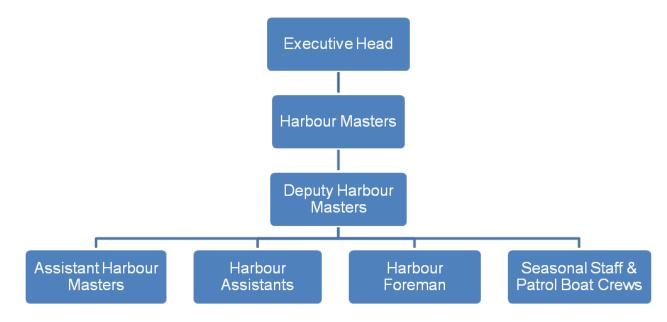
Conservancy Policy:

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

<u>Hydrography</u>

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



Environment Policies, Plans & Procedures

Tor Bay Harbour Environmental Policy Statement - December 2016

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.

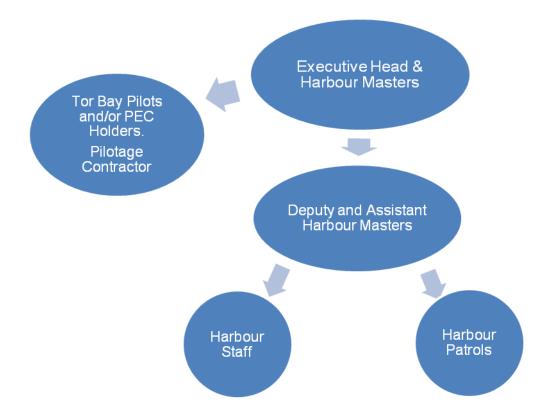
Torbay Council and its Harbour Master recognise their duty to assess risk and make proper use of powers to make byelaws, and to give directions (including pilotage directions), to regulate all vessel movements in their waters.

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.

<u>Monitor</u>

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.

<u>Control</u>

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

<u>Zones</u>

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

<u>Events</u>

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

<u>Moorings</u>

Moorings are allocated by TBHC.

<u>Marinas</u>

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:

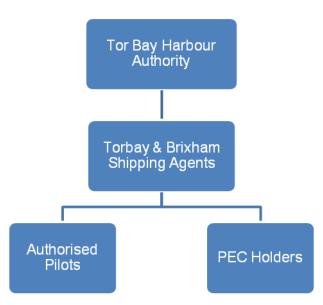
Torbay council, through its TBHC, is the competent harbour authority and accountable for the duty to provide a pilotage service; and for keeping the need for pilotage and the service provided under constant and formal review.

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



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:

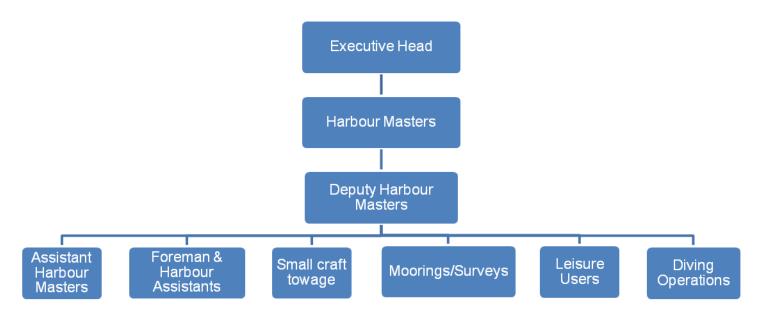
TBHC's safety management system shall cover the use of harbour craft and the provision of moorings.

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.

<u>Towage</u>

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.

<u>Salvage</u>

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 & Executive Head & Harbour		PMSC Guide to Good Practice refers	
Operational Standards	Masters	Internal Procedures	
		MCA Code of Practice. Torbay &	
Pilot Boat Operations	Pilotage Contract	Brixham Shipping Agents are the	
		current service provider.	
Harbour Lounab Operations	Harbour Master	MCA Code of Practice. Internal	
Harbour Launch Operations	Harbour Master	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

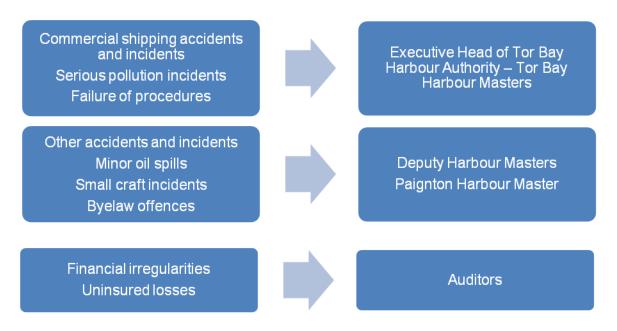
Reviewing Policy

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:



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
PE0028	Port infrastructure delay: Fishing Industry	
PE0029	Port infrastructure delay: Torquay Bridge & Cill	
EP0032	Air pollution	
EP0033	Ballast water discharge	
EP0034	Other environmental: Hull Cleaning	
EP0036	Illegal waste discharge	
EP0041	Bunkering: and Fuelling	
CM0045	Terrorist threat: Bomb Threat	
EP0072	Pollution in water	
NS0067	Other nautical safety: Diving commercial	2.5
NS0063	Fire/Explosion: Berthed	3.06
PE0031	Road traffic congestion	3.13
NS0003	Fire/Explosion: Anchored or Underway	3.44
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 Debris	4.19
NS0069	Other nautical safety: Towage	4.31
NS0009	Collision - Multiple underway: Small Vessels - Under 36m - Underway and-or Anchor	4.5
NS0071	Flooding/Foundering: Large vessel	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
NS0024	Salvage: Large and small vessels	5.06
NS0014	Contact - Fixed object: Heavy berthing - All vessel types	5.06
CM0044	Natural Emergency: Storm event - surge and wave	5.38
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 = 32

Average Risk Assessment Score = 4.47

RISK ASSESSMENTS - not listed on MarNIS

ID	Name	Date	Review Date	Status	Department
2	Angling	15/10/2015	09/10/2017	Active	Marine
3	Boatyard Working	21/05/2016	21/05/2017	Active	Marine
4	Car Parks & Boat	16/02/2016	16/02/2017	Active	Marine
	Parks				
5	Cranes (Mobile, Static	10/11/2015	10/11/2016	Active	Marine
	& Hoists)				
6	Harbour Events	20/05/2016	20/05/2017	Active	Marine
7	Harbour Office	30/06/2016	30/06/2017	Active	Admin
8	Harbour Workboats	21/05/2016	21/05/2017	Active	Marine
9	Licensed Works (e.g.	22/04/2015	22/04/2016	Active	Marine
	Dredging, Sea				
	Defences)				
10	Marina Working	21/05/2016	21/05/2017	Active	Marine
11	Mooring Maintenance	13/11/2015	13/11/2016	Active	Marine
12	Mooring & Unberthing	10/11/2015	10/11/2016	Active	Marine
13	Public Access to	13/11/2015	13/11/2016	Active	Marine
	Quays				
14	Public Slipways &	16/02/2016	16/02/2017	Active	Marine
	Launching Hards				
15	Scrubbing Grids	13/11/2015	13/11/2016	Active	Marine
16	Workshops	21/05/2016	21/05/2017	Active	Marine
125	Expectant Mothers RA	18/11/2015	19/11/2020	Active	Marine
	Torquay Office				
145	Inspection and	15/10/2016	15/10/2017	Active	Maintenance
	Maintenance of Aids				
	to Navigation				

Appendix 2

RISK CONTROLS

- 1) Accurate tidal information published & on internet
- 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
- 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

Appendix 3

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