Cattewater Harbour
Plymouth



MARINE SAFETY MANAGEMENT SYSTEM MANUAL

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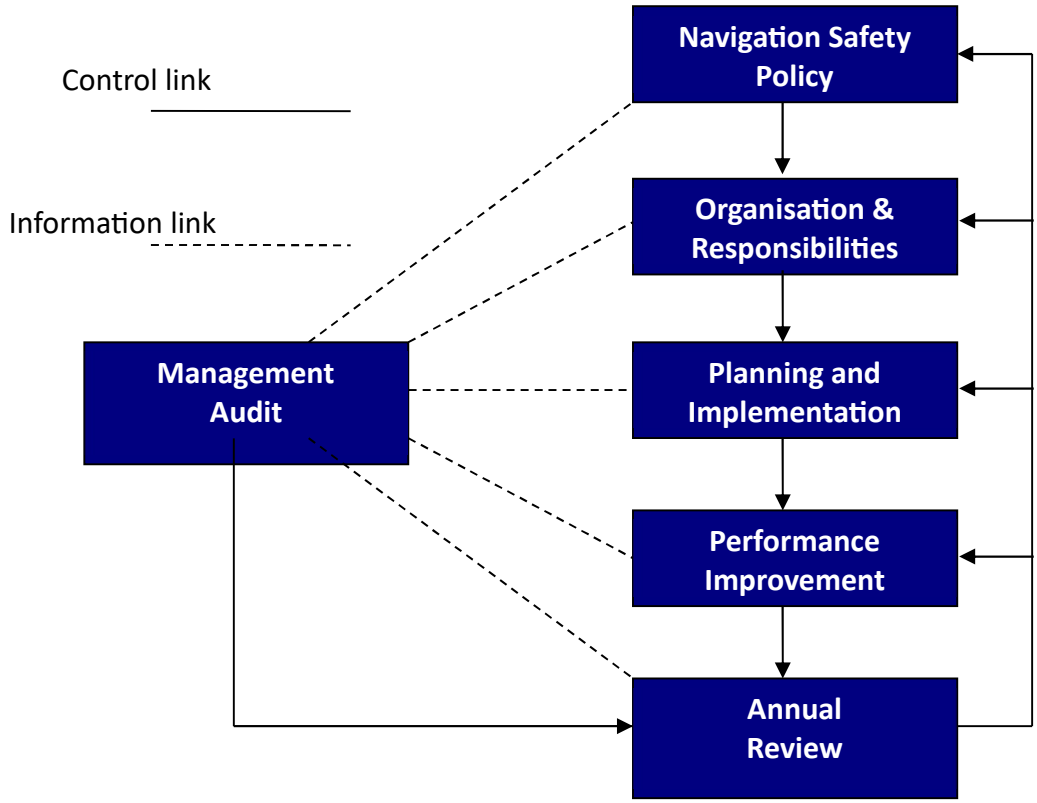
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0.0 Marine Safety Management System Principals

The Cattewater Harbour Commissioners' (CHC) Marine Safety Management System (Marine SMS) is designed to deliver the relevant requirements of the **Ports and Marine Facilities Safety Code** (PMSC) and is also based on principles embodied in guidance published by the Health and Safety Executive.

The Cattewater Harbour Commissioners' **Navigational Safety Policy** defines the organisation and arrangements that the CHC has established to monitor, promote and proactively manage the conduct of navigation and associated marine activities so that safety is enhanced.

Fig. 1 shows the link between policy, the organisational structure and the administration of the Marine Safety Management System. **Figure 1**



1.0 Introduction

The provisions of the Cattewater Harbour Commissioners' Marine SMS are set out in this manual. The purpose of this document is to describe the overall framework for the management and co-ordination of marine activities necessary for the effective facilitation of navigational safety. The navigational SMS arrangements referred to in this Manual comply with the requirements of the **Ports & Marine Facilities Safety Code**. The Harbour Management are responsible for maintaining the design, the overall content, approval, and subsequent management of this Marine SMS.

1.1 Scope of the Marine Safety Management System

The Ports and Marine Facilities Safety Code, as administered and managed by the Cattewater Harbour Commissioners, applies to marine operations and activities within the Cattewater Harbour and, on occasion, in waters under the Dockyard Port of Plymouth plan. Other documents relevant to the DPOP will be referred to in this document.

The scope of the Marine SMS includes all:

- Commercial shipping operations in port, with the exception of operations that are solely the responsibility of the berth, or facility and with no implications for navigational safety.
- Marine leisure and sports activities
- Marine operations undertaken by any support organisations, including mooring, civil risk and line handling, dredging, and other marine services. Also including the navigational activities of other regulators such as the emergency services, government agencies and voluntary organisations.

1.2 Port & Marine Facilities Safety Code Requirements

Marine SMS procedures and guidelines fulfil the requirement of the **Ports & Marine Facilities Safety Code**, including but not limited to the following:

- Making risk control the basis of all marine activities, procedures and regulations applied to or required by port users.
- Standard operating procedures
- Identifying the requirements for navigational aids
- Applying risk assessment to all harbour works and operations.
- Maintaining systems to implement the findings of risk assessments
- Applying and adhering to current pilot transfer arrangement regulation
- Reporting deficiencies on visiting vessels
- Providing procedural advice for giving directions in relation to dangerous vessels or substances
- Maintaining appropriate plans and procedures for emergency response and associated training and exercises

- Using verification and audit systems
- Publish and report on a marine safety plan as per sections 1.4 and 9.2 of the PMSC.
- The Harbour will formally review its compliance with the PMSC every three years.

1.3 System Components

The Marine SMS focuses on:

- Harbour Operations
- Pilotage

It includes the following components:

- Policies
- Risk Assessment
- Incident reporting
- Consultation with stakeholders
- Audit and review.
- Staff involvement and consultation

1.4 Applicable Local and National Legislation

COMMISSIONERS CLAUSES ACT **1847**
HARBOURS, DOCKS AND PIERS CLAUSES ACT– **11th MAY 1847**
DUCHY OF CORNWALL MANAGEMENT ACTS **1863/1868**
THE CATTEWATER HARBOUR PETROLEUM ACTS **1871/1926**
PIER AND HARBOUR ORDERS CONFIRMATION ACT **1874**
CATTEWATER HARBOUR ORDER **1915**
CATTEWATER HARBOUR BYE LAWS **1915**
PILOTAGE ORDERS CONFIRMATION (NO.1) ACT **1921**
CATTEWATER HARBOUR ORDER **1925**
PIER AND HARBOUR ORDERS CONFIRMATION (NO.1) ACT **1925**
CATTEWATER HARBOUR PETROLEUM BYE LAWS **1928**
CATTEDOWN WHARVES PETROLEUM BYE LAWS **1928**
MINISTRY OF TRANSPORT PROVISIONAL CATTEWATER HARBOUR ORDER **1929**
PIER AND HARBOUR ORDERS CONFIRMATION ACT **1929**
CATTEWATER HARBOUR (AMENDMENT) BYE-LAWS **1935**
COASTLINES LIMITED RATES ON GOODS AND VESSELS **1941**
COAST PROTECTION ACT **1949**
PIER AND HARBOUR ORDER (CATTEWATER) CONFIRMATION ACT **1950**
TERRITORIAL WATERS ORDER IN COUNCIL **1964**
HARBOURS ACT **1964**
HEALTH AND SAFETY AT WORK ETC ACT **1974**
MERCHANT SHIPPING ACT **1979** – SCHEDULE 1 (PILOTAGE COMMISSION)
PILOTAGE ACT **1983**
PLYMOUTH MARINE EVENTS BASE ACT **1985**
DANGEROUS VESSELS ACT **1985**
CATTEWATER HARBOUR REVISION ORDER **1986**
PREVENTION OF OIL POLLUTION ACT **1986**
TERRITORIAL SEA ACT **1987**
THE DANGEROUS GOODS IN HARBOUR AREAS REGULATIONS **2016**
PILOTAGE ACT **1987**
THE CATTEWATER (PILOTAGE) HARBOUR REVISION ORDER **1988**
CATTEWATER RECLAMATION ACT **1992**
MERCHANT SHIPPING ACT **1995**
CORPORATE MANSLAUGHTER AND CORPORATE HOMICIDE ACT **2007**
THE DOCKYARD PORT OF PLYMOUTH ORDER **2020**
THE CATTEWATER HARBOUR REVISION (CONSTITUTION) ORDER **2005**
THE HARBOUR DIRECTIONS (DESIGNATION of HARBOUR AUTHORITIES) ORDER **2015**
CATTEWATER HARBOUR REVISION ORDER **2025**

2.0 Policy

The **Navigational Safety Policy** sets out the Harbour's intentions and commitment to safety. It also describes the organisational responsibilities and arrangements established to ensure that the policy is implemented. The policies contribute to operational objectives and state that the Cattewater Harbour Commissioners are committed to meeting its legislative responsibilities. The fundamental objective of the Marine SMS is to demonstrate the consistent application of these policies.

- Navigational Safety Policy
- General Policy Statement
- Enforcement policy

2.1 Policy Development and Communication

The **Navigational Safety Policy** was developed by the Cattewater Harbour Master and the Plymouth Pilotage Service and approved by the Cattewater Harbour's Board of Commissioners. Consultation is included within this policy; the application of which further aids the development of the Marine SMS, ensures the involvement of all port users and stakeholders, and contributes to compliance with the PMSC.
The **Navigational Safety Policy** has been communicated to Cattewater Harbour staff, port users and interested parties through the company website. There is a continuing process of briefing and updating information with regard to marine safety.

2.2 Purpose and Use of the Policy

The primary purpose of the **Navigational Safety Policy** and the Cattewater Harbour Commissioners' Regulation and Management of Navigation Document is to provide an overall standard for the marine operations throughout the Cattewater Harbour, and waters leading to and from the harbour, to ensure the requirements of the PMSC are being continually met.

2.3 Commitment Statement

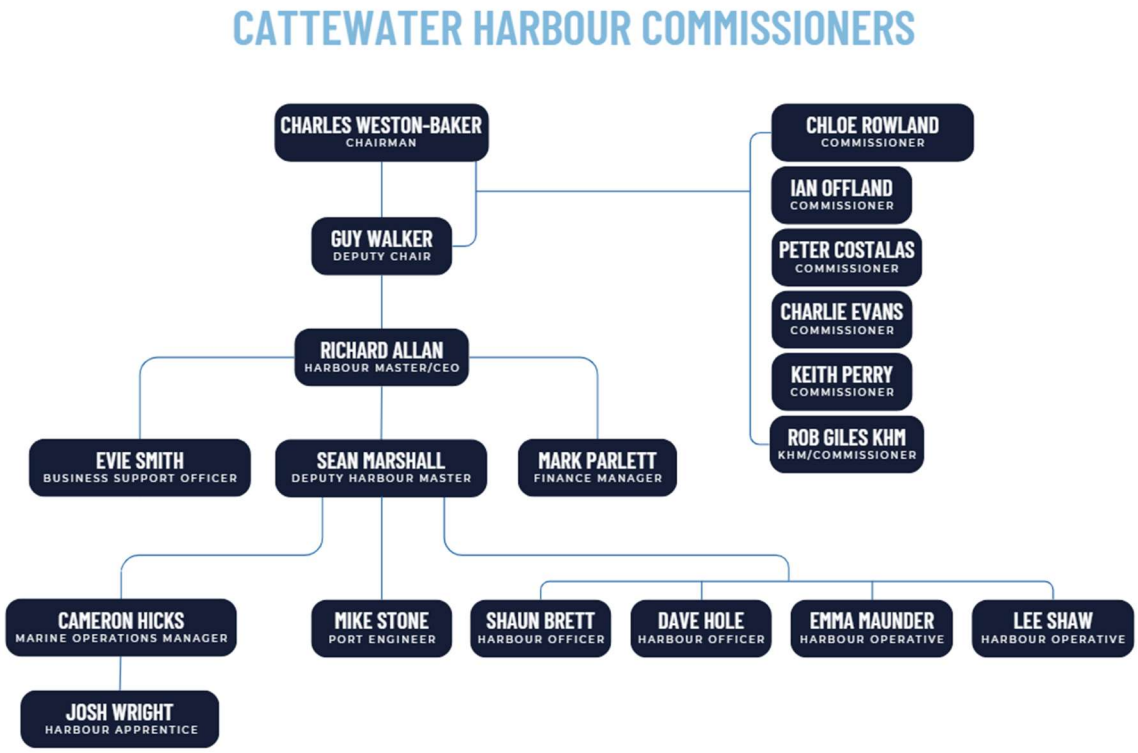
The Cattewater Harbour's Board of Commissioners, as "Duty Holder" under the PMSC, and as the body with ultimate responsibility, has committed itself to comply with the requirements of the PMFSC. Furthermore, it is committed to ensuring that adequate resources are available to discharge its navigational safety obligations.

Statement of PMSC Compliance: The Board (as Duty Holder) has confirmed and continues to confirm, as required to the MCA, compliance with the requirements of the PMSC.

2.4 Consultation and Review

Feedback from staff and harbour officers provides a vital Marine SMS component, and they are actively encouraged to be involved in the management of safety. The policy will be reviewed on a 3 yearly basis or more frequently, if circumstances permit. Internally there is a yearly review of this MSMS to ensure it continues to meet the requirements of the PMSC and is aiding the safe running of the harbour alongside marine facilities within the Cattewater Harbour limits.

3.0 Organisation



3.1 Functional Structure for the Management of Marine Safety - as above

3.2 Responsibilities - Please See CHC Staff Responsibilities

3.2.1 The Duty Holder / Board of Commissioners

- In respect of marine safety, the Cattewater Harbour Commissioners discharge the duties and exercises the powers given to it, both directly and by delegation.
- Discharges the function of "Duty Holder" as defined in the PMSC, for which they are collectively and individually responsible, by ensuring compliance with the PMSC, and the safe management of navigation.
- Approves strategies, policies, plans and budgets for the harbour.
- Provides and informed oversight for marine safety considerations.
- Reporting and transparency ensure marine safety information is openly recorded, reported and shared to support accountability and improvement.
- Reviews the harbours performance against its objectives, plans and budgets.
- Submits a statement of PMSC compliance to the MCA every three years.

Accountability for compliance with the code cannot be delegated on the grounds they do not have particular skills.

The Duty Holder is committed to the application of good governance principles in the management of marine safety, including clear accountability, informed oversight, provision of appropriate resources, independent assurance, effective reporting and transparency, and continuous improvement, in accordance with the Ports and Marine Facilities Safety Code 2025 and the associated Guide to Good Practice.

3.2.2 Executive Committee (EXCO)

For the purpose of the Marine SMS, EXCO is responsible for co-ordinating cross departmental projects, which may include or bear upon marine safety. It is also responsible for budget preparation and resource planning. EXCO consists of the Chairman, HM, DHM, Finance Officer with advice from a serving pilot if required.

3.2.3 Harbour Master

The Harbour Master is appointed by the Cattewater Harbour Commissioners to discharge the statutory role of Harbour Master in accordance with the PMSC. He is responsible for delivering the Navigational Safety Policy, authorising the initiation of prosecutions and keeping the Board of Commissioners advised and informed.

This role is key to ensuring that the Marine SMS fulfils the marine aspects of the Cattewater Harbour Commissioners' statutory duties and relevant non-statutory obligations.

The Harbour Master is the recognised representative for the Competent Harbour Authority (CHA) and is responsible for overseeing pilotage arrangements made by the CHA.

The HM, with support of management is responsible for overseeing the Marine SMS, and where appropriate, for the provision and maintenance of any aids to navigation.

3.2.4 Vessel Traffic Services - Owned and operated by KHM Plymouth

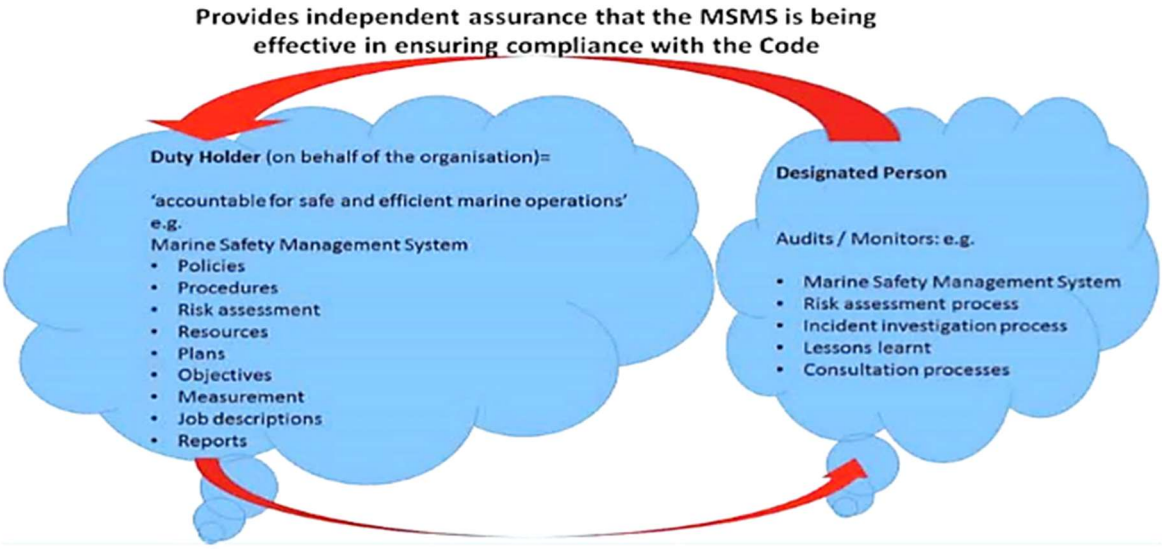
A VTS is provided within the Cattewater Harbour up to the Oreston Channel, on behalf of the Cattewater Harbour Master by KHM, as the VTS authority for the Dockyard Port of Plymouth.
The Cattewater Harbour has full HD CCTV coverage, both internally and externally (VTS).

3.2.5 Designated Person

In meeting its obligations under the PMSC, the board of the Cattewater Harbour Commissioners has appointed a 'Designated Person' (DP) who is afforded direct access to the Board. The DP has an in-depth knowledge and understanding of the requirements of the PMSC and any associated port and marine legislation. Their role does not obscure the accountability of the organisation's duty holder.

The role of the DP is to:

- Provide independent assurance to the board that the harbour has an effective and appropriate Safety Management System.
- Prove the board with independent and professional advice regarding the harbour's overall compliance with the requirements of the PMSC.



- The designated person for Cattewater Harbour Commissioners is **Mr Chris Jones.**

The designated person will carry out an annual audit and has the authority to raise concerns without obstruction. Findings will be presented to the board.

3.2.6 Administration Staff - Please see CHC staff responsibilities.

Other responsibilities and duties are contained within individual job descriptions, which are signed as an acceptance and undertaking of those responsibilities by the individuals concerned.

3.3 External Involvement and Responsibilities

3.3.1 Cattewater Harbour Water User Forms

The Harbour Master uses the **Cattewater Harbour Users Group** (CHUG) as the vehicle to provide consultation on all marine maritime matters relative to the Cattewater Harbour, Plymouth. CHUG meets on a regular basis, and representatives of all disciplines are members.

To manage both commercial and recreational user concerns, there is the **Port of Plymouth Marine Liaison Committee** forum. The aim of the forum is three-fold. Firstly, as a formal means of communication between all users of the port. Secondly, to discuss and resolve any concerns before they could escalate into conflict, and thirdly to allow the Harbour Master to brief all concerned on any likely changes or forthcoming events which may have an effect on navigation within the Cattewater.

3.3.2 Pilotage Management Committee

The PMC is represented by a Designated Pilot and the Harbour Master. The Pilots host a meeting every 4 months and feedback is fed through the Harbour Master to HALC, if required. Tug skippers used in Port also attend.

3.3.3 Navigational Risk Assessment Working Group (HALC)

Navigational Risk Assessment Working Groups consist of appropriate Cattewater staff, and other relevant interested parties. Internally the Harbour Master, Pilots, and marine staff have a range of SOPs to work from.
The Cattewater Harbour, is a member of HALC (Harbour Authorities Liaison Committee) for those working within the Dockyard Port of Plymouth. Meetings are held every 3 months, with all port stakeholders to review Risk Assessments and discuss any issues within the port - reviewed every 6 months.

HALC is a forum for raising and discussing navigational issues, including safety, relating to the harbour and pilotage jurisdiction.

The Harbour Master also sits on a number of consultative forums within the port structure:

- Port of Plymouth Sailing Association (PPSA)
- Tamar Estuaries Consultative Forum (TECF)

The Harbour Master is Chairman and Deputy Port Security Officer of the Plymouth Port Security Authority. This role does not arise from the responsibilities of the Commissioners.

4.0 Implementation

4.1 Marine Safety Objectives

As part of its duties and responsibilities, the Cattewater Harbour Commissioners annually reviews its strategic objectives. To support those objectives CHC also set individual Departmental Objectives, which include the ongoing maintenance and development of the Marine SMS. In general, these objectives seek to:

- Reduce risks to as low as is reasonably practicable (ALARP).
- Ensure all reasonably practicable steps are taken to identify the hazards and risks arising from operational activities.
- Ensure conformance with our navigational and marine safety policies, associated operating controls and applicable port and marine legislation and non-statutory obligations.

- Periodically review data gathered from audits, inspections, incidents, and any concerns raised to evaluate and determine where improvements and changes need to be made.
- Implement employee competence training and Marine SMS awareness programmes.
- Encourage employees to become more involved and participate in continuous improvement of the MSMS.
- Facilitate port user involvement in the maintenance of the MSMS and the overall improvement in marine safety.

Review the effectiveness of and look to improve the Marine SMS.

5.0 Marine Safety

5.1 Hazard Management Database

The Hazard Management Database (HAZMAN) is specifically designed for the stakeholders of Plymouth port. Hazards and Risk Assessments are reviewed 6 monthly.

5.2 Navigational Incident Database

The Cattewater Harbour comes under the Dockyard Port of Plymouth plan, and when required, an MOD incident report form is completed and sent to KHM for review.

Cattewater incident records are used by the KHMSO when compiling port statistics to improve safety within the harbour. Incident reports are discussed at regular intervals between the Harbour Master and the Duty Holder, as well as at HALC meetings if necessary. Board meetings and staff meetings are also utilised to share this information if required.

Incidents and near misses within the harbour are to be reported using the website Incident Report Form. Internally, incidents are to be reported using SeaFlux.

6.0 Risk Control Measures

General risk control measures within the Cattewater can be categorised as follows:

6.1 Documentary Risk Controls

- Regulatory Framework – includes Byelaws and Harbour Directions
- The provision and promulgation of accurate charts, tidal and other navigational information, navigation warnings and weather advice (KHM / VTS)
- Departmental guidelines and SOPS's
- Emergency Plans and Procedures
- Notice to Mariners
- Training and Assessment
- Sanction checks

6.2 Hardware Risk Controls

- AIS available to all port users, fully utilised by Plymouth VTS
- Radars – Plymouth including the Cattewater has radar coverage operated by Plymouth VTS & CCTV.
- VHF communication – a marine radio network covering the whole of the Port of Plymouth, providing effective port communications for shipping, VTS and port control.
- Aids to Navigation – Within the port of Plymouth the navigation marks are maintained by either Trinity House, MOD or civilian harbour authorities.
- Moorings are continually subject to ongoing review and assessment.

6.3.1 Conservancy

A number of measures are in place to ensure that the Cattewater Harbour is '*fit for use as a port'* and '*in a fit condition for a vessel to use it safely'* as required by the Code. These measures are described below:

- **Bathymetric surveys** – Bathymetric surveys of the Cattewater are carried out on a regular basis (usually annually) by an independent marine survey company. It is on the basis of these surveys that a decision is made by the Harbour Master on whether dredging is required to maintain charted depths. Electronic copies of the surveys are forwarded to the UKHO who will amend the Admiralty Charts if required. CHC has a bilateral agreement with the UKHO regarding the exchange of information on hydrographic matters in the Cattewater.

- **Chart Corrections** – If a correction to the representation of the Cattewater on an Admiralty Chart is required, the Harbour Master will forward full details to the UKHO. CHC have a bilateral agreement with the UKHO regarding the exchange of information on the Cattewater.

- **Dredging** – When dredging to the main channel and /or the berths alongside the commercial wharves is required, this is carried out by an independent dredging company. This is to maintain the depth marked on the appropriate Admiralty Charts published by the UKHO.
  Prior to dredging, a license to deposit the spoil arising must be obtained to ensure that the requirements of the Marine and Coastal Access Act 2009 are met. These licenses are issued by the MMO. Powers to dredge are included in the Cattewater Harbour Order 1915. During dredging, the work is monitored by the Harbour Master.

- **Environmental Duty** – To ensure that the environment of the Cattewater is protected, the CHC complies with the Environmental Protection Act 1990, the Environment Act 1995, The Marine and Coastal Access Act 2009 and other relevant statutory provisions.

- **Fault Reporting** – Should a Pilot notice that a navigation aid is defective, the Harbour Master must be notified. All users of the Cattewater are requested to notify the Harbour Master of any defect to a navigation aid (and the navigation aid contractor).
  Short term information concerning defective navigational aids, dangers, or other important details are notified by the publication of a Plymouth Navigational Warning (PLYMNAVWARNS) message. These are issued by KHM on behalf of the Cattewater Harbour.
  Any longer term changes, likely to affect Navigation within the Cattewater, are published by KHM as a Plymouth Local Notice to Mariners (PLNTM).

  Apart from routine checks made by the Harbour Master/Pilots and 4 monthly buoy checks, the high level commercial and leisure movements in the Cattewater ensure that no navigational defects go unnoticed and unreported for any significant time.

  In addition, a yearly audit of all the navigation aids within the Cattewater is undertaken by a Trinity House Lighthouse Authority Inspector of lights as the **General Lighthouse Authority** with the responsibility for, and control of navigation marks and lights in the UK. Since 2002 Cattewater has been using the Trinity House LARS system, which is fully integrated, removing the necessity for quarterly submissions.

- There is a Historic Wreck NNE of Mount Batten Tower, which is protected from unauthorised interference under the Protection of Wrecks Act.
- The relationship between safety of navigation, and nature conservation must be managed with care to allow the delivery of potentially conflicting objectives and to ensure compliance with the CHC's statutory duties and environmental responsibilities.

6.3.2 Pilotage

Whilst responsible for Pilotage within the Cattewater, the CHC has wider powers as the CHA for providing pilotage to all applicable non-military vessels, excepting vessels on charter to the MOD or proceeding to/from MOD berths within the Plymouth Pilotage District. Vessels on charter to the MOD are covered by the DPPO.

The Cattewater Harbour Master, through the Marine SMS, (risk assessment) determines the compulsory pilotage requirement in the Port.

Pilotage Policy

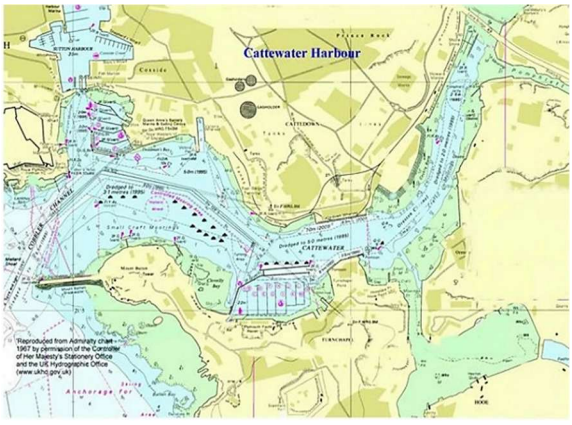
Vessels over 50m visiting Plymouth must request a Pilot

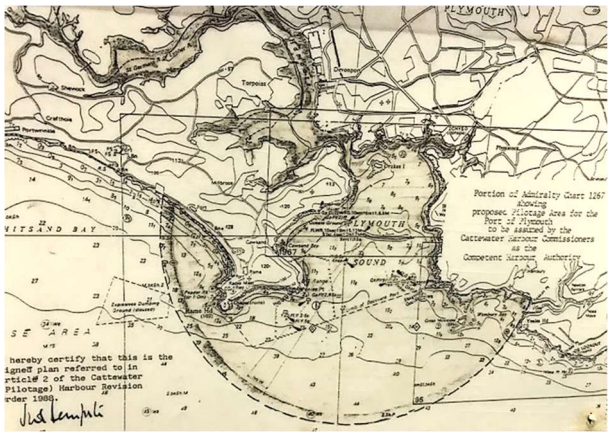
Pilot Exemption Certificates are issued if a vessel's *Bone Fide* Deck Officer meets a stringent set of standards.

PEC Application Form

Rules of Issue

Cattewater Harbour and Pilotage Limits:





6.3.3 Harbour Patrol

A regular harbour patrol is maintained throughout the port during busier periods or when required, to assist in the effective regulation and enforcement of the MSMS, dealing with anti-social behaviour, checking for payment of Harbour Dues, assisting visiting leisure craft and for reasons of general safety.

6.3.4 Harbour Master

This central support function includes the maintenance of an appropriate regulatory framework, including the revision of byelaws, directions and the publication and promulgation of navigational information and advice e.g. LNTM.

6.3.4.1 Marine Services

Company Marine Operations Manager is responsible for the upkeep of the Cattewater Harbour's marine assets. Supported by the DHM. marine department, port engineer and external contractors where necessary.

6.3.5 Emergency Preparedness and Response

Cattewater Harbour has an Oil Spill Response plan assisted by 3rd party provider Serco as it's Tier 2 responder. Oil spill response equipment is provided on site and is accessible to all staff in case of emergency. Cattewater, with its sister ports (Sutton Harbour, Royal Navy and ABP Millbay) alternate oil spill training throughout the 3-year period. The Dockyard Port of Plymouth Marine Emergency Plan is in the form of 'SOUND OFF' provided by the MOD of which the Cattewater Harbour is a stakeholder.
All Cattewater staff have sufficient MCA 2P/4P training certification.

6.3.6 Vessel Operational Standards

The PMFSC requires the Cattewater Harbour Commissioners to manage marine operations and regulate navigation within the port in order to reduce the risk of marine accidents and incidents to a level where risks are ALARP. There are many component parts to this process, including HAZMAN, provision of Pilots, VTS provision (KHM) and up to date hydrographic information. An important component part of this system is that vessels navigating the port, whether subject to pilotage or not, are maintained to an appropriate standard, and operated in a competent manner commensurate with national and international standards. Unfortunately, this is not always the case. On behalf of the whole of Plymouth Port, utilising KHM's VTS Plymouth VHF interrogation, CERS forms, supplemented by further required details via email, checks are made that the vessels are compliant. There is no guarantee that a compliancy system can be 100% effective, however as a port we need to take every reasonable step to try and reduce the chances of a sub-standard ship increasing the level of navigation risk.

Items that are asked include, but are not limited to:

1. Charts and Navigational publications up to date
2. Passage plan prepared
3. Vessel is compliant with ISM if relevant.
4. No defects with machinery, personnel, hull
5. Pilot information form & Equasis Software

Harbour Authorities work closely with the MCA. With staff reporting concerns to the MCA re. operational status of the ship, condition and or welfare of staff onboard a visiting vessel.

7.0 Risk Assessments

All risks associated with marine operations are assessed in accordance with the requirements of the Ports and Marine Facilities Safety Code and are recorded on SeaFlux.

The risk assessments are completed by personnel with the relevant competence, qualification, and experience for the operation being assessed. Risk assessments are reviewed;

1. Annually at an all-staff meeting
2. When new plant, machinery, equipment, vehicles, or vessels are introduced
3. When new processes or operations are to be undertaken
4. Following an incident or near miss

Risk assessment reviews consider the following

- Are there any audit findings that require review?
- Have any hazards changed?
- Have any situations changed?
- Do any references need updating or changing?
- Are further control measures required?
- Do all statements and instructions make sense and are they clear and easy to understand?

The process involved for risk management comprises five steps:

1. Identify risks/hazards.
2. Assess risks.
3. Specify risk control options.
4. Make a decision.
5. Take action, record and review.

The aim of risk management is to reduce the risk factor to 'as low as reasonably practicable' ('ALARP').

Cattewater Harbour's risk matrix is shown below:

Risk Matrix

	Consequence				
Likelihood	Negligible	Minor	Medium	High	Catastrophic
Almost Certain	Moderate	High	**Extreme**	**Extreme**	**Extreme**
Likely	Moderate	High	High	**Extreme**	**Extreme**
Possible	Low	Moderate	High	**Extreme**	**Extreme**
Unlikely	Low	Low	Moderate	High	**Extreme**
Rare	Low	Low	Moderate	Moderate	High

Evaluation Table

Evaluation	Description
Low	The process or activity in question continues with existing controls
Moderate	Actions are to be taken to eliminate or minimise the risk
High	Actions are to be taken to eliminate or minimise the risk
Extreme	The process, task or activity in question must not occur or must cease until actions are taken to eliminate the hazard or minimise the risk

The CHC Safety Management System (SMS) operates to the 'ALARP' principle.

Risk management is not confined to the commercial area of the Cattewater. All organised major recreational events held in Plymouth Sound, whether local, national or international sailing races/championships, or other events such as powerboat races, import risk into the port as a whole. The risk is owned by the organisers, but CHC will engage with organisers and assist in the mitigation of risk where possible.

Risk Management for the CHC is based on several factors, such as formal risk assessments and procedures/controls, to ensure that the risk to all users of the Cattewater is ALARP.
Formal risk assessments were carried out for a range of risk factors to be expected in port operations within the Dockyard Port and Cattewater Harbour:

a. Collisions between vessels.
b. Contact between vessels and fixed objects.
c. Fires.
d. Explosions.
e. Loss of hull integrity.
f. Flooding.
g. Grounding.
h. Stranding.
i. Hazardous, noxious or polluting substances (or cargoes) accidents.
j. Accidents to personnel.
k. Loss of services.

In addition, internal Operations Risk assessments for day-to-day marine operations can be found on SeaFlux and are accessible to all marine staff. These are work-place specific for tasks such as crane work, mooring, towage etc. Training records, Permits to Work, and checklists can also be found on SeaFlux and are used to mitigate risks.

7.1.1 Periodic Reviews - Proactive

The identification and assessment of navigational hazards is central to the effective maintenance of the MSMS. The Dockyard Port of Plymouth, of which we are a stake holder in has their own RISK MANAGEMENT SYSTEM in the form of the HAZMAN. The review of Hazards and control measures are prompted by three circumstances:

- Planned annual review of the harbour's risk assessments and risk management system (50% every 6 months conducted post HALC meetings)
- Review of hazards and associated risk controls following an incident
- The identification and assessment of any potential hazards arising from changes in circumstances including the introduction of a new trade/marine operation.

7.1.2 Post incident Reviews – Reactive

Following a navigational incident, the HM will conduct an initial investigation. This will establish whether there has been a failure to comply with Byelaws or internal procedures, and whether further regulatory action is required. It will also establish whether there is a need to review the relevant hazard and its associated control measures. This review may involve appropriate staff and users, and the HM may convene a Navigational Advisory Panel.

7.1.3 New Risk Assessments

Whenever circumstances change, to bring in activities outside the existing scope of the Marine SMS, the HM will organise a Risk Assessment of the intended operation. This will involve input from whoever is deemed necessary.

7.1.4 Safety Meetings

Regular meetings are held with available staff, to review recent events, and to look at the week ahead. Consider any safety implications, internally and externally. Interaction and input from all staff is strongly encouraged. (Generally, Monday mornings)

This is a platform for personnel to raise concerns in a semi-formal environment. Any external safety information, reviews or reports pertinent to our operations will be raised and discussed at this forum.

Participation is strongly encouraged and is planned around shipping movements to ensure at least a representative is available from each department.

Minutes of the Safety Meetings are stored online.

8.0 Training

8.1.0 Competence Assurance

The competence assurance process is linked directly to considered personnel selection and recruitment procedures, relevant job descriptions and appropriate pre-determined recruitment selection criteria.

Typically, the process consists of four stages.

Stage 1 – Pre Job

A person shall not be permitted to undertake work until the entry level criteria have been satisfied.

Stage 2 – Induction Training

All new staff, including temporary personnel, will receive appropriate induction training. This will take the form of general induction training common to all new staff, followed by specific departmental induction training.

Stage 3 – Supervision of on-the-job training

Once a person has bene identified as suitable to fulfil a specific job function, that person will be placed under the supervision of a competent person.

Stage 4 – Competence

A person may be considered competent once he/she has completed all necessary induction training and has been assessed by his/her supervisor.

8.2 Marine Training

Training is a key element within the MARINE SMS.

In order to ensure that personnel are properly trained, the principles of job analysis and training design are followed.

These are:

- Identify operational and safety training needs.
- Establish a skills matrix of competency levels required for each task.
- Plan how training requirements are to be met and when.
- Establish a process to appraise the effectiveness of training

8.3 Safety Management Training

It is the harbours policy that all new appointees shall attend a general induction to include aspects of the Marine SMS. Topics to be covered shall include:

- Overview of relevant byelaws and Pilotage
- Specific role and responsibilities
- Review of the Navigational Safety Policy
- Outline of operating procedures, and their provisions
- Formal and individual procedural controls in place
- Outline of response to emergencies and contingencies
- Training and competence records

8.4 Refresher Training

To ensure that staff remain abreast of developments and to prevent any decline in the level of competence and skills of either management or staff, relevant training and instruction shall be repeated periodically, or as when the legislation permits.
This will ensure that continued competence and skill levels are maintained in accordance with required competence, pre-determined job requirements and/or risk control criteria.

8.5 Training and Competence Records

All training/instruction provided to employees is recorded and kept in a secure file.

EXERCISE/TRAINING	Frequency	HM / DHM	Marine Staff	Marine Manager	Pilots	Admin Staff	Crew
HM Certificate (M)		x		x			
Oil Spill Training Level 4/5p (M)	3 yearly	x		x	x		
Oil Spill Training Level 2p (M)	3 yearly		x		x		x
First Aid as per SCV code (M) or equivalent	5 yearly	x	x	x	x	x	x
ENG1	2 Yearly	x	x	x	x		x
Engineering Course (O)			x	x			
Sea Survival (M)	5 yearly	x	x	x	x		x
Plymouth Boatman license or higher (BML)			x	x			
Fire Drills (M)	6 monthly		x	X	x		
MOB drills (M)	6 monthly		x	x	x		x
Fire Wardens (M)						x	
Hot Works (Gas) (O)			x	x			
Radar for coded vessels (O)			x	x			
Crane Training (O)			x	x			
Banksman (O)			x	x			
Manned models 5y					x		
New Joiner ladder training					x		

9.0 Audit

The auditing process of the Marine SMS aims to provide input into the system ensuring continuous development by independent feedback. This is conducted by the Designated Person and reported to the Commissioners. The audit and review history for this SMS and the Marine Safety Plan is documented on SeaFlux.

9.1 Audit Objectives

A system of 'Health checking' has been established to monitor the operational aspects of the Cattewater Harbour's navigational remit. The process is to ensure specific departmental functions comply with aspects of the PMSC.

The intention of the audits is to ensure a high level of proficiency and effectiveness of the various functions which fulfil the requirements of the SMS. Where appropriate ways in which the port can enhance the way, it carries out its duties may be identified, and any best practice can be shared across departments. Audits include:

- Pilotage
- PMS
- SMS (Annual SMS performance review)

Audits are conducted to achieve the following objectives:

- To determine if the Marine SMS aims to provide input into the system ensuring.
- To monitor the effect of the system
- To support continual improvement in navigational safety performance.
- To confirm that SMS procedures are understood and being actioned by those involved.

Cattewater Harbour Commissioners have established an internal audit system where each department will be audited internally once a year by another department. The audit report from these checks will be kept in the safety meeting folder in the Harbour Master's office.

In addition to the Harbour Commissioner's own audit process, independent checks on operations are carried out by external bodies and form part of the audit process. They are as follows:

- Pilot Boats — by MCA
- Navigation Aids — by Trinity House
- Sea going vessels — by MCA
- Waste Management (wharf owner) — by MCA and Environment Agency (EA)
- Oil Contingency Planning — by MCA
- Environmental Management — by TECF
- Financial Management — by External Auditors – Published

9.2 Measurement of Performance

Marine safety performance is monitored and measured to provide assurance that risks are being effectively managed and that the Marine Safety Management System remains suitable and effective. Performance information is derived from incidents and near misses, risk assessments, audits, emergency exercises, and other relevant assurance activities. Performance is reviewed periodically by senior management and the Duty Holder, and is used to identify trends, inform decision-making, and drive continuous improvement.

9.3 Review of External Information

MAIB Safety Digest, incident reports and other international/local reports.
The Cattewater Harbour regularly reviews any external incident reports and assesses if the report has the potential to affect the Cattewater's operations. They will then be discussed at the monthly safety meeting, or immediately with staff if deemed necessary. A review of our operations would be conducted relevant to the external report received. The points raised and action on the recommendations, if any was taken will be recorded in the minutes.

10.0 Investigating Incidents

The benefits of investigating incidents are two-fold namely: -

- It is a management tool to improve performance and reduce the possibility of future incidents.
- Findings can be used to assist settlement of disputes arising from the incident.

There are two types of Investigation.

- Standard Investigation is carried out by a responsible person who is part of the senior management team. This will be the Harbour Master, Deputy Harbour Master or Pilot.
- Detailed Investigation is carried out when there are, or is potential for, serious injuries, fatalities or serious structural damage to vessels or properties. Incidents may include near miss reports. The Harbour Master will head an investigation team reporting to the Board. In addition to CHC Staff, specialist consultants may be appointed and will be assisted by MCA and HSE personnel as appropriate.
- Navigational reports will be submitted on a separate MOD reporting form to KHM. Measures will be agreed upon and annotated by the CHC to minimise the chances of a repeat occurrence of an incident.

Cattewater Harbour Commissioners will comply with requirements to report incidents and investigations made to the MAIB. Reference MGN 458 (M+F) and fulfil under RIDDOR.

10.1.1 Technique of Investigation

In line with modern pro-active risk assessment procedures, an investigation will be used to predict future problems and measures put in place to prevent similar incidents occurring again. A reactive control will be put in place to reduce future risk of occurrence.

10.1.2 Evidence Gathering

Documentary, photographic, physical and oral evidence from witnesses and participants will form the mainstay of the evidence.

10.1.3 Analysis of Evidence

Evidence will be recorded in written report form, whilst still clear in the memory. Such reports will largely be chronological and will be factual and free of opinion.

10.1.4 Conclusion and Recommendations

Once a report has been compiled, it will be submitted to the Harbour Master who will make conclusions in consultation and report to the Board. Included in the report will be changes made and/or recommendations to reduce or prevent future reoccurrence.

10.1.5 Availability of the Investigation Report.

Reports on investigations into incidents will be available to MAIB, MCA and other authorities and organising committees of events, together with those involved in the incident.
The report / accident report form which is to be used is attached to this document.
The form identifies the accident, why it happened, what went wrong and what measures have been taken to prevent a re- occurrence.
Navigational reports are stored in the Pilots office as well as electronically.

Internal Marine accident investigation reports are held on SeaFlux.