Bristol City Docks Marine Safety Management System

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1.0. Introduction

1.1. Marine Safety Management System

This document is a risk-based system for managing marine operations.

All Harbour Authorities must have a Marine Safety Management System (MSMS). It is key to the effective discharge of the functions described in the Ports and Marine Facilities Safety Code (the Code). The type and content will be proportionate to an organisation's size and operations.

1.2. Bristol City Docks

1.3. Background

Bristol City Council (BCC) is the Statutory Harbour Authority for Bristol City Docks. This area includes the Floating Harbour, Feeder Canal, New Cut, the River Avon between Netham and Hanham Locks, and Portishead Pier and approaches.

1.4. Floating Harbour and Feeder Canal

The Floating Harbour is an impounded body of water maintained at a level of 9.6m above Cumberland Basin sill (6.1m AOD). Moorings are provided for a mixture of residential leisure and commercial vessels. Over recent years, the harbour has become a visitor destination popular with a wide range of visiting craft.

Commercial operators offer ferry and trip boat services to the boundaries of the authorities' waters and beyond.

The Feeder Canal links the harbour with the River Avon at Netham Lock, where feed rates are set for the maintenance of harbour levels.

1.5. New Cut

New Cut was created to provide a divert for fluvial water not required for maintaining harbour levels. Netham Weir is situated at its's Eastern limit. It is not maintained for navigation.

1.6. River Avon between Netham and Hanham Locks

The river is maintained at harbour level by Netham Weir. During larger tides the weir is overtopped, and the river experiences a rise and fall with the top of the tide. Water levels are also affected by heavy rain fall.

1.7. Portishead Pier

BCC retained responsibility for Portishead Pier, and it's approaches when Portishead Docks were sold to Crest Nicholson in 1996.

1.8. Neighbouring Authorities

To the West, the Bristol Port Company are the Statutory Harbour Authority for the tidal River Avon. To the East, the Canal and River Trust are responsible for Hanham Lock and the water beyond.

1.9. BCC Statutory Harbour Authority Area

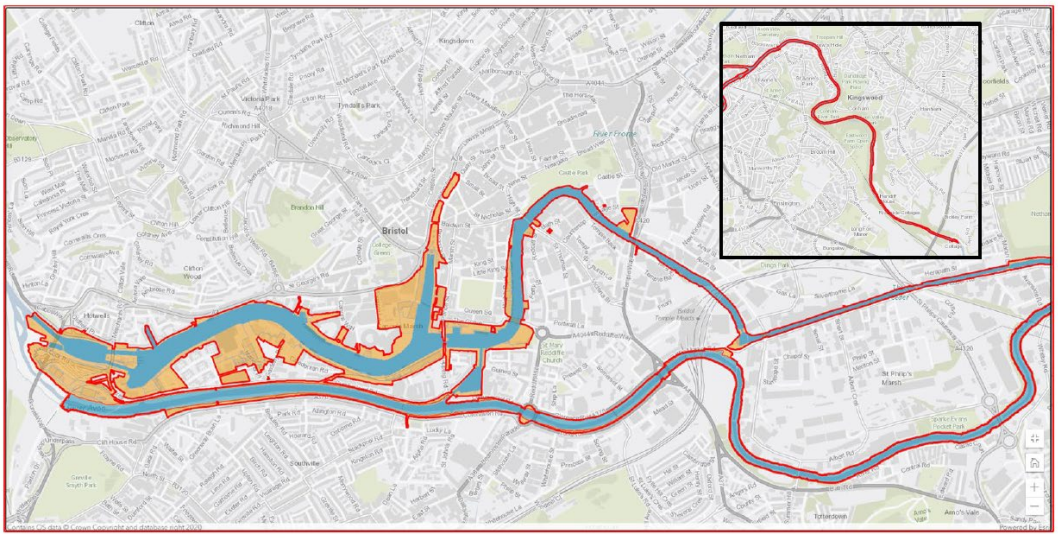


Figure 1. Plan of Bristol 'City Docks'

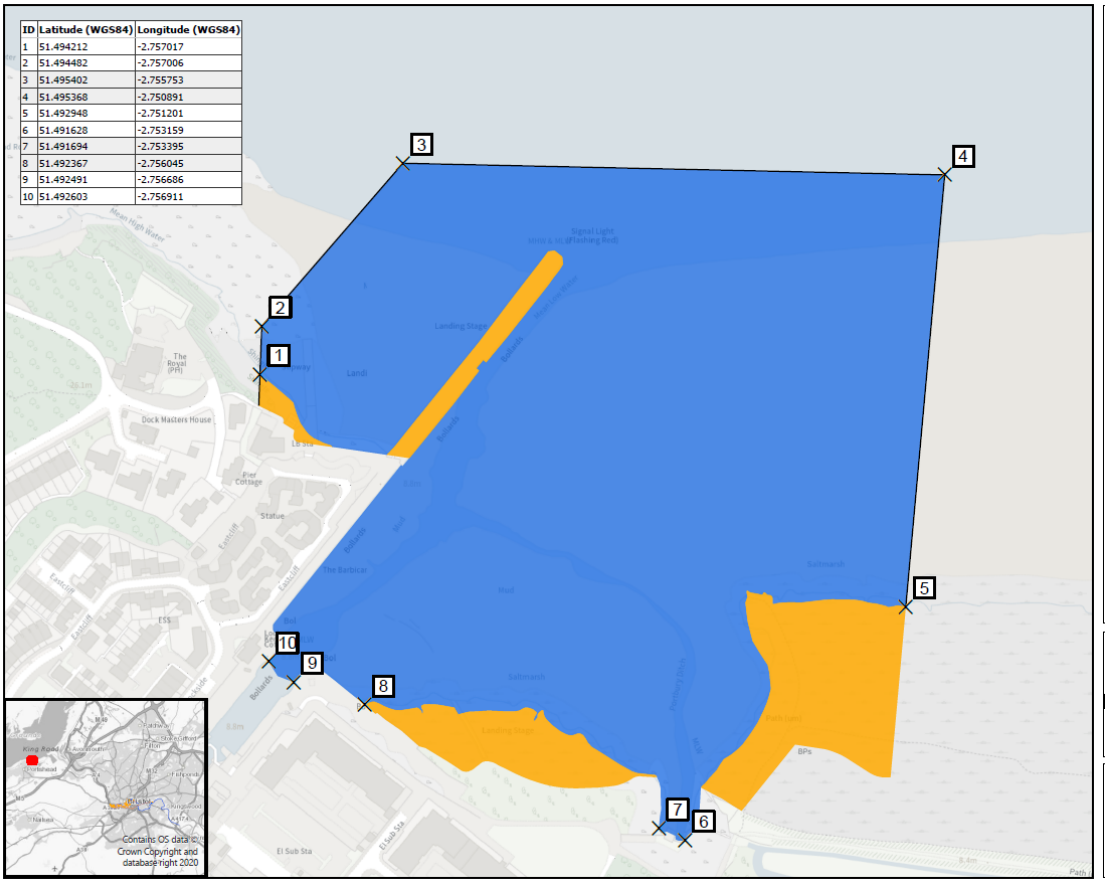


Fig 2 Portishead

2.0. Ports and Marine Facilities Safety Code

The Ports and Marine Facilities Safety Code (the Code) was published in April 2025 and replaces the Port Marine Safety Code. The Code sets out a national standard for every aspect of port marine safety. Its aim is to enhance safety for everyone who uses or works in the UK port marine environment.

It is endorsed by the UK Government, the devolved administrations, and representatives from across the maritime sector and, while the Code is not mandatory, these bodies have a strong expectation that all harbour authorities will comply. The Code is intended to be flexible enough that any size or type of harbour or marine facility will be able to apply its principles in a way that is appropriate and proportionate to local requirements.

3.0. Guide to Good Practice on Port and Marine Facilities

The A Guide to Good Practice on Ports and Marine Facilities is intended to supplement the Code. It contains a more detailed guidance on a number of issues relevant to the management of ports and other marine facilities. The Code and the guide are applicable both to statutory harbour authorities and to other marine facilities which may not necessarily have statutory powers and duties.

4.0. Harbour Authority Structure

4.1. Duty Holder

Refer to sections 1.1-1.10 of the Code

The Duty Holder has executive accountability for marine safety. They are accountable for meeting the statutory requirements set out in the Code, and for notifying the MCA on compliance.

The Duty Holder cannot assign or delegate their responsibility for compliance on the grounds that they do not have particular skills.

BCC has appointed Councillor Andrew Brown as Duty Holder for Bristol City Docks. Cllr Brown is contactable at Cllr.Andrew.Brown@bristol.gov.uk

In order to effectively undertake their role, the Duty Holder must:

- be aware of the organisation's powers and duties related to marine safety
- ensure that a MSMS, which employs formal safety assessment techniques, is in place
- appoint a suitable designated person to monitor and report the effectiveness of the MSMS and provide independent advice on matters of marine safety
- appoint competent people to manage marine safety
- ensure that the management of marine safety continuously improves by publishing a marine safety plan and reporting performance against the objectives and targets set
- report compliance with the Code to the MCA every 3 years
- ensure that sufficient funds for marine safety are available to the Harbour Authority

The Duty Holder has undertaken Duty Holder Training, made themselves aware of the requirements set out in the Code, has a good working knowledge of the MSMS, and what takes place in the harbour.

4.2. Harbour Committee

The Duty Holder chairs regular meetings of the Harbour Committee.

The Purpose of the committee is to determine all matters relating to the strategic management of BCC's function as a Statutory Harbour Authority.

It provides strategic direction to the Harbour Master and the Leader of BCC in relation to those assets within Bristol City Docks and the harbour estate that are managed by Bristol Statutory Harbour Authority.

The Committee reviews the powers delegated to the Harbour Master annually.

Consisting of elected members and co-opted members with relevant marine industry backgrounds, it is a decision-making committee and provides oversight on finance, the setting of fees and charges, and providing the annual revenue budgets within the ring-fenced harbour accounts.

The Harbour Committee produces the Bristol City Docks Annual Report.

4.3. Designated Person

Refer to sections 2.1 – 2.4 of the Code

A Designated Person has been put in place to regularly monitor and review compliance with the Code. They report directly to the duty holder on matters regarding the Code including non – compliance.

Where Stakeholders concerns on matters of safety have not been adequately addressed by the Harbour Master, the Designated Person provides a line of communication between them and the Duty Holder.

ABP MER have been contracted to provide Designated Person Services. Richard Vaughan is the current Designated Person and is contactable by email by Stakeholders at dp.bristol@abpmer.co.uk.

The Designated Person will take appropriate measures to determine whether the individual elements of the MSMS meet the specific requirements of the. Code

These measures will include:

- monitoring and auditing the thoroughness of the risk assessment process and the validity of the assessment conclusions
- monitoring and auditing the thoroughness of the incident investigation process and the validity of the investigation conclusions
- monitoring the application of lessons learnt from individual and industry experience and incident investigation

- assessing and auditing the validity and effectiveness of indicators used to measure performance against the requirements and standards in the Code
- assessing the validity and effectiveness of consultation processes used to involve and secure the commitment of all appropriate stakeholders

4.4. Harbour Master

Refer to sections 4.10-4.11 of the Code

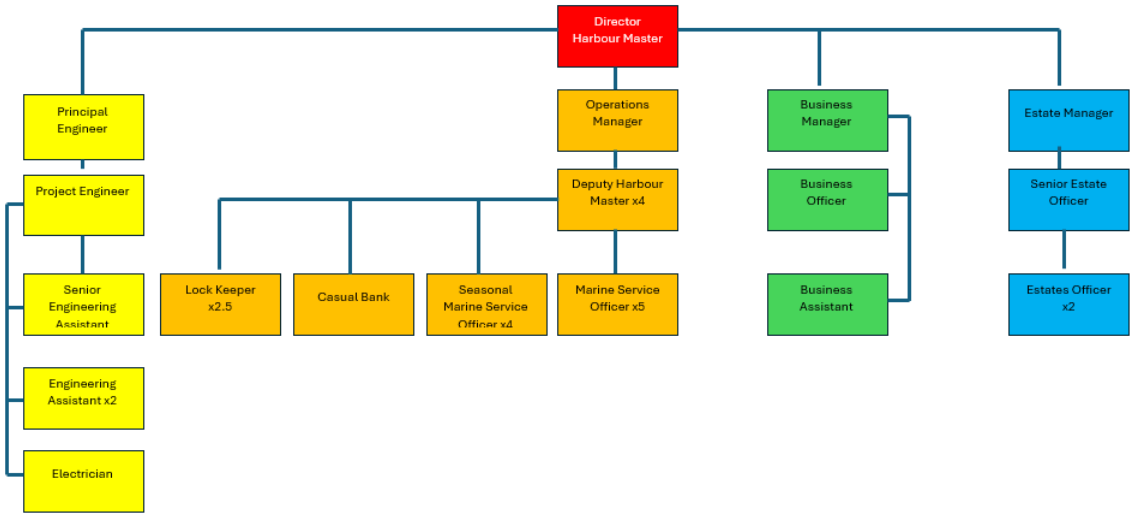
To discharge the responsibilities of the duty holder BCC has appointed a suitably qualified Harbour Master (David Lockwood) who has operational responsibility for marine safety, and the maintenance the MSMS.

The Harbour Master has sufficient competent trained staff, and the mobile and static plant needed to meet statutory requirements, and the expectations of Stakeholders.

The Harbour Master reports to the Duty Holder, and the Designated Person on matters of safety, and compliance with the Code.

The Harbour Master engages with stakeholders, staff, and BCC through regular minuted forums.

4.5. Harbour Authority Structure Chart



The Harbour Master has an Operations Manager, a team of 4 Deputy Harbour Masters and 5 Marine Services Officers.

These staff provide locking services and water management, direct vessels, enforce bye laws, and promote and facilitate safe use of the harbour.

In BST, an additional 4 Seasonal Marine Services Officers and 3 Netham Lock Keepers are employed to meet increased demand and cover.

The Business Support Team consists of a Business Manager, 1 part time Senior Business Officer and 1 full time Business Support Officer.

The Principal Engineer has a Project Engineer and a team of 4 carrying out planned and response maintenance of Bristol City Docks infrastructure and plant.

Weekly staff and management meetings take place. These are minuted with Health and Safety a standing agenda item.

4.6. Roles and Responsibilities for Operations Staff.

Harbour Master Director

Responsible for safety and efficiency of the City Docks.
Strategic lead.
Compliance with the Code & Statutory functions of City Docks as a Statutory Harbour.
Management of budgets.
Stakeholder Engagement.

Operations Manager

Reporting directly to the Director/Harbour Master, to manage Operational Staff within the Marine Services Section.

Responsibility for all aspects of managing harbour operations including vessel management, tidal operations, event and quayside operations.

Formulates, maintains and updates Safety Systems, Policy and Procedures.

Deputises for Harbour Master Director when required.

Compliance with Port Marine Safety Code and statutory functions of City Docks as a Statutory Harbour.

In the absence of the Director/Harbour Master the Operations Manager assumes designation of Harbour Master under the Harbour, Docks and Piers Act 1847 warranted through BCC constitution to act on behalf of the council as the Harbour Master for the Competent Harbour Authority under the 1998 Harbour Revision Order.

Deputy Harbour Master

Deputy Harbour Masters report directly to the Harbour Operations Manager.

The role involves working a shift system, supervising staff within the Marine Services section.

They provide senior management presence throughout the shift pattern ensuring continuity of service to users and proper management of staff teams.

Within policies formulated by the Operations Manager, they manage all tidal activity and berthing arrangements by liaising directly with customers and allocating berths accordingly.

They assist with:

The management of daily tidal operations, vessel movements and berthing, waterway, and water event management within the City Docks.

Monitoring compliance with the Code and the statutory functions of the City Docks.

Ensuring the daily functions of the Marine Services Section run efficiently and effectively and within the obligations of all Harbour Acts and Byelaws, safety systems and procedures.

Defining daily tasks, duties, rosters and work programmes for staff and contractors.

Coordinating and planning leisure, event and recreational use of the immediate water area within the City Docks**.**

In the absence of the Harbour Master/Director and Operations Manager deputise for the Harbour Master/Director.

Marine Services Officer

Working in a shift pattern under the supervision of the Deputy Harbour Masters provide operational cover for all aspects of harbour activities.

5.0. Harbour Authority Powers

Refer to sections 4. – 4.30 of the Code.

The Harbour Master has powers of General and Special Direction.

The acts and local legalisation below give the Harbour Master and their Deputies powers of direction to regulate the time and manner of ships entry to and departure from and movement within harbour waters.

Harbour Docks and Piers Clauses Act 1847
Merchant Shipping act 1995
The Harbours Act 1964
Dangerous Vessels act 1985
Dangerous Goods in Harbour Areas Regulations 2016
Pilotage act 1987
Bristol City Docks Acts 1849-1998
Bristol Corporation Act 1961
Bristol City Docks Byelaws 2009

5.1. Reviewing Existing Powers

Refer to sections 3.13 -3.14 of the Code

Existing powers are reviewed periodically. Where additional powers are required and appropriate, Bye Laws can be added to or amended.

Powers can also be Augmented using a Harbour Revision Order.

5.2. Bye Laws

Refer to sections 4.12 - 4.15 of the Code

Bye Laws regulating the manner in which the harbour is used based on promoting safety, were revised in 2009.

Bristol City Docks Byelaws (2009) can be viewed on the Bristol Harbour website in the Plans and Policies section or by following the link below:

https://www.bristol.gov.uk/files/documents/874-city-docks-byelaws/file

5.3. Special Directions

Refer to sections 4.16 - 4.18 of the Code

Special Directions are formal instructions issued by the Harbour Master under statutory powers to ensure the safe and efficient navigation and operation of vessels in the harbour.

They are legally enforceable and typically apply to specific vessels or situations rather than being general rules.

Purpose of Special Directions:

- to regulate vessel movements in the interests of safety and efficiency
- to prevent danger to life, property, or the environment
- to manage emergencies or unusual conditions, such as hazardous cargo or defective vessels

In the event of refusal to comply a written template can be used to reinforce the direction and ensure that a record is kept (See Appendix 8).

5.4. General Directions

Where Special Directions are temporary and relate to specific individuals, vessels or circumstances, General Directions form the framework that promotes safe and efficient use of the harbour.

The 2009 Bristol City Docks Byelaws function as General Directions within Bristol Harbour Authority waters.

5.5. Dangerous Vessels

Refer to sections 4.23 of the Code

Under **The Dangerous Vessels act 1985**, the Harbour Master may prohibit the entry into, or require the removal from, the harbour of any vessel if, in their opinion, the condition of that vessel or the nature or condition of anything it contains, is such that its presence in the harbour might involve a grave and imminent danger to the safety of persons or property or risk that the vessel may, by sinking or foundering in the harbour, prevent or seriously prejudice the use of the harbour by other vessels.

The Harbour Master must have regard to all the circumstances and to the safety of any person or vessel.

Whilst unlikely given the nature and location of the Harbour, such directions may be over-ridden by the Secretary of State's representative (SOSREP) for maritime salvage and intervention who may issue contrary directions to the Harbour Master in the interests of safety.

The SOSREP has the ultimate and decisive voice for maritime salvage, offshore containment and intervention. The SOSREP role does not include any responsibility for either at sea or shoreline clean-up activities. In the unlikely event of conflicting priorities between the "at-sea" and "land based" response cells, the SOSREP may, where appropriate, consider exercising the intervention powers where actions being taken, or being proposed, are not deemed to be in the overriding UK public interest.

5.6. Dangerous Goods

Refer to sections 4.92 of A guide to Good Practice on Port and Marine Facilities

The Dangerous Goods in Harbour Areas Regulations 2016, requires the master, agent or operator, as relevant, of any vessel or vehicle, or any other mode of transport, before bringing any dangerous goods into the harbour area, to give not less than 24 hours' notice to the Harbour Master.

The Harbour Master has the powers to:

- regulate or prohibit entry into the harbour
- require the removal from the harbour
- regulate the handling, movement, or position within the harbour

Normal operations of Bristol City Docks do not include the handling of dangerous goods.

In the event of an emergency incident caused by a vessel carrying dangerous goods, BCC Operation Centre would be contacted at the earliest opportunity to activate a BCC Emergency Plan. Avon Fire and Rescue would treat a Dangerous Goods incident as they would any HAZMAT incident.

5.7. Pilotage and Pilotage Exemption

Refer to sections 4.25 -4.27 of the Code

Under the **Pilotage Act 1987 (section 11-2)**, a Competent Harbour Authority may arrange for all or any of its functions relating to pilotage other than its duty under **section 2(1)** to be exercised on its behalf by another competent Harbour Authority.

An agreement was made with The Bristol Port Company (BPC) in 1994 to provide pilotage services to Bristol Harbour Authority covering the harbour and Portishead Pier.

All aspects of maintaining a Pilotage Safety System are managed by BPC.

The Pilots are provided by Bristol Pilots Ltd. – a company that provides pilotage services for Hinkley Point, Port of Bristol, and Bristol City Docks including Portishead Pier.

Before a Pilot can carry out acts of pilotage within BCC waters, local knowledge is assessed by Bristol Harbour Authority using a questionnaire which is completed by the candidate. On receiving a satisfactory return Bristol Harbour Authority sends a formal request to BPC asking for the Pilot to be authorised.

Authorisation maybe suspended if it appears—

1. That the authorised person has been guilty of any incompetence or misconduct affecting his capability as a Pilot.
2. That the authorised person has ceased to have the qualifications required from persons applying for authorisation by it under this section or has failed to provide evidence that he continues to have those qualifications.
3. That the number of persons for the time being authorised by it under this section exceeds the number required to be authorised, or

4. That it is appropriate to do so by virtue of the termination of any contract or other arrangement under which the services of pilots are provided within the harbour.

When engaged in compulsory pilotage, the Pilots are integrated with the Harbour Authority. Passage plans are discussed and agreed upon, and communication with harbour escort launches maintained throughout.

Boarding and landing is done when the vessel is alongside (either in Lock or quay wall), unless the Pilot has embarked in Port of Bristol Company controlled water.

Pilotage Directions were reviewed in 2025.

5.8. Pilotage Exemption.

Refer to sections 4.29-4.30 of the Code

Pilotage exemption for Portishead Pier is available to bona fide Ships Officers that meet the required criteria. To qualify the Applicant must berth on the pier at least 2 times under a Pilot or an existing Pilotage Exemption Certificate (PEC) holder.

A valid certificate of competency and a current MCA ENG 1 Medical Certificate are also required.

Pilotage exemption for Bristol City Docks is available to bona fide Ships Officers that meet the required criteria.

To qualify the applicant must transit the harbour at least 3 times under a Pilot or an existing PEC holder.

Local knowledge is assessed prior to issuing the PEC. A valid certificate of competency and a current MCA ENG 1 Medical Certificate are also required.

A PEC is valid for 12 months from the date of issue. It may be revoked in the following cases:

1. Where an event has occurred as a result of which the authority is no longer satisfied with the competency of the holder.
2. Where the authority thinks that the person has provided false information to the authority.
3. Where the authority thinks that the person has been guilty of professional misconduct while piloting a ship.
4. Where pilotage notification was given in reliance on the person's certificate, and in the event, the pilotage was carried out by a person who was neither an authorised pilot nor acting in accordance with a pilotage exemption certificate.

Pilotage Directions 2025 can be viewed on the Bristol Harbour Website in the Plans and Policies section or by following the link below:

https://www.bristol.gov.uk/files/documents/8572-pilotage-directions/file

5.9. Power to Set Fees and Charges

The 1964 Harbour Act gave Harbour Authorities a general power to set ship, passenger and goods dues.

The 1964 Act also empowered Harbour Authorities to levy charges for services provided by the harbour.

The Bristol Harbour Schedule of Fees and Charges Schedule is published annually, with engagement with stakeholders in the event of significant changes. It can be viewed on the Bristol Harbour website under Fees and Charges or by following the below link:

https://www.bristol.gov.uk/bristol-harbour/about/bristol-harbour-fees-and-charges

6.0. Managing Marine Risk

6.1. Bristol City Council Corporate Health, Safety and Wellbeing Strategy 2024-29

BCC has formulated a Health, Safety and Wellbeing Strategy, setting out how it will meet the required level of legal compliance and how it will continue to provide appropriate, high-quality approaches, interventions, and support to help protect the people (workforce, customers, clients, service users, visitors and stakeholders), built estate (including green and blue spaces), and environment, so that everyone can keep safe and manage their own health and wellbeing.

BCC aims to:

- meet health and safety statutory obligations and attaining the required level of compliance
- developing a culture where BCC has one approach to health, safety and wellbeing that achieves a consistent, sensible and proportionate approach
- minimising harm through learning
- supporting the health and wellbeing of the workforce so that they can stay well and remain in work or return to work as soon as possible

This Strategy can be viewed at Appendix 1 1B HEALTH SAFETY AND WELLBEING STRATEGY.pdf

6.2. Bristol Docks Safety Policy for Marine Operations

To Augment this strategy, a Safety Policy for Marine Operations has been formulated (See Appendix 1).

6.3. Bristol Docks Marine Safety Plan

To demonstrate commitment to marine safety, and to ensure the involvement of harbour users, a Marine Safety Plan has been produced.

The MSP has been set out to show how BCC intends to fulfil duties listed in the MSMS.

The MSMS explains operational procedures and processes, that have been developed and maintained by the Harbour Master, to manage marine safety within Statutory Harbour waters. These include:

- traffic management
- operational guidelines
- pilotage
- Conservancy
- marine services

All key components of the Marine Safety Plan are reviewed in 3-year cycles.

The Safety Plan be viewed on the Bristol Harbour website under Plans and Policies or by following the below link:

https://www.bristol.gov.uk/files/documents/9029-marine-safety-plan/file

6.4. Marine Facilities in the Harbour

Refer to section 6.16- 6.18 of the Code

The Code states that where other marine facilities are situated within the jurisdiction of a SHA, organisations should engage with one another to ascertain the scope and extent of the SHA's MSMS and whether, or how, it incorporates or interacts with other facilities operating within that area.

There are 5 Marine Facilities operating in Bristol Floating Harbour. They are:

Underfall Yard and Slip

a group of independent boat builders and repairers that work as a cooperative when using the slip to bring vessels out of the water for maintenance and repair.

Bristol Marina

a marina, hauling way, slipway and hard standing with berths for 80 vessels.

Pooles Wharf Marina

a former dry dock now independently run as a mooring area for approximately 30 vessels.

Bristol Channel Yacht Sales

a vessel brokerage with moorings for 14 vessels and a small hard standing space.

Albion Dock Company

Albion Dock Company provide ship repair and building services in a dry dock setting. Typically used by large vessels moored permanently in Bristol Floating Harbour, it also attracts vessels requiring its services in the Bristol Channel area.

As these facilities have the capacity to impact on the safety and environment of the harbour, a gap analysis has been undertaken.

This is to ensure that in the event of an incident there is a capacity to respond competently with the necessary equipment. Waste management capabilities are also assessed.

Where the facility does not have the capacity, the Harbour Authority covers the shortfall. This is laid out in a Memorandum of Understandings between the facility operator and Harbour Authority.

6.5. Operations Risk Assessments

Refer to sections 5.1-5.13 of the Code

All activities undertaken by the Harbour Authority have been risk assessed, with hazards recognised and risks mitigated to as low as practicable using the Plan-Do-Check-Act cycle.

Risk Assessments are reviewed annually, when there is an incident or when there is a substantive change of staff.

Operations Staff are consulted when formulating and reviewing Risk Assessments.

The need for Dynamic Risk Assessment is recognised, and staff have the necessary experience and competence to discuss and formulate work plans where risks are as low as practicable.

A different template is used for Occupational and Marine Risk Assessments to reflect the need for consideration of financial, environmental, and reputational impacts in the latter (see appendices 1-7 for Marine Risk Assessments).

6.6. Formal Safety Assessment

Refer to sections 5.8 -5.9 of the Code

Formal Safety Assessments can be undertaken when risk assessments result in risk controls that may be subject to cost benefit assessment.

This process will typically follow the International Maritime Organization's Formal Safety Assessment process of which the five stages are:

1. Identification of hazards
2. Assessment of risks
3. Risk control options
4. Cost benefit assessment
5. Recommendations for decision-making

6.7. Incident Reporting and Investigation

Refer to sections 6.19-6.23 of the Code

It is a legal requirement for a Harbour Authority to report marine casualties and marine incidents occurring within their waters to the Marine Accident Investigation Branch (MAIB).

Incidents are investigated by the Harbour Authority with findings used to assist with improving safety across all activities.

Marine Casualty

A marine casualty is an event or sequence of events that has occurred directly by, or in connection with the operation of ship, and has resulted in:

- the death of, or serious injury to, a person

- the loss of a person from a ship
- the loss, presumed loss or abandonment of a ship
- material damage that significantly affects the structural integrity, performance or operational characteristics of the ship requiring major repair or replacement of components
- the ship being unfit to proceed, or requires flag state approval or a condition of class before it may proceed
- at sea, the ship requiring towage or shore assistance
- the stranding or disabling of a ship, or the involvement of a ship in a collision.
- material damage2 to marine infrastructure external of a ship that could seriously endanger. the safety of the ship, another ship or any individual
- pollution, caused by damage to a ship or ships

Marine Incident

A marine incident means an event, or sequence of events, which occurred directly in connection with the operations of the ship, that do not meet the criteria to be classified as a marine casualty but that endangered or, if not corrected would endanger, the safety of the ship, its occupants or any other person or the environment.

Examples of marine incidents include:

- close-quarters situations where avoiding action was required to avoid collision
- any event that had the potential to result in a serious injury
- a fire that did not result in material damage
- an unintended temporary grounding on soft mud, where there was no risk of stranding or material damage
- a person overboard who was recovered without serious injury
- snagging of fishing gear resulting in a dangerous heel

The MAIB is contacted for advice if there is any doubt on whether an incident should be reported.

6.8. Bristol Harbour Authority Collision or Near Miss Reporting Form

Collisions and near misses within the limits of the Harbour Authorities waters, must be reported by those involved at the earliest opportunity. A Bristol Harbour Authority Collision or Near Miss Reporting Form must then be completed and sent to the Harbour Authority. An investigation is then undertaken with findings passed to those involved. Where the investigation highlights behavioural or environmental factors that have been identified as causational in past reported incidents, action can be taken to lessen the likelihood of further incidents.

The Collision or Near Miss Reporting Form can be downloaded from the Bristol Harbour website in the Navigating Around Bristol Harbour section or by following below link:

https://www.bristol.gov.uk/bristol-harbour/arriving-departing/navigating-around-the-harbour

If it is necessary to report to the MAIB, the information gathered is used to assist in the completion of the MAIB reporting form.

A copy of the MAIB reporting form can be obtained using the following link:

https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fassets.publishing.service.gov.uk%2Fmedia%2F691324bf8c90b927c818ad6b%2FAccidentReportForm_ARF.docx&wdOrigin=BROWSELINK

6.9. RIDDOR Reporting

In areas where there is an overlap of Health and Safety Executive and MAIB, incidents will also be covered under RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrence Regulations). The Harbour Authority completes an internal incident report, and it is passed to BCC Corporate Health and Safety who in turn report to the Health and Safety Executive.

6.10. Reviewing Marine Accident Safety Branch Safety Digest

Refer to sections7.- 7.3 of the Code

The Harbour Authority receives MAIB Digests. These are scrutinised, and where there has been an incident that could conceivably happen within its waters, a formal review of safety systems takes place.

User groups are consulted, and any additional measures identified as necessary, are put in place and safety systems amended.

Risk Assessments are amended where deficiencies have been highlighted by reported incidents.

6.11. Local Notices to Mariners

All notices relating to safety of navigation and changes to arrangements or procedures are promulgated as Notices to Mariners (NTMs.)

NTMs are numbered in sequence and displayed on notice boards, available in Harbour Office.

NTMs are also posted on the Bristol Harbour website in the About Bristol Harbour section, and can be viewed using the link below:

https://www.bristol.gov.uk/bristol-harbour/about/local-notices-to-mariners

NTMs are also distributed to stakeholders listed below:

Cabot Cruising Club
Bristol Cruising Club
Port of Bristol Sailing Association
Bristol Marina
The Bristol Port Company
Bristol Canoe Club
Bristol Rowing Club
Ariel Rowing Club
All Aboard
Avon and Somerset Police
Beeses Tea Gardens
BCC Highways
Bristol Ferry Boats
Bristol Gig Club

6.12. Works Licencing

Permission to carry out works in the harbour must be obtained from the Harbour Authority. Applications are assessed for impact on harbour use. Where outside contractors are undertaking work for a third party, Risk Assessments and Method Statements (RAMS) are requested for approval and proof of insurance is required. If contractors are working afloat, proof of competency is required.

A Harbour Works Licence will only be issued when the Harbour Master is satisfied that all hazards (including environmental) in the works have been recognised and the risks mitigated to be as low as reasonably practicable.

Works undertaken by the Harbour Authority (in house and using contractors), is planned and risk assessed. Those involved are suitably trained, competent and experienced.

If works are liable to affect safe navigation, NTMs are promulgated giving details of the nature of works, the duration and the impact on navigation together with control measures identified in Risk Assessments.

6.13. Permit to Dive

Refer to section 4.8.1-4.8.2 of A guide to Good Practice on Port and Marine Facilities

All diving work is undertaken by outside contractors.

Diving work operations are regulated under the **Diving at Work Regulation 1997** and enforced by the HSE.

Recreational diving is not permitted in Bristol City Docks.

All diving operations must be formally approved by the Principal Engineer, and the Harbour Master.

A Permit to Dive form is completed by the diving contractors and signed by the Principal Engineer, and Harbour Master. Harbour users are alerted to the activity by the promulgation of NTMs.

6.14. Police Diving

Police Divers occasionally undertake searches for evidence and missing persons. They also use the harbour for training exercises.

Police search and rescue diving is regulated by the Police Authority themselves. Permission to dive is required from the Harbour Master.

6.15. Hot Works Permit

Refer to section 4.9.18 of A guide to Good Practice on Port and Marine Facilities

All welding or cutting using a naked flame needs permission from the Principal Engineer.

A Hot Works Permit is completed. This form lists the precautions necessary and requires the contractor to state that they are in place.

6.16. Bunkering

Refer to section 4.9.18 of A guide to Good Practice on Port and Marine Facilities

Transfer of fuel or waste oil requires a bunkering form to be completed.

48 hours' notice must be given.

The Bunkering Form has a check list that is signed off by the receiver and supplier before and after the transfer.

A Bunkering Form can be downloaded from the Bristol Harbour website in the Safety at Bristol Harbour section, or by following the link below:

https://www.bristol.gov.uk/bristol-harbour/safety

Small transfers of fuel are not regulated. Byelaws Prohibit pollution of the harbour.

6.17. Regulation of Commercial Marine Craft

Refer to section 4.34 of the Code

Vessels being used for commercial purposes within Bristol City Docks are licenced by the Harbour Authority for the activity they undertake.

7.0. Open Port Duty

Refer to section 4.9 of the Code

BCC will facilitate the shipping and unshipping of goods and the embarking and landing of passengers on payment of the rates and other conditions as published in the Fees for Navigation and Berthing of Craft as Defined in the Bristol Corporation Act 1961.

8.0. Marin e Services

Refer to sections 11.1 – 11.7 of A guide to Good Practice on Port and Marine Facilities.

8.1. Large Vessel Movements

The maximum size of vessel entering Bristol Floating Harbour is constrained by the dimensions of the entrance lock, air draft when passing under the Avonmouth Bridge, and the regulations for River Avon transit set by the Competent Harbour Authority for the river, The Bristol Port Company.

Vessels in excess of 50m require Pilotage within Bristol City Docks (see Pilotage section).

Any vessel meeting compulsory pilotage criteria will be escorted by a Harbour Authority work boat that clears other vessels from the navigation channel and provides assistance with manoeuvring on and off the berth.

Vessels in excess of 24m are also provided with an escort boat.

8.2. Vessel Management

There are approximately 400 private berth holders in the harbour. Moorings are maintained by Harbour Authority staff and the engineering team.

A data base of vessels is maintained enabling contact with owners when necessary.

8.3. Vessels Based in Bristol

Refer to section 8.10.18 – 8.10.20 of *A guide to Good Practice on Port and Marine Facilities*.

Moored vessels fall into 4 categories:

Leisure Mooring Vessels

These are charged depending on length and location. Adequate third-party insurance and an in-date boat safety certificate is required.

Live Aboard Vessels

These vessels are charged at an enhanced rate. Owners use them as their residence.

Static Commercial Vessels

Most of these vessels are bars or restaurants. Leases are agreed with BCC Property Services. Vessels are insured and regularly surveyed.

Residential Vessels

As for static commercial vessels, leases are agreed with BCC Property Services. Vessels

are insured and regularly surveyed.

8.4. City Docks Operational Moorings and Facilities Policy 2025 – 2030

This policy sets out the BCC's approach to moorings operation within the Statutory Harbour Authority's jurisdiction, as defined by section 57 of the Harbours Act of 1964. It can be viewed at the Bristol Harbour website in the Plans and Policies section, or by following the link below:

https://www.bristol.gov.uk/files/documents/9668-mooring-policy-for-bristol-harbour-1/file

8.5. Licenced Passenger Boat Operations.

Passenger vessels are licenced by the Harbour Authority. Vessels are certified as fit for purpose and regularly surveyed. Masters are medically fit, suitably trained, competent and experienced.

Vessels carrying over 12 passengers are regulated by the MCA.

Skippers of vessels carrying over 12 passengers require a Boatman's Licence and are examined by the MCA.

The Harbour Authority has adopted the Inland Waters Small Passenger Boat Code to regulate vessels carrying less than 12 passengers.

Skippers of vessels carrying less than 12 passengers must hold a RYA level 2 Powerboat qualification with 12 months relevant experience.

Safe landing and boarding facilities are supplied, maintained and formally inspected.

All licenced passenger boats operating in the harbour operate a passenger recording system.

Fees as defined in Bristol Corporation Act 1961.

8.6. On Water Leisure Activities

Activity providers, clubs, schools, and organisations operate on the harbour. These enable members, clients and the public to get afloat in a range of craft.

It is important that the Harbour Authority maintains oversight of the activities of clubs, organisations and activity providers using the harbour.

The Harbour Master is responsible for ensuring all water activity is safe with the risks mitigated to be as low as practicable.

Organised groups maintain their own safety systems and provide a copy to the Harbour Authority for scrutiny when relicensing every year.

These are kept on file, and in the event of an incident reviewed in consultation with the relevant group/s with amendments made if agreed necessary.

Members of the public not connected with activity providers, clubs, schools, and organisations are able to use the water providing insurance is in place and a navigation and mooring licence is purchased for their craft.

Fees as defined in **Bristol Corporation Act 1961.**

Water activities are governed by the relevant association, with guidelines on best practice to promote safety formulated.

See list of associations below:

British Canoeing
British Rowing
Royal Yachting Association
Cornish Pilot Gig Association
British Dragon Boat Racing Association
British Stand Up Paddleboard Association

8.7. Codes of Practice

The Harbour Authority meets with members from the various groups and formulates Codes of Practice that follow best practice set by associations, with amendments and additions to take into account the hazards present in the harbour. These Codes of Practice are available on the Bristol Harbour website in the Safety section and can be viewed on the below link:

https://www.bristol.gov.uk/bristol-harbour/safety/water-safety-codes-of-practice

8.8. On Water Events

Organisers of on water events must obtain permission from the Harbour Authority to use the harbour. Larger events have to be approved by the Safety Advisory Group for Events (SAGE).

This is a forum consisting of Emergency Services, BCC Events and Operations Department staff and The Harbour Authority.

Method Statements and Risk Assessments are reviewed and approved, with mitigation to risks such as the requirement for safety boats stipulated.

8.9. Vessel Traffic Services

As a Statutory Harbour Authority BCC is responsible for assessing the need for Vessel Traffic System (VTS) within harbour limits in accordance with the Code. A Risk Assessment has been undertaken on the need for a VTS. This process has demonstrated that at present hazards have been identified and risks sufficiently mitigated to allow regulation of arrival and departure to safely take place without a VTS. This outcome is reviewed annually and in the event of an incident.

Local Port Services control the manner and timing in which vessels arrive and depart from the City Docks.

9.0. Port Conservancy Duty

Refer to sections 10 – 10.17 of the Code

Harbour authorities have a legal duty to conserve their harbours to ensure that they are fit for use, and a duty of reasonable care to see that the harbour is in a fit condition for a vessel to utilise it safely. This duty covers several specific requirements to:

- Survey, using appropriate specifications based on international standards, as regularly as necessary in accordance with good practice guidance
- Find and mark the best navigable channels
- Place and maintain navigation marks in the optimum positions which are suitable for all conditions
- Have a risk-based approach and keep a vigilant watch for any changes in the sea- or riverbed affecting the channel or channels and move or renew navigation marks as appropriate
- Keep proper hydrographic and hydrological records
- Ensure hydrographic information is published in a timely manner; and provide regular returns and other information about the authority's local aids to navigation as the relevant GLA may require

BCC has a duty to conserve the City Docks to ensure that it is in a fit condition for a vessel to use safely and efficiently.

Reasonable care will be taken to ensure, as far as practicable, that all who may choose to navigate in the Portishead Pier approaches, Bristol Floating Harbour, Feeder Canal and River Avon between Netham and Hanham Locks may do so without danger to their lives or property.

9.1. Hydrographic Survey Requirements

Refer to sections 10.2-10.5 of the Code

Bristol Harbour Authority commissions a hydrographic survey of the Floating Harbour and its approaches every 2 years or when a water depth related issue is reported.

Contractors carrying out the survey are required to have an agreement with the UKHO to send data which is used to amend Admiralty Chart 1859.

Changes to depths, navigation marks, navigation lights and navigation channels are reported to the UKHO following any survey or when required.

9.2. Promulgation of Navigation and Hydrographic Information

Refer to section 10.2-10.5 of the Code

Information on navigation and changes to depths is promulgated through NTMs.

These are available at the Harbour Offices, online and by post to stakeholders. Tide times, including locking services are available on the Sail Bristol App, and at the Harbour Offices.

The UK Hydrographic Office is provided with the results of surveys undertaken.

9.3. Wrecks and Abandoned Vessels

Refer to sections 10.10-10 -17 of the Code

The Harbour Authority has powers set out in The Merchant Shipping Act 1995 to remove wrecks and abandoned vessels within its waters. This is undertaken by suitably trained and competent Harbour Authority staff and contractors, with costs being recovered through insurers and vessel owners. NTMs are promulgated where the wreck itself or recovery work to remove could affect navigation.

The Harbour Master may give a direction to remove a vessel from the City Docks if, in their opinion, its condition is such that it poses a grave and imminent danger to the safety of any person or property.

Abandoned vessels are impounded. If an owner cannot be traced, the vessel is disposed of.

9.4. Lighting and Marking

Refer to sections 10.6-10.9 of the Code

Bristol Harbour Authority is the Local Lighthouse Authority for Bristol City Docks. Navigation lights aid safe navigation between the entrance lock and Junction Lock. These lights are regularly inspected and maintained by the Bristol City Docks Engineering Department in accordance with the criteria laid down by the General Lighthouse Authority - Local Aids to Navigation Reporting System (LARS).

Within the harbour, there is sufficient ambient light to give illumination to all dock structures and berths enabling navigation through the harbour during the hours of darkness without further navigational aids.

9.5. Dredging

Refer to sections 10.9.1-10.9.3. of A guide to Good Practice on Port and Marine Facilities

Maintenance Dredging

The Harbour Authority has powers to dredge to maintain and improve navigation channels.

Suitably trained, competent and equipped outside contractors are sourced and RAMS agreed.

NTMs are promulgated.

Hydrographic surveys take place before and after dredging.

Cumberland Basin Scours

Every 3 weeks the entrance gates are opened, and Cumberland Basin is drained with the outgoing tide. Once empty, paddles are opened on the upper gates and for 15 to 20 minutes water from the harbour is used to scour mud building up in the basin out into the river. The entrance gates are then put on, and Cumberland Basin is refilled from the harbour ready for the next tidal service period.

This evolution is undertaken by the Engineering Department with staff that are suitably trained and competent.

Scour dates are promulgated in NTMs.

Capital Dredging

Capital Dredging is not usually undertaken.

In the event of capital dredging being proposed, advice would be sought from the Marine Management Organisation to ensure correct licences are in place and whether additional powers were needed.

9.6. Locking Services Cumberland Basin

The Harbour Master is responsible for ensuring that locking operations are carried out safely and agreed service levels are met. Service levels for GMT and BST are published in NTMs.

Hazards have been identified, and risks mitigated to be as low as reasonably practicable. Risk assessments are maintained and formally reviewed.

9.7. Inbound Vessel Traffic Services Reporting Procedure

Refer to section 8.6 of A Guide to Good Practice on Port and Marine Facilities.

Invariably, large vessels prearrange their passage to Bristol City Docks.

A passage plan, recognizing services required, will be in place and agreed with the Bristol Port Company and Bristol Harbour Authority.

The Bristol Port Company's Vessel Traffic Services will control the vessel to Cumberland Lock.

Calls will be made (VHF CH14, call sign "City Docks Radio") to the Watch House by the Master or Pilot of the vessel at Black Rock, and the Suspension Bridge.

In the case of Compulsory Pilotage criteria vessels, a call is also made by mobile phone by the Pilot at Sea Mills to ensure that the outer lock gates are open and that the entrance lock is ready, before proceeding further.

The Harbour Authority does not pass vessel traffic information to the MCA. Vessels transiting the River Avon that meet criteria are reported to the MCA by Bristol Port Company.

Small craft not carrying more than 12 passengers, not requiring services and not subject to any constraints do not have to arrange their passage but inform the Bristol Port Company VTS and the duty Deputy Harbour Master on a tide-by-tide basis, of their arrival and departure times.

Docking signals are displayed on the Hotwells Pontoon showing fixed green for come ahead with caution and fixed red for stop and await instructions.

Once inbound vessels have passed Junction Bridge, they must change VHF channels to

Ch 73. Call sign “Bristol Floating Harbour”.

Mariners on small craft can book locking services via the Sail Bristol App. The App includes tide times, locking timings and acts as a payment vehicle for fees. Locking can also be booked by telephone, email or by attending the Harbour Office.

Advice on entering and leaving Bristol can be found in The Cruising Almanac and on the BCC website on below link, or by contacting the Harbour Office.

9.8. Entering and Leaving Bristol Harbour

Refer to section 10.15.9. of A guide to Good Practice on Port and Marine Facilities.

Staff responsible for the locking evolution are competent, trained and experienced. PPE is supplied and used.

Timings and the manner of arrival and departure of vessels are controlled by the Harbour Authority.

The Principal Engineer is responsible for the planned and responsive maintenance of all plant associated with water management and the locking process.

9.9. Locking Services Netham Lock

Refer to section 10.15.9. of A Guide to Good Practice on Port and Marine Facilities.

A weir at Netham maintains the level of the River Avon upstream. The lip of the weir is 6.0m AOD. This facilitates navigation towards Hanham and onward into Canal and River Trust water.

Mariners navigating the river upstream of Netham during tides in excess of 6.0m AOD will experience a rise and fall with the tide overtopping the weir.

During BST, Netham Lock is staffed by personnel on site. During GMT harbour staff respond to locking requests from the Harbour Office. When water levels in the river allow, both sets of gates are left off during working hours, permitting transit without locking for vessels.

The Harbour Master is responsible for ensuring that locking operations are carried out safely and agreed service levels are met. Service levels for GMT and BST are published in NTMs.

Hazards have been recognised, and risks mitigated to as low as reasonably practicable. Risk Assessments are maintained and formally reviewed.

Staff responsible for the locking evolution are competent, trained and experienced. PPE is supplied and used.

As Netham is an important part of water level management for the harbour, the public are not permitted to lock themselves through.

The Principal Engineer is responsible for the planned and responsive maintenance of all plant associated with the locking process.

9.10. Towage

Refer to sections 4.6- 4.6.6 of A Guide to Good Practice on Port and Marine Facilities

Bristol Harbour Authority provides a towage service within the limits of its waters. All towage is risk assessed and undertaken by suitably trained and competent staff using workboats and equipment suitable for the task. Maximum wind speed for a tow to go ahead is decided based on the windage and inertia of the towed vessel against the bollard pull of the work boats involved.

Fees are as set out in the Bristol Harbour Fees and Charges Schedule.

Towage evolutions can be broken down into the following categories:

Ship Assist Towage

Ship assist towage typically takes place when a vessel is of sufficient size to be constrained in its ability to manoeuvre in the restricted channel of a harbour.

Due to the risks associated with a work boat running with a ship with lines attached, ship assist towage is restricted to towing a vessel's bow or stern clear of the berth.

If a vessel requires towing off from its berth, lines will be detached before vessel moves off.

Dead Tows

The towage of large vessels without propulsion. These tows fall into compulsory pilotage criteria.

Method Statements, Risk Assessments and a Tow Plan are completed and agreed before towage commences.

A briefing involving the Pilot (if required), Harbour Authority, and any others involved in the evolution takes place. Emergency berths are identified and cleared. harbour users are informed, and an escort boat is provided.

The Hirer must ensure that the Tow is insured under UK Standard Towing Conditions.

The hirers insurer may stipulate that an MCA Surveyor must attend to inspect the suitability of vessels and equipment being used. In such instances, the Harbour Authority makes all equipment available for inspection.

General Towage

Movement of smaller vessels unable to move themselves, pontoons, flatters and barges.

Tows are normally alongside or push tows. These are regularly undertaken routine evolutions. A generic towing risk assessment is used.

Project Towage

Towage that does not fit into above categories. Method statements and Risk Assessments are completed and agreed before a tow commences.

10.0. Enforcement

Refer to section 6.24-6.25 of the Code

BCC, the Harbour Master and his Deputies, will enforce all legalisation applying to the City Docks including Byelaws, issuing warnings and in the case of repeated breaches prosecuting.

If prosecution is considered appropriate, a report is made to the BCC Legal Department to action.

This will be done in consultation with the MCA, the HSE, Police and the Environment Agency.

10.1. Dealing with incidents of operators using a vessel while intoxicated

Unfortunately, vessel owners occasionally choose to combine the consumption of alcohol with being in charge of their vessel while navigating the harbour.

Bristol Docks byelaws include the following:

"Navigation under influence of drink or drugs prohibited.

33. A person shall not navigate any vessel in the harbour whilst under the influence of drink or drugs to such an extent as to be incapable of taking proper control of the vessel."

It is also an offence under the Railways and Transport Safety Act 2013 (Section 4) for:

(a) a professional master of a ship,
(b) a professional pilot of a ship,
(c) a professional seaman in a ship while on duty
to have their abilities to carry out their duties impaired because of drink or drugs.

When there is reasonable suspicion that an offence is taking place, action is taken.

A vessel being driven erratically is stopped and the operator is spoken to. Through observation during the conversation, assessment is made of the fitness to navigate. If it is apparent that the operator is incapable of safely navigating the vessel, they are put ashore, and the vessel impounded.

If there is any resistance to this the Police are contacted for assistance. Once on-site Police can make an assessment on whether the operator is intoxicated that can be used in court if the choice to prosecute is made.

10.2. Reporting and Recording of Crime

All instances of observed or reported crime are logged and passed on to Avon and Somerset Police. Victims of crime on the City Docks estate are encouraged to contact the Police in all cases.

Lines of communication with the Community Beat Team have been established and a good working relationship maintained. Information passed and received on crime trends across the dock's estate, assist both the Police and the Harbour Authority to build up an accurate picture.

Members of the Beat Team have been trained to RYA Level 2 Power Boat, and undertake water patrols on days where there are high levels of leisure activity on the harbour estate.

When on water patrols the Police are integrated with the Harbour Authority.

11.0 Emergency Preparedness and Response

11.1. Civil Contingencies Duty

Refer to section 4.37-4.41 of the Code

BCC is a Category 1 responder for Civil Emergencies.

Where an emergency impacts on the harbour, the Harbour Authority acts as a co-operating body. The department has first responder capabilities within the limits of its waters, and can act when there is risk to life, property or environment.

The Operations Manager and all Deputy Harbour Masters are Jesip trained.

Duty staff are trained and competent. Suitable equipment is provided and maintained.

11.2. BCC Emergency Plans

BCC has the following emergency plans:
Evacuation Plan
Flood Plan
Fuel Shortage Plan
Humanitarian Assistance Plan
Incident Response Plan
Oil Spill Shoreline Response Plan
Recovery Plan
Severe Weather Plan
Strategic Emergency Management Guide
Standard Operating Procedures / Policies
Emergency Centre SOP (includes Rest Centre information)
Evacuation Plan SOP

BCC Operations Centre is responsible for activation of an emergency plan and must be contacted by the department that has been notified of an incident.

It is important that notification of an incident is carried out at the earliest opportunity so that BCC staff can have as much time as possible to prepare their response.

Where a response is required from the Harbour Authority out of hours, key staff are contacted by the Operations Centre. Once onsite, Harbour Authority staff are integrated within the multi-agency emergency response. Briefings are convened and attended by relevant parties to co-ordinate activities.

11.3. Bristol City Docks Marine Incident Guide

The Bristol City Docks Marine Incident Guide is intended to support and guide critical staff in dealing with a harbour emergency up to the point that a BCC emergency plan is activated. Once this has been done, the Harbour Authority is integrated into a multi-agency response.

The Plan is reviewed annually.

11.4. Oil Spill Contingency Plan

Bristol Harbour Authority has an Oil Spill Contingency Plan, which recognises the risk of oil spills, sets out requirements for containment and clean-up materials that must be kept on site, together with the need to maintain skills through training exercises. A record of training exercises is kept.

Operations staff have undertaken MCA 2P Oil Spill Responder training, and the Harbour Master has completed MCA 5P Oil Spill Operations Executive Commander training.

A contract is in place with Ambipar, who provide training, equipment and technical assistance in the event of a substantial oil spill.

The Oil Spill Contingency Plan has been approved by the MCA and is reviewed every 3 years.

The Oil Spill Contingency Plan can be viewed on the Bristol Harbour website in the Plans and Policies section or by following the link below:

https://www.bristol.gov.uk/files/documents/9123-oil-spill-contingency-plan/file

12.0. Environmental Duty

Refer to section 4.35.4.36 of the Code

Bristol Harbour Authority have published MCA approved Oil spill Response and Port Waste Plans.

and as part of BCC, work under the Corporate Environmental Management System, designed to help manage, measure and reduce the environmental impact of services.

All operations in the harbour, are conducted with due regard to environmental and conservation considerations.

12.1. Bristol City Council Environmental Policy

"Bristol City Council is a large land and asset owner, employer, and consumer of

goods and services. We will use our influence and powers to enable us,

individuals, communities and organisations, to improve Bristol's environment,

keeping it a Green Capital.

- *We have declared climate and ecological emergencies and will deliver our commitments on carbon neutrality, climate resilience and ecology.*
- *We will continually improve our performance, meet our compliance obligations, prevent pollution, and protect the environment.*
- *We will manage risks and reduce our direct environmental impacts in energy, travel, waste, water, products sourced from sensitive habitats, food, biodiversity, and land use.*
- *We will use our resources efficiently, working with suppliers to reduce the impact of goods, works and services using a lifecycle perspective.*
- *We will use our influence and policies to manage and reduce citywide environmental impacts and improve our resilience.*
- *We will provide training, publicly report on our performance regularly and maintain a comprehensive and effective Environmental Management System.*

Version 4 was approved by Cllr Kye Dudd on 17/11/2022.

The policy will be reviewed each year"

To assist preserving the harbour environment, BCC has developed the following documents:

12.2 EMS Harbour Operational Procedures

This document contains the procedures needed to manage harbour operations which may impact the environment.

12.3. EMS Chemical Storage and Spill Response Procedures

This document contains the procedures needed to store chemicals safely and securely and how to respond to a spill should one occur.

12.4. Port Waste Plan

To comply with Marine Guidance Notice (MGN 253)- Port Waste Reception Facilities Regulations 2003 and the Merchant Shipping and Fishing Vessels (Port Waste Reception Facilities) 2003 (Si 1809), BCC has formulated a Port Waste Plan.

This legislation was introduced to prevent dumping of vessel waste at sea by ensuring there are adequate waste reception facilities in harbours and landing places.

All masters of vessels, except fishing vessels and recreational craft designed or certified to carry no more than 12 passengers, must notify the Harbour Master through completion of the Port Waste Management Form of the type and quantity of waste to be discharged at the harbour.

The Port Waste Plan has been approved by the MCA and is reviewed every 3 years.

It can be viewed at the Bristol Harbour website in the Plans and Policies section, or by following the link below:

https://www.bristol.gov.uk/files/documents/1180-bristol-city-docks-port-waste-management-plan/file

13.0. Training and Competencies

Refer to section 8-8.4 of the Code.

BCC as the Statutory Harbour Authority for Bristol City Docks recognises, that in order to manage a safe and efficient harbour, it is essential to have suitably trained competent staff.

Suitably qualified staff are employed following BCC recruitment policy. Where nationally recognised relevant qualifications exist, these are included in the criteria for making it to interview stage.

Once employed, staff development continues.

Training needs have been set out in a training matrix and training records kept for all marine operations personnel.

Where available, course suppliers are used to run training and independently verify standards of competency.

Where competencies require revalidations, dates for requalification are kept.

Records for individual staff are used highlight any training needs that can then be worked on to bring up to standard.

13.1. Bristol City Docks Training Policy

The Bristol City Docks Training Policy sets out the Harbour Authorities commitment to ensure that staff are properly trained, competent and empowered to carry out their roles.

The Training Policy can be viewed on the Bristol Harbour website in the Plans and Policies section or by following the link below:

https://www.bristol.gov.uk/files/documents/10148-bristol-floating-harbour-training-policy/file

14.0. Consultation

Refer to section 6.14-6.15 of the Code.

To ensure that the MSMS remains relevant and meets the objective of promoting safe and efficient harbour management, regular consultation takes place between Stakeholders and the Harbour Authority.

14.1. Harbour Stakeholder Group

The Harbour Stakeholder Group, is an engagement vehicle allowing the Harbour Authority to take opinions and concerns from water users, residents and businesses on matters relating to the management of the harbour into consideration. The group meets at least 4 times a year with minutes feeding into the Harbour Committee.

14.2. Harbour User Group

The Harbour User Group, comprises mainly of water activity groups, clubs and commercial operators and focuses on the safety of water activities. The group meets 4 times a year with minutes feeding into the Harbour Stakeholder Group.

14.3. Harbourside Forum

The harbour business community, meet quarterly with representatives of the Harbour Authority to discuss issues relevant to them occurring on the dock's estate

14.4. Water Safety Partnership

Stakeholder group including the Emergency Services, ROSPA, representatives of the Harbour Authority, and BCC meet quarterly on matters involving water safety.

14.5 SAGE

Safety Advisory Group for Events, meet monthly to discuss event-based matters of safety.

These meetings are formal, recorded and minuted.

15. Key Performance Indicators

In order to assist in the continual reviewing the effectiveness and validity of the MSMS, Key Performance indicators are used.

BCC has selected the following performance indicators as appropriate for monitoring the performance of the MSMS.

- Operational Risk Assessments Reviewed annually, when there is an incident or a substantive change of staff
- Oil Spill Contingency Plan approved with required number of training exercises completed and reported to the MCA
- Reported Incidents investigated within 7 days and closed within 1 month
- Weekly minuted Staff meetings take place with Health and Safety a standing agenda item
- All aids to navigation meet General Lighthouse Authority standards

16. Auditing

Refer to section 1.3 of A guide to Good Practice on Port and Marine Facilities.

A formal review of the MSMS takes place every 5 years.

An internal audit and review on the MSMS, are carried out annually and a report on compliance published.

An external audit is carried out every 3 years by the Designated Person. The Designated Person reports Code compliance to the Duty Holder.

All Operational Risk Assessments are reviewed every year, after an incident or after a substantive change of operational staff.

The Bristol City Docks Marine Incident Guide is reviewed annually.

Formal staff, management and corporate meetings take place with Health and Safety a standing agenda Item.

17.0. Summary of Changes

Version	Date	Author	Summary of Changes
1	July 2023	P. Seed	First Publication
1.1	August 2024	P. Seed	Updated with changes to Duty Holder, the formation of the Harbour Board, and the Harbour Stakeholder Group. 12.1 Large Vessel Movements amended to include the provision of an escort for vessels in excess of 24m 12.3 Vessels Based in Bristol amended to include Live Aboard Licences.
1.2	January 2025	P. Seed	5.3 Amended to reflect change of Harbour Master, and the formation of the Harbour User Group
1.3	June 2025	P. Seed	9.3 Amended to better reflect Harbour Master discretion to remove vessels. Review of MSMS in order the conduct gap analysis against the new Ports and Marine Facilities Safety Code.
1.4	July 2025	P. Seed	Amended to include Marine Facilities within harbour limits.
1.5	November 2025	P. Seed	Amended following annual external audit
2.0	January 2026	P. Seed	Rewrite
2.1	March 2026	P. Seed	Amended to include Key Performance Indicators

18.0. Appendices

1. Safety Policy for Marine Operations

Bristol City Council (BCC), recognises and accepts the Statutory Duties and Responsibilities, set out within the Port and Marine Facility Safety code (PMFSC) associated with overseeing the safe and efficient running of Bristol City Docks and is committed to achieving and maintaining compliance.

BCC will do it's upmost to ensure the Health and Safety of its employees, stakeholders of Bristol City Docks and visitors. The Safety Policy for Marine Operations augments BCC's Corporate Health and Safety Policy required by The Health and Safety at Work Act and relates to marine operations and compliance with the PMFSC.

BCC will do this by:

- recognising and assessing hazards, putting in place control measures to reduce the risk to as low as reasonably practicable, formally reviewing risk assessments on a regular basis
- investigating and reporting marine incidents
- periodically reviewing powers to ensure they are sufficient and fit for purpose
- publishing a Safety Plan every 3 years
- regulating traffic and providing safety of navigation within harbour limits
- ensuring through recruitment of suitable personnel in adequate numbers, and subsequent formal training, that staff are competent and qualified to carry out their roles
- meeting statutory requirements set out in the Code
- developing and publishing a Marine Safety Management System (MSMS) together with supporting documentation
- maintaining channels of communication on health and safety through regular minuted meetings at workplace, divisional and corporate levels with health and safety a standing agenda item
- ensuring that as far as is reasonably practicable sufficient funding is available to address health and safety issues
- using enforcement where necessary to promote safety and best practice
- promulgating information to users of the harbour
- ensuring as far as practicable that all craft moored or navigating are fit for purpose, safe, insured and licenced

- undertaking regular surveys and Informing the United Kingdom Hydrographic Office (UKHO) of changes to depths and navigation marks.
- making Hydrographic Information available and promulgating safety information locally, conforming to UKHO Harbour Masters Guide to Hydrographic Information Exchange (May 2016).
- maintaining mobile and static plant in good order with established planned maintenance programmes.
- providing aids to navigation for inbound and outbound vessels
- regularly consulting with stakeholders on safety matters

BCC maintains health, safety and wellbeing management systems, arrangements, and organisational structures to ensure adequate health, safety and wellbeing for all people affected by its operations.

It has adopted the Plan, Do, Check, Act approach set out in the Health & Safety Executive's "Managing for Health and Safety" (HSG 65) document.

BCC monitors and reviews the effectiveness of its health, safety and wellbeing management system.

2. Special Directions Form

Bristol City Docks

Harbour Authority — Special Direction Form

For use when issuing a Special Direction to a vessel or person within Bristol City Docks Statutory waters limits.

Form Ref. No.		Date (YYYY-MM-DD)	
Time (Local)		Time	
Location/Position			

1) Vessel / Person Details

Vessel Name		IMO/MMSI/Reg. No.	
Call Sign		LOA / Beam / Draft	
GT / Displacement		Type (Passenger/Tug/Other)	
Master / Person in Charge		Contact (VHF/Phone/Email)	
Agent / Owner		Pilot Required (Yes/No)	

2) Legal Authority

This Special Direction is issued under the Harbour Authority's statutory powers,

Harbours Act 1964, section 40 Directions to Vessels.

Enforcement (1) The master of a ship must ensure that harbour directions are complied with. (2) Breach of subsection (1) without reasonable excuse is an offence. (3) A person guilty of the offence is liable on summary conviction to a fine not exceeding level 4 on the standard scale

3) Nature of Special Direction

Category	Tick / Details
Navigation / Movement (e.g., route, speed, timing)	
Berthing / Mooring / Anchorage	
Traffic Management (e.g., one-way, exclusion zone)	
Safety / Emergency (e.g., fire, medical, structural risk)	
Pollution Control / Environmental Protection	

4) Detailed Instruction(s)

5) Effective Period

Start Date		Start Time	
End Date		End Time (Local/UTC)	

6) Supporting Measures / Conditions

Pilotage / Escort Tug(s)	
Towage / Linesmen / Mooring Support	
Under-keel clearance / Draft restrictions	
Weather / Tide / Visibility conditions	
Notifications (VTS, Port Ops, HM Coastguard, etc.)	
Risk Assessment / Permit reference	

7) Communication & Service of Direction

Served To (Name/Role)		Method (VHF/Phone/Email/In person)	
Date/Time Served		By (Officer name)	
Acknowledgement (Yes/No)		Channel / Recording Ref.	
If refused / non-compliance detail		Escalation (police, detain, etc.)	
Witness(es)		Evidence (photos/video/log)	

8) Closure / Outcome

Compliant (Yes/No)		Actual completion date/time	
Incidents / Near misses / Pollution		Report references	
Reviewed by (Harbour Master / Supervisor)		Date of review	

9) Distribution

VTS / Marine Services / Harbour Master	
Agent / Owner / Master	
Towage / Pilotage / Terminal	
Regulators (Coastguard/Environment)	
Other (specify)	

10) Authorisation & Signature

Issued by (Name/Role)		Signature	
Approved by (Harbour Master / Delegate)		Date	
Notes		File/Record Ref.	

3. Navigation Risk Assessment

Gross Risk (Worst case without controls)					**Net Risk** (with existing controls)				**Future Net Risk** (with future controls in place)				
Hazard	**Consequences**	*Impact/Severity*	*Likelihood*	Gross Risk	**Existing Controls**	Severity/Impact With existing controls	Likelihood With existing controls	Net Risk Rating	**Additional Controls**	**Control Owner**	Severity/Impact With future controls	Likelihood With additional	Future Net Risk
Collision with other vessels	Injury to harbour users, Injury to vessel crews, Loss of one or both vessels Damage to one or both vessels, Environmental damage, Navigation impacted, Financial impact, Reputational impact.	4	5	**20**	Collision Regulations apply, Byelaws enforced, All vessels required to be licenced and insured, VHF communication on working channels, Oil Spill Response plan. Emergency Plan, Vessels in excess of 24 m required to gain permission from HA before moving, Pilotage Directions, Pilotage service provided, Notices to Mariners, Navigation Risk Assessment, Emergency plans formulated, Traffic control system in place at seaward approach to entrance lock. All reported	3	2	**6**	Continued review of best practice, Annual review of Navigation Risk assessment or when there is an incident, All reported Incidents investigated and investigations closed	Harbour Master	3	2	**6**

					collisions and near misses investigated.								
Passenger boat operations	Injuries to passengers embarking/disembarking, Injuries to crews, Environmental damage, Damage or loss of vessel/s, drowning as a consequence of emersion.	3	5	15	Commercial vessels licenced to carry in excess of 12 surveyed by the MCA, Skippers of vessels licenced to carry in excess of 12 passengers are qualified Boat masters with local knowledge, Commercial vessels licenced to carry less than 12 passengers conform to the Small Passenger Boat Safety Code, MOB procedures in place. Life rafts (where applicable), and life rings carried, All passenger boat companies maintain their own Safety Systems.	2	2	4					
Dangerous Vessels	Vessel foundering/sinking in harbour, Environmental damage, Reputational damage, Closure of navigation, Financial impact.	3	2	6	Dangerous Vessels Act 1985, Dangerous vessels not permitted to enter harbour (unless HA overruled by SoS Rep), Oil Spill Response Plan, BCC Emergency Plans.	3	1	3					
Dangerous Goods	Hazmat Incident due to dangerous goods, Loss of life Loss of vessel, damage to docks infrastructure, Loss of use of water and quaysides, Reputational damage. Finances impacted. Environmental damage,	5	2	10	Dangerous Goods Act 2016, Vessels carrying dangerous goods not permitted into harbour, Avon Fire and Rescue would respond to a dangerous goods incident as they would for any Haz Mat incident, BCC Emergency Plans.	5	1	5	Continued reviewing of Safety Systems	Harbour Master	5	1	5
Collision with Docks structures	Injury to vessel crews and passengers, Loss of vessel, Damage to vessel, damage to				Pilotage regulations, Pilotage service provided, Docks structures charted, Air draft				Continued reviewing of Safety Systems,	Harbour Master			

	docks assets, Environmental damage, reputational damage	4	3	12	heights on all bridges promulgated, Navigation aids in place and maintained, Traffic control system in place at seaward approach to entrance lock. Oil Spill Response Plan. Marine Incident Plan. Plan. All reported collisions and near misses investigated.	4	2	8			4	2	8
Large Vessel Movement	Death/injury as a result of collision with smaller vessels, Damage to docks assets, Damage to environment Reputational damage. Environmental damage.	5	3	15	Pilotage Regulations, Pilotage service provided, Passage plans discussed and agreed before commencing move, Escort provided for vessels in excess of 24 m, Tug/Push boat provided, Commercial operators made aware of move, destination berth confirmed as clear. Towage Service available. Oil Spill Response Plan.	5	2	10	Continued reviewing of Safety Systems	Harbour Master	5	2	10
Fire onboard vessel underway	Loss of life. Injury. Loss of vessel. Fire spreading to other vessels and docks structures. Explosion. Environmental impact. Reputational impact. Financial impact.	5	2	10	Marine Incident Plan. BCC Emergency Incident Plan. Avon Fire and Rescue on water capabilities. Harbour Authority staff instructed not to attempt to fight fire.	4	2	8	Continued reviewing of Safety Systems	Harbour Master	4	2	8
Grounding of Vessel	Damage to vessel. Closure of Navigation. Reputational damage. Financial impact. Environmental damage.	2	4	8	Pilotage regulations. Pilotage service provided. Regular hydrographic surveys. Changes to depths identified by surveys passed to UKHO. Dangers to navigation published in NTM's. Dredging where surveys identify an issue. Oil Spill Response Plan.	2	2	4	Continued reviewing of Safety Systems	Harbour Master	2	2	4

4. Public Moorings Risk Assessment

Gross Risk (Worst case without controls**)**					**Net Risk** (with existing controls)				**Future Net Risk** (with future controls in place)				
Hazard	**Consequences**	*Impact/Severity*	*Likelihood*	Gross Risk	**Existing Controls**	Severity/Impact With existing controls	Likelihood With existing controls	Net Risk Rating	**Additional Controls**	**Control Owner**	Severity/Impact With future controls	Likelihood With additional	Future Net Risk
Slips trips	Muscular skeletal injuries	3	2	6	Regular quayside patrols, Pontoon inspections	3	1	3		HM	3	1	3
Immersion	Drowning Fatality	5	2	10	Quay edge protection, Life rings, Grab Chains, Ladders to assist exit from water. Water Safety Partnership Forum meetings. Review of MAIB reports.	4	2	8	Continued review of risk assessments, maintaining inspection routines.	HM	4	2	8
Fire/Explosion	Burn injury/Fatality. Loss of vessels Damage to Pontoons, Financial impact, Environmental impact	5	3	15	Permanent vessels have boat safety certificates and 3rd party insurance, Fire Extinguishers on pontoons, checked and maintained. Avon Fire and Rescue on water capability. Review of MAIB reports. Oil spill	5	2	10	Continued review of risk assessments, maintaining inspection routines.	HM	5	2	10

					response plan. Docks Incident Plan.								
Electrocution	Injury/Fatality	5	2	10	Industry standard maintained for electrical supplies. Armoured cables specified for use with electrical supplies.	5	1	5	Continued review of risk assessments, maintaining inspection routines.	HM	5	1	5
Structural failure of pontoon/brow	Muscular skeletal injuries Reputational damage	3	2	6	Regular Pontoon inspections undertaken, looking at decking, fixings, and moorings	3	1	3					
Fall from height onto deck of vessel	Muscular skeletal injuries	3	2	6	Quay edge protection. Low freeboard vessels not moored on high quay walls.	3	1	3					
Sinking of vessel	Loss of vessel, damage to pontoon, environmental impact, exposure to recovery/clean-up cost	2	4	8	Regular patrols checking vessels, licencing of vessels depends on condition, data base of owners used to contact in the event of taking on water, emergency pumps available to HM staff, Oil Spill Response Plan. Owner pursued for cost of recovery. Wreck insurance held by Harbour Authority	1	2	3					

5. Large Towage Risk Assessment

Gross Risk (Worst case without controls)					**Net Risk** (with existing controls)				**Future Net Risk** (with future controls in place)				
Hazard	**Consequences**	*Impact/Severity*	*Likelihood*	Gross Risk	**Existing Controls**	Severity/Impact With existing controls	Likelihood With existing controls	Net Risk Rating	**Additional Controls**	**Control Owner**	Severity/Impact With future controls	Likelihood With additional	Future Net Risk
Girting	Loss of Life. Injury. Loss of vessel. Environmental damage. Reputational impact. Financial impact. Environmental damage.	5	3	15	Trained competent experienced staff. Life Jackets not worn in Albion work boat cabins while towing. Authorised Pilots used for compulsory pilotage moves. Gobs applied. All involved agreed tow plan. Communication by VHF. Crew member standing by to release tow line. Oil Spill Response Plan	5	2	10	Continued review of best practice.	Harbour Master	5	2	10
Collision with moored vessels or quaysides	Loss of Life. Injury. Loss of vessels damage to vessels. Environmental damage. Reputational impact.	5	4	20	Trained competent experienced staff. Authorised Pilots used for compulsory pilotage moves. Gobs applied. All	5	2	10	Continued review of best practice.	Harbour Master	5	2	10

	Financial impact. Environmental damage.				involved agreed tow plan. Areas where lack of steerage and available space recognised and risk mitigated (push boats and removal of moored vessels as necessary). Destination berth confirmed clear. Oil Spill Response Plan								
Windage of Towed vessel exceeds Bollard Pull of tow vessel	Loss of Life. Injury. Loss of control of tow Collision. Loss of vessel. Damage to vessel. Reputational impact. Financial impact. Environmental damage.	5	3	15	Large towage not undertaken in weather conditions that would overwhelm bollard pull with windage of tow (typically winds in excess of 12 knots). Oil Spill Response Plan	5	2	10	Continued review of best practice	Harbour Master	5	2	10
Collision with other vessels underway	Loss of Life. Injury. Loss of vessels damage to vessels.. Reputational impact. Financial impact. Environmental damage.	5	3	15	All commercial operators informed of tow and marshalled around evolution. Escort boat in attendance. Activity groups removed from area. Leisure users controlled by escort boat. Oil Spill Response Plan	5	2	10	Continued review of best practice.	Harbour Master	5	2	10
Mechanical breakdown of tow vessels or swing bridges	Collision with moored vessels or quaysides. Tow unable to reach destination berth.	5	3	15	Plant maintained. Emergency berths identified.	5	2	10	Maintain plant as required.	Harbour Master	5	2	10
Ropes under tension	Parting of lines. Serious injury. Loss of control of tow. Collision with quayside. Collision with other vessels.	4	3	12	Trained competent experienced staff. All involved agreed tow plan. Communication by VHF.	4	2	8	Continued review of best practice,	Harbour Master	4	2	8
Bights and coils	Entrapment. Serious injury.	4	3	12	Trained competent experienced staff. Decks kept clear.	4	2	8	Continued review of best practice,	Harbour Master	4	2	8

6 Large Vessel Movement Risk Assessment

Gross Risk (Worst case without controls)					**Net Risk** (with existing controls)				**Future Net Risk** (with future controls in place)				
Hazard	**Consequences**	*Impact/Severity*	*Likelihood*	Gross Risk	**Existing Controls**	Severity/Impact With existing controls	Likelihood With existing controls	Net Risk Rating	**Additional Controls**	**Control Owner**	Severity/Impact With future controls	Likelihood With additional	Future Net Risk
Narrow navigation channels	Lager vessels constrained by their size.	5	3	15	Compulsory Pilotage for vessels in excess of 50 m using authorised Pilots with proven local knowledge. Escort and push boat provided for larger vessels (>24m).	5	2	10	Continued review of risk assessments, and working practices.	Harbour Master	5	2	10
Collision with Docks structures	Loss of life. Injury Loss of vessel. Damage to vessel. Damage to Docks Structures. Closure of bridges. Financial impact. Reputational Damage	5	4	20	Compulsory Pilotage for vessels in excess of 50 m using authorised Pilots with proven local knowledge. Escort and push boat provided for larger vessels.	5	2	10	Continued review of risk assessments, and working practices.	Harbour Master	5	2	10
Collision with commercial traffic	Loss of life. Injury Loss of vessel. Damage to vessel. Damage to Docks Structures. Closure of bridges. Financial impact. Reputational Damage	5	4	20	Commercial traffic have a listening watch on CH 73/14. Operators contacted prior to movement. Escort vessel directs commercial traffic around large vessel.	5	2	10	Continued review of risk assessments, and working practices	Harbour Master	5	2	10

Collision with leisure traffic	Loss of life. Injury Loss of vessel. Damage to vessel. Damage to Docks Structures. Closure of bridges. Financial impact. Reputational Damage	5	4	20	Activity providers informed of movement and their groups cleared from water. Other leisure users directed by escort vessel. Consideration given to second escort in peak times.	5	2	10	Continued review of risk assessments, and working practices	Harbour Master	5	2	10
Insufficient steerage	Increased likelihood of collision	5	3	15	Push boat in communication with Master/Pilot and standing by when needed.	5	2	10	Continued review of risk assessments, and working practices	Harbour Master	5	2	10
Miscommunication	Increased likelihood of collision	5	3	15	Passage plan discussed and agreed before commencing. Communication on CH73/14	5	2	10	Continued review of risk assessments, and working practices	Harbour Master	5	2	10

7. Locking Services Risk Assessment

Gross Risk (Worst case without controls)					**Net Risk** (with existing controls)				**Future Net Risk** (with future controls in place)				
Hazard	**Consequences**	*Impact/Severity*	*Likelihood*	Gross Risk	**Existing Controls**	Severity/Impact With existing controls	Likelihood With existing controls	Net Risk Rating	**Additional Controls**	**Control Owner**	Severity/Impact With future controls	Likelihood With additional	Future Net Risk
Insufficient water over sill	Damage to vessel, damage to sill. Suspension of locking services, Financial impact, reputational impact	3	3	9	Competent trained staff, Lock depth gauge. River depth gauge.	3	1	3					
Vessels getting hit by moving gates	Damage to vessel, Damage to mitre, Suspension of locking services, Financial impact, Reputational impact	3	4	12	Competent trained staff, Direct communication with vessels (face to face and Ch14), Vessel moored out of gate arcs.	3	2	6	Continued review of best practice and staff training	Harbour Master	3	2	6
Vessel grounding in approaches to entrance lock	Damage to vessel, Loss of propulsion.	2	2	4	Tide times published, Hydrographic surveys. Depths charted, Dredging and scouring operations to maintain depths, Competent trained staff able to assist vessel as necessary, incoming tide will refloat vessel	2	1	3	Continued review of best practice and staff training	Harbour Master			

Vessels getting hung up in dropping lock	Serious injury, Damage to vessel.	3	4	12	Competent trained staff, Direct communication with vessels (face to face and Ch14), Skippers alerted to impending drop down, Vessels checked to have lines of sufficient length, A good watch maintained on crews tending their lines, Staff standing by to close sluices if a problem arises, Lock refilled to alleviate problem, Knives carried by staff.	3	2	6	Continued review of best practice and staff training.	Harbour Master	3	2	6
Large vessel damaging smaller vessels in lock	Loss of life, Serious injury, Loss of smaller vessels, Damage to smaller vessels, Reputational impact, environmental impact.	5	3	15	Competent trained staff, Direct communication with vessels (face to face and Ch14), Supervisor dictates the order of craft entering and leaving the lock, with large vessels entering first and leaving last.	5	2	10	Continued review of best practice and staff training	Harbour Master	5	2	10
Collision at lock entrance	Loss of life, Injury, Loss of vessel, Damage to vessel, Environmental impact, Reputational impact, adverse media attention	5	3	15	Collision Regs, Competent trained staff, Direct communication with vessels (face to face and Ch14), Traffic light system at seaward entrance to lock, Staff dictate the timing and manner of vessels entering and leaving Cumberland Basin, All craft exiting lock cleared before permitting entering craft in, Advice for boaters available.	5	2	10	Continued review of best practice and staff training	Harbour Master	5	2	10
Bridge strikes	Loss of life, Injury, Loss of vessel, Damage to vessel, Loss of Bridge, Damage to bridge, traffic disruption,	5	3	15	Competent trained staff, Direct communication with vessels (face to face and Ch14), Vessels requiring	5	2	10	Continued review of best practice and staff training	Harbour Master	5	2	10

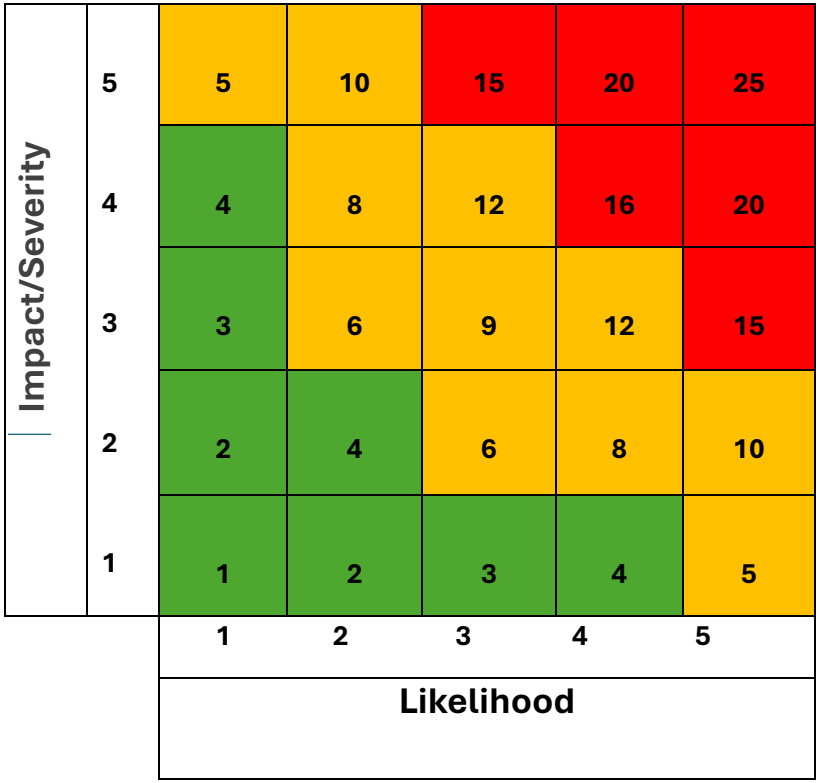
	Financial impact, reputational damage, Environmental impact				bridge swings proceed only when bridge is fully open, Bridge heights published, Advice for boaters available.								
Excessive turbulence in lock	Damage to vessel, Reputational impact.	2	3	6	Competent trained staff, Awareness of the turbulence especially at the start of tidal operations when the lock is low. Sluices not fully opened when there are vessels in the vicinity that may be affected.	2	2	4					
Hydraulic pipe failure	Environmental impact, interruption to locking services. Financial impact	2	3	6	Planned maintenance program, Oil spill response plan. Emergency call out engineer. Communication with affected vessels, NTM issued if subsequent tides are impacted	2	2	4					
Crowds of spectators as a result of interest in a large vessel	Immersion, entrapment in mooring ropes, serious injury, Reputational injury	3	2	6	Working area kept clear using physical barrier (cones and hazard tape) Behaviour of spectators closely monitored	3	1	3					
Obstruction on sill preventing closure of lock gates	Interruption to locking services, Financial impact.	2	2	4	Communication with affected vessels, competent trained staff, If obstruction cannot be cleared, Divers contracted to clear, NTM issued if subsequent tides are impacted	2	2	4					

8. Ship Assist Tow Risk Assessment

Gross Risk (Worst case without controls)					**Net Risk** (with existing controls)				**Future Net Risk** (with future controls in place)				
Hazard	**Consequences**	*Impact/Severity*	*Likelihood*	Gross Risk	**Existing Controls**	Severity/Impact With existing controls	Likelihood With existing controls	Net Risk Rating	**Additional Controls**	**Control Owner**	Severity/Impact With future controls	Likelihood With additional	Future Net Risk
Work boat getting run over by vessel under power.	Loss of life. Loss of vessel/s. Damage to vessels. Reputational damage. Financial impact. Environmental damage.	5	4	20	Trained competent experienced staff. Authorised Pilot on Compulsory Pilotage criteria vessels. Discussion between Pilot Master, and Skipper of work boat, establishing clear plan of evolution, destination, limitations of equipment and expectations. Communication throughout by VHF.	5	2	10	Continued review of risk assessments, and working practices	Harbour Master	5	2	10
Collision with other water users	Loss of life. Loss of vessel/s. Damage to vessels. Reputational damage. Financial impact. Environmental damage.	5	4	20	Trained, competent experienced staff. Escort boat provided. Commercial operators warned of vessel movement. Communication with other users by VHF and face to	5	2	10	Continued review of risk assessments, and working practices	Harbour Master	5	2	10

					face. Activity groups removed from water.								
Collision with Docks structures	Loss of life. Loss of vessel/s. Damage to vessels. Reputational damage. Financial impact. Closure of road and pedestrian Bridges. Environmental damage.	5	4	20	Trained competent experienced staff. Authorised Pilot on Compulsory Pilotage criteria vessels. Discussion between Pilot Master, and Skipper of work boat, establishing clear plan of evolution.	5	2	10	Continued review of risk assessments and working practices.	Harbour Master	5	2	10
Girting	Loss of life. Loss of vessel. Financial impact. Reputational Impact. Environmental damage.	5	4	20	Trained competent experienced staff. Authorised Pilot on compulsory pilotage criteria vessels. Discussion between Pilot, Master, and Skipper of work boat, establishing clear plan of evolution. Communication on VHF. Gobs used on work boat. **Work boat will not run with vessel with line attached**. In the event that a vessel needs towing off of berth, lines will be detached before vessel moves off.	5	2	10	Continued review of risk assessments, and working practices.	Harbour Master	5	2	10
Immersion	Drowning. Hypothermia.	4	2	8	Competent trained staff. Ability to swim. Life jackets worn.	1	1	1					
Miscommunication	Increased exposure to hazards above.	5	4	20	Trained competent experienced staff. Authorised Pilot on Compulsory Pilotage criteria vessels. Discussion between Pilot Master, and Skipper of work boat, establishing clear plan of	5	2	10	Continued review of risk assessments, and working practices.	Harbour Master	5	2	10

					evolution. Contingency plan discussed. Communication VHF								



	>14	Risk Unacceptable
	5 to 14	Review risk control measures
	<5	Risk likely to be acceptable – but review to ensure that risk is as low as reasonably practicable

Impact/Severity

Impact Score	Health and Safety Definitions
5	**Catastrophic -** Fatality/fatalities (RIDDOR reportable), Total loss of equipment/property. Loss of harbour, Significant long lasting environmental impact requiring assistance from retained contractors, and other agencies, Local residents evacuated, Prolonged suspension of operations, Services terminated. Prolonged adverse national media attention. Financial impact sufficient to cause long lasting BCC budget pressure.
4	**Major** – Major (possibly life changing) injury (RIDDOR reportable), Multiple people injured. Serious damage to equipment/property putting it out of action for significant period, Significant environmental impact requiring assistance from retained contractors, and other agencies. Services stopped, Navigation blocked, prolonged disruption, Adverse national media attention. Financial impact requiring HA request for additional funding from BCC.
3	**Serious** –Serious injury (RIDDOR reportable), Moderate damage to equipment/property (possible down time), Moderate environmental impact that can be dealt with by duty staff and in house resources, Services disrupted with navigation and or locking services impacted. Adverse local media attention, Financial impact manageable with normal funding, or covered by insurers.
2	**Minor** – Minor injury (non-RIDDOR reportable), minor equipment/property damage, Small environmental impact easily dealt with, Short disruption to services, No media attention, Negligible financial impact.
1	**No injury** – near miss

Likelihood Score		Health and Safety Definitions
5	**Certain**	No safeguards, known instances of injury, task carried out frequently several times per hour
4	**Highly Likely**	Relies solely upon training and awareness of individual
3	**Strong possibility**	Provision of PPE and training.
2	**Possible**	Safe Systems of work, training in force, single safeguard
1	**Unlikely**	Due to physical safeguards no known occurrence of failure, tasks carried out very infrequently