



Arbroath Harbour

Marine Safety Management System (MSMS)

Version 3 / January 2024



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Version Control

Date	Version	Update Reason	Author	Duty Holder Briefing
31/05/21	1.0	Overhaul of MSMS for 2021	Bruce Fleming	23/11/21
31/05/22	2.0	<ul style="list-style-type: none"> Additional roles added in section 1.6 and 1.7 Incident Reporting Procedure updated SPA and SSSI information added in section 3.3.5 Delegation of Powers added in section 4.1.1 The use of CCTV deleted from section 4.4.1 Appendix 2 - Training Matrix updated Organogram updated in Appendix 1 	Bruce Fleming	22/11/22
31/05/23	3.0	<ul style="list-style-type: none"> In section 3.4, Section 40A changed to Section 48A The absence of VTS detailed in section 4.4.1 and more details on navigation within harbour limits added Speed limit added in section 4.4.2 Amendments made to the Training Matrix 	Bruce Fleming	16/01/24

Document owner:
 o Harbour Master, Arbroath Harbour

Executive Summary

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 authored by the UK Government, supported by the devolved administrations and representatives from across the maritime sector and, whilst the Code is not mandatory, these bodies have a strong expectation that all organisations will comply. The Code is applicable both to Statutory Harbour Authorities and to organisations that own and operate marine facilities.

This 'Marine Safety Management System' (MSMS) has been produced to detail how Angus Council, operating Arbroath Harbour, meets the requirements of the Code for its Statutory Harbour Authority area of operation and its approaches. Within this MSMS the harbour is identified as the 'Arbroath Harbour'.

This MSMS has been created with reference to the latest version of the Code and its accompanying 'Guide to Good Practice' (GtGP) on Port Marine Operations.

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PMSC Section Name	PMSC Subject Heading	PMSC Paragraph Reference	GtGP Reference	Document Page
1. Accountability for Marine Safety	Duties and Powers	1.3 – 1.5	1.3 – 1.4	13
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	Implement a MSMS	2.12 – 2.17	Section 5	18
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MSMS: Distribution List

A controlled copy of the MSMS is kept electronically on the Angus Council network	
The Harbour Master will advise the following parties of any changes to the policy document by email.	
1	Duty Holder
2	Harbour Master
3	Designated Person
4	Briggs Marine and Environmental Services Ltd.

Section 1: Accountability

1.1 Harbour Authority

1.1.1 Harbour Origins

Arbroath or Aberbrothock is the largest town in the council area of Angus in Scotland. It is located 16 miles north east of Dundee and 51 miles south of Aberdeen. Historic evidence indicates that there was some form of harbour at the mouth of Brothock Burn in Pictish times. It is known that a wooden pier had been built at Arbroath by 1194 and the first harbour, known as the Abbot's Harbour, was built in 1394 by Abbot John Gedy. It stood until 1706 when it was destroyed in a gale, another harbour was constructed around 1734. The foundation of the enlarged harbour was reconstructed by James Leslie in 1839 and was completed with the opening of the wet dock in 1877. By the 20th century, Arbroath had become one of the larger fishing ports in Scotland. Arbroath's name comes from its position at the mouth of the Brothock Burn. Through much of its history the town was called 'Aberbrothock', by the early 1600s the town's name had been shortened to its current form 'Arbroath'.

1.1.2 Harbour Description

Arbroath Harbour is used by commercial shellfish fishing boats, commercial vessels offering day trips to anglers and sightseers, a boat builder, plus recreational craft including yachts and powerboats. Arbroath Harbour is a tidal harbour with a fish market built on the pier between two basins. The basins are split into the inner harbour which is a rectangular wet dock formerly the old harbour and the outer harbour, or new harbour, formed as a rectangular tidal basin

The inner harbour is currently arranged with a 59-berth marina using floating pontoons. The inner harbour dock walls provide for berthing of commercial fishing vessels, workboats and larger recreational craft which raft to the maximum allowable space. Half height dock gates with a walkway are located between the inner and outer harbours, which open and close at half-tide, maintaining a minimum of 2.0 m of water in the inner harbour.

The outer harbour is an open tidal basin with its entrance facing a south west directly and angled to provide protection from wave conditions. The harbour pier forms the perimeter wall of the dock, separating the open sea from the dock basin. This pier is known as the south breakwater and has a roadway and provides for access along the quay face. The outer harbour quay walls provide berthing over the high-water period and for any vessels where it is safe to lay aground at low water. A mechanical patent slipway is available in the Outer Harbour, which can pull vessels of up to 30.4 m (100 feet) and maximum weight of 120 tonnes. There is a two-leafed bascule bridge over the entrance to the patent slip providing pedestrian access. Angus Council also own and operate a Wise Boat Hoist which can lift vessels in and out of the water up to a limit of 25 tonnes. The slipway, although owned and operated by Angus Council is used by Mackay Boatbuilders to slip and launch boats which has operated in Arbroath since 1967.

Separate to the harbour basins is the West Breakwater, which provides additional protection from wave conditions for any vessels making entry to the outer harbour. The breakwater and foreshore lay within the harbour limits; this area is the location of the RNLI slipway (launching the Mersey Class

and D Class lifeboats) and an amenity slip with public access to the foreshore. The outer harbour almost dries at low water springs, as does the area behind the West Breakwater which is almost entirely drying at low water springs.

The approach to Arbroath Harbour follows a leading line at 299° True (T) marked by two fixed red leading lights which have a range of five Nautical Miles (NM). The outer end of the channel is approximately three cables seaward of the harbour entrance. The normal method for entering the harbour is to stay offshore, to avoid the rocky shore, until lined up on the leading line. Once inside the harbour breakwater and adjacent to the outer harbour entrance, a sharp turn to starboard is executed once past the end of the pier. See Figure 1 for Admiralty chart extract.

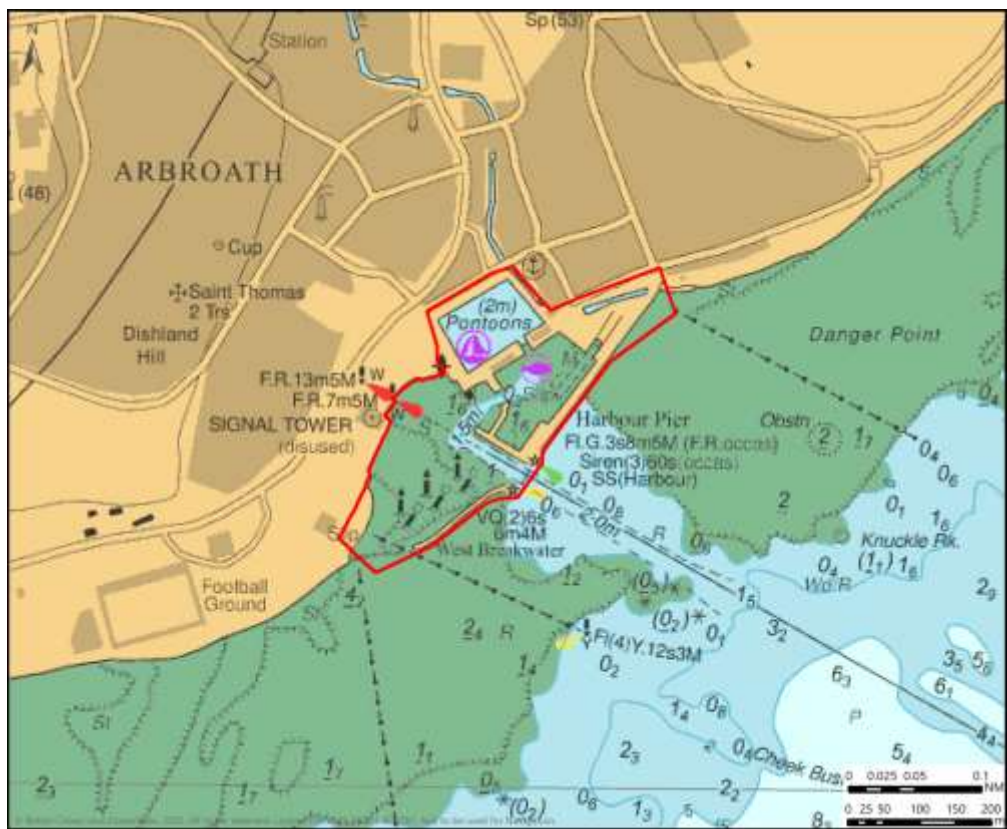


Figure 1 Limits Shown on Admiralty Chart



Figure 2 Limits Ordnance Survey



Figure 3 Limits Shown on Aerial image

1.1.3 Harbour Authority Status

Angus Council is the Statutory Harbour Authority (SHA) for Arbroath Harbour through the provision of the 'Arbroath Harbour Acts and Order 1839 to 1919'. Angus Council is also the Local Lighthouse Authority (LLA) with respect to aids to navigation by virtue of Section 193 of the Merchant Shipping Act 1995. The harbour is a Municipal Harbour Authority, being owned and operated by the Council. The Harbour Undertaking was transferred to the Town Council by the 'The Arbroath Harbour Order Confirmation Act 1919' with the dissolving of the previous Trustees property, powers, authorities, privileges, rights, jurisdictions, obligation, and exemptions. Angus Council is not a Competent Harbour Authority (CHA) with respect to Pilotage.

Arbroath Harbour's limits are set out in 'The Arbroath Harbour Order Confirmation Act 1919', Section 11 which describes the prescribed limits. This states that: *"The limits within which the Town Council shall have authority and within which the power of the Harbour-Master and the power to levy rates may be exercised are embraced by a line ...[text defining the limits of the order]"*. This are is shown in Figures 1, 2 and 3.

Outside of the SHA limits, the Competent Authority with respect to marine and navigational safety is the Maritime and Coastguard Agency (MCA). For Aids to Navigation the Competent Authority is the Northern Lighthouse Board (NLB) in its role as General Lighthouse Authority.

1.2 Duties and Powers

Angus Council's duties and powers are provided in its local legislation, as contained in the 'Arbroath Harbour Acts and Order 1839 to 1919', plus obligations drawn from the inclusion of the Harbours, Docks and Piers Clauses Act 1847 into Arbroath Harbour acts and orders. As a SHA, Angus Council recognises its statutory duties in relation to safe and efficient port marine operations. This includes the Council's duty of care to those using the harbour which is recognised as an obligation to conserve and facilitate the safe use of the harbour. Appendix 1 details Angus Council's Organogram with respect to marine safety.

1.3 The Duty Holder

Angus Council, as the owner and operator of the Arbroath Harbour, acknowledges its responsibilities for marine safety, including adherence to the standard set out in the Code. The Code requires all organisations to confirm who the Duty Holder is. Arbroath Harbour confirms that the Communities Committee is the Duty Holder for the marine aspects of Arbroath Harbour and is therefore accountable for compliance with the Code. Appendix 1 details Angus Council's Organogram with respect to marine safety.

To comply with the Code, the Duty Holder on behalf of Angus Council will:

- Comply with the duties and powers under existing legislation, as appropriate.
- Attend as regularly as necessary, PMSC awareness training to understand the organisation's powers and duties related to marine safety.
- Ensure that a suitable MSMS, which employs formal safety assessment techniques, is in place.

- Ensure adequate resources and support is available for the discharge of duties and responsibilities relating to marine safety.
- 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 'safety plan for marine operations and report performance against the plan's objectives.
- Report compliance with the Code to the Maritime and Coastguard Agency every three years.

1.4 The Designated Person

The PMSC requires that organisations appoint a Designated Person to oversee the organisations obligations with respect to the provision of an effective MSMS. The function of the Designated Person is to provide independent assurance directly to the Duty Holder that the MSMS is working effectively. To fulfil this requirement, the Designated Person needs to have direct access to the Duty Holder.

To comply with the Code, the Designated Person for Angus Council will:

- Determine through assessment and audit that Arbroath Harbours has an effective and appropriate Marine Safety Management System. This will be conducted as an annual audit, with the output provide as a written report to the Duty Holder.
- Monitoring the thoroughness of the marine risk assessment process and the validity of the assessment conclusions.
- Monitoring the thoroughness of the incident reporting and any subsequent investigation to confirm the validity of the investigation conclusions.

1.5 Chief Executive

The Chief Executive is accountable for the operational and financial control of the Council. The Chief Executive will advise the Council on all matters related to its duties and powers, with appropriate advice from other officers.

The Chief Executive will:

- Oversee the implementation of its policies and decisions.
- Have overall executive responsibility for the safety of operations and staff.
- Have overall executive control on financial decisions.

1.6 Director of Infrastructure and Environment

Overall responsibility for the delivery of policies and financial decisions relating to Angus Council infrastructure and environment.

1.7 Service Leader - Roads and Transportation

Overall responsibility for the delivery of policies and financial decisions for roads and transportation, of which Arbroath Harbour is part.

1.8 Harbour Master

The Harbour Master is accountable to the Duty Holder for the discharge of the role in accordance with the standard of the Code. The appointee is responsible for delivering the Marine Safety Policy. The Harbour Master's duties in respect of marine safety include:

- Monitor all matters related to marine safety.
- Manage and update the Marine Safety Management System (MSMS).
- Bring to the attention of the Duty Holder any resources and support required to maintain standards of marine safety. Subsequently, identify areas where extra resourced are required and bid for funding.
- Ensure marine risk assessments are in-date and reviewed in line with industry best practice.
- The recording and proportionate investigation of marine incidents/accidents.
- Ensure reviews and audits of the MSMS are conducted and report on this to the Duty Holder.
- Ensure that all staff with marine safety responsibilities and duties are trained in accordance with the safety training and familiarisation procedures, using accredited competence standards where appropriate.
- Comply with the directions from the General Lighthouse Authorities (the Northern Lighthouse Board) and supply information and returns as required.
- Undertaking Harbour safety inspections, including the checking of Aids to Navigation.
- Programme hydrographic surveys and dredging in consultation with the operational requirements.
- Carry out formal and informal liaison with harbour stakeholder groups as required by the Council

1.9 The Organisations Officers

Other officers of the organisation with marine safety responsibilities include the Harbour Master, the Senior Harbour Assistant, and the Harbour Assistants.

They are responsible for:

- Identifying and proposing solutions to any hazards to safe berthing and safety in the workplace.
- The reporting of any harbour or marine incidents/accidents.
- Participation in Oil Spill Response & Emergency Response (including exercises).
- Undertaking maintenance of equipment/machinery in accordance with published schedules.
- Contribute towards maintaining harbour user marine safety awareness.

Section 2: Key Measures

2.1 Review Existing Powers

2.1.1 National Legislation

General legislation provides a range of duties and powers that as a SHA, Angus Council understands and applies within its approach to managing the harbour undertaking, this includes (but is not limited to) the following:

- Civil Contingencies Act 2004
- Dangerous Vessels Act 1985
- Harbours Act 1964
- Harbours, Docks and Piers Clauses Act 1847
- Health and Safety at Work Act 1974
- Marine Navigation Act 2013
- Merchant Shipping Act 1995
- Railways and Transport Safety Act 2003
- Pilotage Act 1987
- Wildlife and Natural Environment (Scotland) Act (2011)

2.1.2 Local Legislation

The following Acts and Order provides the SHA duties and powers:

- An Act for extending improving regulating and managing the harbour of the Royal Burgh of Aberbrothwick in the County of Forfar, 1839
- The Aberbrothwick Harbour Act, 1864
- Aberbrothwick Harbour Order, 1877
- Aberbrothwick Harbour Finance Act, 1897
- The Arbroath Harbour Order Confirmation Act, 1919.

The above orders are cited together as the 'Arbroath Harbour Acts and Order 1839 to 1919'.

2.1.3 Harbours, Docks and Piers Clauses Act 1847

The Harbours, Docks and Piers Clauses Act 1847 is included within the 'The Arbroath Harbour Order Confirmation Act, 1919' by virtue of Section 4 of the 1919 Act. This includes all sections of The Harbours, Docks and Piers Clauses Act 1847, except:

- Section 6 to 13;
- Section 16 to 19;
- Sections 23, 25, 26, 30, 32, 50, 79, 80, 93; and
- Sections 95 to 101

The Act can be viewed in full [here](#).

2.2 Marine Risk Assessment

2.2.1 Formal Risk Assessment

Angus Council applies Formal Risk Assessment (FRA) methods to its harbour operations at Arbroath Harbour. This entails carrying out Risk Assessments (RA) for any marine operation in which harbour staff must carry out and are supplemented by corresponding Safe Systems of Work (SSoW). Responsibility for the maintenance of up-to-date Risk Assessments is assigned to the Harbour Master, who ensures that all necessary competent staff and stakeholders are involved at all stages of assessment and review.

The process of assessment is continuous and reflective, so that new hazards to navigation and marine operations are identified and properly addressed. Central to the risk management process is the concept of reducing risk to a level which is considered to be 'As Low As Reasonably Practicable' (ALARP).

ALARP is an industry wide concept applying to both health and safety and port marine safety. The core concept is that of 'reasonably practicable', which involves weighing up the risk against the effort, time and money needed to control it. Angus Council has applied the ALARP principle in the FRA process with respect to each individual assessment. The purpose being, to consider if the summary risk for each hazard scenario can be reduced to a point which is both 'reasonable' and 'practicable'. ALARP is not defined as a threshold or benchmark target.

All marine risk assessments are reviewed on an annual basis. Assessments are also considered following a marine incident, which may prompt a revision to the assessment risk outcome or risk control measures.

2.2.2 Dynamic Risk Assessment

Activities undertaken at Arbroath Harbour by Angus Council employees are conducted with an ethos of continual dynamic risk assessment. Before the commencement of an activity, a toolbox talk is conducted to tie the risks identified in the FRA with any additional risk perceived due to the current conditions and external influences. The fundamental understanding of dynamic risk assessments is that any activity may be stopped at any time if a hazard is perceived as:

- Unexpected and not accounted for;
- Makes the activity more difficult than expected due to surrounding influences;
- Changes the purpose or goal of the activity; and
- Increases the time required to complete the task beyond the expected period.

The experience gathered from conducting dynamic risk assessments is utilised in the review process of FRAs and the refinement of the SSoW.

2.3 Marine Safety Management System

The Code requires all organisations, including harbour authorities, to establish and maintain a MSMS. The information and structure contained in this system, together with supporting documents, such as, marine policies, procedures and working documents produced by Angus Council provides this requirement. The system components include:

- The MSMS (this document) inclusive of Appendices.
- The Marine Risk Assessments and Accident-Incident records.
- Safe Systems of Work (SSoW)
- Emergency plans (Oil Pollution Response Plan and Emergency Response Plan).
- Personnel training records.
- Waste Management Plan.
- Infrastructure inspection records

2.4 Competence

Under the Code, all persons involved in the management and execution of marine operations should be qualified and trained to the requirements of the position. Angus Council has in place an Arbroath Harbour Marine Training Policy published on the Council's website. Appropriately trained and competent members of staff are key elements of many risk control measures and are essential in determining risks and appropriate controls from the outset. Competence assurance begins at the recruitment stage and is maintained thereafter. To assure initial competence staff should satisfy the following:

- Prior to Job Commencement: no staff member will be permitted to undertake work until the entry level criteria (as defined in the job description / vacancy advertisement) have been met.
- Induction Training: All new staff (including temporary) will receive appropriate induction training and specific job related operational and procedural training, which will be overseen and recorded by appropriate line managers.
- Competence: When all the above stages have been satisfactorily completed, the person may be considered competent.

Where possible, those with the required qualifications and experience will be employed to perform marine roles. If a suitable applicant does not hold all the relevant qualifications, a training plan will be required once employment commences. Angus Council maintains a training matrix for harbour staff. This ensures that harbour staff are suitably trained for their roles and responsibilities, allows for tracking of training received and expiry dates, and planning for refresher training as required. A Training Matrix is attached in Appendix 2.

2.5 Incident Reporting and Investigation

Following a marine accident, incident or near-miss in the harbour or its approaches, an entry is made to the Accident/Incident record. For incidents involving collision (vessel-to-vessel contact), harbour contact (impact), grounding or pollution (from a vessel), the vessel's Master must contact

the Harbour Master and provide a statement, supporting evidence and allow access for any subsequent investigation the Harbour Master may conduct.

Investigations of marine incidents have two essential purposes, these are:

- To determine the cause of the incident, with a view to preventing a recurrence of that incident (or similar).
- To determine if an offence has been committed: if so, there may be the need, on the part of the organisation, to initiate enforcement action that may lead to prosecution or through an agency of another authority such as the Police or the MCA.

All incidents that come under the remit of this procedure must be formally reported by completing an online Internal Incident Reporting form as soon as possible after the event so that an accurate account of what happened can be gained. Once completed this will then be registered with the Council's Risk, Resilience & Safety Section.

These forms can be found on the Angus Council Health & Safety Portal of the Intranet. Forms should be completed by the Harbour Master unless the incident involves a minor injury or near miss, in which case it may be done by the affected person.

Deaths, notifiable serious injuries, and injuries involving more than 7 days off work are reportable under RIDDOR where staff are involved, as are certain injuries to non-employees, some occupational diseases, and particular dangerous occurrences.

Incidents involving people not at work may also be RIDDOR reportable, if they are (1) injured because of something the Council has or has not done, and (2) needed to be taken to hospital as a result.

All non-fatal / major injury RIDDOR reportable incidents must be reported to the HSE's Incident Contact Centre, online (www.hse.gov.uk/riddor/index.htm).

RIDDOR incidents involving contractors must be reported by their own employer and not Angus Council. Where a self-employed person is working under the control of Angus Council, however, that person should be treated in the same manner as a member of staff for the purposes of this procedure.

The flow diagram in Figure 4 is used by Angus Council harbour staff to determine the course of action:

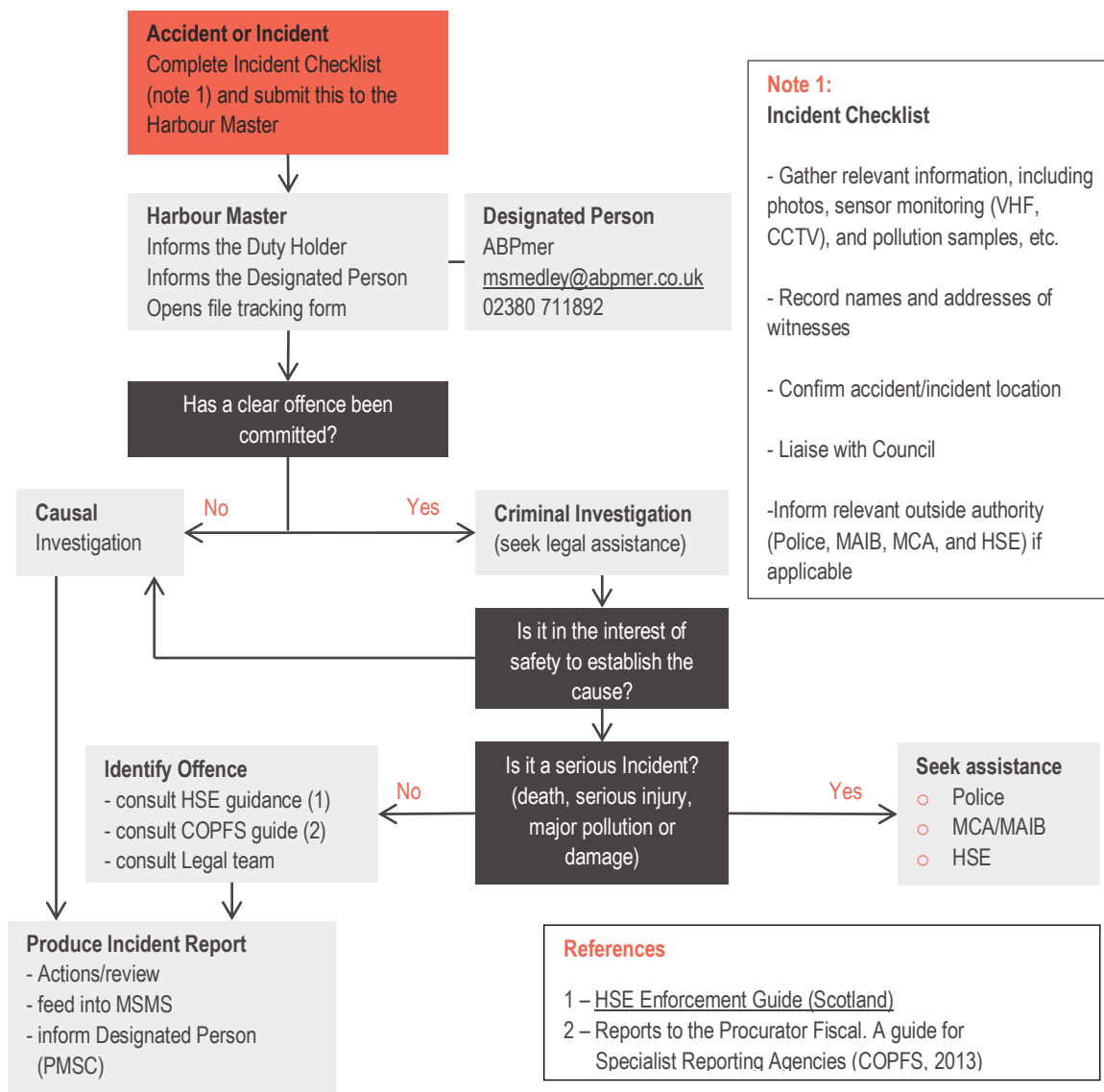


Figure 4 Accident/Incident Decision Tree

2.5.1 Reporting

Any Accident/Incident matching the reporting criteria from ‘The Merchant Shipping (Accident Reporting and Investigation) Regulations 2012’ are reported to the Marine Accident Investigation Branch (MAIB) within 24 hours.

Any quayside Accident/Incident matching the ‘Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013’ are reported to Angus Council’s Risk, Resilience and Safety Manager.

2.5.2 Investigation

Regarding marine incident investigation, the Code states: ‘by ensuring that a robust, rigorous, independent investigation has been carried out, the board and the duty holder can be assured that

their obligations for compliance has been addressed'. Investigations will be conducted in accordance with standard marine incident methodology to provide a:

- Accident/Incident synopsis.
- Narrative surrounding casualty events and accident events.
- Human factors analysis.
- A root cause analysis.
- Conclusions.
- Actions taken.
- Recommendations.

In the suspicion of an offence having been committed evidence will be collected in accordance with the Police and Criminal Evidence Act 1987 (PACE) and the investigation conducted in the interests of enforcement by the relevant authorities.

2.5.3 Incidents Involving Drugs or Alcohol

Harbour users (vessel masters and crew) accused of being under the influence of alcohol and/or drugs may be committing an offence under Part 4 of [the Railways and Transport Safety Act 2003](#). The Harbour Master has the power to detain a vessel, if he suspects that a mariner (master, pilot, seaman) has committed a drink or drugs related offence when on duty. The power can be exercised only if the Harbour Master summons a police officer before, or immediately after the vessel is detained. The power of detention lapses after the police officer has decided whether to administer a preliminary test and has notified the Harbour Master of that decision.

Byelaw 16 states that: *“No person shall navigate or attempt to navigate a vessel while unfit by reason of drink or drugs. The master of a vessel who causes or permits any person to navigate or attempt to navigate the vessel in contravention of this byelaw shall in addition to that person be in breach of this byelaw”.*

2.6 Enforcement

Angus Council, as SHA for Arbroath Harbour, is responsible for the enforcement of its regulations which are in place to manage safe and efficient port marine operations. Principally, this means enforcement of Byelaws and Directions issued by the Harbour Master and officers of the Authority with delegated powers. Angus Council has in place an Arbroath Harbour Enforcement and Prosecution Policy published on the Council's website.

The principal use for enforcement at Arbroath Harbour are:

- **Education:** education by Harbour Staff that a contravention or omission has occurred.
- **Warning:** warning by Harbour Staff that a breach of direction, byelaws or criminal act has occurred.
- **Formal Caution:** written warning from the Harbour Master or Council Official setting out the way the Direction or Byelaw has been breached and the implications should the recipient re-offend.
- **Prosecution:** in the local Magistrates Court.

2.7 Monitoring and Reporting

2.7.1 Audits

Audits will be carried out by the Designated Person or delegated officer at regular intervals. Audits conducted at Arbroath Harbour aim to meet the following objectives:

- To monitor the overall effectiveness of the system.
- To identify and implement ways of improving overall performance.
- To confirm that relevant procedures are understood and being actioned by those involved.

The Designated Person will use the results of the internal audits to monitor and report the effectiveness of the MSMS and compliance with the Code to the Duty Holder. The Duty Holder is responsible for publishing an assessment (every three years) of Angus Council's performance at Arbroath Harbour against the Marine Safety Plan. This report will draw heavily on the results of the audit process.

2.7.2 Safety Plan for Marine Operations

The Code provides detail on the way in which marine facility operators should show commitment to maritime safety and to ensuring the involvement of users. The Code requires a 'safety plan for marine operations' which should be published at least once every three years. Angus Council has in place an Arbroath Harbour Marine Safety Plan published on the Council's website.

2.7.3 MCA Compliance Statement

Every three years, the Duty Holder should write to the MCA to confirm compliance with the requirements of the Code.

2.8 Consultation and Consensus

The Code requires facilities to maintain consensus with users and stakeholder regarding marine operations. To fulfil this requirement, Angus Council conduct consultation with the Arbroath Harbour Joint Consultative Committee (AHJCC)

The AHJCC is a sub-committee of the Communities Committee (Duty Holder) and comprises of local elected members (councillors) and harbour users' representatives. The AHJCC meets three times per year when a report by the Service Leader – Roads & Transportation outlining marine operations, operational and financial, which have taken place in the preceding months and any future marine operations proposed in the coming months.

Following the meeting of the AHJCC the minute is presented to the next meeting of the Communities Committee (Duty Holder) for approval.

Section 3: Safe and Efficient Port Marine Operations

3.1 Open Port Duty

Angus Council has an Open Port Duty through the inclusion of Section 33 of the 'Harbours, Docks and Piers Clauses Act 1847' into the 'The Arbroath Harbour Order Confirmation Act, 1919'. This means that the harbour, dock, or pier must be open to anyone for the shipping and unshipping of goods and the embarking and landing of passengers, on payment of the rates and other conditions set in local legislation (i.e., the Arbroath Harbour Acts and Order 1839 to 1919).

3.2 Collection of Dues

Angus Council as the SHA for Arbroath Harbour has the powers to collect harbour dues (and make Pilotage Charges, should a Pilotage service be offered). The Authority's powers to levy dues is drawn from Section 26 of the Harbour Act 1964. The rate and dues leviable on vessels are approved by the Duty Holder biennially and published on the Council's website. Other services offered by the Council are subject to sundry charges also approved by the Duty Holder and published on the Council's website.

3.3 Conservancy

Angus Council as the SHA for Arbroath Harbour has a duty to conserve the harbour. This means that the Council will ensure it is fit for use as a harbour and a duty of reasonable care is in place to see that the harbour is in a fit condition for a vessel to utilise it safely. Angus Council has in place an Arbroath Harbour Marine Safety Plan published on the Council's website.

Under the 'Marine Scotland Act 2010' Scottish Ministers are responsible for marine licensing and enforcement in the Scottish Inshore Region (out to 12 nautical miles). This includes waters of estuaries and tidal rivers, as far as the tide flows from the Mean High Water Spring (MHWS). Marine Scotland is responsible for the integrated management of Scottish waters alongside Scottish Natural Heritage (SNH) and the Scottish Environment Protection Agency (SEPA). Marine Licensing is managed by the Marine Scotland Licensing Operations Team (MS LOT). Council liaises with MS LOT, SEPA and the UK Hydrographic Office on conservancy and environmental matters.

3.3.1 Hydrographic Survey

Angus Council has the authority to contract hydrographic survey services to chart the depths in the harbour and its approaches when required. Due to the limited degree of accretion and variance in depths, hydrographic surveys are conducted on an ad hoc basis. If any surveys are required, they will be conducted to the standard required by the International Hydrographic Office (IHO) SP44. In accordance with the Code, hydrographic records are maintained and passed to the UK Hydrographic Office (UKHO) to update their records.

3.3.2 Dredging

Where hydrographic surveys show a reduction in navigable depths or obstructions that may be a danger to navigation, maintenance dredging or seabed clearance work will be undertaken to provide a minimum safe depth for vessel navigation. Angus Council has committed to the dredging of Arbroath Harbour on an annual basis.

When required, the Harbour Authority will apply to Marine Scotland for a Licence to Deposit any Substance or Object in the Scottish Marine Area under the Marine (Scotland) Act 2010, Part 4 Marine Licencing. Dredging of the harbour and the disposal of dredged material at the designated spoil ground will only be carried out after the issue of the said licence from Marine Scotland.

3.3.3 Aids to Navigation

Arbroath Harbour is located within the Northern Lighthouse Board area of jurisdiction (the General Lighthouse Authority). Angus Council is a Local Lighthouse Authority (LLA). In agreement with the Northern Lighthouse Board, Angus Council monitors its AtoN and report availability via the LATON Reporting Online Portal (<https://nlbhq.nlb.org.uk/latononline>). Angus Council owned AtoN include the following:

Category 1:

- Fixed Red 7m 5 NM Lat. 56 33'17" N, Long. 2 35'10" W
- Fixed Red 13m 5 NM Lat. 56 33'18" N, Long. 2 35'12" W

Category 2:

- Flashing White VQ(2) 6s 6m 5 NM Lat. 56 33'13" N, Long. 2 34'59" W
- Flashing Green 3s 8m 5 NM (Flashing Red) Lat. 56 33'15" N, Long. 2 34'58" W

Category 3:

- 3x Green Poles (starboard) 5m. No lights. Lat. 56 33'12" N, Long. 2 35'08" W
Lat. 56 33'13" N, Long. 2 35'06" W
Lat. 56 33'14" N, Long. 2 35'04" W
- 3x Red Poles (port) 5m. No lights. Lat. 56 33'12" N, Long. 2 35'09" W
Lat. 56 33'13" N, Long. 2 35'07" W
Lat. 56 33'14" N, Long. 2 35'05" W

Angus Council is responsible for the monitoring and maintenance of its AtoN.

3.3.4 Wrecks, Derelict and Abandoned Vessels

The harbour has no identified wrecks, but should a new wreck occur, it will be marked and removed.

The process of removing a wreck is defined in [Section 252 of the Merchant Shipping Act 1995](#) as:

“The Harbour Master (HM) or Deputy (DHM) will exercise their wreck marking and removal powers where, in their opinion, a wreck is - or is likely to become – an obstruction or danger to navigation. The HM or DHM ensure, under the safety management system, that a risk assessment will be undertaken of any wreck in, or in or near the approaches to the harbour.

Having undertaken this risk assessment the authority's powers to raise, remove, destroy and mark a wreck which is, or is likely to become, a danger to navigation may be exercised, with the aim of reducing the risk to as low as reasonably practicable."

Through the inclusion of Section 52, 56 and 57 of the 'Harbours, Docks and Piers Clauses Act 1847' into the 'The Arbroath Harbour Order Confirmation Act, 1919', Angus Council may remove any unserviceable vessel located within the harbour and will do so wherever these present a risk to safety.

3.3.5 Special Protection Area (SPA) and Sites of Specific Interest (SSSI)

The area of the Angus coast which includes Arbroath Harbour is an environmentally sensitive area and is part of the Outer Firth of Forth and St. Andrews Bay Complex Special Protection Area. **The waters in this SPA attract one of the largest and most diverse marine bird concentrations in Scotland and the site is classified for the protection of 21 seabird and waterbird species.**

There are also two SSSIs within this area which are:

- Elliot Links
- Whiting Ness to Ethie Haven

More information on the SPA and SSSIs are detailed in Arbroath Harbour's Oil Spill Contingency Plan.

3.4 Environmental Duty

Angus Council as the SHA for Arbroath Harbour has environmental duties. These include:

- Environmental duties laid out in the 'Harbour Act 1964', Section 48A.
- Wildlife and Natural Environment (Scotland) Act (2011), which requires public bodies, including Statutory Harbours, to have regard to biodiversity in their activities.
- Habitats Directive under the Conservation (Natural Habitats) Regulations 1994, having due regard to protected species, this requirement is also considerate within the Scottish Marine Plan.

Angus Council has in place an Arbroath Harbour Conservancy and Environmental Policy for Arbroath Harbour.

3.5 Civil Contingencies Duty

The Civil Contingencies Act 2004 provides a framework for civil protection in the event of an emergency that threatens serious damage to human welfare, the environment or security. Angus Council as the SHA for Arbroath harbour is classified as a category 2 'co-operating body' in respect of its Statutory Harbour undertaking. This requires the cooperating and sharing relevant information with Category 1 (emergency services and local authorities) and other Category 2 responders.

Section 4: Harbour and Vessel Traffic Management

4.1 Appointment of a Harbour Master

Through the inclusion of Section 51 of the 'Harbours, Docks and Piers Clauses Act 1847' into the 'The Arbroath Harbour Order Confirmation Act, 1919', Angus Council as Harbour Authority has the power to appoint a Harbour Master. This appointment is a statutory role; the Harbour Master is accountable to the Authority for the safety of marine operations in the harbour.

4.1.1 Delegation of Powers

Powers of Direction are delegated to all Harbour Assistants. The Byelaws states that: *"Harbour Master" means the person appointed as such by the Authority and includes deputed, assistants and any other person for the time being authorised by the Authority to act, either generally or for a specific purpose, in the capacity of the Harbour Master*". Therefore, all Harbour Assistants are authorised to act as the Harbour Master in applying the Byelaws.

4.2 Byelaws

Angus Council in exercise of the powers conferred upon it by Section 83 of the 'Harbours, Docks and Piers Clauses Act 1847' and the Arbroath Harbour Acts and Orders 1839 to 1919 and of all other powers enabling it has issued a set of 79 Byelaws reference as the 'Angus Council – Arbroath Harbour Byelaws 1997'. The 1997 Byelaws revoked all previously issued Arbroath Harbour Byelaws.

4.3 Powers of Direction

4.3.1 Special Directions

The Harbour Master (and any duly appointed deputy) has powers of direction to regulate the time and manner of vessels' entry to, departure from and movement within Arbroath Harbour, and related purposes. These powers are given for the purpose of giving specific directions to specific vessels for specific movements. The Harbour Master's directions are referred to as 'Special Directions'. Special directions are not for setting general rules but relate to specific vessels - or in an emergency, to a class of vessels - on occasions.

4.3.2 General/Harbour Directions

Powers of General Direction are not available to Angus Council at Arbroath Harbour. Harbour Directions have not been applied for.

4.3.3 Dangerous Vessels

Under the Dangerous Vessels Act 1985, the Harbour Master (or Authorised Deputies) may:

"give directions prohibiting the entry into, or requiring the removal from, the harbour for which he [or she] is Harbour Master, of any vessel if in his [or her] 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 any person or property, or*
- b) *Grave and imminent 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 Dangerous Vessels Act 1985 does not apply to any vessel belonging to Her Majesty (or employed in the service of the Crown) or any vessel which is a pleasure boat of 24 metres or less in length.

These directions can be given to the vessel owner, the master or any Salver or their Agent. The Harbour Authority may have limited liability for any loss or damage occurring outside the Harbour because of any such direction. Direction of the Harbour Master/Deputy may be overruled by the Secretary of State's representative (SOSREP). In these cases, the vessel must be permitted to enter or stay in the Harbour and the Government assumes liability for the vessel.

4.3.4 Dangerous Substances

The 'Dangerous Goods in Harbour Area Regulations' (DGHAR) 2016 defines the meaning of a dangerous substance. Angus Council's response to dangerous substance incidents is addressed in the harbour's emergency plans. The Harbour Master has powers to prohibit the entry into a harbour of any vessel carrying dangerous goods, if the condition of those goods, or their packaging, or the vessel carrying them is such as to create a risk to health and safety, and to control similarly the entry on to dock estates of dangerous substances brought from inland (as prescribed in the DGHAR). Angus Council requires that prior notice is given to bring dangerous substances into the Arbroath Harbour from sea or inland. The period of notice is 24 hours. Dangerous goods and marine pollutants in packaged form are administered through the provisions of the International Maritime Dangerous Goods (IMDG) Code.

4.3.5 Pollution Prevention

Under Section 144 of the Merchant Shipping Act 1995, the Harbour Master may detain a vessel if there is reason to believe that it has committed an offence by discharging oil, or a mixture containing oil, into the waters of a harbour.

Under Section 135 of the Merchant Shipping Act 1995, Notice must be given to a Harbour Master before oil is transferred at night to or from a ship in any harbour. In addition, under Sections 136/259(6) of the Merchant Shipping Act 1995, all oil spills into harbour waters are to be reported and Harbour Masters have powers to board ships to investigate possible offences.

Angus Council, as Harbour Authority, under the requirements of the Merchant Shipping (Oil Pollution Preparedness Response and Co-operation Convention) Regulations 1998 (OPRC), produce an Oil Pollution Response Plan or Oil Spill Contingency Plan. This plan is maintained in date and signed off by the MCA.

For minor spills, where the response is addressed within either the outer or inner harbour, Angus Council, via the Harbour Master will take the appropriate action and arrange for safe storage and legal disposal of waste. Tier 1 spills will be monitored and dealt with by Arbroath Harbour staff, and if the situation is escalated to Tier 2 the Council's retained oil pollution contractor (Briggs Environmental Services Ltd.) will be called in.

Risk assessments and a Safe Systems of Work for dealing with Oil Pollution are in place as part of the harbours marine risk management process.

4.4 Traffic Management

Traffic management principal methods include the Harbour Master's powers of Special Direction, published Byelaws and the harbour entry lights on the pier head. When one of the Cat. 2 AtoN is flashing green the harbour is open. When it's flashing red the harbour is closed.

Around 31 commercial fishing boats work out of Arbroath Harbour landing shellfish consisting of lobsters, crabs, prawns, and scallops. Landings can be daily during the summer months to less frequent during the winter months. The fishing vessels can usually find their own berth in the outer harbour.

Around 25 commercial fishing boats visit Arbroath Harbour each year to have work carried out on the slipway within the boatyard. They usually berth at the black shed quay in the inner harbour before and after being in the boatyard if necessary.

There are 53 annual berths for recreational boats on the pontoon fingers in the inner harbour.

There are between 150 to 200 visiting yachts to the harbour each year. Visiting yachts are directed to use the visitors berths on the pontoons in the inner harbour.

There is a lifeboat station within the extents of the harbour with an inshore Mersey Class RIB and an all-weather D Class boat which are launched from the shed down a slipway into the navigational channel when required.

4.4.1 Harbour office

Arbroath Harbour does not operate a VTS. Several different methods are used to monitor the movement of traffic within Arbroath Harbour, these include:

- Visual observation,
- VHF monitoring on Channels 11 and 16, and
- Automatic Identification System (AIS) monitoring.

All vessels which have an allocated berth within either the outer or inner harbours are familiar with the layout of the harbour and can navigate within the harbour with ease.

All visiting vessels whether commercial or leisure are requested to call the harbour office on VHF Ch11 as they approach the navigation channel for directions to a berth either in the outer or inner harbour.

The harbour office is open from 07:00 to 20:00 every day (1st April to 30th September) and 07:00 to 18:00 every day (1st October to 31st March). Harbour users may communicate with the harbour office using VHF radio, the telephone, email or in person.

4.4.2 Navigational Advice and Guidance

Navigational information or assistance is mostly provided as advice. Details of the navigation at Arbroath Harbour and its approaches including lights, marks and sources of communication are published annually in the Reeds Nautical Almanac and Reeds Marina Guide. In managing navigation, in the interests of safety it may be necessary to require vessels to alter their navigation in some way. Such requirements may be expressed in the form of a request, but it should be made clear that the Harbour Master or an assigned deputy has the power to issue Special Directions, and should consider doing so, if a vessel ignores or declines to comply with a Direction, an enforcement action may be taken.

The speed limit within the extents of the harbour is 5 knots as detailed in section 8 of the Arbroath Harbour Bylaws 1997.

4.5 Pilotage

The size and type of vessels using Arbroath Harbour, plus the available navigational information in the form of charts and guidance means that Pilotage as a risk control is considered not to be required.

4.6 Harbour Management

4.6.1 Diving

All commercial diving in Arbroath Harbour must be carried out according to the 'Diving at Work Regulations 1997' Statutory Instrument 1997 No. 2776. The general definition of commercial diving is 'all diving carried out for hire or reward'. Any commercial diving operations in the harbour must be subject to a 'Diving Permit to Work' issued by the Harbour Master on behalf of Angus Council.

Before permission to dive is granted, the contracting party (client) whether it is Angus Council or another body, must be satisfied that all legislative requirements have been met. Specifically, they should have sighted and checked the risk assessment, diving project plan, diving operations records, divers record books, that the equipment seems in a satisfactory condition and that the diving operation will be carried out in a proper manner. The client should advise the diving contractor of any hazards or other conditions that may affect the diving operation.

Angus Council has a responsibility to ensure the marine safety of the facility. Sports diving in the harbour is therefore prohibited within the boundaries of the harbour unless with the permission of the Harbour Master. Anyone sports diving outside of harbour limits is recommended to maintain a listening watch on VHF Channels 11 and 16.

Byelaws 18 states that: *"Except in an emergency no person shall bathe, dive or engage in any activity in or under the water in any part of the harbour area without the permission of the harbourmaster"*.

4.6.2 Towage

Arbroath Harbour does not provide towage facilities for visiting vessels. Activities requiring towage are to be arranged by vessel operators and communicated to the Harbour Master. In the event of a towage operation a specific risk assessment is to be conducted and a security broadcast made on VHF channel 11 and 16 if deemed appropriate.

4.6.3 Hot Works

Major planned repair work, including hot works is permitted in the outer harbour and within Mackay Boatbuilders yard. Planned repair work, including hot works is also permitted while the vessel is alongside the black shed quay in the Inner Basin.

Whilst working on a vessel berthed in the harbour an application to carry out hot work must be submitted to the Harbour Master and no hot work can commence until the application is granted and a permit has been issued by the Harbour Master.

Emergency repairs, namely essential repairs needed to rectify malfunctioning equipment and prevent hazardous or unsafe conditions, will be permitted on a case-by-case basis following approval by the Harbour Master.

4.6.4 Bunkering

Angus Council is a Registered Dealer in Controlled Oils (RDCO) and can purchase “red” diesel to sell to commercial and pleasure boats. There is a 10,000-litre storage tank situated on the “oil quay” in the outer harbour from where all bunkering operations are carried out. All bunkering procedures are carried out by the harbour staff only. No harbour users have access to the fuelling facilities. A Risk Assessment (RA) and Safe System of Work (SSoW) are in place to assist the harbour staff with the bunkering procedure.

4.6.5 Control of Harbour Craft

Angus Council does not own or operate any harbour craft within Arbroath Harbour.

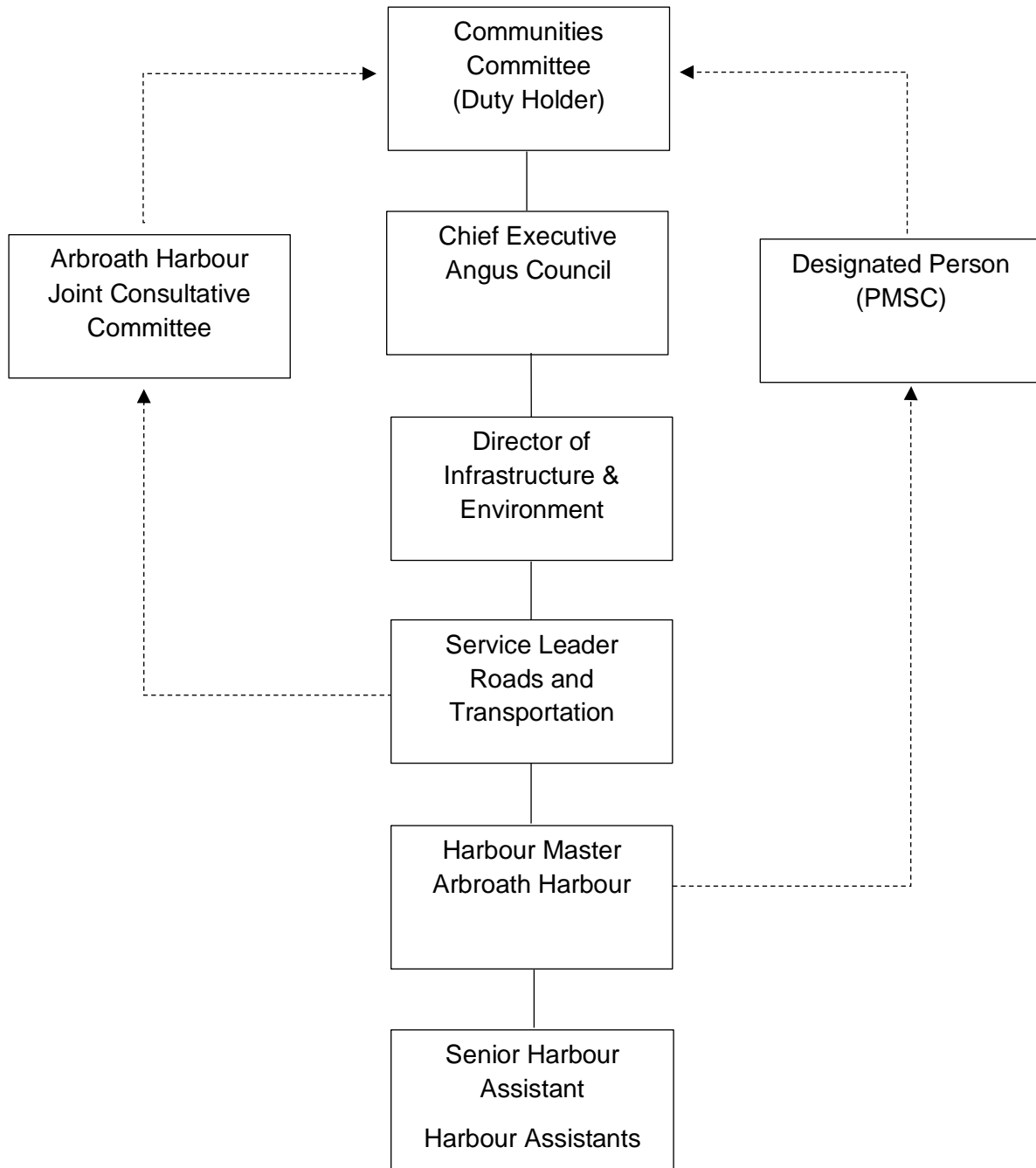
Abbreviations/Acronyms

Abbreviation/Acronym	Definition
AHJCC	Arbroath Harbour Joint Consultative Committee
ALARP	As Low as Reasonably Practicable
CCTV	Close Circuit Television
CHA	Competent Harbour Authority
COPFS	Crown Office and Procurator Fiscal Services
DGHAR	Dangerous Goods in Harbour Area Regulations
GtGP	Guide to good practice
HM	Harbour Master
HSE	Health & Safety Executive
IMDG	International Maritime Dangerous Goods
LLA	Local Lighthouse Authority
MAIB	Marine Accident Investigation Branch
MCA	Maritime Coastguard Agency
MSMS	Marine Safety Management System
OPRC	Oil Pollution Response Convention
PMSC	Port Marine Safety Code
RA	Risk Assessment
SHA	Statutory Harbour Authority
SI	Statutory Instrument
SOSREP	Secretary of State Representative
SPA	Special Protection Area
SSoW	Safe System of Work
SSSI	Site of Special Scientific Interest
UK	United Kingdom
UKHO	UK Hydrographic Office
VHF	Very High Frequency

Cardinal points/directions are used unless otherwise stated.

SI units are used unless otherwise stated.

Appendix 1 – Angus Council Organogram for the operation of Arbroath Harbour



Appendix 2: Training Matrix

Qualification / Course / Experience	Duty Holder	Harbour Master	Senior Harbour Assistant	Harbour Assistants
GMDSS Short Range Certificate (SRC) Very High Frequency (VHF) Operator's Licence		E	E	E
MCA Level 2 – Oil Spill Sorbents & Equipment				E
MCA Level 4/5 – Oil Spill Response Manager Harbour Master training (options include): <ul style="list-style-type: none"> IDG Maritime Harbour Master Training International Diploma for Harbour Masters Certificate of Competence UK Harbour Masters' Association 		E E	E	
Full Member of UKHMA		O		
Wise Boat Hoist Operators Training		E	E	O
Manual Handling Training		E	E	E
Marine Risk Assessment training		O	O	
PMSC Duty Holder Training	E	O		
First Aid Training		E	E	E
Mooring Line Handling		E	E	E
LOLER Awareness Training		O	O	O
Marine Safety Management System Briefing	E	E	O	O
PMSC Internal Auditor		O		
Marine Accident/Incident Investigation training		O		

Key

E – Essential

O – Optional