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## 3 / GLOSSARY

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1.1 The Responsible Fishing Scheme

The Seafish Responsible Fishing Scheme (RFS) is a voluntary vessel-based programme certifying high standards of crew welfare and responsible catching practices on board fishing vessels.

The RFS is open to all types of fishing vessels and fisheries, and is a ‘business-to-business’ tool that helps fishermen showcase best practice through independent, third-party auditing. To become certified, applicants must meet the requirements of the RFS Standard. A vessel and its skipper is the ‘unit’ audited against the Standard.

Certification to the scheme demonstrates that the skipper and vessel operate to best practice in five core areas:

Core Principle 1: Safety, health and welfare
- A commitment to generating a culture of integrity and respect (e.g. no forced labour) will be demonstrated.
- Best practice drawn from other relevant safety management and ethical and welfare initiatives to improve safety of the crew and promote decent working conditions.

Core Principle 2: Training and professional development
- Access to training for the key priority areas, especially safety.
- Focus on improving skills, knowledge and understanding.
- Commitment to raise standards, open up new opportunities and cooperate with management authorities.

Core Principle 3: The vessel and its mission
- The vessel and its gear are in compliance with all current legislation.
- The vessel operates within the legal framework with the right documentation in place.
- Full cooperation with Voluntary Agreements in existence in the fisheries within which they operate.

Core Principle 4: Care of the catch
- Focus on supplying safe, high quality, wholesome product with known provenance.
- Hygienic handling and storage at appropriate temperatures.
- Full traceability from catch to quayside.
- Responsible capture and landing of live products.
- Commitment to maintaining the value of the catch.

Core Principle 5: Care for the environment
- Responsible practice with respect for the environment (management of litter, lost fishing gear recovery, wildlife interaction records).
- Supporting fishery science (e.g. observers, science partnerships etc).
- Tie-in with other voluntary schemes.
1.2 RFS Compliance Support Guides

The RFS Compliance Support Guides (CSGs) underpin the RFS Standard and assist the skipper in understanding all areas that need to be complied with to successfully achieve RFS certification.

There are six CSGs in total - five sector-specific guides that the applicant will work through as appropriate to their own operations, and one cross sector guide that applies to all sectors. Applicants should read all the applicable CSGs before submitting their RFS application forms.

**Sector specific CSGs (applicants must read any which cover their type of fishing operations)**
- Demersal
- Shellfish
- Nephrops
- Pelagic
- Scallops

**General Cross Sector CSG (all applicants must read this guide)**
- Health and Safety
- Welfare
- Catch safety and traceability
- Onboard food preparation
- The environment

The legal requirements that apply to the operation of a fishing vessel cover basic issues of food safety, fish marketing, fishery controls and health and safety, most of which meet requirements set by the EU. **It is the responsibility of the skipper to ensure that the vessel is operating and catching within the appropriate legal framework.**

The CSGs provide information and support to assist applicants in meeting the conditions of the RFS Standard, and help them prepare for the RFS certification audit. These guides include support on general fishing operations as well as sector specific practices. The Guides direct RFS applicants to relevant documents and explain the conditions which underpin the Scheme, and help in the application and preparation process before a vessel undertakes its certification audit.
2 / SCALLOP SECTOR GUIDANCE

2.1 Fishing practices

The two species of scallop that are captured around the UK coast are the king scallop and the smaller queen scallop. Currently in the UK there are three commercially recognised fishing methods for scallops, the most common is dredging, followed by trawling and hand picking through diving.

Dredging

For both scallop species the fishing gear of choice will be the dredge trawl and this is towed across the seabed scooping up the scallops. There are two different types of dredge: those with teeth that dig into the seabed to extract the king scallop, and those without that catch queen (or ‘queenie’) scallops that lie on the seabed. It is advisable to keep the towing times used to a minimum to help reduce the possible adverse effects on the catch that may be caused from long tow times, as this action will help to minimise scallop damage and quality of the catch deterioration during the dredging process. Tows in excess of one and a half hours are not be recommended.

Fishermen should use information on the composition of the seabed to target effort specifically on substrates that contain the scallop species of choice to help avoid damage to other habitats and non-target species. The use of charts, good interpretation of echo sounders and the use of more sophisticated ground discrimination systems such as OLEX or WASSP is advisable to assist the fishermen in this process. Scallop fishermen should work in partnership with other fishermen, fishery and conservation managers, and the Statutory Nature Conservation Agencies (SNCAs) to ensure that their fishing activities avoid damage and/or disturbance to sensitive seabed habitats and protected sites. Where there are voluntary agreements in place to avoid such areas of seabed for scallop fishing activities fishermen are required to sign up and adhere to these initiatives.

Scallop dredge and trawl fisheries must have regard for microbiologically-based water quality classifications, and are included under measures designed to avoid harvesting of bivalves containing harmful levels of algal toxins such as ASP and DSP. Fact sheets providing more information on these toxins are available via the Seafish website, links being found in Section 2.8 of this guide. Where levels of toxins are found in excess of safe limits fishing areas are closed and fishers must have regard for these closures.

The presence of grit in scallops harvested by the dredge or trawl will cause quality issues. This is because the dredging process can result in contamination of the inter-valvular fluid with grit, which if the scallops are not shucked for several days will lead to significant deterioration in quality. The majority of this grit may be removed by washing during the factory process and/or in certain circumstances by allowing the live animals to de-grit in holding tanks. Scallops should be held in controlled conditions with a seawater temperature of between 10 to 18°C for between 10 to 24 hours. However, if a live scallop is stipulated by the supply chain the scallops should be hand-picked off the fishing grounds by divers to minimise the risk of grit being present in the live product.

As with other fishing operations, it is always recommended that between all hauls that any equipment coming into contact with the catch should be rinsed down with clean seawater and any organic matter or debris trapped in the dredge/gear should be removed prior to re-shooting. If possible, any other fish or other animal species that are not the target catch should be carefully removed from the gear and handled in accordance with quota and landing obligations requirements. It is required that any contact with threatened, endangered or protected species is recorded.
2 / SCALLOP SECTOR GUIDANCE

Trawling

This method is particularly useful for capturing scallops that can swim and will avoid capture using the more common dredge fishing method. The way the gear is set will tend to have minimal impact on the seabed and research has shown that there is usually very little by-catch.

All considerations and requirements stipulated for the scallop dredge fishery are equally applicable to the trawl fishery and should be considered and adhered to.

Diving

The use of surface air supply and scuba diving equipment are the most common diving methods; however, in order to be classified as a responsible diving vessel with respect to the RFS it is required that all commercially registered, vessel-based dive operations must operate in accordance with the Health and Safety Executive Scallop Diver Code of Practice which can be located on the Health and Safety Executive website. In addition, research has shown that while this form of fishing will have no impact on the seabed it allows harvesting of scallops from areas inaccessible to dredging and trawling that may be important for stock recruitment. Care must therefore be taken to abide by any mandatory or voluntary fishery management measures that may be in place for their particular fishing ground.

Unlike dredge or trawl caught scallops, where scallops are diver captured for the live market, fishers have regard for national water quality criteria which determine the acceptability or otherwise before scallops can be placed on the market for sale.

Water qualities are classified into four grades A-D as below.

A  May be harvested and placed onto the market without the need for further treatment.
B  Before placing on the market requires depuration (purification), or by relaying in grade A classified waters or by a heat treatment in a specified temperature/time regime.
C  Before placing on the market requires relaying for at least two months in grade A or B waters followed by a depuration as appropriate or a heat temperature in specified conditions of time and temperature.
D  Harvesting is prohibited.

2.2 Onboard handling

The areas used to receive the catch should be designed and worked in a way so as to protect the catch from all possible sources of contamination.

Studies have shown that it is advisable to handle, sort and chill store the catch as soon as practically possible after taking the scallops on board. Any scallops that are undersized and any by-catch species such as starfish, sea urchins, etc, not required to be retained under landings obligation requirements should be removed from the gear as quickly as possible and returned back to the sea. The gear should always be lowered as close to the deck as possible prior to the dredges/cod end being opened to minimise damage to the catch.
On trips over 12 hours duration, once sorted the scallops should be placed into sacks and stored in temperature controlled storage in the fish hold or in insulated containers. For day boats the catch should be placed in sacks and positioned to minimise exposure to heat and excessive wind, and covered where necessary.

2.3 Onboard processing

Unless approved by the relevant competent authorities as an approved establishment, no onboard processing of scallops should take place.

2.4 Onboard storage

Conventional storage for all scallop species is usually by way of holding in polypropylene sacks. Provided that they are maintained at temperatures appropriate to trip durations, (and where temperature control is required as soon as possible after capture) there are minimal additional care requirements necessary until landing.

Trip durations in excess of seven days should be avoided as this will reduce the shelf life of the scallop for both processors and consumers and will additionally reduce the quality attributes of the consumed product.

In order to assist processors in processing trip caught scallops in date of capture order it is recommended that, as well as complying with labelling regulations sacks are identified by colour coding or by labelling.

In addition to having due regard for catch quality, consideration must also be given to both vessel and crew safety, particularly when deck stowing scallops during day boat fishing operations. Care must be taken not to compromise the stability of the vessel and not to hinder egress of water through scuppers.

**Whitefish by-catch**

There is a high likelihood of vessels targeting scallops capturing some whitefish by-catch.

Any by-catch retained and legally allowed to be sold should be handled and stowed in accordance with best practice detailed in the Demersal Compliance Support Guide. Where landings obligations regulations apply catch should be retained in accordance with those regulations.

**Fishroom Structural Condition:**

- If the vessel is large enough and has a fish hold, construction should be such that it will aid cleaning and will not pose any contamination risk to the stowed catch.
- It should also be well insulated to minimise the effect of outside temperature fluctuations. It is recommended to have at least 50mm of insulation in the walls and 100mm on the bulkheads that separate engine room spaces from the fish hold.

In addition, mechanical refrigeration is advisable for trip boats as this will reduce the rate of ice melt and support the ice in keeping the catch in the optimum temperature range of between +1°C and +2°C. If a vessel has no mechanical refrigeration they should regularly check the ice levels on the sacks and re-ice when necessary.
2.5 Temperature monitoring and control

As with any protein based food and food ingredients, effective temperature monitoring and control are an essential part in ensuring that a safe, quality product is purchased by vessel customers or final consumers.

Many boats operating in the industry today are equipped with insulated and refrigerated holds. Such equipment aids the preservation of the catch to help ensure that it is in optimum condition when landed. The correct setting and maintenance of the fishroom temperature is essential if the catch is to maintain its quality.

Care should be taken to ensure that the hold temperature is not set too warm, as the catch will then be stored at a temperature which does not fully inhibit the growth of naturally occurring spoilage bacteria. If this occurs it will result in a faster quality loss thereby reducing its shelf life, salability and value.

Refrigerated fishrooms will generally have cooling plates or coils which are fitted to the bulkheads and ceiling of the room. The temperature will vary from area to area within the fishroom. Such temperature variations will be dependent on a number of factors:

- The pattern of air circulation in the hold.
- The efficiency of the refrigeration unit.
- The number of times and the length of time that the hatch door is open.
- The external ambient conditions.
- The duration of any defrost cycle on the plant.

Due to these variables it is advisable to conduct regular checks to ensure that the fishroom temperature is still within a range that will hold the catch at the optimum temperature range to preserve its quality. It is also important to ensure that any measured or recorded air temperature accurately reflects the temperature throughout the hold.

Temperature monitoring sensors

All vessels fitted with refrigerated fishrooms should have a display thermometer or recorder, ideally located in the wheelhouse, to provide a means of monitoring the fishroom temperature. These devices will aid the skipper as it will provide a means of monitoring the fishroom temperature. Care should be taken to locate the temperature sensor in a good location to help ensure that a true reflection of the fishroom temperature is being captured.

The fishroom will have ‘hot’ and ‘cold’ locations within it, depending on its design. The sensor should therefore not be fitted in an area which reflects the warmest or coldest location. It should not be situated near the hatch where it will be affected by the intake of warm air when the hatch is open. Similarly, it should not be located in close proximity to a cooling pipe or plate as this may then reflect an unrealistically cold temperature.

Damped temperature sensors should be used. These types of sensors are designed to react less sensitively to fluctuations in temperature, rather than react to variations quickly as would be the case upon the addition of more catch to tanks or holds.
Temperature monitoring (trip vessels)

To help ensure that the catch is being stored at the optimum temperature it is strongly recommended that a temperature monitoring procedure is developed and implemented.

For vessels with no mechanical refrigeration, where only ice is used to preserve the catch, the skipper or responsible crewman should systematically check to ensure that the level of ice on the catch is sufficient and is replenished as required. The skipper should also consider undertaking supplementary temperature checks to ensure that the catch is being held within the optimum temperature range. Electronic data loggers have been successfully used to measure both air and product temperature in fishrooms but care must be taken to download the information regularly otherwise unacceptable rises in fishroom temperatures may occur and not be noticed until downloaded.

The development of documented temperature monitoring and control procedures (inclusive of temperature control recovery procedures and what happens to the catch during the period of unacceptable temperature control) should be built into vessel food safety management systems.

For vessels where deck storage is the only option it is essential that if trips are to be of 12 or more hours duration that sufficient ice is taken to chill the maximum amount of anticipated catch. Even if trips are expected to be of less than 12 hours duration it is recommended that ice is taken as smaller vessels tend to offer less shade, and temperatures in summer can be significantly higher causing increased rates of quality loss.

2.6 Guidelines for labelling at sea

The vessel should label each consignment of catch prior to landing. The following section describes these requirements in detail but as yet not all these requirements are mandatory.

As an aid to compliance with traceability regulations it is strongly recommended that catch is labelled at sea with the following information.

Recommended labelling practice

As an aid to compliance with traceability regulations it is required that landings are identifiable with documentation kept that records the following information:

- Boat identification.
- Species of scallops and fish (both common and scientific name).
- Size grade (where applicable).
- Date of capture: this may include several days or a period of time corresponding to several dates of catches.
- Unit weight.
- Area of capture: for the North East Atlantic the FAO sub area or code.
- Production method (e.g. caught at sea).
- Fishing method.
Any additional information such as haul number and the fish code may be applied at the discretion of the individual vessels.

Labels should be attached or displayed on each container in such a way that all fish label data is clearly visible to the buyer on the marketplace.

2.7 Vessel hygiene and cleaning schedules

The use of a simple cleaning schedule can act as a straightforward tool to improve and maintain a high standard of hygiene on board any type of fishing vessel. The use of a cleaning schedule is good practice as it provides a step-by-step instruction as to the systematic cleaning of the working areas to ensure that they are effectively maintained to help preserve the catch and to provide a safe working environment.

A good cleaning schedule should detail:

- What is to be cleaned.
- How often it should be cleaned.
- Any chemicals to be applied, together with their dilutions and contact time.
- The method of cleaning.
- Details of any Chemical Safety Data sheets.

Vessel cleaning guidelines

Crews must be made aware that good basic hygiene practices will ensure the overall quality of the catch is maximised and maintained. It is important to make crew members aware of this, as there will be no visible evidence at sea if fish has been excessively contaminated through poor hygiene standards. This set of guidelines explains why certain hygiene practices are important to the fisherman. If crew understand what can spoil the catch, then they will be in a better position to prevent this occurring in the first instance.

Working areas

An effective ‘clean-as-you-go’ policy throughout the trip, and once fishing has been completed, will keep areas in a suitably clean condition. Nets can be stowed, and catch can be graded and washed within an environment with minimal bacterial contamination.

Equipment

The variety of equipment held on board for the handling of the catch can on some vessels be quite extensive. All equipment that comes into direct contact with the catch during the handling process should be given particular attention when cleaning. Each piece of equipment is a potential source of contamination to the catch, especially if it is not maintained in a clean condition.

Gutting tables, boards, knives, grading bins (for handling by-catch)

This is the most intensive work area on the vessel, where the crews are removing the guts of the fish from the body cavity. Fish entrails and organs have high contents of bacteria and enzymes, which will rapidly contribute to fish spoilage if not removed thoroughly. Equipment too can become badly soiled.
• Tables, boards and knives should be cleaned regularly and effectively to prevent excessive build-up of residues.

• Gutting boards should be made from a non-porous, readily cleanable material such as polypropylene. Wooden boards in time become waterlogged thus harbouring bacteria, and making them difficult to clean effectively. They are also prone to splintering through wear, which in turn is a potential foreign body risk to the catch; as such they should not be used.

• It is also recommended that plastic-handled knives are used for similar reasons.

Gutting machines (for handling by-catch)

Some vessels are equipped with small semi-automatic gutting machines. As their action is quite rigorous they will generate a greater breakdown of the entrails in the process of removing them from the fish. This offal will be contained within the guarding and covers of the machine.

• Check internal surfaces regularly and keep clean.

• Failure to do so will result in offal accumulating inside; stale offal will be harder to remove and will become an ideal breeding ground for bacteria which will ultimately contaminate the fish passing through the machine.

Fish washer (for handling by-catch)

• Clean off scum and other fish residues from around the edge of the washer.

Fish baskets and scales

• Fish in these baskets will generally be un-iced. Therefore, given that there is no temperature control, it is essential that they are kept as clean as possible to minimise the effect of contact contamination.

• Boats with weighing systems on board should not overlook the cleaning of their scales.

• If electronic scales and labelling systems are used on board, care should be taken in ensuring that the button interface is not water-or chemically-damaged.

• Operate a ‘clean-as-you-go’ system with these items of equipment, cleaning frequently when in continuous use.

Fish storage containers

Whether owned and cleaned by vessels themselves, or hired from box provision companies, boxes or insulated bins should be checked prior to use to ensure they are both clean and in good condition. Any cracked or broken boxes or bins should be rejected as these cannot be cleaned thoroughly and may contaminate the catch if used. Any dirty boxes or bins should be re-cleaned prior to use.

Boxes and bins should be made of durable materials that are easy to keep clean and cleaned in accordance with vessel cleaning schedules. Where fishroom stowage is not possible boxes should be taken on board prior to sailing and re-washed before use. Where bins are used these should remain lidded to prevent contamination by birds or from other sources of contamination.
Hold

The catch may be stowed in the fishroom from anywhere between one to eight or more days at a time. The conditions under which catch is maintained in the fishroom are essential in preserving quality throughout the trip. The fishroom must be well insulated; it must have good drainage; all contact surfaces must be easily washable and it must be free from taints and odours.

- Ensure that the hold is thoroughly cleaned and rinsed at the end of every trip.

Cleaning chemicals

It is essential that the correct food-safe approved chemicals are used for the applications outlined above.

Vessels are strongly advised to take professional advice when selecting chemicals, for a number of reasons:

- It can make a significant improvement to the boat’s hygiene standard, even if the effects of this are not visible.
- Some chemicals may react with certain metals such as aluminium, which may be present in equipment on board.
- The use of the wrong chemical such as an engine room degreasant does not provide any sanitising effect on work contact surfaces.
- The correct dilution rates and application methods will be advised.
- Chemicals that have a strong residual taint such as bleach will more than likely taint some fish at some point on board the boat.
- Always ensure that your supplier provides you with the relevant chemical data sheets for the products you use.

In addition, persons involved in the application of cleaning products must be fully instructed in their safe and correct application. Chemicals must be correctly stored away from working areas.

Records

As part of a well-managed cleaning schedule, boats should keep a record of the cleaning activity that takes place on board. This provides a record of the ‘due diligence’ the boat has undertaken to ensure that the catch landed is from a vessel which is operating a regular cleaning programme. The record then forms part of the traceable quality history of the catch landed by the vessel.

The record should also incorporate a check on the working and storage areas and equipment of the boat to ensure that once the cleaning activity has taken place that the work has been done to a satisfactory level.

Methods of application and frequency

The method by which areas and equipment of a vessel should be cleaned will depend upon their use, and how heavily soiled they becomes during use.

- In many cases simple hosing down of work areas at regular intervals to prevent build-up of fish and marine debris is sufficient.
- When it comes to thorough clean-downs, a number of applications can be used: areas can be manually scrubbed down with cleaning solutions, or vessels may utilise the use of a power hose to apply high pressure cleaning with built-in chemical applicators.
- Some items of equipment can be soaked in sanitising dips; rinsing off should be carried out with either clean seawater or fresh water.
- A thorough clean-down at the end of a trip is essential. Failure to clean effectively at this time will result in a high build-up of bacteria. It is recommended that a refresh clean is carried out on a vessel before fishing starts at the beginning of the next trip.
It is essential that the correct chemicals are used for the various jobs. There are differences between the function of each chemical that can be used to properly clean a fishing vessel.

**Detergent**

These are chemicals that are designed to remove organic matter e.g. fish oil, flesh and inorganic matter, e.g. engine oil, dirt, etc. from items of equipment or surfaces. They can be either alkaline or acid based and will have differing characteristics and abilities to remove materials. A very common detergent is soap.

**Disinfectant**

These are chemicals that are designed to kill bacteria and some also kill viruses which create biologically clean surfaces that they are applied to. They cannot clean the surface of dirt and should be used after the surface has been cleaned with a detergent, if not the disinfectant properties will tend to be compromised. A very common disinfectant is bleach.

**Sanitiser**

This is a range of chemicals that have both detergent and disinfectant properties.

Other points skippers may wish to consider include:

- Chemicals that have a strong residual taint such as bleach can if not rinsed off correctly inadvertently taint the catch, which if occurring could have a detrimental impact on any of the quality, value, safety or marketability.

- Always ensure the crew involved in the application of these products during cleaning are instructed in their correct method of application and have the correct suitable protective equipment available and in place, prior to use.

- Always keep chemicals correctly stored away from working areas. Chemicals should never be placed in containers originally used for other chemicals, as this will compromise the safety instructions on the container which could have a potentially harmful effect on the catch and the crew member handling the product.

**Cleaning policy records**

In order to approach the cleaning of the vessel and its equipment in a systematic way it is recommended that vessels develop policies, inclusive of cleaning schedules that clearly document activities and responsibilities. As well as ensuring a hygienic vessel it also gives the added benefit of being able to demonstrate commitments to high standards and provides a record of due diligence should issues arise with respect to catch safety and quality. These cleaning policies can additionally form part of a traceable quality history of the fish landed by the vessel.
An example of a cleaning schedule for use on a scallop vessel*

<table>
<thead>
<tr>
<th>Area or item of equipment</th>
<th>Recommended frequency of clean</th>
<th>Method of application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conveyers</td>
<td>Every haul.</td>
<td>Hose down.</td>
</tr>
<tr>
<td></td>
<td>One full clean per trip</td>
<td>Wash down, hose rinse.</td>
</tr>
<tr>
<td>Working deck area</td>
<td>As necessary.</td>
<td>Hose down.</td>
</tr>
<tr>
<td></td>
<td>Significant breaks in fishing.</td>
<td>Chemical clean, hose down.</td>
</tr>
<tr>
<td></td>
<td>End of trip.</td>
<td>Chemical clean, soak,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>rinse.</td>
</tr>
<tr>
<td>Receiving pounds</td>
<td>Between hauls.</td>
<td>Hose down.</td>
</tr>
<tr>
<td></td>
<td>Significant breaks in fishing.</td>
<td>Chemical clean, hose down.</td>
</tr>
<tr>
<td></td>
<td>End of trip.</td>
<td>Chemical clean, soak,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>rinse.</td>
</tr>
<tr>
<td>Baskets</td>
<td>Between hauls.</td>
<td>Hose down.</td>
</tr>
<tr>
<td></td>
<td>Significant breaks in fishing.</td>
<td>Chemical clean, hose down.</td>
</tr>
<tr>
<td></td>
<td>End of trip.</td>
<td>Chemical clean, soak,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>rinse.</td>
</tr>
<tr>
<td>Hold</td>
<td>End of trip.</td>
<td>Chemical clean for all surfaces; soak, and rinse off. Ensure no residual taint – use fresh water to rinse.</td>
</tr>
</tbody>
</table>

* Not all areas shown above will be present on all vessels.

- When commencing a trip; any exposed fish handling areas and containers especially on open decked boats, should be re-cleaned before the first fish are taken on board.
- Note that in reference to applications referring to a hose and/or rinse down, clean seawater or, if in harbour, fresh water, should be used.
- It is never recommended to use harbour water for cleaning applications as this water will tend to be contaminated with chemical and other organic material.

2.8 Algal toxins and amnesic shellfish poisoning

Algal toxins sometimes referred to as ‘biotoxins’ are produced by naturally occurring phytoplankton sometimes found in UK coastal waters. The number of phytoplankton occurring at any one time can be very small and local in size, or can be so vast that they can create ‘blooms’ of more than 1,000 square miles in size. The term ‘algal bloom’ is sometimes used to denote such an event.

Bivalve molluscs which include scallops in particular have the ability to accumulate any toxins present in the locality, and retain them for significant periods of time.

Amnesic Shellfish Poisoning (ASP) is caused by consumption of shellfish that have accumulated domoic acid, a neurotoxin produced by some strains of phytoplankton, called Pseudonitzschia. Other types of poisoning that can be caused by blooms in UK waters include Paralytic Shellfish Poisoning (PSP) and Diarrhetic Shellfish Poisoning (DSP).

Because of this there are rules in place that require scallops to be tested. Depending upon how much is caught, where they are sold and in what form, will decide what testing needs to be done.
For further guidance fishermen targeting scallops should look at the Seafish Industry Guidance Note on Amnesic Shellfish Poisoning which can be found at:

www.seafish.org/media/publications/FactsheetAmnesicShellfishPoisoning_201110.pdf

Further guidance can be found at:
http://www.seafish.org/industry-support/aquaculture/aquaculture-support/delivering-safer-seafood
Ambient  The temperature of the surrounding environment.

Bacteria  A group of single-cell living organisms. Some may spoil food and some may actually cause illness.

Clean seawater  Natural, artificial or purified seawater or brackish water that does not contain micro-organisms, harmful substances or marine plankton in quantities capable of directly or indirectly affecting the health quality of food.

Clean water  Means clean seawater and fresh water of a similar quality.

Cleaning  The removal of food residues, dirt, grease and other undesirable debris.

Cleaning schedule  Written document setting out how a boat is to be kept clean. It will detail each area and piece of equipment to be cleaned; the cleaning product to be used; person/s with responsibility for carrying out cleaning; standard of cleanliness required; frequency; and Health and Safety precautions to be taken. All persons concerned must be aware of their individual responsibilities. A supervisor is responsible for checking the total cleaning process.

Cold store or freezer  Equipment for keeping food at frozen temperatures. Usually set around -18°C.

Compliance  Actions that satisfy the legal requirements.

Contact surface  Any surface which comes, or may come, into contact with fish, either directly or in such close proximity that it could contaminate the food if dirty. Includes work surfaces, containers and equipment.

Contamination  The introduction or occurrence in food of any microbial pathogens, chemicals, foreign material, spoilage agents, taints, unwanted or diseased matter, which may compromise its safety or wholesomeness.

Core temperature  The temperature at the centre of a mass or piece of food.

Disinfection  Reduction in levels of contamination on food equipment or in food premises, normally by the use of chemicals to kill micro-organisms. Disinfectants used must be suitable for use in food premises.

Hygiene  Measures to ensure the safety and wholesomeness of food.

Infestation  Entry and survival of pest animals and insects on board the boat or within equipment or products.

Packaging  Means the placing of one or more wrapped foodstuffs in a second container, and the latter container itself.

Personal cleanliness  Measures taken by food handlers to protect food from contamination.

Pest  Animal life unwelcome in food premises, especially insects, birds, rats, mice and other rodents capable of contaminating food directly or indirectly.


Primary products  Products of primary production including products of the soil, of stock farming, of hunting and fishing. (EU Definition as 852/2004).
### Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processed products</td>
<td>Foodstuffs resulting from the processing of unprocessed products. These products may contain ingredients that are necessary for their manufacture or to give them specific characteristics.</td>
</tr>
<tr>
<td>Protective clothing</td>
<td>Clothing – hats, boots, waterproofs – worn by the crew when handling fish to prevent contamination of fish by the individual.</td>
</tr>
<tr>
<td>Refrigerated hold</td>
<td>Area of the boat fitted with equipment to keep product cold. Normally between 0°C and 2°C.</td>
</tr>
<tr>
<td>Spoilage</td>
<td>Fish deterioration resulting in off flavours, odours and possibly appearance indicating products are unsuitable for sale or to eat.</td>
</tr>
<tr>
<td>Taint</td>
<td>Contamination of food with undesirable flavours or odours.</td>
</tr>
<tr>
<td>Unprocessed products</td>
<td>Foodstuffs that have not undergone processing, and includes products that have been divided, parted, severed, sliced, boned, minced, skinned, ground, cut, cleaned, trimmed, husked, milled, chilled, frozen, deep frozen or thawed.</td>
</tr>
</tbody>
</table>
Did you find the information in this guide useful? Is there anything we could have done better?

We would love to hear your feedback so please contact Mick Bacon on michael.bacon@seafish.co.uk with your comments.