CODEX ALIMENTARIUS COMMISSION



Food and Agriculture Organization of the United Nations



#### Agenda Item 4

CX/FFP 15/34/5 Add.1

#### JOINT FAO/WHO FOOD STANDARDS PROGRAMME

#### CODEX COMMITTEE ON FISH AND FISHERY PRODUCTS

**Thirty-fourth Session** 

Ålesund, Norway

19 - 24 October 2015

#### PROPOSED DRAFT CODE OF PRACTICE ON THE PROCESSING OF FRESH AND QUICKFROZEN RAW SCALLOP PRODUCTS (Comments at Step 3)

Comments submitted by Costa Rica, Japan and the United States of America

#### **COSTA RICA**

Costa Rica welcomes the report of the electronic working group chaired by Canada, however at this time does not comment .

# <u>JAPAN</u>

Japan appreciates Canada's efforts as the chair country of the electronic working group and is pleased to submit the following comments on the proposed draft Code of Practice on the Processing of Fresh and Quick Frozen Raw Scallop Products.

#### Specific comments

#### Figure X.1

Between step 8 "Scallop reception" and step 9 "chilled storage", and step 22 "washing" and 9"chilled storage", a new step "Chilling" should be inserted.

Rationale: Before the product is kept in the chilled storage, usually the product is gone through a chilling process.

See comment on the X.2.3.3 Chilled Storage (Processing Steps 9, 23) below.

## X.2.1.1 Scallop Landing/Deck Dump (Processing Step 1)

Technical Guidance

5<sup>th</sup> bullet point

Clean seawater must should be used and surfaces should be clean and impervious.

Rationale: Since this is a COP document, so "should" be used throughout the document.

#### X.2.2.1 On Board Storage (Deck/hold) of Whole Scallops (Processing Step 18)

Technical Guidance:

4,5,8 and 9<sup>th</sup> bullet point

"must" should be replaced by "should".

Rationale: Since this is a COP document, so "should" be used throughout the document.

#### X.2.3.2 Reception (whole scallops) (Processing step 20)

Scallop handlers and appropriate personnel should acquire skills in physical examination techniques and **<u>Good</u>** Best-Hygiene Practice.

Rationale: editorial

# X.2.3.3 Chilled Storage (Processing Steps 9, 23)

Technical Guidance:

## 5<sup>th</sup> bullet point

"If freshwater ice is used to chill scallops, care should be taken to provide adequate drainage and minimize water uptake (See section X.1.2.7 Chilled Storage). Any measurable absorbed water from ice should be properly measured and labeled."

Comments: This guidance is related to "chilling" step, not "chilled storage". Therefore, a new step "chilling" should be developed and this guidance should be relocated in the new step.

## X.2.3.6 Size Grading and Examination (Processing Step 11)

Technical Guidance:

2nd bullet point

Gray or black adductor meat, which indicates that the scallop was dead at the time of

shucking and is likely decomposed and may present a consumer health hazard, should be

removed culled from the lot.

Rationale: editorial

## X.2.3.11 Labelling (Processing Step 16)

Technical Guidance:

3rd bullet point

Labelling **<u>should</u>** must-accurately describe the nature of the product so that consumers are not misled and can make an informed choice.

Rationale: Since this is a COP document, "should" be used throughout the document.

## **UNITED STATES OF AMERICA**

#### **General Comments**

The United States recommends four general changes for the draft COP:

- 1. <u>Biotoxin Risk</u>: The biotoxin provisions in the Scallop Standard (Codex Standard 315-2014) have been agreed, and their principles should carry over to the COP.
- <u>Disposition of Dead Scallops</u>: Throughout the draft Scallop COP, the term "live scallops" was replaced with "whole scallops", which inserts uncertainty about this requirement. All instances of the term "whole scallops" should be replaced with "live scallops" in order to accurately describe the nature of the raw material used.
- <u>Potential Duplication</u>: The Scallop COP should not attempt to duplicate guidance on the steps on live scallop harvesting and transportation provided in the Code of Practice for Fish and Fishery Products because the confusion caused by duplicative guidance on the control of bivalve hazards could increase public health risk.
- 4. <u>References to other sections within the Code of Practice for Fish and Fishery Products</u>: The draft scallop COP should use the same simple (section number) format as the rest of the Code because listing headings could lead the reader to make an improper decision to <u>not</u> read integral guidance that is not repeated in the current section.

#### Biotoxin Risk

Sea scallops (*Placopecten magellanicus*) represent the largest scallop fishery. Sea Scallop viscera can become toxic during harmful algal blooms; however, toxin is never detected in the meat of live sea scallops with highly toxic viscera (Bourne 1964).

Degrasse et al. (2014) studied the sea scallop roe and whole scallop fishery and reported that

"Toxicity above the regulatory guidance level was observed for some of the scallop gonads and viscera throughout this study, reiterating the risk of PSP in this commodity and further supporting the reasoning that led to this resource being strictly managed for decades, allowing only the harvest of the adductor muscle."

During the above study, adductor muscle meat was not analyzed because the absence of toxin in the meat was not in question. In fact, the researchers ate all the adductor muscle meat from the scallops used for the study.

We found only one paper (Beitler 1991) that suggests that biotoxins may occur in the adductor muscle of live scallops. This was for an unusual slow growing species (purple hinged rock scallop) that firmly attaches to large rocks on the Pacific Coast of North America. However, this paper is a "short communication" and does not indicate if these scallops were alive before the analysis.

Because of the possibility that some species may accumulate toxin in the meat while alive, we agree with the wording in the Scallop Standard that "the hazard analysis should consider marine biotoxins as a potential hazard in scallop meat, and exclude or include this hazard based on species and the available data for toxins in that species."

For scallops shucked on shore, there is a risk that some scallops die during transportation and remain undetected, in which case toxin may leak from the viscera and contaminate the meat. FAO (2004) reported that:

"Data on toxicity measured under different conditions for the adductor muscle of highly PSP-infested scallop *Patinopecten yessoensis*, were reviewed. In the adductor muscle, separated from live or fresh scallop, not any toxicity was observed even though the whole scallop contained levels as high as 2 900 MU/g. [The regulatory limit is 400 MU/100 g.] On the other hand, the adductor muscle separated from the frozen whole body, showed very small toxicity whose score depended on the different procedures, high especially in slow thawing over many hours. It can be concluded that the adductor muscle of the scallop Patinopecten yessoensis is safe for consumption only when it is prepared from live or fresh scallop with careful removal of toxic viscera, roe and the other organs (Murakami and Noguchi, 2003)."

Because of the increased biotoxin risk, and the difficulty tracking end use, live scallops transported to shore should follow the same biotoxin control requirements as other bivalves.

#### References:

Beitler MK. Toxicity of adductor muscles from the purple hinge rock scallop (*Crossodoma gigantean*) along the Pacific Coast of North America. Toxicon Vol. 29, No. 7, pp. 889-894, 1991

Borne N. Paralytic shellfish poison in sea scallops (*Placopecten magellanicus*, Gmelin). Journal Fish. Res. Bd. Canada, 22(5), 1965.

DeGrasse S, Vanega C, Conrad S. Paralytic shellfish toxins in the sea scallop *Placopecten magellanicus* on Georges Bank: Implication for an offshore roe-on and whole scallop fishery. Deep-Sea Research II 103 (2014) 301-307

Marine Biotoxins, FAO Food and Nutrition Paper 80, Food and Agriculture Organization of the United Nations, Rome 2004 (Section 2.6.1) Link: <u>http://www.fao.org/docrep/007/y5486e/y5486e00.htm</u>

#### Disposition of dead scallops

Most EWG members agreed that dead scallops (not intentionally slaughtered) are unsuitable and potentially unsafe for human consumption. The generally accepted recommended practice to cull out and dispose of dead scallops should not be in question because it has already been discussed and agreed for the Bivalve Standard and the Scallop Standard.

Standard for Live and Raw Bivalve Molluscs (Codex Stan 292-2008), Section II – Raw Bivalve Molluscs, II-2.1 Product Definition, 1<sup>st</sup> sentence:

"Raw bivalve molluscs processed for direct consumption or for further processing are product that were <u>alive</u> immediately prior to the commencement of processing and comply with Section I-2.2 relating to harvesting, purification and relaying."

*Draft Standard for Fresh Quick Frozen Raw Scallop Products* (at Step 8 of the Procedure), REP14/FFP Appendix III, 2.1 Product definition, 2.1.1 Scallop Meat, 1<sup>st</sup> sentence:

"Fresh or Quick Frozen "Scallop Meat" is prepared by completely removing the adductor muscle from the shell and completely detaching the viscera and roe from the adductor muscle of <u>live</u> scallops."

This practice for raw bivalve molluscs is also indicated in several parts of the *Code of Practice for Fish and Fishery Products*, Section 7, Processing of Live and Raw Bivalve Molluscs.

Throughout the draft Scallop COP, the term "live scallops" was replaced with "whole scallops", which inserts uncertainty about this requirement. All instances of the term "whole scallops" should be replaced with "live scallops" in order to accurately describe the nature of the raw material used.

#### Potential duplication of coverage for harvest and transport of live scallops

Live scallop harvest and transportation (both vessel and land) is fully covered by *Code of Practice for Fish and Fishery Products*, Section 7, Processing of Live and Raw Bivalve Molluscs. The Scallop COP (*Processing of Fresh and Quick Frozen Raw Scallop Products*) should not attempt to duplicate guidance on these steps because resulting confused guidance on the control of bivalve hazards will increase public health risk. New guidance is only needed for land based processing into the products covered by the Scallop Standard.

#### References to other sections within the Code of Practice for Fish and Fishery Products

The formatting for referrals to other sections of the Code in this draft differs from the rest of the *Code* by including referred section headings and "in the *Code of Practice for Fish and Fishery Products.*" The draft scallop COP should use the same simple (section number) format as the rest of the *Code* because listing headings could lead the reader to make an improper decision to <u>not</u> read integral guidance that is not repeated in the current section. Listing only the section number clearly indicates that the section is located in the current document.

#### **Specific Comments**

#### TABLE OF CONTENTS

Comment: Suggest removing table of contents.

**Rationale:** It is probably not useful to maintain changes because the final format is likely to be different. The table of contents in the published edition of the *Code* only lists top level headings, and the online version does not include a table of contents.

#### Paragraphs before Definitions

Comment: Remove paragraphs:

This Code of practice on the processing of raw, fresh, and quick frozen scallop products has been developed in complement to the Code of Practice for Fish and Fishery Products (Section 7 – Processing of Live and Raw Bivalve Molluscs) and the Standard for Live and Raw Bivalve Molluscs to provide specific guidance on processing practices of scallop products. The application of Good Manufacturing Practices (GMP), Hazard Analysis Critical Control Point (HACCP) and "defect action point" (DAP) approaches for these products should be promoted to ensure consumer health and safety as well as product quality.

This Code will address the general processing steps and technical guidance to be employed by scallop product manufacturers which could vary from country to country. Potential hazards and defects at each processing step starting from raw material reception and ending with final product distribution will also be identified. In addition, each processing step will include technical guidance for controlling the identified hazards and defects that help ensuring consumer safety and product quality.]

As stressed by this Code, the application of appropriate elements of the pre-requisite program (Section 3) and HACCP principles (Section 5) at these steps will provide the processor with reasonable assurance that the essential quality, composition and labelling provisions of the Draft Standard for Fresh and Quick Frozen Raw Scallop Products will be maintained and food safety issues controlled.

#### Rationale:

- The wording is not unique to scallop products, and could apply to all products covered by the Code of Practice for Fish and Fishery Products. However, similar wording is not found in other sections of the Code.
- The first line is problematical:
  - Codes of practice serve a different purpose from commodity standards, and the COP is not considered complementary to the Standard.
  - The draft Scallop COP does not complement the Bivalve Code because harvesting, vessel storage and transportation of live scallops is fully covered in the Bivalve Code. If repetitive guidance is removed, it could be complementary.

 It is not clear if these paragraphs are intended to be part of the Code of Practice for Fish and Fishery Products because they are located before the starting section (i.e., Section X, Processing of Fresh and Quick Frozen Raw Scallop Products.)

# SECTION X PROCESSING OF FRESH AND QUICK FROZEN RAW SCALLOP PRODUCTS, Second Paragraph

Comment: Revise as follows:

This section applies to scallop products defined in the *Standard for Fresh and Quick Frozen Raw Scallop Products*, including Fresh or Quick Frozen Scallop Meat; Fresh or Quick Frozen Roe-on Scallop Meat; and Quick Frozen Scallop Meat, or Quick Frozen Roe-on Scallop Meat, with Added Water and/or Solutions of Water and Phosphates; and covers harvesting through land-based processing operations.

Rationale: To align with the Scallop Standard.

## X.1.1.1 Marine Biotoxins, 1<sup>st</sup> paragraph

Comment: Revise footnote #1 as follows:

1 Marine biotoxins: <u>e.g.</u>, paralytic shellfish poisoning toxin (PSP); amnesic shellfish poisoning toxin (ASP); and diarrhetic shellfish poisoning toxin (DSP)

**Rationale:** Include "e.g." because the list does not include neurotoxic shellfish poisoning (NSP) or azaspiracid shellfish poisoning (AZP), which are covered in the Molluscan Bivalve Standard.

# X.1.1.1 Marine Biotoxins, 2<sup>nd</sup> paragraph, 2<sup>nd</sup> & 3<sup>rd</sup> sentence

## Comment:

2<sup>nd</sup> Sentence: Replace "country specific scientific evidence" with "data.

3<sup>rd</sup> Sentence: Remove sentence as follows:

Scientific data has shown that when algal blooms producing marine biotoxins are present in harvest areas, toxins may accumulate at a hazardous level in the viscera and roe. Therefore, for roe-on scallop meat products, preventive measures should be in place in accordance with the Standard for Live and Raw Bivalve Molluscs (CODEX STAN 292-2008)

With respect to scallop meat products, marine biotoxins are not reasonably likely to present a hazard. While the hazard analysis will consider marine biotoxins a potential hazard, this hazard will be excluded or included based upon the species and the available <del>country specific scientific evidence</del> [data] for toxins in that species. <del>During shucking to produce scallop meat, incomplete removal of the viscera and roe may introduce biotoxin health hazards.</del> If marine biotoxins are an identified hazard in the meat of the species then biotoxin control measures should be in place.

#### Rationale:

2<sup>nd</sup> Sentence: Change words to be consistent with text in Standard for Fresh and Quick Frozen Raw Scallop Products (Codex Stan 315-2014), Section 5 Contaminants, (i) Scallop Meat.

3<sup>rd</sup> Sentence: The removed sentence does not follow the logical flow of the section, which covers the biotoxin hazard in general and not specific processing guidance. The previous paragraph already explains that "toxins may accumulate at a hazardous level in the viscera and roe". The removed sentence provides shucking guidance that should be located at the shucking step, and is.

# X.1.1.1 Marine Biotoxins, 3<sup>rd</sup> (bracketed) paragraph

Comment: Remove:

# [Marine biotoxins are not reasonably likely to present a hazard in in properly processed commercial scallop adductor muscle meat shucked live.]

**Rationale:** This sentence replicates the 1<sup>st</sup> sentence of the 2<sup>nd</sup> paragraph, however it includes two additional criteria ("properly processed", and "shucked live".) These criteria relate to a hazard if good manufacturing practices are not followed, and not to a natural biotoxin hazard in scallop meat. The appropriate GMP guidance on proper shucking and disposal of dead scallops is adequately covered at the shucking step.

# X.1.1.1 Marine Biotoxins, 4th (bracketed) paragraph

#### Comment: Remove:

[Biotoxins may migrate into the adductor muscle (meat) if the viscera and roe are not removed while the scallop is alive.]

**Rationale:** This is processing guidance that should be covered at the appropriate processing step(s) (see previous two comments.)

## X.1.1.1 Marine Biotoxins, 5<sup>th</sup> (bracketed) paragraph

#### Comment: Remove:

#### [Toxins may accumulate at a hazardous level in the adductor muscle (in some species)]

**Rationale:** The hazard in adductor muscle is best covered by the 2<sup>nd</sup> paragraph, which states "this hazard will be excluded or included based upon the species and the available country specific scientific evidence for toxins in that species." The bracketed sentence covers the same concept by making a statement of fact that has not been well established, and is contrary to papers published in peer reviewed journals that study adductor muscle from live scallops.

# X.1.1.1 Marine Biotoxins, 6th (bracketed) paragraph

#### Comment: Remove:

[If there is information from monitoring of the harvesting area or from on-board biotoxin screening that toxins are present in the viscera/whole body analysis, control measures should be in place to confirm that scallop products are safe for human consumption (i.e. further testing of meat or roe-on scallops).]

Rationale: The paragraph contains erroneous guidance.

- For scallop meat where the hazard analysis has excluded the hazard for the species, information on the level of toxins in the viscera, or whole body, is irrelevant. No further testing of the meat is required, even when there are high levels of toxin in the viscera (see general comment.)
- For roe-on scallops, or for scallop meat where the hazard analysis has identified a hazard in the species, the first and second paragraphs already indicate that biotoxin controls must be in place. The controls listed in this paragraph are inadequate and inaccurate. If on board or harvest area screening indicates the presence of toxins in the viscera, product with an identified hazard would not be harvested, and certainly would not be harvested and tested again, as implied here.

#### X.1.2.2 Excess Water Uptake, last sentence

#### Comment: Remove sentence

The use of a solution of water and phosphate, or added water alone, is only permitted in quick frozen scallop products.

#### Rationale:

- This statement is misleading because phosphate solutions, or water, are not within the Scallop Standard definitions for Quick Frozen Scallop Meat or Quick Frozen Roe-on Scallop Meat.
- Product definitions diverge from the theme of this section, and are better discussed under Step #10 (Addition of solution of water and phosphates or of water.)
- The term "permitted" should not be used in place of product definitions because some countries do not permit scallops with water added as an ingredient because the reason for adding water is to increase net weight, which may be considered misleading to the end customer.

#### Figure X.1 Example of a Flow Chart for production of scallop products

**Comment:** Flow chart labels should be revised to reflect section heading changes made by the comments that follow.

#### X.2.1 Shucking on vessel

Comment: This heading should be moved above section X.2.1.3.

Rationale: Sections X.2.1.1 (landing) and X.2.1.2 (washing) apply to both scallops shucked on land and scallops shucked at sea.

## X.2.1 Shucking on vessel

Comment: Revise heading as follows:

X.2.1 Vessel Operations (Sshucking on vessel)

Rationale: To show what is being broadly covered. A parallel change is recommended for Section X.2.2. "Shucking on land" should be "Vessel Operations (shucking on land)."

X.2.1.1 Scallop Landing/Deck Dump (Processing Step 1), heading

Comment: Revise heading as follows:

## Scallop Landing/Deck Dump Scallop Harvesting (Processing Step 1)

## Rationale:

- "Landing" is associated with the point where fish are taken ashore.
- "Deck Dump" is not commonly understood and was previously criticized.
- "Harvesting" is used in comparable Section 7.3 of the Bivalve COP.

## X.2.1.1 Technical Guidance, 2<sup>nd</sup> bullet

**Comment:** Remove bullet:

 For at sea shucking voyages, [live] scallops should be collected and placed in clean storage containers made from material that is easy to wash and disinfect and that is suitable for contact with seawater, without undue delay and with care to avoid contamination.

#### Rationale:

- Cleaning, disinfection, and contamination are covered in prerequisite Sections 3.1, 3.3, 3.4, and 3.5. According to the introductory guidelines for use of the Code of Practice for Fish and Fishery Products, only new guidance specific to scallops should be included in this section
- Use of "storage containers" is not required, and their use is not exclusive to shucking on the vessel.
- If the bullet is retained, the phrase "For sea shucking voyages" should be replaced with "For shucking on the vessel" to be consistent with the flow chart and the section heading, and the term "live" should be retained to be accurate and consistent with the Bivalve and Scallop Standards.

# X.2.1.1 Technical Guidance, 3rd bullet and 2 sub-bullets

**Comment:** Remove bullets:

- For short haul voyages [live] scallops should be collected and placed on deck or clean work surface to allow for washing of scallops. This should be carried out without undue delay and with care to avoid contamination.
  - To reduce stress and increase longevity, provide shade, seawater spray, or quickly transfer to a chilled environment to and minimize the time scallops are exposed to elevated temperatures and dry conditions.
  - Clean seawater must be used and surfaces should be clean and impervious. Where wooden surfaces are used, they must be easily cleanable and not contaminate the scallops.

#### Rationale:

- Washing of live scallops covered at the next step (Section X.2.1.2), and Section X.2.2.1 covers live storage similar storage information.
- Section 7.3 (Harvesting and transportation of live bivalve molluscs) already contains guidance for the harvest and transport of live scallops. The washing guidance in these bullets is covered more completely in Section 7.3.
- Guidance for scallop harvest and live transport is the same as for other bivalves, and if any guidance is
  missing, it should be added to Section 7.3 (if applicable to all bivalves.)
- If retained, the term "short-haul" should be replaced with "shucking on land" to be consistent with the Flow Chart and the heading of Section X.2.2. When scallops are shucked on the vessel, the voyages may be long or short (see X.2 Processing Operations.)

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- 1st sub-bullet: Live storage is covered in Section X.2.2.1; and temperature requirements are more fully covered in Section 7.3.
- 2nd sub-bullet: Clean seawater and contact surface requirements are covered in the prerequisite sections of the Code and should not be repeated.

## X.2.1.1 Technical Guidance, 5th bullet

**Comment:** Revise as follows:

 Rough handling of live scallops should be avoided to minimize stress and injury which that could lead to the death of scallops prior to processing.

Rationale: Editorial

X.2.1.1 Technical Guidance, 6th bullet

Comment: Remove

• Waste material should be disposed of in an appropriate manner.

Rationale: Waste disposal is not unique to scallops and is covered in prerequisite Sections 3.1.2 and 3.1.6.

## X.2.1.2 Washing Whole Scallops / Size Grading (Processing Step 2)

**Comment:** Revise heading as follows:

X.2.1.2 Washing Whole Live Scallops / Size Grading (Processing Step 2)

#### Rationale:

- "Live" is more accurate because "whole" could be dead or alive (see general comment.)
- Scallop size is generally regulated by the size of the dredge openings, and various regulatory stock
  management strategies are not within the scope of Codex codes of practice.
- No hazards or defects are identified with "grading."
- End product grading in the example occurs at the land based processing facility.

## X.2.1.2, Technical Guidance, 1st bullet

**Comment:** Revise as follows:

• Refer to Sections 7.3 Harvesting and transportation of live bivalve molluscs and 7.6.3 Washing, declumping, debyssing and grading of the Code of Practice for Fish and Fisheries Products.

**Rationale:** Section 7.3 better covers washing on the vessel. Section 7.6.3 is intended to cover washing at the "distribution centre" or "establishment."

## X.2.1.2, Technical Guidance, 2<sup>nd</sup> bullet

**Comment:** Remove bullet:

#### • The surface of the shells should be washed free of mud, detritus and sand.

Rationale: This is covered in Section 7.3 as follows:

"Bivalve molluscs should be freed from excessive mud and weed soon after being harvested by washing with clean seawater or potable water under suitable pressure. Wash water should not be allowed to flow over bivalve molluscs already cleaned. The water could be recirculated if it meets the definition of clean water."

# X.2.1.2, Technical Guidance, 3rd bullet

**Comment:** Remove bullet:

#### • Scallops having formed clumps should be de-clumped.

Rationale: Unlike oysters, scallops live individually, can move, and do not form clumps.

# X.2.1.2, Technical Guidance, 5th bullet

**Comment:** Remove bullet:

• Scallops should be sorted (graded) if legal minimum or marketing sizes apply.

**Rationale:** Local stock maintenance regulations are various and beyond the scope of this Code. See comment on the Section Heading above.

## X.2.1.2, Technical Guidance, new bullet

Comment: Add new bullet as follows:

• Following washing, scallops intended for shucking on land should be immediately transferred to on board live storage.

Rationale: Live scallops require immediate attention to temperature control.

## X.2.1.3 Shucking (Processing Steps 3, 21)

Recommendation: Combine the "Washing" and "Shucking" steps as, "Shucking and Washing."

**Rationale:** Washing should be an integral part of shucking for food safety reasons. Washing is included in the shucking step in the Bivalve COP (Section 7.8.)

## X.2.1.3, Technical guidance, 2<sup>nd</sup> bullet

**Comment:** Revise as follows:

Live Sscallops should be shucked as soon as possible, after harvest.

Rationale: See general comment.

# X.2.1.3, Technical guidance, 3rd bullet

**Comment:** Revise as follows:

• For at-sea shucking voyages, dDead scallops observed during shucking should be disposed of in a proper manner because the time of death is unknown and the quality of the meat and roe may be unacceptable. Dead scallops can be identified through sensory evaluation, covering characteristics such as shell gaping with no response to percussion, sour odor, and/or viscera exposed outside the shell, picking of muscle or mantle, or other effective methods to assess viability.

Rationale: This guideline is the same for scallops at sea or on land.

#### X.2.1.3, *Technical guidance*, 6<sup>th</sup> bullet

Comment: Remove:

 Care should be taken to insure that worker's hands, shucking tables, containers, and knives are properly cleaned and sanitized.

Rationale: Cleaning and sanitation guidance is covered in Section 3 (prerequisites) and should not be repeated.

## X.2.1.3, *Technical guidance*, 7<sup>th</sup> bullet

Comment: Remove:

#### Workers should be trained so as to avoid damage to scallops.

Rationale: Training is not unique to scallops and applies to all processing steps in the Code.

# X.2.1.3, Technical guidance, 8th bullet

**Comment:** Revise as follows:

 The sShucked scallops should proceed immediately to the next washing steps to minimize their exposure to ambient temperatures above 4 °C, and to remove any visceral remains.

#### Rationale:

- A step only needs to cover the transition to the next step, and 'washing' is the next step.
- Viscera may contain biotoxins and immediate washing after shucking is important to remove potentially toxic viscera.

## X.2.1.4 Washing (Processing Step 4, 22), heading

**Comment:** If not combined with "Shucking" step, revise section heading as follows:

X.2.1.4 Washing shucked scallops (Processing Step 4, 22)

## Rationale: To differentiate from washing live scallops.

#### X.2.1.4 *Technical guidance*, 1<sup>st</sup> bullet

#### **Comment:** Revise as follows:

• <u>Immediately after shucking, Cc</u>lean sea water or salt water made from potable water should be used to wash scallops after shucking to remove any objectionable matter such as remains of viscera, shell fragments, sand, and foreign matter such as debris.

**Rationale:** To emphasize immediacy. The term "objectionable matter" does not appear appropriate for potentially hazardous viscera.

# X.2.1.4, *Technical guidance*, 2<sup>nd</sup> bullet

**Comment:** Revise as follows:

 During washing, scallops should be gently agitated and separated from each other in order to allow the removal of viscera remains, shell fragments, sand, and other foreign matter such as sand.

Rationale: Viscera and shell from scallops themselves are not "foreign" matter.

#### X.2.1.4, *Technical guidance*, 5<sup>th</sup> bullet

**Comment:** Combine with 6<sup>th</sup> bullet:

Washed scallops should be adequately drained.

Rationale: To reduce bullet points.

## X.2.1.4, Technical guidance, 6<sup>th</sup> bullet

**Comment:** Revise as follows:

 After washing, the shucked scallops should be <u>drained and</u> immediately pre-chilled. , packed and refrigerated or iced and kept at the adequate temperature (between 0°C and 4°C).

**Rationale:** To include 'draining' from the previous bullet. The details of the subsequent "Pre-chilling" step are best covered at that step.

#### X.2.1.6 Packing (Processing Step 6), step format

**Comment:** Combine the "Packing" (Step 6) and "Chilled Storage" (Step 7) technical guidance under the following heading:

#### X.2.1.6 Packing On Board Storage of Shucked Scallops (Processing Step 6)

Recommended edits to the technical guidance from the "Packing" and "Chilled Storage" steps are shown below.

#### Rationale:

- To parallel the wording and structure of the analogous Section X.2.2.1 "On Board Storage of Whole Scallops."
- A separate "packing" step is not included in Section X.2.2.1 for comparable placing of live scallops into "net sacks or other suitable containers."
- "Packing" is not an appropriate term for placing product into temporary storage containers during transportation. The term is usually used for final product packing, and should be reserved for that step. (This has apparently already caused confusion with guidance in the 2<sup>nd</sup> bullet to include warning labels at this step.)
- The bins or bags used for temporary storage are an integral part of the storage process.
- The draft guidance under the two step approach is repetitive.

#### X.2.1.6 Packing, Potential Defects

**Comment:** Revise as follows:

Potential Hazards: Microbiological contamination, chemical and physical contamination

Potential Defects: Damaged scallops, <u>Physical damage</u>, foreign matter/filth, <u>decomposition</u>, excess water uptake

## Rationale:

- The term "physical damage" (from X.2.1.7 Chilled Storage) is preferable to "damaged scallops".
- "Decomposition" is moved from X.2.1.7 to combine steps.
- If steps are <u>not</u> combined as suggested, please note that chemical and physical contamination are storage hazards (identified in 7.6.5.2 Storage of raw bivalve molluscs.)

## X.2.1.6 Packing, *Technical guidance*, 1<sup>st</sup> bullet

#### **Comment:** Revise as follows:

- Also refer to Section 8.5.1 Reception Packaging, Labels & Ingredients; Section 8.5.2 Storage – Packaging, Labels & Ingredients and Section 8.4.4 Wrapping and Packing of the Code of Practice for Fish and Fisheries Products.
- <u>Refer to Subsections 3.1, 3.2, 3.3, and to Section 4</u>

## Rationale:

- Prerequisite Program Sections (3.1, 3.2, and 3.3), and the General Considerations for the Handling of Fresh Fish, Shellfish and Other Aquatic Invertebrates (Section 4), offer more appropriate guidance for storage during vessel transportation.
- Sections 8.4.4 (Wrapping and packaging) and 8.5 (Packaging, labels and ingredients) for Fresh, Frozen
  and Minced Fish, pertain more to final product packaging and labelling (e.g., net weight) than to filling
  temporary storage containers. And, any needed guidance on cleanliness of storage containers/bags is
  contained in the 2<sup>nd</sup> technical guidance bullet.
- Section names are not used for referrals within the Code.

# X.2.1.6 Packing, Technical guidance, 2<sup>nd</sup> bullet

**Comment:** Revise as follows:

Shucked scallops should be stored in clean containers <u>or bags</u> made of a suitable material appropriate to be in contact with food.
 , a tag or other appropriate identification should be attached to each container to determine the date of harvest, harvest area, and other relevant product information. The authority could require the addition of precaution legends about the risks of consumption of raw and inadequate cooked food.

#### Rationale:

- To assure that the unique issue of mesh storage bag cleanliness is covered. Standard storage bins are adequately covered in prerequisite programs.
- Harvest area tags are covered in a later bullet, and are only required for live shellfish.
- Authorities would not require warning labels about the risk of raw shellfish consumption on scallops being transported to a processing facility.

# X.2.1.6 Packing, *Technical guidance*, 3<sup>rd</sup> bullet

#### **Comment:** Edit as follows:

 <u>Storage</u> Ccontainers/bags should not be too large, should be appropriately filled and not over-stacked in order to facilitate cooling and to prevent scallops from being damaged.

#### Rationale:

- Editorial, to reflect section heading.
- Please note that this, and other equally relevant guidance, is already covered by the recommended referral to Section 4 (see comment for 1<sup>st</sup> bullet above), which includes, "Where boxes are used for storage of fish and shellfish, they should not be overfilled or stacked too deep."

# X.2.1.6 Packing, Technical guidance, 4th bullet

Comment: Remove:

#### • If packed manually, worker's hands should be properly cleaned and sanitized.

**Rationale:** Personnel hygiene is not unique to scallops. Hand washing is adequately covered in 3.5.2 Personnel hygiene (Prerequisite Programme.)

# X.2.1.6 Packing, Technical guidance, 5th bullet

Comment: Remove:

The scallops should be kept in a clean condition.\

Rationale: Not unique to scallops, and adequately covered in Sections 3 and 4.

#### X.2.1.7 Chilled Storage, Technical guidance, 1<sup>st</sup> bullet

**Comment:** Remove bullet:

 Refer to Section 8.1.2 Chilled Storage of the Code of Practice for Fish and Fisheries Products.

#### Rationale:

- All pertinent information is included in the current section (X.2.1.7) and a referral to Section 8.1.2 does not add any further information.
- Because Section 8.1.2 applies to land based fish storage, it contains some inappropriate information concerning thermometers, fish layering, and stock rotation in a refrigerated room. A step should only refer to other sections that are wholly applicable.

## X.2.1.7 Chilled Storage, Technical guidance, 3rd bullet

Comment: Revise as follows:

 Where ice is used, measures should be taken that avoid or limit water uptake to that which is technologically unavoidable (e.g., shorter trips, rapid and complete precooling, effective holding area insulation, impermeable containers, impervious film between ice and the container).

**Rationale:** Melting ice must percolate through shucked scallops to remove heat and prevent spoilage. Depending on various factors, net added moisture (less drip loss) can be positive or negative.

# X.2.1.7 Chilled Storage, Technical guidance, 6th bullet

**Comment:** Remove bullet:

Containers should be appropriately stacked to facilitate cooling and prevent scallop damage.

Rationale: This item is covered in Section X.2.1.6 Packing (3<sup>rd</sup> bullet), and in Section 4.

# X.2.1.7 Chilled Storage, Technical guidance, 7th bullet

**Comment:** Revise as follows:

 Storage containers should be identified by harvest date and other relevant product information. Stock rotation schemes should be used to ensure proper utilization of the scallops at the land-based processing facility.

**Rationale:** Stock rotation schemes apply to land-based product usage, not to vessel storage, and are covered in X.2.3.3 Chilled Storage (land-based.)

#### X.2.1.7 Chilled Storage, Technical guidance, 9th bullet

**Comment:** Remove bullet:

 Prior to offloading, product and storage information (e.g. dates of harvest in relation to onboard chilled storage locations) should be considered to facilitate proper utilization of the scallops.

**Rationale:** The earliest harvested scallops may be difficult to offload first. It is the responsibility of the landbased processor to select the earliest harvest date for first processing after the scallops are landed (based on the container labels, see 7<sup>th</sup> bullet above.)

## X.2.2 Shucking on land, 1<sup>st</sup> sentence

**Comment:** Remove brackets:

This section covers the handling and storage of *flive* whole scallops on board short haul harvesting vessels where shucking is done in the land based processing facility.

Rationale: See general comment.

# X.2.2.1 On Board Storage (Deck/hold) of Whole Scallops (Processing Step 18)

Comment: Revise heading as follows:

# X.2.2.1 On Board Storage (Deck/hold) of Whole Live Scallops (Processing Step 18)

## Rationale:

- The term "Deck/hold" is confusing and complicates the heading. If guidance is needed on different types
  of live storage (e.g., on a deck, in a hold, in a bin, iced, refrigerated, etc.), then it should be detailed in
  the technical guidance.
- The term "live" more accurately describes this step. The scallops can be 'whole' without being 'live', but they cannot be 'live' without being 'whole'. See general comments.

# X.2.2.1, *Technical Guidance*, 1<sup>st</sup> bullet

# Comment: Revise as follows:

• Refer to Section 7.3 Harvesting and transportation and section 8.1.2 Chilled Storage of live bivalve molluscs of the Code of Practice for Fish and Fisheries Products.

## Rationale:

- Guidance for harvesting/storage/transport of live scallops is fully covered in Section 7.3.
- Section 7.3 refers to Sections 3.1, 3.3, 3.4 and 3.5, but not to Section 8.1.2.
- Section 8.1.2 applies to land based refrigerated storage of fish and contains inappropriate guidance for on board storage of bivalves, such as the recommended temperature.
- A step should only refer to another section that is wholly applicable in order to avoid confusion.

# X.2.2.1, Technical Guidance, new bullet

Comment: Add new bullet as follows:

# Scallops should be maintained in a live condition until processed.

**Rationale:** Maintaining live condition is the primary goal of on board storage of live scallops.

# X.2.2.1, *Technical Guidance*, 2<sup>nd</sup> through 12<sup>th</sup> bullets

**Comment:** Remove 2<sup>nd</sup> through 12<sup>th</sup> bullets

## Rationale:

- Harvesting, storage and transport of live scallops is fully covered in Section 7 of the Code.
- This section should not attempt to duplicate coverage with similar guidance
- If any new guidelines are needed, an update to the Bivalve COP should be considered (if applicable to other bivalves.)
- The rationale for removal of individual bullets is given below:

# 2<sup>nd</sup> bullet:

 Scallops should be protected against sun exposure, contact with foreign matter, be stacked in a proper manner in order to keep them alive, maintain integrity and avoid damage and contamination.

Rationale: Covered in Section 7.3 (2<sup>nd</sup>, 3<sup>rd</sup>, 6<sup>th</sup> bullets.)

# 3<sup>rd</sup> bullet:

## Scallops should be placed in clean net sacks or other suitable containers.

**Rationale:** It is not necessary to place scallops in net sacks or containers. This is better covered in Section 7.3 (2<sup>nd</sup> bullet.)

# 4<sup>th</sup> bullet:

# Containers must provide for adequate drainage.

**Rationale:** This is better covered in Section 7.3 (2<sup>nd</sup> bullet.) This includes holds where containers are not used.

# 5<sup>th</sup> bullet:

• Areas where scallops are stored must be clean and cleanable.

Rationale: Covered by Section 3.4 (referenced in Section 7.3.)

# 6<sup>th</sup> bullet:

- Scallops should not be stored on surfaces such that they can become re-immersed and/or subject to contamination.
- **Rationale:** Covered in Section 7.3 (2<sup>nd</sup> and 3<sup>rd</sup> bullets.)

# 7<sup>th</sup> bullet:

 Temperature control is recommended for storage to ensure scallops are stored between 0°C and 4°C. This can involve both fishroom chilling and/or the use of ice. However care must be taken as in warm seawater conditions a sudden reduction in temperature can induce stress through thermal shock.

**Rationale:** Better covered in Section 7.3 (6<sup>th</sup> bullet.) "In most cases, storage above 10 °C (50 °F) or below 2 °C (35 °F) should be avoided."

## 8<sup>th</sup> bullet:

#### Ice must be made from clean water or clean seawater.

Rationale: Covered in Section 3.4.5.2.

9<sup>th</sup> bullet:

- Care must be taken when icing scallops to minimize exposure to freshwater meltwater as it can cause stress.
- Rationale: Better covered in Section 7.3 (6<sup>th</sup> bullet).

10<sup>th</sup> bullet:

 Scallops stored on deck for short periods of time should be covered to protect them from direct sunlight and can be hosed down periodically using clean seawater to help lower temperatures in warm ambient conditions.

**Rationale:** This is adequately covered in Section 7.3 (6<sup>th</sup> and 7<sup>th</sup> bullets.) Cooling with water is not specifically discussed, but washing and protecting from sunlight and maintaining temperature is well covered. Note that under GMPs, scallops should be moved to storage immediately after washing.

# 11<sup>th</sup> bullet:

 Where ice is used, measures should be taken that avoid or limit water uptake to that which is technologically unavoidable (e.g. rapid and complete precooling, effective holding area insulation, impermeable containers, impervious film between ice and the container).

#### Rationale:

- Live scallops are not normally directly exposed to ice or melting ice water because this causes stress that would lead to likely mortality before significant water uptake.
- If exposed to ice water, live scallops are unlikely to absorb significant amounts because they can close their valves to keep water out, and can osmoregulate.

# 12<sup>th</sup> bullet:

 Appropriate documentation should be maintained to meet with any harvesting and transporting regulatory requirements that apply.

#### Rationale:

- It should be presumed that processors will comply with miscellaneous unidentified government regulations.
- Only specific guidelines relevant to food quality or food safety should be included in the Code.

#### X.2.2.2 Landing of Whole Scallops to Market/Processor (Processing Step 19)

**Comment:** Remove section.

X.2.2.2 Landing of Whole Scallops to Market/Processor (Processing Step 20 4)

Potential hazards: Microbiological contamination; chemical and physical contamination

Potential defects: Physical damage; water uptake

Technical Guidance:

- Refer to Section 7 Processing of Live and Raw Bivalves of the Code of Practice for Fish and Fisheries Products as well as closely related guidance in Step 8.
- During landing scallops should be unloaded without undue delay and not be subject to excessive physical shock through rough handling.
- During storage at the place of landing and subsequent transport, temperature should be maintained at 4°C or below. Where processing facilities are near to the landing area this may not be necessary.
- Transportation units should be clean, free of contamination and temperature controlled where necessary.
- Appropriate documentation should be completed to comply with any regulatory requirements.

#### Rationale:

- This section is not needed for the example, and would be equally applicable to shucked scallops.
- The flow chart for shucked scallops leads directly from vessel storage to scallop reception at the
  processing facility, and live scallops are actually more likely to be delivered directly to the processor than
  shucked scallops.
- If the intention is to include guidance on ground transportation to the processing facility for live scallops, then this is already fully covered in Section 7.3.
- If the intention is to cover the common practice of directly marketing live scallops (as it appears because "to market" is included in the heading), then this product is covered by the Bivalve Standard and should not be discussed in the Scallop Code because the Scallop Code is only for products covered by the Scallop Standard (see Section X.)

#### X.2.3.1 Reception (shucked scallops) (Processing Step 8), *Technical Guidance*, 1<sup>st</sup> bullet

Comment: Revise, capitalize and remove semi-colons as follows:

- Product specifications could commonly include the following provisions:
  - o eOrganoleptic characteristics such as appearance, flavour, odour, texture, etc.;
  - o sSpecies identification;
  - o Moisture content (acceptable upper limit) moisture content;
  - ₩<u>W</u>orkmanship (e.g. presence of viscera/roe;
  - o eChemical contamination such as heavy metals, pesticide residues, etc.;
  - o pPresence of foreign matter;
  - o **⊬V**isible parasites.

**Rationale:** Editorial. The term "could" (as a substitute for "should") provides questionable guidance because anything "could" be included. "Commonly" provides some useful information. Alternatively reword the sentence, e.g.:

# The following provisions are recommended for consideration when developing product specifications:

#### X.2.3.1, Technical Guidance, 2<sup>nd</sup> bullet

Comment: Revise as follows:

For receiving of roe-on scallop meat, <u>or scallop meat where the hazard analysis has determined</u> <u>that marine biotoxins are a potential hazard in the meat of the species</u>, a processor should have a process in place to ensure that the toxicity content meets the regulatory requirements of the official agency having jurisdiction over the harvest area <u>(as per X.1.1.1 Marine Biotoxins.)</u> This could be accomplished by adhering to a toxin monitoring programs or end product testing. As per X.1.1.1 this consideration would also apply to scallop meat where the hazard analysis has determined that marine biotoxins are a hazard in the scallop meat. Refer to Section 7.2 Classification and monitoring of growing areas of the Code of Practice for Fish and Fisheries Products for further information on the classification and monitoring of growing areas.

**Rationale:** Editorial, in order to consolidate an accurate description of the products having the potential hazard, and to show that Section X.1.1.1 is applicable to all these products.

#### X.2.3.2 Reception (whole scallops) (Processing step 20), heading

Comment: Revise heading as follows:

X.2.3.2 Reception (whole live scallops) (Processing step 20)

Rationale: To consistently and accurately describe the product. See general comments.

#### X.2.3.2 Potential defects

Comment: Revise as follows:

Potential Defects: Dead, dying or damaged scallops; parasites; objectionable matter; foreign matter

Rationale: To parallel Section 7.6.1 that also covers the reception of live scallops.

## X.2.3.2 Technical Guidance, 1<sup>st</sup> bullet

**Comment:** Revise as follows:

Refer to Section 7.6.1 Reception of the Code of Practice for Fish and Fisheries Products.

Rationale: See general comment.

# X.2.3.2 Technical Guidance, 2<sup>nd</sup> bullet

**Comment:** Revise as follows:

 Whole <u>Live</u> scallops should be unloaded without undue delay and with care and adequately chilled to avoid microbiological contamination and decomposition.

Rationale: See general comments.

# X.2.3.2 Technical Guidance, 3rd bullet

**Comment:** Revise as follows:

Whole Live scallops should be examined at reception to assure they are alive and in good condition suitable for processing. Unfit Dead scallops can be identified through sensory evaluation, covering characteristics such as shell gaping with no response to percussion, sour odour, and/or viscera exposed outside the shell, or other effective methods to assess suitability for shucking viability.

Rationale: See general comments. To retain the terms "dead" and "viability" from the original draft.

#### X.2.3.2 Technical Guidance, 4<sup>th</sup> bullet

Comment: Revise as follows:

 Rough handling of <u>live</u> scallops should be avoided to minimize stress and damage to the animal <u>which could lead to the death of scallops</u> prior to processing.

Rationale: See general comments. To retain original language.

# X.2.3.2 Technical Guidance, 5th bullet

**Comment:** Revise as follows:

- Product specifications could commonly include the following characteristics provisions:
  - e<u>E</u>vident signs of death (dead/gaping);
  - o bBroken shells;
  - o sSpecies identification;
  - o eChemical contamination such as heavy metals, pesticide residues, etc.;
  - o pPresence of foreign matter;

 $\circ \forall \underline{V}$  is ble parasites.

**Rationale:** Editorial. See comment for X.2.3.1, 1<sup>st</sup> bullet. See general comments. "Dead/gaping" was the original first bullet.

## X.2.3.2 *Technical Guidance*, 6<sup>th</sup> bullet.

**Comment:** Move bullet to the top of the list of technical guidance bullets as follows:

 Refer to Section 7.2 Classification and monitoring of growing areas of the Code of Practice for Fish and Fisheries Products for further information on the classification and monitoring of growing areas.

**<u>Rationale</u>**: Referrals are generally listed at the top, and this referral is particularly important for control of the potential hazards at this step.

#### X.2.3.3 Chilled Storage (Processing Steps 9, 23), Potential Hazards

Comment: Revise as follows:

Potential Hazards: Microbiological contamination, chemical and physical contamination

Rationale: Potential hazards aligned with Section 7.6.5.2 for chilled storage of bivalve molluscs.

#### X.2.3.3 Potential defects

**Comment:** Revise as follows:

Potential Defects: Decomposition, physical damage

Rationale: Potential defects aligned with Section 7.6.5.2

#### X.2.3.3 Technical Guidance, 1<sup>st</sup> bullet

**Comment:** Revise as follows:

 Refer to Sections 7.6.5.2 Storage of raw bivalve molluscs and 8.1.2 Chilled Storage of the Code of Practice for Fish and Fisheries Products.

Rationale: See general comment.

## X.2.3.3 Technical Guidance, 2<sup>nd</sup> bullet

Comment: Remove bullet:

Stock rotation schemes should be used to ensure proper utilization of the scallop products.
 For scallops packed in containers, their identification tag facilitates the determination of the harvest date.

Rationale: Stock rotation is covered in Section 8.1.2 (4<sup>th</sup> bullet.)

# X.2.3.3 *Technical Guidance*, 3<sup>rd</sup> bullet

**Comment:** Revise as follows:

• <u>Scallop</u> products should be stored between 0 °C and 4 °C. The temperature should be monitored during chilled storage.

**Rationale:** This guideline is already listed in Section 8.1.2 (3<sup>rd</sup> bullet), however it should be retained because Section 8.1.2 applies to finfish and readers may question if the same temperature should apply to scallops. Also for this reason, "scallop products" is included.

## X.2.3.3 Technical Guidance, 4th bullet

• Product should be stacked in a manner that would facilitates adequate and uniform temperature distribution to all parts of the stored product.

Rationale: Editorial

# X.2.3.5 Addition of Water (Optional) (Processing Step 10), Technical Guidance, 2<sup>nd</sup> bullet

Comment: Revise as follows:

 The weight of water and scallops should be controlled and accurate<u>ly measured</u> in order to calculate the percentage added water for labelling purposes.

Rationale: Editorial

# X.2.3.7 Freezing Process (Processing Step 12)

Comment: Combine "Freezing Process" and "Glazing" steps into a single step.

#### Rationale:

- To simplify guidance and flow chart because there is no new guidance specific to scallops included in these steps.
- To better cover block frozen and IQF product that is not glazed.

## X.2.3.7, Potential Defects

Comment: Revise as follows:

Potential Defects: Texture deterioration, freezer burn, dehydration

Rationale: To include dehydration from "Glazing" step in combined step.

# X.2.3.7, Technical Guidance, new 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> bullets

**Comment:** Remove referral to Section 8.3.1, and add three bullets as follows:

- Refer to Section 8.3
- If scallops are individually quick frozen (IQF), glaze is often applied to extend shelflife.
- If scallops are block frozen glaze is not commonly applied (block freezing would occur after the packaging step.)

#### Rationale:

- A large percentage of scallops in international trade are block frozen
- Substantial quantities of IQF scallops without glaze are purchased by food service
- Section 8.3 covers both freezing and glazing

## X.2.3.8 Glazing (Processing Step 13)

Comment: Remove step:

X.2.3.8 Glazing (Processing Step 13)

Potential Hazards: Unlikely

Potential Defects: Dehydration

Technical Guidance

- Refer to Section 8.3.2 Glazing of the Code of Practice for Fish and Fisheries Products.
- When scallops are individually quick frozen (IQF), glaze is usually applied.
- Care should be taken to ensure that the entire surface of the frozen Scallop Meat or Roe-on Scallop Meat is covered with a suitable protective coating of ice and should be free of exposed areas where dehydration (freezer burn) can occur during frozen storage.

**Rationale:** Covered by comment for Section X.2.3.7 (above.) Guidance in 3<sup>rd</sup> bullet is already covered in Section 8.3.

## X.2.3.9 Weighing (Step 14)

**Comment:** Combine Weighing Step 14 and Packaging Step 15 as follows:

X.3.3.X Weighing and Packaging (Processing Step X)

**Rationale:** Weighing and packaging are not separate steps and occur simultaneously, either by packaging machinery (e.g., Hayssen) or by hand.

#### X.3.3.9, Potential Hazards:

Comment: Combine weighing and packaging hazards as follows

#### Potential Hazards: Unlikely Microbiological, chemical and physical contamination

**Rationale:** To include hazards from Packaging step. Since weighing and packaging are simultaneous, the same hazards exist during weighing and packaging.

#### X.3.3.9, Potential Defects:

Comment: Combine weighing and packaging defects as follows:

Potential Defects: Incorrect net weight, loss of quality characteristics of packaging materials

**Rationale:** Defect from Packaging step. "Misdescription", an unusual term listed at the Packaging step, is not included because it applies to the Labelling step.

#### X.3.3.9, Technical Guidance, 1<sup>st</sup> bullet

**Comment:** Combine weighing and packaging references as follows:

- Refer to Section 8.2.1 Weighing and 8.3.2 Glazing of the Code of Practice for Fish and Fisheries Products.
- Refer to Section 7.6.1.2 Packaging and labelling of raw bivalve molluscs, 8.5.1 Reception Packaging, Labels & Ingredients; Section 8.5.2 Storage - Packaging, Labels & Ingredients and Section 8.4.4 Wrapping and Packing of the Code of Practice for Fish and Fisheries Products.
- <u>Refer to Sections 7.6.4.2, 8.2.1, 8.3.2, and 8.4.4 for guidance on weighing and packaging.</u>
- <u>Refer to Sections 8.5.1 and 8.5.2 for guidance on receiving and storing packaging</u> <u>material.</u>

Rationale: To present referrals more clearly and without names.

# X.3.3.9, Technical Guidance, 2<sup>nd</sup> and 3<sup>rd</sup> bullets

Comment: Combine as follows

- Net weight is often determined by weighing glazed scallops and accounting for the weight of the glaze. For that reason, glaze levels should be routinely measured to ensure that proper net weights are identified.
- Scales should be properly adjusted to account for the estimated glaze percentage and readjusted when glaze percentage change.
- For individually quick frozen (IQF) scallops, the percentage glaze is continually monitored, and the scales adjusted to assure that the actual net weights meet the declared net weight.

**Rationale:** These bullets overlap and the subject is covered in Section 8.3.2, therefore they are combined into a simpler bullet.

## X.3.3.9, Technical Guidance, new 4th (final) bullet

**Comment:** Move bullet from Packaging (Step 15) as follows

For fresh scallops, and scallops intended to be block frozen, scallops should be adequately drained before packing into cartons.

Rationale: To include the remaining bullet from the "Packaging" step.

#### X.2.3.10 Packaging (Step 15)

**Comment:** Remove step:

X.2.3.10 Packaging (Processing Step 15)

Potential Hazards: Microbiological, chemical and physical contamination

Potential Defects: Misdescription, loss of quality characteristics of packaging materials

- Refer to Section 7.6.4.2 Packaging and labelling of raw bivalve molluscs, 8.5.1 Reception Packaging, Labels & Ingredients; Section 8.5.2 Storage - Packaging, Labels & Ingredients and Section 8.4.4 Wrapping and Packing of the Code of Practice for Fish and Fisheries Products.
- For fresh scallops and scallops intended to be block frozen, scallops should be adequately drained before packing into cartons.

Rationale: Combined into "Weighing and Packaging" above.