1. Executive summary

The MSC is progressing a draft MSC Mass Balance CoC Standard which will provide chain of custody requirements for marine ingredients handled by feed mills certified against the Aquaculture Stewardship Council’s (ASC) Responsible Feed Standard (ASC-FS).

The MSC Mass Balance CoC Standard supports the ASC-FS by providing requirements to allow controlled physical mixing of MSC-certified marine ingredients with non-certified marine ingredients at ASC-FS certified feed mills. Mass balance CoC will help incentivise more sustainable sourcing of marine ingredients where logistical challenges combined with present limited availability of MSC-certified marine ingredients otherwise make it uneconomic. A mass balance CoC approach will help catalyse the uptake of the ASC-FS, and thereby over time create enough certified raw material volume to work towards use of a segregation CoC model. A portion of feed products from certified mills will be eligible to carry an ASC/Mass Balance compliant claim, based on the amount of compliant marine ingredients purchased.

Key points
- MSC Mass Balance will provide CoC requirements for marine ingredients at ASC certified mills.
- Mass Balance allows physical mixing of MSC certified and non-certified ingredients.
- A portion of feed products from certified mills will be eligible to carry an ASC/Mass Balance compliant claim, based on the amount of compliant marine ingredients purchased.

2. Purpose of the consultation

The purpose of this consultation is to provide:

a. clarity on the definition and application of the MSC Mass Balance CoC Standard for use with the ASC Feed Standard,
b. an update on development of key aspects of the MSC Mass Balance and ASC Feed Standard, and
c. a revised draft of the Mass Balance CoC Standard for public comment.

Each of these are elaborated under Section 4, ‘Clarifications and questions for feedback’.

3. Background

The ASC is developing the ASC-FS for certification of feed mills to supply responsible feed to ASC certified aquaculture farms. Eventually all ASC certified aquaculture farms must use ASC compliant feed. The ASCFS aims to incentivise feed mills to source more responsible raw materials over time, partly by requiring incremental increased volumes of marine ingredients sourced from MSC (or equivalent) certified fisheries. The ASC-FS will require certified feed mills to meet the MSC Mass Balance CoC Standard for physical mixing of certified and non-certified marine ingredients.

The first public consultation on the draft Mass Balance CoC Standard took place between 1 March and 30 April 2017 and included two external webinars outlining this project and other topics. Feedback was received from five respondents through an online survey, and a further emailed response from one party. See the anonymous details of the feedback and MSC responses.
4. Clarifications and questions for feedback

4.1 The MSC Mass Balance CoC Standard for use with the ASC Feed Standard

- Mass balance is a type of chain of custody model which involves balancing volume reconciliation.
- There are different types of mass balance. In the model developed by the MSC for use with the ASC Feed Standard, the volume of product that a feed mill may claim as ‘mass balance certified’ is determined by the volume of material the feed mill has sourced from recognised fisheries over a specified period of time. The greater the quantity of material that is sourced from recognised fisheries, the greater the quantity of product that the feed mill can sell as ‘mass balance certified’.
- A crucial difference between the mass balance approach, and the approach used in the MSC Default CoC Standard, is that in the mass balance approach certified feed ingredients are not separated and may be physically mixed with non-certified ingredients, provided that the quantities are controlled. This is different than the approach used in the MSC Default CoC Standard, which requires physical segregation of certified and non-certified products.
- A portion of feed products from certified mills will be eligible to carry an ASC / Mass Balance compliant claim, equal to or less than the amount of marine ingredients purchased from sustainability levels defined in the ASC-FS (see below under Section 4.2). This general approach is illustrated in Figure 1.

Figure 1. Mass Balance diagram for ASC feed

In line with the terms of reference for the development of the MSC Mass Balance Standard, it is essential to note that the MSC ecolabel is not permitted under the mass balance approach. Mass balance certified products must be identifiable as such, but may not carry the MSC ecolabel.

4.2 Key aspects on the application of the MSC Mass Balance CoC Standard

Recent decisions by the ASC Feed Standard Steering Committee have clarified the following key aspects of how mass balance will apply in relation to ASC feed:

- Use of the MSC Mass Balance CoC Standard is only permitted at the ASC certified feed mill, not at prior steps in the feed supply chain.
• All ingredients\(^1\) handled by ASC certified feed mills must pass a due diligence assessment. For marine ingredients, due diligence covers products from IUU fishing, production using child labour or forced labour and production that is likely to have a major detrimental impact on ‘Species at Risk.’

• All marine ingredients can be physically mixed at ASC certified feed mills. This includes ingredients that have passed the due diligence assessment (both whole fish and by-products; Level 0), are sourced from fisheries which are in an IFFO RS Improvers Program (Level 1), are IFFO RS approved (Level 2), are in an approved time-bound Fishery Improvement Project (FIP; Level 3) or are MSC-certified (Level 4).

• Ingredients from Levels 1 through 4, and all by-products which have passed the due diligence assessment, are counted in the mass balance calculation to determine the amount of feed product outputs that are eligible to carry an ASC / Mass Balance compliant claim.

• ASC / Mass Balance compliant products must be identified as such to ensure ASC-certified farms can identify purchases as ASC / Mass Balance compliant. Where it is impossible or impractical to apply a physical label to the product, the feed mill must demonstrate how the product can be verifiably linked with associated traceability or inventory records that identify its compliant status.

4.3 Revised draft of the MSC Mass Balance CoC Standard

A revised draft of the Mass Balance CoC Standard is provided in Appendix A. The draft reflects updates from the considerations above, incorporates feedback from the March–April 2017 public consultation period\(^2\) and from the July 2017 MSC Technical Advisory Board Working Group meeting, and presents a new document structure which is more aligned with the structure of the MSC Default CoC Standard for the purposes of consistency and usability. The MSC seeks feedback on the draft standard provided in Appendix A.

The MSC welcomes feedback on all aspects of the standard, but also highlights the following specific consultation questions:

1. The ASC approach to due diligence, and MSC’s requirements for its implementation (see Appendix 1A and 1B of the MSC Mass Balance CoC Standard), are both new. We would especially welcome comments on the general approach:
   a. Does it provide a reasonable balance between the need to combat IUU fishing, and the challenges and cost of accessing information to prove that a source is not associated with IUU fishing?
   b. Do you support in principle the due diligence approach?
   c. Will such an approach adequately exclude IUU sources from ASC feed?
   d. What other references or considerations should be added?

2. The MSC will develop equivalent additional requirements for application of the due diligence system to the exclusion of sources associated with child labour and forced labour aligned with the MSC ‘Labour’ workstream, and for the exclusion of sources that are likely to have a major detrimental impact on endangered, threatened or protected species, aligned with its ‘Fisheries’ workstream. This work will take place over the coming months. What specific elements do you think should be included in the determination of ‘high’ risk in relation to child labour and forced labour, and/or the exclusion of sources that are likely to have a major detrimental impact on endangered, threatened or protected species?

3. The determination of risk in relation to sources associated with IUU fishing is based on the identification of the ‘red flags’ listed in Appendix 1A of the draft Mass Balance CoC Standard, Table 2.1. However, red flags may be cancelled if there is evidence that appropriate mitigating action has been taken to address the potential concern. What (if any) specific mitigating actions do you propose would be sufficient to address the red flags identified in Table 2.1?

5. Potential interactions with other work

The MSC Mass Balance CoC Standard relies on the exclusions of marine ingredients from certain undesirable sources (associated with IUU, forced labour or child labour, or with major detrimental impacts on endangered, threatened and protected species (referred to as “Species at Risk” in the ASC Feed Standard) in order to allow physical mixing of MSC certified and non-certified ingredients. The due diligence assessment which is linked to the ASC Feed Standard may also be considered for other related MSC

---

\(^1\) All ingredient types that constitute more than 1% of the annual volume of ingredients purchased

\(^2\) Note MSC is further researching some suggestions received from the last consultation period, e.g. in relation to IUU and other exclusions. These are noted in the summary of feedback and MSC responses.
projects, such as the Labour and Fishery Traceability projects. Conversely, findings from these workstreams will also be included in future revisions of this MSC Mass Balance CoC Standard, to ensure alignment.

6. Next steps

All consultation feedback will be anonymised and published in a report on the MSC Program Improvements website after the consultation closes. This will also be emailed to all respondents.

The MSC Mass Balance CoC Standard and the ASC Feed Standard will be tested jointly with a sample of interested feed mills later in 2017. The mutual aim of the MSC and ASC is to align implementation and audit processes of both standards to minimise the audit burden on participating feed mills.

7. Who can comment? How do I give feedback?

This consultation is public and open to all interested parties.

The online feedback survey allows you to respond to specific questions on this topic. We also welcome any more detailed comments that you wish to make on this consultation which can be emailed directly to: standards@msc.org.
Appendix A. Draft MSC Mass Balance CoC Standard

Terms and Definitions

Note: Terms and definitions already defined in MSC-MSCI Vocabulary (V1.1, 20th February 2015) have not been included.

**Marine Ingredient**: an ingredient that consists of or is derived from marine material. A marine ingredient may contain marine material from one or more sources which may not all have been certified to the same fishery management standard.

**Marine Material**: a material that consists of or is derived from any marine organism.

**Mass Balance Certified Product**: a product that has been designated for sale under a mass balance claim.

**Mass Balance Eligible Marine Material**: marine material from mass balance recognised fisheries or that consists of fish byproducts from suppliers that have provided assurance that they have taken adequate measures for the exclusion of material derived from IUU fishing; from sources that are likely to have a major detrimental impact on endangered, threatened or protected species; or from sources associated with child labour or forced labour.

**Mass Balance Ingredient**: an ingredient that consists of or contains mass balance eligible marine material.

**Mass Balance Recognised Fisheries**: fisheries that have been certified at a level recognised by MSC and ASC as contributing towards better fisheries management. There are currently four such levels, referred to as: sustainability level 1, sustainability level 2, sustainability level 3, and sustainability level 4. Sustainability level 4 refers to certification to the MSC Principles and Criteria or equivalent. Detailed specifications, as well as certification schemes that are recognised as meeting these specifications, are given in Appendix 3 of the ASC Feed Standard, Second Draft published for public consultation.

**Non-Permitted Marine Material**: any marine material not covered by an assurance that adequate measures have been taken for the exclusion of content derived from IUU fishing, from sources that are likely to have a major detrimental impact on endangered, threatened or protected species, or from sources associated with child labour or forced labour, OR, that is subsequently shown to contain such material despite the previous provision of an assurance that it had been excluded.

**Organisation**: the entity that seeks certification for its production under this standard. An organisation may be a company, corporation, firm, enterprise, authority or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration.

(from ISO 14001:2004).

**Principle 1  Mass balance ingredients are purchased from certified suppliers**

**1.1  Purchasing**

1.1.1 The organisation shall have a process in place to ensure that all marine ingredients are purchased from suppliers that have provided a due diligence assurance for their sourcing of such ingredients that:

   a. meets the requirements of the Aquaculture Stewardship Council (ASC) specified in Criterion 2.8 and Appendix 2 of the ASC Feed Standard, Second Draft published for public consultation, relating to the exclusion of material from:
• illegal, unreported or unregulated fishing;
• sources using child labour or forced labour; or
• sources that are likely to have a major detrimental impact on endangered, threatened or protected species.

b. meets the additional requirements for implementation of the ASC due diligence system as it applies to marine ingredients, as specified in Appendix 1B of this standard.

**Guidance 1.1.1.b**

Marine ingredients that are supplied under a chain of custody certificate recognised by the ASC as showing that they contain marine material from fisheries certified as achieving sustainability levels 1, 2, 3 or 4 are deemed to meet the due diligence assurance without the need for additional evidence. A list of the chain of custody certificates recognised as such by ASC, in consultation with MSC, is given in Appendix 3 of the ASC Feed Standard, Second Draft published for public consultation.

1.2 Control of mass balance ingredient deliveries

1.2.1 Organisations handling mass balance ingredients shall have a process in place to confirm the certified status of the ingredients upon receipt.

1.2.2 Organisations with mass balance ingredients in stock at the time of the initial certification audit shall be able to demonstrate that these ingredients were purchased from a certified supplier and comply with all relevant sections of this standard before they can be used for the production of mass balance certified products.

1.3 Records of mass balance ingredient deliveries

1.3.1 The organisation shall have a process in place to record the quantity of all mass balance ingredients received, including:

a. Ingredient name / unique identifier

b. Date of receipt

c. Quantity received (including conversion if required into kg/mt)

d. The proportion of the ingredient that consists of mass balance eligible marine material, if applicable

e. The supplier’s name

f. The chain of custody certificate code (or equivalent) which covers the ingredient
1.3.2 The organisation shall have a process in place to calculate and record at the end of each calendar month the total weight of mass balance ingredients it has received over the month.

Principle 2  Mass balance certified products are identifiable

2.1 Labelling of mass balance certified products

2.1.1 Once a product has been designated as a mass balance certified product, it shall be readily and reliably identifiable as such at all subsequent stages of storage, processing, packing, labelling, selling and delivery to a customer.

Guidance 2.1.1
Where it is impossible or impractical to apply a physical label to the product the organisation will need to demonstrate how the product can be verifiably linked with associated records that identify its status as a mass balance certified product.

2.1.2 The organisation shall operate a system that ensures packaging, labels and other materials identifying mass balance certified products can only be used for mass balance certified products.

2.1.3 Any product that is sold as a mass balance certified product shall be identified with a mass balance chain of custody certificate number and accompanying statement or claim. No product sold without carrying the mass balance certificate number may be associated with any mass balance statement or claim.

2.1.4 The organisation shall not promote any mass balance certified product in association with the MSC ecolabel, logo or other trademarks.

2.2 Sales invoices

2.2.1 If products are sold as mass balance certified products, they shall be identifiable as such on the line item of the related invoice.

Principle 3  Mass balance is calculated

3.1 Determination of input mass

3.1.1 The organisation shall have a system in place to calculate and record at the end of each calendar month the total mass of mass balance eligible marine material within the ingredients it has received over that calendar month.

3.1.2 If the processing of an ingredient prior to its use to manufacture an end product is likely to result in a change of more than 5% by weight between the time of its delivery to the site and the time of its use, for example due to the extraction or addition of water, or removal of waste, then the weight difference for such prior processing shall be determined and recorded, and shall be used as a conversion factor for the calculation of the mass of mass balance eligible marine material received, which shall be reduced accordingly.
3.2 Determination of output mass

3.2.1 The organisation shall have a system in place to calculate and record at the end of each calendar month the total mass of all marine material contained in the mass balance certified products it has supplied over that calendar month.

3.3 Mass balance calculation

3.3.1 At the end of each calendar month the organisation shall calculate and record its running twelve-month mass balance, which is the total input mass for the previous twelve-month period as calculated in 3.1.1, above, minus the total output mass for the previous twelve-month period as calculated in 3.2.1, above.

3.3.2 The mass balance as calculated in 3.3.1 shall determine the maximum quantity of feed containing marine material that may be supplied as a mass balance certified product in the following month, as specified in clause 4.3, below.

Principle 4  Mass balance certified products are traceable and volumes are recorded

4.1 Determination of marine material in products

4.1.1 The organisation shall have a system in place to determine and record the proportion by weight of marine material contained in each of its unique product types, calculated as the total weight of marine material in the product’s ingredients at the time of its/their use in the manufacture of the product, as a proportion of the total weight of all the product’s ingredients.

4.2 Sales of products containing marine material

4.2.1 The organisation shall record the following information for the sales of all of its products that contain marine material:

a. Product name, including a unique identifier that indicates whether the product was sold as a mass balance certified product

b. Date of sale and supply from the organisation’s site

c. Quantity supplied (including conversion if required into kg/mt)
d. The proportion of the product’s mass that consists of marine material, calculated in accordance with clause 4.1, above.

e. The customer name, company address and delivery address (if different to company address)

f. If the product was sold as a mass balance certified product, the chain of custody certificate code that covers the product.

4.3 Supply of mass balance certified products

4.3.1 The organisation shall have a system in place that ensures that its supply of mass balance certified product in a given calendar month cannot exceed its running twelve-month mass balance, as calculated in clause 3.3, above.

4.4 Accurate records of sales and supplies

4.4.1 Records of mass balance certified product sales and supplies shall be accurate, complete, and up to date.

4.4.2 Where records are changed, these changes shall be clearly documented including the date and name or initials of the person that made the changes.

Principle 5  The organisation has a management system

5.1 Management and training

5.1.1 The organisation shall operate a management system, documented in a formal manual or equivalent written procedures, that addresses all requirements in this standard.

5.1.2 The organisation shall ensure that responsible personnel are trained and competent in order to ensure conformity with this standard.

5.1.3 The organisation shall maintain records that demonstrate conformity with this standard for a minimum of three years, or for the full duration of the shelf life of any product containing marine material if longer than three years.

5.1.4 The organisation shall appoint an individual CoC contact person who will be responsible for all contact with the certifier and for responding to any requests for documentation or information related to CoC conformity.

5.2 Reporting changes

5.2.1 The organisation shall inform their certifier in writing or by email within 10 days of the following changes:

5.2.1.1 New CoC contact person within the organisation, as specified in 5.1.4;

5.2.1.2 Marine ingredients received from a new certified supplier; or,

5.2.1.3 A new type of marine ingredient or new species received.
5.2.2 The organisation shall receive written approval from their certifier before making the following changes:

5.2.2.1 Undertaking a new activity with respect to certified products, which is not already included in the scope of certification.

5.2.2.2 Using a new subcontractor that does contract processing or packing / repacking for certified products.

5.3 **Subcontractors, transport and contract processing**

5.3.1 The organisation shall be able to demonstrate that all subcontractors handling certified product comply with the relevant requirements of this standard.

5.3.2 The organisation shall maintain an up-to-date record of the names and addresses of all subcontractors handling certified products or any material that may be used as ingredients for certified products, excluding transport companies.

5.3.3 The organisation shall inform any non-certified contract processors that they will be required to have an on-site audit by the certifier to verify compliance with relevant sections of this standard prior to use of the contract processor and at least once per year afterwards.

5.3.4 If subcontracted storage facilities are used, the organisation shall have the ability to request relevant product records from subcontractor storage facilities and to allow certifiers access to certified products or any material that may be used as ingredients for certified products at any point in time.

5.3.5 The organisation shall have a signed agreement with all subcontractors that transform, process, or repack certified products or any material that may be used as ingredients for certified products, which covers the following points:

5.3.5.1 The subcontractor shall have systems in place to ensure traceability, segregation, and identification of certified products or any material that may be used as ingredients for certified products at every stage of handling; and

5.3.5.2 The subcontractor will allow the MSC, the CAB, and the MSC’s accreditation body to have access to the premises and any records related to certified products or any material that may be used as ingredients for certified products upon request.

5.3.6 Organisations that use contract processors or perform contract processing of certified products or any material that may be used as ingredients for certified products shall maintain records of all such contract-processed ingredients or certified products, including:

5.3.6.1 Weight and product details received;

5.3.6.2 Weight and product details dispatched; and,

5.3.6.3 Dates of dispatch and receipt.

5.3.7 Certified contract processors shall record the name and CoC code for all certificate holders for whom contract processing of certified products or material that may be used as ingredients for certified products has been provided since the previous audit.

5.4 **Non-conforming mass balance certified product**
5.4.1 The organisation shall have a process for managing non-conforming mass balance certified product that includes the following requirements:

5.4.1.1 Immediately cease to label, sell or supply any non-conforming product as mass balance certified.

5.4.1.2 In the case that a product has been supplied as a mass balance certified product when such supply exceeded the available running twelve-month mass balance, determine and record the extent of the over-supply in terms of the mass of marine material contained in the supplied products.

5.4.1.3 In the case of ingredients that may contain a non-permitted marine material, take effective measures within four working days of detecting the issue:

a. to ensure that any ingredients that have already been received and that may contain the material are excluded from the production of mass balance certified products, or, if this is not possible, are excluded from all further production; and,

b. to ensure that further deliveries of such material are placed in quarantine until they can be returned to the supplier.

5.4.1.4 Notify the certifier within two days of detecting the non-conformity and inform the certifier of the steps being taken to identify and address the reasons for the non-conformity.

5.4.1.5 Identify the reason the product is non-conforming and implement measures to prevent re-occurrence where necessary.

5.5 Requests for traceability and supply chain assurance

5.5.1 The organisation shall cooperate with all MSC and certifier requests for chain of custody information, purchase records for marine ingredients or sales records for certified marine products.

5.5.2 Documents shall be provided within two days of request.

5.5.3 Organisations shall allow the MSC, the certifier or a representative from the accreditation body to collect samples of marine ingredients or certified products from their site for the purposes of DNA or other product authentication testing.

5.5.3.1 Where a product authentication test identifies the marine ingredient or a certified product as a different species or origin than identified, the organisation shall:

a. Investigate the potential source of the issue;

b. Present the certifier with findings from this investigation and, where non-conformities are found, a corrective action plan to address these; and,

c. Cooperate with further sampling and investigation.

Appendix 1: MSC Due Diligence Requirements for the Sourcing of Marine Ingredients

Overview

The Aquaculture Stewardship Council (ASC) has developed a due diligence system for the sourcing of any ingredient that constitutes more than 1% of the volume of material used for the production of feed by a certified feed mill (see Criterion 2.8 and Appendix 2 of the ASC Feed Standard, Second Draft published for public consultation). The key elements of the ASC due diligence system are shown in 1A, below. In the case of marine ingredients, the due diligence system is intended to exclude marine ingredients from:
• Illegal, unreported or unregulated fishing
• Sources using child labour or forced labour
• Sources that are likely to have a major detrimental impact on endangered, threatened or protected species*.

(*ASC refers to ‘Species at Risk’ – for the purposes of due diligence assessment this term is considered to be equivalent to ‘endangered, threatened or protected species’.)

In addition, ASC references further requirements to be specified by MSC for the determination of risk as it applies to the due diligence assessment of marine ingredients. These further MSC requirements are provided in 1B, below. It should be noted that the MSC requirements for the assessment of risk specify just two levels of risk: high, or low. If the risk is judged to be high, the source must be excluded from any use by a certified feed mill until and unless action is taken to reduce the level of risk to the acceptable, or ‘low’ level.

1A: Key elements of the ASC due diligence system for the sourcing of all ingredients

The key elements of the ASC due diligence process for supplies which are not covered by a recognised chain of custody certificate are as follows:

a) The feed mill requires the supplier of the ingredient to provide it with as detailed information as possible about the geographical location of the primary source of the ingredient, but including as a minimum its country or countries of origin (or in the case of marine ingredients the fishery of origin), and copies of any certificates of compliance or other indications of compliance with relevant legal, social and/or environmental standards.

b) The feed mill consults relevant sources of information and available guidance and determines whether the risk that the primary source of the ingredient fails to comply with [the issues of concern listed above] is considered to be low, medium or high.

c) The feed mill records the results of its assessment, together with its justification, including reference to any documentation, guidance or other evidence it has taken into account in reaching its determination.

d) If the feed mill determines that the level of risk in relation to any element of the assessment is ‘high’ or ‘medium’, the feed mill specifies what actions it would expect the supplier to take in order to reduce the level of risk to ‘low’.

e) The feed mill documents any actions taken by the supplier in response to its assessment, and adds an update to the report if such action results in the assignment of a lower level of risk in relation to any of the legal, social or environmental standards required.

f) The feed mill makes the due diligence reports (updated if applicable) for any of the ingredients it has determined are ‘low risk’ for all the applicable [issues of concern] publicly available on its company website.

If the level of risk for an ingredient source is raised from ‘low’ to ‘medium’ or ‘high’ on the basis of a re-assessment following a material change of the source, the feed mill must delist this supply until action has been taken to reduce the level of risk back to ‘low’.

Marine ingredients that are supplied under a chain of custody certificate recognised by the ASC as showing that they contain marine material from fisheries certified as achieving sustainability levels 1, 2, 3 or 4 are deemed to meet the due diligence assurance without the need for additional evidence. A list of the chain of custody certificates recognised as such by ASC is given in Appendix 3 of the ASC Feed Standard, Second Draft published for public consultation.
1B: Additional MSC Requirements for the implementation of due diligence for marine ingredients

The MSC’s guidance on the implementation of due diligence is based on the identification of ‘red flags’, intended to indicate sources of ingredients that are associated with a relatively high level of risk in relation to the issues of concern.

In relation to IUU fishing, assessment focusses on four elements: the fishery of origin, the landing port, the fishing vessel, and the fishing vessel’s flag state, as shown in Table 1. Sources associated with ‘red flags’ in relation to each of these issues are shown in Table 2.1. If an ingredient contains material that is from a source associated with a red flag in relation to any of these elements, then the ingredient is considered to be high risk, until and unless evidence is submitted to show that it is low risk, OR to show that recognised mitigating action has been implemented to control the level of risk. If no information is submitted to show that a source is low risk, then the default assumption is to consider it to be high risk.

<table>
<thead>
<tr>
<th>Table 1: Determination of risk levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Level</td>
</tr>
<tr>
<td>High Risk</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Low Risk</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 2.1 Red Flags for IUU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Flags</td>
</tr>
<tr>
<td>Fishery of origin</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Landing port</strong></td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>The landing port is not reliably known.</td>
</tr>
<tr>
<td>The landing port does not operate effective catch inspection, registration and reporting mechanisms in cooperation with relevant coastal states and RFMOs.</td>
</tr>
<tr>
<td>The landing port is located in a state that is 'pre-identified' as non-cooperating (‘yellow card’), ‘identified’ as non-cooperating (‘red card’) or ‘listed’ by the European Union.</td>
</tr>
<tr>
<td>The landing port is located in a state that is identified or certified by the USA's National Marine Fisheries Service (NMFS) as being responsible for vessels engaged in IUU fishing.</td>
</tr>
<tr>
<td>Recognised mitigating actions:</td>
</tr>
<tr>
<td>SEE CONSULTATION QUESTION 3</td>
</tr>
</tbody>
</table>

**Recognised mitigating actions:**
- The fishery of origin is certified under a scheme listed by ASC in Appendix 3 of the ASC Feed Standard.
- [Catch certificate](http://www.imonumbers.lrfairplay.com/)
- [The Combined IUU Vessel List maintained by Trygg Mat Tracking (TMT)](http://iuu-vessels.org/iuu)
• Coastal State/RFMO registers of authorised fishing vessels.
• Vessel listing on FAO Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels.

**Flag state**
- The flag state for the vessel is not reliably known.
- The vessel’s flag state is not a member or cooperating party of the RFMO fishery of origin (or equivalent national, bilateral or other multilateral agreement), if applicable (see also ‘fishery of origin’, above).
- The vessel’s flag state is ‘pre-identified’ as non-cooperating (‘yellow card’), ‘identified’ as non-cooperating (‘red card’) or ‘listed’ by the European Union.
- The vessel’s flag state is identified or certified by the USA’s National Marine Fisheries Service (NMFS) as being responsible for vessels engaged in IUU fishing.
- The vessel’s flag state is a known flag of convenience.

**Recognised mitigating actions:**
• See Consultation Question 3

**Coastal state/RFMO registers of authorised fishing vessels.**
- Catch certificate
- EU lists of ‘pre-identified’, ‘identified’ and ‘listed’ states:
- Report including NMFS listing and certifications:

**Additional resources on IUU fishing include:**

### Table 2.2 Red flags for child labour or forced labour associated with the supply of marine ingredients

<table>
<thead>
<tr>
<th>Red Flags</th>
<th>Means of verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be determined</td>
<td>To be determined</td>
</tr>
<tr>
<td>To be determined</td>
<td>To be determined</td>
</tr>
<tr>
<td>To be determined</td>
<td>To be determined</td>
</tr>
<tr>
<td>To be determined</td>
<td>To be determined</td>
</tr>
</tbody>
</table>

### Table 2.3 Red flags for major detrimental impacts on endangered, protected or threatened species associated with the supply of marine ingredients

<table>
<thead>
<tr>
<th>Red Flags</th>
<th>Means of verification</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be determined</td>
<td>To be determined</td>
</tr>
<tr>
<td>To be determined</td>
<td>To be determined</td>
</tr>
<tr>
<td>To be determined</td>
<td>To be determined</td>
</tr>
<tr>
<td>To be determined</td>
<td>To be determined</td>
</tr>
</tbody>
</table>