Monterey Bay Aquarium

Verification Platform Guidance and Procedures

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Verification Assessment Questions

1. Assessment information

1. Select the farm site.
2. Name of primary assessor.
3. Are there secondary assessment participants? Role(s) of the secondary assessment participant. Name(s) of secondary participant(s).

2. Effluent

2.1 Use and discharge of water

1. How is water supplied to the farm?
2. Where does water go once brought into the farm?
3. Does the farm do partial harvests or an all-in/all-out production?
4. Is water exchanged in production ponds at any time during a production cycle for reasons other than to harvest?
5. For the last three production cycles, how often has water been discharged from production ponds?
6. When water is drained from production ponds, where does it go?
7. Describe any additional details of how water is managed on the farm during the production cycle, including water exchange within the farm (between reservoir, production and treatment ponds) and between the farm and environment.
8. Are records kept of all water exchange and discharge between the farm and the environment?

2.2 Water quality

1. Are water quality parameters in production ponds (temperature, DO, salinity, pH, and ammonia) measured at least weekly? Are records available to demonstrate water quality monitoring?
2. Is the quality of water tested in whichever pond(s) are the last to hold water before it is discharged to the environment?
3. Is that pond's water quality tested immediately prior to water discharge to the environment? Which parameters are tested for?
4. Are the results of water quality testing recorded?

5. Do those records give confidence that water is only discharged if the quality is of sufficient similarity to the influent or receiving waterbody to pose no more than a minimal risk of impact? Describe what data for the quality of the receiving waterbody were used to compare to the results of farm effluent water quality data.
6. Is dredged sediment from ponds, canals, and other sources of settled organic matter properly disposed of? Describe how dredged sediment is managed, used, or disposed of
7. Describe the relevant laws or requirements for effluent water management.
8. Is the farm compliant with relevant effluent water quality regulations? Do the laws require any records kept which demonstrate compliance? Are those records available on the farm?

3. Habitat

3.1 Farm siting and construction

1. What year was the farm constructed?
2. What was the habitat prior to shrimp farm construction?
3. Are there records available to demonstrate the year of farm construction?
4. Has the farm been expanded since 1999? What was the expansion for? What was the habitat prior to expansion?
5. Is the farm sited in a nationally- or internationally-protected area? Is this siting permitted by the relevant authorities and is there a management plan in place to ensure farm siting and operation do not negatively impact the area?

3.2 Farm operation

1. Is fresh groundwater (below 5 ppt) used in ponds? Is groundwater use permitted under national and local regulations? Are records available to demonstrate that groundwater use is permitted?
2. Are records available that demonstrate the use of groundwater in ponds is in compliance with the relevant regulations?
3. Have the potential impacts of groundwater use on the farm been assessed?
4. Describe the assessment of potential impacts of groundwater use on the farm.
5. Is the farm designed and managed to ensure saline water cannot be discharged into freshwater bodies or agricultural lands? Describe the farm design and management to ensure saline water cannot be discharged into freshwater bodies or agricultural lands.

4. Source of stock

1. Are fry or post-larvae (of the primary farmed species) sourced from the wild? How are they introduced to ponds?
2. Does the farm source seed (of the primary farmed species) from one or more hatcheries? How does the farm source hatchery seed? (Select all that apply).
3. Are receipts available that show the hatchery origin of all seed purchased within the last calendar year?
4. Does the farm have the contact details of all hatcheries that supply their seed?
5. For the current and last two complete production cycles, are records available for the stocking of each production pond, including the number of pieces stocked?
6. For the current and last two complete production cycles, what percentage of stocked seed came from domesticated broodstock?

5. Farm profile

1. Is there farm profile documentation available?
2. Does it include the accurate: Name of the farm?
3. Name of the farm owner and/or manager?
4. Membership to farmer cooperative or other farmers union (if applicable)?
5. Farm location (i.e. coordinates)?
6. Aerial map or farm layout?
7. Farm size?
8. Number of ponds?
9. Annual production?
10. Species farmed?
11. What is the name of the farm owner?
12. What is the name of the farm manager?
13. Is the farm a member of a farmer group and/or cooperative? What is the name of the group(s) and/or cooperative(s)?
14. What is the production method?
15. What is the total farm size in hectares?
16. How many production ponds are there?
17. What is the area of all production ponds in hectares?
18. How many reservoir ponds are there?
19. What is the area of all reservoir ponds in hectares?
20. How many effluent treatment ponds are there?
21. What is the area of all effluent treatment ponds in hectares?
22. Which is the primary species farmed?

23. Are there additional (i.e. secondary) species actively stocked? List additional species stocked.
24. How are shrimp nutritional needs met?
25. Is production continuous or are production cycles distinct?
26. For the last calendar year, what has been the farm's average stocking density (e.g. in PLs per m2)?
27. For the last three complete production cycles, what is the average farm production in metric tons per hectare?
28. For the last three calendar years, what is the average annual farm production in metric tons?
29. What was last calendar year's total farm production in metric tons?
30. Does the farm have the appropriate permits or other applicable evidence to operate?
31. Is the farm currently certified to any national or international farming standards? Select all standards that the farm is currently certified to.
32. Can a relevant government staff member, such as an extension agent, be identified and contacted?

6. Feed

6.1 Acquisition of feed

1. Which feed companies does the farm use?
2. Does the farm purchase feed directly from the feed company or through a broker?
3. Are receipts for feed available from the feed mills that supply their feed?
4. Are receipts available from the broker which identifies the feed mills that supply their feed?
5. If the farm wished to contact the feed company directly, do they have the contact details to do so?
6. Which specific feeds does the farm use throughout the production cycle?

6.2 Use and efficiency of feed

1. For the last three complete production cycles, what is the average economic FCR?
2. Enter total volume of feed given, in metric tons, during the last full production cycle.
3. Enter total volume of shrimp harvested, in metric tons, during the last full production cycle.
4. Is feeding recorded?

6.3 Use of feed and nutrition supplements

1. Are any feed additives or other nutrition supplements used? Are there records for the use of supplement products?

7. Biosecurity and disease

7.1 Biosecurity protocols

1. Does the farm have a written health management guide or disease management plan?
2. Have all farm workers received training or guidance on good shrimp health management and biosecurity practices? What type of training or guidance is given? When was the most recent training that farm workers received?
3. Does the health management plan and/or training include a section on disease monitoring procedures?
4. Does the health management plan and/or training include a section on what to do if a disease is suspected or found?
5. Does that section include how to ensure pathogens in pond-water and sludge are not discharged outside of the farm boundary? What are the strategies to be used to ensure a disease on the farm is not discharged outside of the farm?
6. Does that section include who to report the occurrence of disease to?
7. Does the health management plan and/or training include a section on how to control vectors and limit the chances of a disease being transferred into the farm?
8. Does the health management plan and/or training include a section on the proper disposal of mortalities?
9. Does the health management plan and/or training include a section on the importance of being aware of the health status of surrounding farmers?
10. Does that section, or a different relevant section, include what to do if a neighboring farm experiences a disease?

7.2 Implementation of biosecurity

1. What strategies are used to protect the farm from disease introductions from outside the farm?
2. Are these strategies a comprehensive application of biosecurity principles that are relevant to the production system?

3. Are shrimp health and disease presence examined? Describe how shrimp health and disease presence are examined. Include the frequency of monitoring, what is looked for, and the equipment used.
4. In the last calendar year, has the farm experienced any disease events? What disease(s)?
5. Were any diseases in the past year ones that are required to be reported (e.g. OIE notifiable diseases)? Were all relevant authorities notified upon evidence of outbreak of these diseases? Are records available to show that all relevant authorities were notified?
6. Describe what happened to pond-water after the incidence of disease.
7. Was the treatment of pond-water after a disease sufficient to reasonably prevent disease discharge to other ponds and outside the farm?
8. Approximately what percentage of the pond(s) stock were able to be saved by early or emergency harvest?
9. For the mortalities that could not be saved, describe how they were disposed of.
10. Was the method of their disposal sufficient to reasonably prevent disease transfer to other ponds and outside the farm?
11. For the current and most recent production cycles, are there records to demonstrate sampling for disease prevalence? Are these records regular, and show when sampling has identified shrimp are in good health and there were no diseases apparent?
12. Do records show that disease was present?
13. Do records show what actions were taken to identify the cause of disease, the strategies to correct it, and that neighboring farms were notified?
14. Do records show the number, volume, or percentage of production of disease-related mortalities?
15. Is the farm in regular communication with neighboring farms regarding disease occurrence and prevention? Do records show that the farmers are in regular communication with surrounding farmers regarding disease occurrence and prevention?

8. Chemical use

8.1 Antibiotic use

1. Have antibiotics been used during the current production cycle?
2. Have antibiotics been used in any of the three most recent complete production cycles?
3. How many treatments have been applied (across all four production cycles)?
4. Were they used to treat a particular disease? What disease(s)?
5. Was each treatment authorized for use?
6. Do records of antibiotic use show the product and the dose/regime used?

7. Are any antibiotics used (in treatments included above) listed as highly- or critically-important for human medicine by the WHO? How many treatments (of those included above) were of WHO-listed antibiotics?
8. After antibiotic treatment, what happens to pond water? (Select all that apply).

8.2 Use of other therapeutants or products

1. Have any other therapeutic chemicals been used during the current production cycle? How many treatments have been applied (across all four production cycles)?
2. Have any other therapeutic chemicals been used in any of the three most recent complete production cycles?
3. Were they used to treat a particular disease? What disease(s)? Was each use recorded?
4. After treatment, what happens to pond water? (Select all that apply).
5. Have any pond preparation products been used (across all four most recent production cycles)? Was each use recorded?
6. Are water quality remediation agents used? Is their use recorded? Do the records include the product and the dose given?

8.3 Chemical use management

1. Are farm staff trained to appropriately administer the products they use? Describe the training that farm staff receive to appropriately administer therapeutants.
2. Have all uses of chemical products (across the four production cycles) been in compliance with local, regional, and national regulations?
3. Is there any evidence that drugs/chemicals banned by the country of production have been used in the last three years?

9. Escapes

9.1 Escapes management

1. When water is exchanged in production ponds, how many screens does discharged water pass through before it leaves the farm?
2. When water is discharged for harvesting, how many screens does it pass through before it leaves the farm?
3. Are escape prevention materials regularly maintained to ensure integrity? Describe the maintenance of escape prevention materials.

4. Are inspection and maintenance activities recorded?
5. For the current and three most recent complete production cycles, have there been any escape events at the farm? Approximately what percentage of the pond stock was lost?
6. Were the escape events recorded, including the estimated magnitude of the event and the likely cause?
7. In the last three years, has the farm ever experienced flooding of production ponds? Was the flooding event recorded?

9.2 Gate and equipment inspection

1. As the assessor, can you confidently determine that all pond gates and farm gates are in good working condition and without obvious weaknesses?
2. As the assessor, can you confidently determine that all harvesting nets and other equipment are in good working condition and without obvious weaknesses?

9.3 Escape risk determination

1. You have indicated that the farm does not screen discharged water or at least two of the following are true: they have recently experienced an escape, they have recently experienced production pond flooding, the gates are in poor condition, or the escape prevention equipment is in poor condition. Is this accurate?

10. Wildlife mortalities

1. Does the farm have a predator management plan?
2. How are predators and other wildlife kept from preying on pond stock or otherwise out of the farm? (Select all that apply).
3. Are predators or other wildlife ever controlled with lethal measures? Does the farm have legal permission for that lethal control? Have these mortalities been recorded, including the common name of the species and the number of mortalities?
4. Do predators or other wildlife ever die accidentally from interacting with the farm?
5. In the last calendar year, how many mortalities have occurred?
6. Can the farm demonstrate that all mortalities in the last calendar year do not negatively impact the health of the population? Provide a brief description of why on-farm mortalities do not negatively impact population health.
7. Have any of these mortalities been of species that are threatened or endangered?

11. Harvest traceability

1. Which processors does the farm sell to?
2. How does the farm's product get sold to the processor(s)? (Select all that apply).
3. Is the sale of the last three harvests (or in the last calendar year if production is continuous) recorded, including how much and to whom?
4. Are all harvest brokers used for those harvests licenced, registered with the government, or an approved supplier for a processor? Are records available for each broker's license, registration, or processor approval?

12. Assessment finalization

1. Signature of the primary assessor.
2. Name of the primary interviewed farm representative.
3. Signature of the primary farm representative.
4. Date and time of assessment completion.

Verification Procedure

1. Purpose

The Monterey Bay Aquarium Verification Platform (VP) is an app-based digital tool that allows groups of farmers to collect and store the data necessary to evaluate environmental performance against the Seafood Watch Aquaculture Standard and demonstrate performance at a Seafood Watch green or yellow level. The purpose of this document is to ensure that Verification against the Seafood Watch Aquaculture Standard occurs in a credible, consistent and rigorous manner.

2. Scope

This document describes the steps to be taken in the process of verification. It outlines the procedures to follow, the roles and responsibilities, and references the appropriate related documents which support and facilitate verification.

3. Definitions

Applicant: An individual or organization that has submitted a completed application form to the Monterey Bay Aquarium. Applicants can represent the producer and/or processor sector.

Assessor: An approved trained person who conducts farm assessments. Assessors may represent companies, non-governmental organizations, governmental extension services, academic institutions, consulting companies, or certification bodies.

Witness assessor: A (qualified) assessor providing oversight to ensure the primary assessor(s) is/are completing the assessment in accordance with the VP requirements. Witness assessors are either Monterey Bay Aquarium staff or approved assessors.

Representative sample: Number of farms representing a group of farms. For example, if the Company-level sample size for a Group is 6 Farms, a representative sample is the completion of 6 Company-level Farm assessments in that Group.

Company: A supply-side actor (i.e. producer or processor company) that is formally engaged in a verification project and has centralized oversight and or coordination of farm groups.

Companies nominate employees for Assessor training, and Company Assessors conduct farm assessments.

Group: An organized collective of farms with centralized oversight and/or coordination.

Partner: An organization that collaborates with the Monterey Bay Aquarium to organize farms for the verification project. A partner may be a Processor, Industry Association or anyone who has the ability to coordinate farms for Verification.

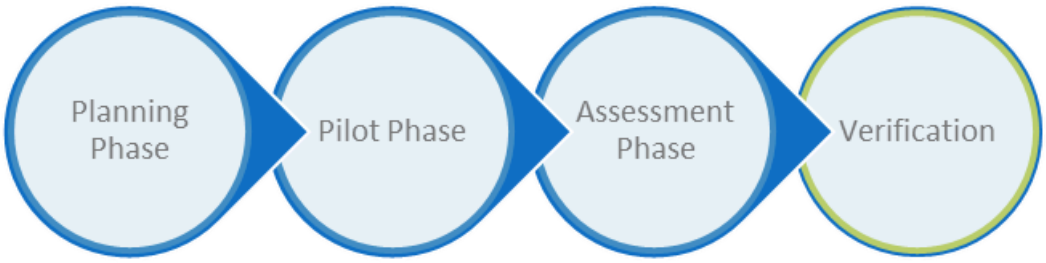
Farm: A Farm can be defined by having a single registration or other coded identifier administered by the relevant governing entity, and a geographic perimeter can be drawn around the Farm without crossing the geographic perimeter of another Farm or enveloping another Farm.

Verification Platform (VP): The Verification Platform (VP) is a web-based, interactive tool designed to complete on-farm sustainability assessments of aquaculture farms against the Seafood Watch Aquaculture Standard and manage all administrative needs, such as user permissions, language translations, farm grouping and verification procedures/rules, standards creation and editing, and back-end reporting.

Verifier: An Assessor who conducts final-stage farm assessments and has the ability to deliver training courses on the use of the VP and the Seafood Watch Aquaculture Standard. Verifiers have the qualifications detailed in VP_03_Assessor and Trainer Qualifications. Verifiers may represent non-governmental organizations, academic institutions, consulting companies, or certification bodies.

4. Process of Verification

4.1 Verification Process Overview

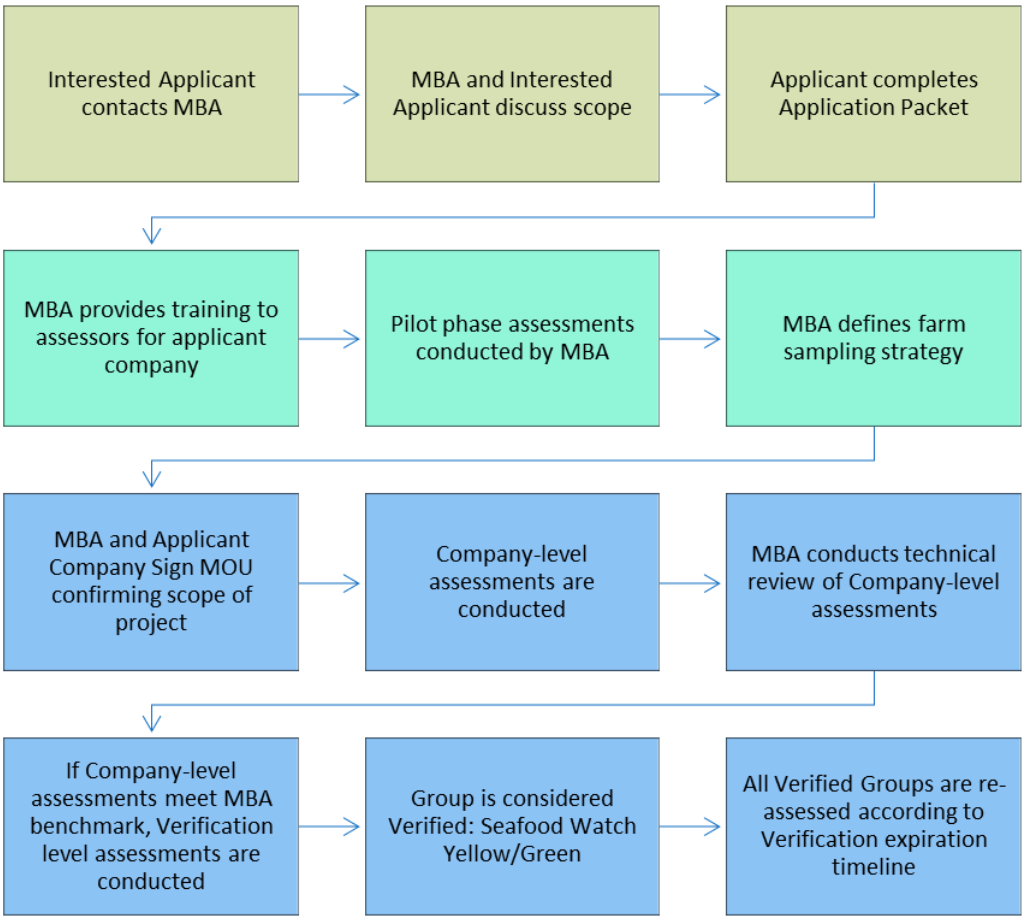


- **Planning Phase:** These steps are taken by the Monterey Bay Aquarium to gather the necessary information to identify and agree on the scope and Partners in the project and use this information to structure the Pilot Phase.
- **Pilot Phase:** these steps are taken by the Monterey Bay Aquarium to (a) train all participants (b) gather baseline information to develop the appropriate sampling strategy (c) establish levels of compliance against the Seafood Watch aquaculture standard and identify areas for improvement.
- **Assessment Phase:** these steps are initially taken by the Applicant Company against Group sustainability goal(s) through the implementation of a sampling strategy informed by the Pilot Phase.
- **Verification Step:** to verify that farms have met the SFW Aquaculture Standard.

Key to the following diagram is:

- Green = Planning Phase
- Yellow = Pilot Phase

- Blue = Assessment Phase and Verification Phase



4.2 Verification Process

4.2.1 Interested Applicant and Discussion of Scope

Interested applicants in a verification project contact the Monterey Bay Aquarium via email at the address verificationplatform@mbayaq.org. Included in the discussion and application are information which includes the species involved, geographic location(s), number of farms, average annual production, category/ies of production intensity, the number/name(s) of organizations in the value chain, details of traceability, and a basic understanding of how the interested Applicant will ensure equitable benefits are distributed among initiative participants. The Monterey Bay Aquarium reviews the inquiry for the potential project's consistency with the principles of the Partnership Assurance Model.

4.2.2 Distribution of and Return of Applicant Packet

If the Monterey Bay Aquarium determines that the initiative is consistent with the principles of the Partnership Assurance Model, they will send an Application Packet to the interested Applicant via email.
The Application Packet shall contain the Application Form (VP_PROC_02) and Supplemental Information.

The Supplemental Information shall include:

1. The current versions of the relevant Seafood Watch Standard and guidance documents relevant to the scope of verification sought.
2. The current version of the VP Verification Procedure (this document, VP_PROC_01).
3. The current version of the VP Assessor & Trainer Qualifications (VP_PROC_03).
4. The current version of the License Agreement, if interested in identifying the product in the marketplace
5. The current version of the Complaints and Appeals procedure.
6. All completed Application Forms are to be sent via email to verificationplatform@mbayaq.org

4.2.3 Review of the Application Packet

1. Monterey Bay Aquarium reviews the completed Application. Before confirming that the project is to proceed, it must be confirmed that:
2. The Applicant has submitted a complete Application Form.
3. The Applicant has not had a verification status withdrawn within the previous twelve (12) months.
4. The Applicant has been in operation for a minimum period of twelve (12) months or three (3) harvest cycles, whichever is less.
5. The project is consistent with all environmental, economic, and social principles of the Partnership Assurance Model:

- Committed multi-stakeholder involvement
- Global sustainability goals localized to an area
- Credible and fit-for-purpose verification
- Supported area-based improvement

Monterey Bay Aquarium may request revisions to the Application Packet during the course of review.

4.2.4 Training of Company Level Assessors

Prospective company level assessors shall be trained by the Monterey Bay Aquarium. The training course shall include classroom-based and field-based elements and be relevant to the scope of verification regarding species, production intensity/ies, and Verification goal(s). The field-based element of the training course shall consist of trainee assessors observing Trainers and/or Assessors conducting assessments of at least five farms or two full working days (whichever is greater) during the Pilot Phase assessments, detailed in Section 4.2.5.

Trainees are considered to have successfully completed the training course (thereafter becoming Company-level Assessors) when they attend the full training course and successfully pass the relevant Assessor Examination.

Training course content is contained in documents VP_PROC_10, and Assessor Qualifications are contained in document VP_PROC_03.

4.2.5 Pilot Phase Assessments

The Pilot Phase assessments have three main functions.

1. Identify any areas for improvement (i.e. 'non-conformances')
2. Ensure the Company has an adequate understanding of the minimum compliance requirements.
3. Establish what the representative sample size for a Group would be (see 4.2.6)

The Pilot Phase has the following steps:

1. The number of Groups within the Pilot Phase, and the number of Farms within each Group, are identified.
2. Staff from the applicant Company are trained by the Monterey Bay Aquarium according to the relevant scope of verification regarding species, production intensity/ies, and Verification goal(s). Classroom-based training occurs prior to the commencement of Pilot Phase Farm assessments, and trainees accompany and observe Assessors as they conduct Pilot Phase Farm assessments.
3. Where feed is used, the feed manufacturers shall be identified and liaised with, to obtain information on the proximate and ingredient composition and origin of ingredients in all feeds. For each feed, the Monterey Bay Aquarium shall create a Feed Profile within the

VP (VP_PROC_05) for an evaluation of feed use sustainability. This is preferably conducted at the feed manufacturing facility.

4. All Farms within each Pilot Phase Group are assessed by the Monterey Bay Aquarium and Company staff observe assessments.
5. The Company is provided with a Group Report (in development with IT) generated by the VP which summarizes each Group's performance and identifies areas for improvement.

4.2.6 Sampling Strategy Development

Based on an analysis of the Pilot Phase, a farm sampling strategy is developed. The goal of the sampling strategy is to ensure that there is a representative sample selected for each Group and is neither under-sized nor over representative.

Through the Pilot Phase, levels of compliance are monitored as farms are assessed. Whilst all farms in the group are assessed in the Pilot Phase, the representative sample for the Group is taken as the number of farms assessed when there are no more new areas for improvement identified, and assessing more farms doesn't yield any new areas for improvement. That is, if the pilot phase identifies a high consistency across the sampled farms, then the representative sample for the Group (for subsequent Company-Level assessments and Technical Review) will be relatively low, whereas increasing variability in the pilot phase results will lead to higher numbers of farms in the representative sample.

The representative sample size is continually monitored (through Company-Level assessments, Technical Review, and Verification), and modified as necessary to ensure that it remains representative for the group, and of consistent robustness across VP projects.

4.2.7 Monterey Bay Aquarium and Company Sign MOU

Upon completion of the Pilot Phase and development of the sampling strategy for the applicant Company, a non-binding MOU is developed between the Monterey Bay Aquarium and the Company. This MOU details the scope of work and a schedule of farms to be assessed by the Company and the Monterey Bay Aquarium over a defined period of the project. The MOU will contain, inter alia, roles and responsibilities and reporting frequency against project objectives.

4.2.8 Company-level Assessments

Upon signing of the MOU, the Monterey Bay Aquarium grants the applicant Company/Partner Assessors access to the VP. Assessments are conducted by Company Assessors using the Monterey Bay Aquarium VP and according to the sampling strategy confirmed in the Project and Group Plans.

If the Company-Level assessment of the representative sample of farms demonstrates that areas for improvement exist (indicated by the Farm and Group report results in the VP), the Company must address those areas and implement the necessary improvements prior to conducting a subsequent representative sample of assessments.

Improvement guidance from the Monterey Bay Aquarium may accompany the Group Report delivered to the Company.

4.2.9 Technical Review of Company-level Assessments

Once a representative sample of Farm assessments conducted by the applicant Company has demonstrated full compliance with the requirements of the sustainability goal (indicated by the Farm and Group report results in the VP), the Monterey Bay Aquarium conducts a technical review for completeness, robustness, impartiality, and consistency.

A technical review consists of the Monterey Bay Aquarium reviewing a sample of a Group's Farm assessment reports to ensure that justifications are robust, evidence collected through photographs and documents in each assessment in the VP, are representative and no conflicting details exist. If clarification is needed, the Monterey Bay Aquarium will contact the Group's person responsible (as identified in the VP) to request clarification.

Once the technical review of Company-level assessments has confirmed the requirements of the sustainability goal have been met, the process of verification may proceed to the next step, which is the Monterey Bay Aquarium-level farm assessments.

4.2.10 Monterey Bay Aquarium Verification-level Assessments

Monterey Bay Aquarium Assessors conduct Monterey Bay Aquarium-level farm assessments using the VP and according to the sampling strategy. The sample of farms that are selected for the Monterey Bay Aquarium-level assessments are a random sample and may or may not involve farms already assessed at the Company-level assessments.

If the first Monterey Bay Aquarium assessment of the representative sample demonstrates that areas for improvement exist (indicated by the Farm and Group report results in the VP), the Company must address those areas and implement the necessary improvements. Once improvements have been made, the Company will need to do an additional round of assessments to confirm that the improvements have been made. Only then will Monterey Bay Aquarium conduct a subsequent representative sample of farm assessments.

Once a representative sample of Farm assessments has demonstrated full compliance with the requirements of the sustainability goal (indicated by the Farm and Group report results in the VP), the Group is deemed Verified and is reported on the Monterey Bay Aquarium website.

4.2.11 Annual Technical Review

An additional annual technical review of Company-level and Monterey Bay Aquarium-level assessments shall be carried out for completeness, robustness, and consistency. The findings of the technical review may result in a review and change of the sampling strategy and/or sample size.

A sample of a Group's Farm assessment reports are reviewed to ensure that justifications and evidence gathered meet the requirements of the standard

4.2.12 Calibration

There shall be a calibration every three years of the VP scoring against the Seafood Watch Aquaculture standard to ensure that there is consistency and accuracy in how the VP is operating. This calibration will occur at more frequent intervals where there are changes to the Seafood Watch Aquaculture standard

4.2.13 Reverification

A Company's verification status is valid for a period of 12 – 24 months, depending on risk categorization. Three (3) months prior to the expiration of a Group's verification, Monterey Bay Aquarium shall notify the Company of the requirements for reverification and the timeframe to carry out the assessments.

If the Company does not reverify within the timeframe, verification will expire, and the Group will be removed from the website.

If the Group wishes to pursue reverification, the following steps shall be taken:

1. The Company shall confirm in writing to Monterey Bay Aquarium of the intention to pursue reverification.
2. Monterey Bay Aquarium will review the sampling strategy used and may make modifications to the sampling strategy based on factors such as performance to date, any changes to the group, input from stakeholders or other risk factors as appropriate.
3. Monterey Bay Aquarium and the Company shall create and agree to a schedule for reverification assessments.
    a. The commencement of reverification assessments (i.e. the first Company-level assessments) shall begin no later than one (1) calendar month prior to the expiration of the Group's current verification

b. The completion of reverification (i.e. the VP Farm and Group Reports, and subsequent Monterey Bay Aquarium technical reviews, have determined that all assessments conducted according to the sampling strategy have demonstrated full compliance with the requirements of the Group's sustainability goal) shall be achieved no later than one (1) calendar month after the expiration of the Group's current verification.
    i. In circumstances where the Group's reverification has not been achieved by the date of expiration for current verification, they shall be granted a 'grace' verification period for the one (1) month between expiration and the requirement mentioned in (b) above
    ii. If reverification has not been achieved one (1) calendar month after expiration, the Group's verification status shall be cancelled and removed from the Monterey Bay Aquarium website.

5. Supplementary Verification Rules

5.1 Reserved Rights

5.1.1 Standard and Verification Requirement Updates

- Monterey Bay Aquarium reserves the right to update the Seafood Watch Aquaculture Standards and verification requirements.
- Verification and reverification are conditional compliance to new or revised standards and verification requirements within timeframes determined by the Monterey Bay Aquarium.

5.1.2 Assessment Oversight Activities

Monterey Bay Aquarium reserves the right to:

- Request and conduct assessments of any verified Farm with a notice made to the Company of at least 24 hours in advance
- Observe any assessment being conducted by any Assessor with a notice made to the Assessor and the Company of at least 12 hours in advance.
- Request and participate in an assessment as a non-assessing observer of any assessment being conducted by any Assessor with a notice made to the Assessor and the Company of at least 12 hours in advance.

5.1.3 Withdraw of Verification Status

Monterey Bay Aquarium reserves the right to withdraw the verification status of any Group where there is evidence of activity that can undermine the credibility and integrity of the Monterey Bay Aquarium, the Monterey Bay Aquarium Seafood Watch Aquaculture Standard or the Verification process. This may include evidence of non-conformance, illegal activities, violations of MOU terms and/or breaches of traceability

5.2 Reporting Language

Farm assessments are conducted in the local language and dialect. In the event that the Assessor is not fluent in the local language/dialect, a translator may be used. The translator must be independent and cannot be an employee of the Company being assessed.

Written communication between Monterey Bay Aquarium, Verification Partners, and the Company may be in any language, but where languages other than English are used, Monterey Bay Aquarium may request that an accurate translation to English is provided.

The original versions of the Monterey Bay Aquarium Seafood Watch Aquaculture standard, the VP, and other relevant verification materials are written in English. Translations to other languages can be made available to facilitate and support utility in non-English speaking locales. In the rare cases where a misunderstanding between original documents and translated versions occurs, the original version and the interpretation of it by the Monterey Bay Aquarium shall prevail. Efforts to rectify the misunderstanding in the non-English document(s) shall take place immediately.

6. Associated Documents

- VP_PROC_02 – Application Form
- VP_PROC_03 – Assessor and Trainer Qualifications
- VP_PROC_04 – Standards and Interpretation Guidance
- VP_PROC_05 – Feed Profiles
- VP_PROC_06 – Manual and User Guidance
- VP_PROC_07 – Farms Import Template
- VP_PROC_08 - Complaints and Appeals
- VP_PROC_09 - Training Course Documents
- VP_PROC_10 - License Agreement
- VP_PROC_11 – Traceability Procedure

Assessor and Trainer Qualifications

1. Purpose

To ensure that all persons using the Monterey Bay Aquarium Verification Platform (VP) who are either conducting assessments or training assessors meet the requirements of the Assessor and Trainer Qualifications.

2. Scope

Qualifications and competencies required for Assessors and Trainers using the VP.

3. Definitions

Verification Platform (VP): The Monterey Bay Aquarium Verification Platform (VP) is a web-based, interactive tool designed to complete on-site sustainability assessments of aquaculture farms and manage all administrative needs, such as user permissions, language translations, farm grouping and verification procedures/rules, standards creation, editing, and back-end reporting. The platform features in-built scoring algorithms to determine compliance with Seafood Watch Yellow and Green levels of environmental performance and identify and classify areas for environmental improvement.

Assessor: A person who conducts farm assessments

Trainer: A person who delivers Assessor training courses

Company: A supply-side actor (i.e. producer or processor company). Companies nominate employees for Assessor training, and Company Assessors conduct farm assessments.

4. Assessor Qualifications

All Assessors shall have minimum qualifications outlined in 4.1 and 4.2.

4.1 Company-level Assessor Qualifications

All company-level assessors shall possess the following qualifications:

Qualification	Requirement
Education	• The individual shall have at least a post-high school diploma or equivalent (minimum course duration of two (2) years) obtained in a discipline related to the scope of verification. • In exceptional cases, practical experience can be regarded as equivalent. These cases shall be documented.
Work experience	• The individual shall have at least one (1) year of experience relevant to the scope of verification.
Audit training	• No formal, recognized audit/auditor training is required, but the individual shall have knowledge of the purpose and procedure of conducting audits and assessments.
Assessor training	• The individual shall have successfully completed the Monterey Bay Aquarium VP Assessor Training course relevant to the scope of verification.
Assessor experience	• The individual shall participate in no less than fifteen (15) assessments per year to maintain Assessor qualification. • The individual shall have at least three (3) assessments per year which they are witnessed by a qualified Assessor.

4.2 Verifier-level Assessor Qualifications

All Verifier-level assessors shall possess the following qualifications:

Qualification	Requirement
Education	• The individual shall have at least a post-high school diploma or equivalent (minimum course duration of two (2) years) obtained in a discipline related to the scope of verification. • In exceptional cases, practical experience can be regarded as equivalent. These cases shall be documented.
Work experience	• The individual shall have at least two (2) years of experience relevant to the scope of verification.
Audit training	• The individual shall have successfully completed at least one (1) formal recognized audit/auditor training course relevant to the scope of verification. These courses may include, but not limited to the ISO 9000 and ISO 14000 family of Lead Auditor Training courses.
Assessor training	• The individual shall have successfully completed the Monterey Bay Aquarium VP Assessor Training course relevant to the scope of verification.
Assessor experience	• The individual shall participate in no less than fifteen (15) assessments per year to maintain Assessor qualification. • The individual shall have at least three (3) assessments per year which are witnessed by a qualified Verifier Level Assessor.

5. Assessor Competencies

In addition to the objective qualifications details in Section 4, all Assessors must have the following soft skills that enable and facilitate successful assessments:

Competency	Requirement
Analytical skills	• The individual must effectively and systematically assess situations and information to make informed decisions on objective and verifiable evidence.
Audit principles and techniques	• The individual must be able to apply audit principles, procedures, and techniques associated with management systems and possess a detailed knowledge of compliance issues commonly experienced in aquaculture and associated processing operations. • The individual must be able to prioritize and focus on matters of significance and understand the appropriateness and consequences of using sampling techniques for auditing/assessing. • The individual must be able to verify the accuracy of collected information and be aware of the significance and appropriateness of evidence to support findings and conclusions. • The individual must understand and assess those factors that can affect the reliability of the assessment findings and conclusions.
Diplomatic	• The individual must be tactful in dealings with people, as appropriate to achieve the assessment objectives.
Ethical	• The individual must be fair, truthful, unbiased, sincere, discreet, trustworthy, and honest. • The individual must possess a high level of integrity, particularly in relation to bribery and corrupt practices.
Language	• Regarding listening, speaking, reading, and writing, the individual must be fluent in a language which can be used during the assessment, either directly with representatives from the operation under assessment or through an independent translator with appropriate language and technical qualifications.
Listening	• The individual must understand and interpret verbal material.

	• The individual must understand and interpret non-verbal communication, such as gestures and personal expression.
Observant	• The individual must be fully aware of physical surroundings and activities throughout the entire assessment process.
Open-minded	• The individual must be open-minded, reasonable, and willing to consider alternative ideas or points of view.
Perceptive	• The individual must instinctively be aware of and can understand situations.
Professional	• The individual must be courteous, conscientious, discreet, and business-like in their approach to assessing. • The individual must deal sensitively with people from different backgrounds, to make them feel at ease, and to resolve conflict without losing composure. • The individual must be empathetic, respectful to others, and help to build trust during and after the assessment. • The individual must keep relevant information confidential in accordance with non-disclosure or confidentiality agreements. • The individual must communicate confidently and with authority. • The individual must maintain strict independence from self-interest or personal bias.
Respectful	• The individual must act respectfully, show politeness and good manners.
Technical language	• The individual must have robust knowledge of the technical language employed in aquaculture.
Tenacious	• The individual must be persistent and focused in their approach to achieve assessment objectives.
Versitile	• The individual must be able to adjust readily to different situations and to effectively resolve conflict and arrive at consensus agreement as far as possible.
Writing	• The individual must have good written communication skills. • The individual must produce written documents that can be understood by the intended audience. The individual must produce clear and accurate reports on

	assessment findings and clearly articulate these in relation to legal requirements, relevant codes, and asks of the VP.
Reading	• The individual must understand and interpret written material.
Numeracy	• The individual must understand and interpret number systems and their significance.

6. Trainer Qualifications and Competencies

In addition to the requirements necessary for an Assessor, Trainers shall possess the following qualifications/competencies:

Qualification / Competency	Requirement
Assessment experience	• The individual shall have completed a minimum of 40 days of onsite experience in conducting assessments relevant to the scope(s) of verification.
Audit training	• The individual shall have successfully completed a Lead Auditor/Assessor training course based on ISO 9000 or ISO 14000 principles. The certificate shall specify the course content and duration, and successful completion shall be indicated on the certificate. The Lead Assessor training course shall cover: applicable standards on quality auditing, auditing techniques, focus of the assessments (psychological aspects and communication) and reporting, and it shall also include a practical case study.
Training experience	• The individual shall successfully lead one (1) training course that is witnessed by a qualified Trainer prior to administering a training course unaccompanied. • The individual shall administer or co-administer no less than two (2) training courses per year to maintain Trainer qualification.

7. Verification of Compliance with Requirements

It is the responsibility of Monterey Bay Aquarium to review the qualifications and competencies of each candidate prior to their approval as an Assessor and/or Trainer, and to conduct an annual review of their continued compliance with the requirements. For the annual review of continued compliance, the VP user shall maintain an assessment log which can be verified by the Monterey Bay Aquarium against the Assessment Reports page in the VP.

Standards Interpretation and Guidance

1. Purpose

To ensure that all terms and definitions used in the Monterey Bay Aquarium Verification Platform (VP) are fully understood by Assessors, Trainers, and all other relevant parties, such that their interpretation and use are consistent and adhere to their original intent, and to the intent of the Seafood Watch Aquaculture Standard.

2. Scope

Terms and circumstances used in Farm Standard and Feed Assessment of the VP. These interpretation and guidance materials supplement those already found in the Tooltip sections (the clickable "i" icon) and the pop-up or modal notifications in the VP App.

The following information is applicable to, and is intended to achieve consistency with the Seafood Watch Aquaculture Standard Version 4.0

3. Farm Standard Interpretation and Guidance

This document shall be updated after revisions to the Seafood Watch Aquaculture Standard or after the scheduled calibration of the VP with the Seafood Watch Aquaculture Standard every 3 years, whichever is sooner.

3.1 Assessment Information

The following terms in the Assessment Information section shall be interpreted as follows:

Term/Circumstance	Interpretation & Guidance
Primary assessor	• The assessor who leads the assessment (i.e. the 'interviewer')

Secondary participants type	• Co-assessor: a peer assessor participating in the assessment as part of the assessment team, not in an oversight role • Witness assessor: a (qualified) assessor providing oversight to ensure the primary assessor(s) is/are completing the assessment in accordance with the VP requirements • Non-assessing observer: a person in the assessment team, but not participating in the assessment itself or the oversight of the assessor(s)

3.2 Farm Profile

The following terms in the Assessment Information section shall be interpreted as follows:

Term/Circumstance	Interpretation & Guidance
Farm profile documentation	• This does not need to be collated into a single document but is present in some form of documentation.
Farm location (e.g. coordinates)	• The latitude and longitude of the farm. Given the size of farms, the closeness of neighboring farms, and the granularity of location information, the coordinates must clearly identify the farm under assessment without confusion.
Species farmed	• All aquatic species farmed/cultivated on site
Aerial map or farm layout	• The aerial map or farm layout can be, but is not required to be, a satellite or similar image; it can, for example, be hand-drawn. It must be, however, clear, to general scale, and accurately identify the important features of the farm such as farm perimeter, pond identification, inlet and outlet water gates and canals, and building structures.
Farm owner/manager	• For farms whose owner and manager are the same person, their name should be written in both places or otherwise similarly made known; (e.g. “same as owner”).

Production methods (e.g. 'extensive', 'intensive', 'integrated mangrove-shrimp')	• Integrated mangrove-shrimp: the cultivation and harvest of both shrimp and mangrove trees simultaneously • Integrated rice-shrimp: the cultivation and harvest of both shrimp and rice, either in rotational succession or simultaneously (or both) • Extensive: the cultivation of shrimp without the use of formulated feeds; cultivation of mangroves or other foliage on the perimeter of ponds only and without intent to harvest shall be considered extensive • Semi-intensive: the cultivation of shrimp with the use of formulated feeds and/or aeration at any time during the production cycle • Intensive: the cultivation of shrimp with the use of formulated feeds and/or aeration throughout the entire (or >80%) of the production cycle • Super-intensive: the cultivation of shrimp at stocking densities ≥250 PLs/m^2 and with the active management of a complex microbial community (e.g. biofloc technology)
Total farm size	• · The area of the entire farm property, inclusive of all ponds, canals, buildings, etc.
Shrimp nutritional needs (e.g. 'formulated fertilizers', 'home-made feeds')	• Natural pond productivity and water exchange: there is no active addition of nutrient sources to pondwater; naturally-occurring leaf litter or similar is not considered 'active addition' • Formulated fertilizers: inorganic and industrially-made, such a urea, silicates, phosphates, nitrates; often termed "chemical fertilizers" • Home-made feeds: feeds that are made on-farm or otherwise outside of an industrial feed mill, typically comprised of agriculture by-product or other crop ingredients but can contain animal products; differentiated from fertilizers by the act of pelletizing or sculpting multiple ingredients into a form to be directly ingested by the shrimp

Pond types (e.g. 'production', 'reservoir')	• Production pond: a pond used to cultivate shrimp • Reservoir pond: a pond used to hold water prior to its introduction to a production pond • Effluent treatment pond: a pond that receives water discharged from a production pond and whose intent is to allow for a material reduction in toxicity of production pond water prior to its discharge outside the farm boundary; where a pond may fit under the definition of both an effluent treatment pond and a reservoir pond, it shall be considered an effluent treatment pond only to avoid duplication
Primary species farmed	• The species of shrimp for which the assessment is being carried out
Additional stocked species	• Not the primary species farmed, and common names are permissible
Continuous and distinct production cycles	• Continuous cycles: the production strategy which continually stocks and continually harvests; there may be 'main' stockings and/or harvests, but there are believed to always be at least some shrimp in production ponds at all times • Distinct cycles: cycles which have a defined beginning (i.e. stocking) and end (i.e. harvest); distinct cycles may have more than one stocking and/or more than one harvest within them, but they can be identified as having a first stocking and a last harvest. • In many questions, there is reference to the 'production cycle'. For example, the number of times something happened 'in the current production cycle', or records from 'the last complete production cycle'. For these questions, Tooltip notes exist to guide interpretation for farms/systems which operate continuously.

Appropriate permits or other applicable evidence to operate	• The permits, licenses, or other documents/permission which allow for-profit shrimp aquaculture – of all species grown on the farm, not just the one under assessment – to take place on the property/premises. These permissions would typically include an aquaculture license and a business license or its equivalence and may include other permissions such as water use rights or veg, effluent discharge permits and vegetation management regulations. National and local regulations which govern farm siting and operation vary, but those relevant to the farm under assessment must be adhered to without exception or incompleteness.
Relevant government staff members and the ability to contact them	• Relevant government staff are those which are directly responsible for government oversight over the aquaculture activities of the farm. • The ability to contact them would include having their current phone number, e-mail address, or known office location.

3.3 Habitat

The following terms in the Habitat section shall be interpreted as follows:

Term/Circumstance	Interpretation
Year of farm construction	• This is the year the farm began construction as a farm for the species of shrimp that is under assessment.
Successful habitat restoration	• If undeveloped wetland areas were disturbed for the construction of farm canals after 1999, their loss must be offset. To be 'successful', the farm must have equitably contributed labor, materials, and/or funding to rehabilitate other areas of disturbed habitat. The area must be physically larger than that which was disturbed by the farm, and the ecosystem services that the rejuvenated area provides must be demonstrated to be equal to those which were lost because of the farm's expansion. The evidence to demonstrate this must be made available to the assessor, who will give an opinion as to the success of restoration; Monterey Bay

	Aquarium technical review will provide the final determination.
Cumulative impact assessment for expansion in non-wetland areas	• If undeveloped riparian, grassland, shrubland, or other similarly-valued habitat was disturbed or converted for farm expansion after 1999 – namely for the construction of production ponds, reservoir or water treatment ponds, or storage or other support buildings – the contribution to the industry's cumulative habitat footprint and impact must have been considered and determined to be insignificant. An official Environmental Impact Assessment (EIA) is not required to have taken place, but a pointed and thorough effort to assess the impact of habitat disturbance or conversion must be demonstrated to have occurred. Evidence must be made available to the assessor, who will give an opinion on the robustness of the assessment; Monterey Bay Aquarium technical review will provide the final determination.
Nationally- or internationally-protected areas	• These include areas like nature reserves, wilderness areas, national parks, habitat or species management areas, and protected land- and seascapes.
Permission to operate in a protected area	• The permission to operate must be under a habitat management plan effectively governed by the relevant authorities and which does not permit habitat degradation beyond that which has already occurred.
Groundwater use records	• Records must be kept which fully demonstrate that all groundwater use provisions are being complied with; these may include, but may not be limited to, volume of water extracted, quality of water discharged, discharge location, and water table height/depth.
Groundwater use assessment	• If not required by regulation, farms must have assessed how the use of groundwater may impact the availability and quality of such water for other, particularly domestic, uses.

3.4 Effluent

The following terms in the Habitat section shall be interpreted as follows:

Term/Circumstance	Interpretation
Proper sludge disposal	Sludge cannot be put directly into a natural waterbody or other place where the nutrients, salinity, or organisms (including pathogens) living in it can negatively impact the environment or other farms.
Weekly water quality measurement	• For farms that provide feed (at any time during the production cycle), temperature, dissolved oxygen, salinity, pH, and ammonia in production ponds must be measured weekly, and the results must be recorded. The records from at least the current and most recent complete production cycles must be on site; for continuous production systems, these records must date back six months.
Sufficient quality of discharged water	• The records which demonstrate the quality of water was tested immediately prior to its discharge to the environment must be made available to the assessor. It is the assessor's responsibility to determine their confidence that the water to be discharged is similar enough in quality that it will not have a material impact on the quality of the receiving waterbody. Monterey Bay Aquarium technical review will provide the final determination.
Calculation of kg N per ton of shrimp production	• The following equation shall be used: { [(kg fertilizer × % N) / (mt harvested)] – 28.48 } Where: • kg fertilizer is that which was used in the last full calendar year • % N is the nitrogen content (in percent) of the fertilizer; if multiple fertilizers (with different N contents) were used, a weighted average shall be calculated • Mt harvested is that which was harvested in the last full calendar year • The last full calendar year is that which took place from January – December. If, for example,

	it is April 2021, use fertilizer use and harvest data from January 2020 through December 2020.
Compliance with relevant effluent water quality regulations	• While it is the responsibility of the assessor to understand the general framework of effluent-related legislation, it is the responsibility of the farm to demonstrate an understanding of the effluent-related legislation that is relevant to their farm. The farm must demonstrate to the assessor they are in compliance with any and all relevant regulations, including the provision of records which demonstrate compliance if they are required to be kept.

3.5 Source of Stock

The following terms in the Source of Stock section shall be interpreted as follows:

Term/Circumstance	Interpretation
Percentage of seed from domesticated broodstock	• It is the farm's responsibility to know how the hatchery they source seed from acquires their broodstock; that is, whether they are wild-caught or from a domesticated breeding program.
Sustainable fishing of broodstock, and sustainability assessment	• Where broodstock are captured from the wild, the fishery must be deemed to be from a well-managed fishery. Monterey Bay Aquarium will provide the final determination of this. If any of the farm's seed comes from this source, the answer to this shall be 'YES'. • The description of the broodstock fishery assessment must be thorough enough for Monterey Bay Aquarium technical review to identify it.

3.6 Feed

The following terms in the Feed section shall be interpreted as follows:

Term/Circumstance	Interpretation
Feed companies	• Feed manufacturers (having one or more feed mills)
Feed company contacts	• These would preferably be those of the specific feed mill which supplies the farm's feed or otherwise the feed manufacturing company's local representative. Having their contact details would include having their current phone number, e-mail address, or known office location.
Specific feeds	• These are the feed 'models' produced by a feed manufacturer, with specific formulations, sizes, shapes, and in-water behavior characteristics. Specific feeds are typically identifiable numbers or alphanumeric code.
Economic FCR	• The total feed inputs divided by total harvested shrimp over the entire production cycle or, for continuous production, a representative length of time (e.g. three months, one year)
Feed additives or nutrition supplements	• Apart from those already incorporated in the feed formulation, and additives/supplements such as probiotics, prebiotics, etc.

3.7 Chemical Use

The following terms in the Chemical Use section shall be interpreted as follows:

Term/Circumstance	Interpretation
Authorization for antibiotic, therapeutant, and non-therapeutant chemical use	• While it is the responsibility of the assessor to understand the general framework of chemical use legislation, it is the responsibility of the farm to demonstrate an understanding of the legislation that is relevant to their farm and what is required of their farm to be compliant. The farm must demonstrate to the assessor that any use of antibiotics or other therapeutant or non-therapeutant chemicals was in compliance with all relevant regulations, including the provision of records which demonstrate compliance if they are required to be kept. • For the use of antibiotics, evidence which demonstrates authorization for use must be captured via photograph by the assessor.
WHO-listed antibiotics/ antimicrobials	• Commonly-used antibiotics/antimicrobials which are considered by the World Health Organization to be highly- and critically-important for human medicine include: ciprofloxacin; enrofloxacin; erythromycin; florfenicol; flumequine; ormetoprim; oxolinic acid; oxytetracycline; sulfadiazine; sulfadimethoxine; trimethoprim. • The most recent World Health Organization publication of the antibiotics/antimicrobials which they consider to be highly- and critically-important for human medicine can be found here: WHO Advisory Group of the Critically Important Antimicrobials for Human Medicine (AG-CIA)

Appropriate training of chemical use	• All farm workers which may administer chemical products shall have appropriate training on the safe and responsible use of those products. The training may come from external sources, like government staff, or from internal sources, like farm management, but it shall cover the types of chemicals potentially used, the reasons those chemicals might be used, techniques to store, handle, and administer those chemicals, requirements for recording the use of those chemicals, the regulations which govern the use of those chemicals, and other relevant materials. It is the responsibility of the assessor to provide an opinion on the appropriateness of chemical use training, and Monterey Bay Aquarium technical review will provide the final determination.

3.8 Escapes

The following terms in the Escapes section shall be interpreted as follows:

Term/Circumstance	Interpretation
Number of discharge screens	• The total number of screens that water passes through before it leaves the farm property. For example, if there is one screen on the production pond, one screen in the canal that connects the production pond to the effluent treatment pond, and one screen on the outlet of the treatment pond before the receiving environment or crossing over to an adjacent farm's property, the total number of screens is 3.
Regular maintenance of escape prevention materials	• As a guide, inspection of in-situ escape prevention materials should be no less frequent than once weekly and before every harvest or other water discharge, though the assessor shall determine the most appropriate timeframe that determines regularity based on farm and production characteristics. Monterey Bay Aquarium technical review will provide the final determination.
Escape events	• An escape event is one in which it is known to the farm that shrimp have escaped from the farm, regardless of the number.

Production pond flooding	• Events that have caused water in production ponds to overflow the pond banks or otherwise breach gates or other sections of the pond that are maintained to keep water and shrimp inside the pond.
Pond gates and farm gates	• Pond gates are those between ponds and between ponds and discharge canals. Farm gates are those at the farm boundary, connecting it to other farms and/or to the environment.
Determination of good working order of pond gates, farm gates, harvesting nets, and other equipment	• It is the assessor's responsibility to evaluate the robustness of all gates, nets, and other escape prevention structures and materials. As a guide, gates must be clearly constructed to withstand flowing water and standing water, high enough to ensure they are not inundated, and have well-fitted and similarly-strong dam boards or other equipment/material which allows and prevents water passage through the gate. Nets and harvesting equipment must also be without holes, have strong frames, and mesh sizes which are appropriate to retain the pond's smallest shrimp. Images must be taken of gates, nets, and other escape prevention equipment and materials to demonstrate either their robustness or their weakness. While the assessor provides a valuable determination, Monterey Bay Aquarium technical review will provide the final determination.

3.9 Wildlife Mortalities

The following terms in the Wildlife Mortalities section shall be interpreted as follows:

Term/Circumstance	Interpretation
Predator management plan	A document which specifies how the farm operates to minimize predation of farmed shrimp by wildlife species and interactions between wildlife species and farm personnel, infrastructure, and equipment that may be harmful to the wildlife. If at-risk wildlife species are possibly or likely to interact with the farm, the plan should include information sufficient to make known that possibility such that farm personnel can take precautions to minimize the risk of harmful interaction. Regulations which govern wildlife interactions, including lethal control allowances and provision, should be clearly identified in the plan.
Stationary and active scaring devices	Stationary scaring devices are those which are placed around the property to deter wildlife from nearing the farm, such as scarecrows, streamers, or decoys. Active scaring devices are those which are typically 'at rest' and either engaged by sensory stimulation (e.g. movement sensor triggering bells) or by people (e.g. sound cannon).

Demonstrating a lack of impact to population health	• As a guide, the farm must prove that either all mortalities are less than 50% of the species' Potential Biological Removal (PBR) or, where PBR does not exist, mortalities on the farm do not impact species total recruitment or abundance. More broadly, a lack of impact to population health can be defined as: utilizing information such as life history characteristics (e.g., fecundity, age at maturity) and presence, absence, or degree of other pressures on the population (e.g., commercial or otherwise significant harvest of the species), together with mortality numbers, the impact to the population can be pragmatically estimated to not manifest across time (e.g., is not multi-generational) or space (e.g., local mortalities are not observable in species abundance distant to those mortalities). • Mortality records are required for this demonstration, and while literature or other third-party information is most helpful and trustworthy in allowing for on-farm mortalities to be compared to the population health of the species in question, the assessor may accept thorough description by the farm as to why on-farm mortalities have not negatively impacted the species recruitment or abundance. If third-party information is available, it must be photographed as evidence.
Threatened or endangered species	• These terms are used as a catch-all to describe a species whose abundance is low and/or trend of abundance is downward and/or are otherwise at risk of poor population health. • These can be species listed as protected, vulnerable, threatened, endangered or critically-endangered by the IUCN (Red list) or by a national or other official list with equivalent categories; however, the use of more recent or more regional/stock specific data can override these determinations or be used in their absence.

3.10 Biosecurity and Disease

The following terms in the Biosecurity and Disease section shall be interpreted as follows:

Term/Circumstance	Interpretation

Comprehensive biosecurity	• To be considered 'comprehensive', the actions the farm takes must address disease risks from:
	  ○ Influent and effluent water
	  ○ Seed/PL's or other stocked animals transported to the farm
	  ○ People
	  ○ Unprocessed feeds, and
	  ○ Local wildlife
	• It is the responsibility of the assessor to determine whether the actions the farm takes adequately address each of the risk factors above, and others where relevant, such that the farm's overall biosecurity can be considered 'comprehensive'. However, Monterey Bay Aquarium technical review will provide the final determination.

Reportable and/or notifiable diseases	• As a guide, the World Organisation for Animal Health (WOAH) Aquatic Animal Health Code must be followed. Diseases of crustaceans which are considered by the Code (2024) include acute hepatopancreatic necrosis disease, AHPND and infections with Aphanomyces astaci, Hepatobacter penaei (Necrotising hepatopancreatitis), infectious hypodermal and haematopoietic necrosis virus (IHHNV), infectious myonecrosis virus (IMV), Macrobrachium rosenbergii nodavirus (White tail disease), Taura syndrome virus (TSV), white spot syndrome virus (WSSV), and yellow head virus genotype 1 (YHV). The most recent copy of the Code can be accessed on the WOAH website here: • Aquatic Code Online Access - WOAH - World Organisation for Animal Health • In addition, national and/or local requirements for disease reporting – should they exist – must be followed.
Relevant authorities for notification	• Individuals and the organizations/entities which they represent who are required to be notified of the occurrence of certain diseases or other disease-related information.

Sufficiently reasonable to prevent disease discharge from pond-water and sludge	• Through thorough conversation with farm personnel, the assessor must make a determination regarding the robustness of actions taken by the farm to prevent active pathogens from being discharged from the diseased/afflicted production pond to other ponds within the farm or, more importantly, from within the farm to either neighboring farms or the receiving environment. There are many strategies to accomplish this, and the relevancy of any one or combination of strategies may vary between farms, so prescriptive measures are not given here. However, as a guide, strategies such as holding pond-water for an extended period of time before discharge, altering pond-water and/or sludge characteristics (e.g., pH) to create unlivable conditions for the pathogen, or chemical treatment are examples that might be employed. • The assessor must evaluate all factors (i.e. the pathogen, the farm's action, the physical characteristics of the farm and its relationship to neighboring farms and shared waterways) to determine if the farm's actions were highly likely to protect the health of neighboring farms and wild organisms. Monterey Bay Aquarium technical review will make the final determination.
Regular communication with neighboring farms	• As a guide, communication should be no less frequent than bi-weekly and surrounding water exchange events, though the assessor shall determine the most appropriate timeframe that determines regularity based on farm and production characteristics. Monterey Bay Aquarium technical review will provide the final determination.

3.11 Harvest Traceability

The following terms in the Harvest Traceability section shall be interpreted as follows:

Term/Circumstance	Interpretation
Recording of sales	• The amount of product (in kg, MT, etc.) and to whom it was sold (including the company name and its representative involved in the transaction) must be included in the records.
Licensure, registration, and approval of harvest brokers	• If licenses from, or registration with, national and/or local governments are required for individuals to operate as a shrimp sales broker or similar role, they must actively hold those permissions. In addition, or in lieu of if those requirements do not exist, they must be identified as an approved broker by the processing plant which receives the product they are transporting/brokering. • Practically, a list of approved brokers should be provided to assessors by the processing company, and the assessor can query this list when on farm to ensure that all product sales of the supply chain under assessment are done with approved brokers.

3.12 Assessment Finalization

The following terms in the Assessment Finalization section shall be interpreted as follows:

Term/Circumstance	Interpretation
Primary interviewed farm representative	• The signature of the individual which led the assessment on behalf of the farm.

4. Feed Mill / Feed Profile Interpretation and Guidance

- VP Feed Mill Assessment Version - under development
- Seafood Watch Aquaculture Standard Version 4.0

5. Associated Documents

- SFW VP_03 Assessor Qualifications
- Relevant and most recent Assessor training materials and Guidance document
    - Training materials and Guidance documents are tailored to the production type(s) for which verification assessments are to be carried out; therefore, the training packet and Guidance relevant to the initiative shall be considered Associated Documents.

Traceability Procedure

1. Purpose

To ensure that all products that have the Verified Green or Verified Yellow claims, are traceable back to verified farms and in accordance with VP_PROC_01_Verification Procedure.

2. Scope

The scope covers all farms that want to make the claim of either Verified Green or Verified Yellow.

3. Tools

3.1 Chain of Custody Checklist for Verified Product

The seafood industry benchmark for chain of custody is the Marine Stewardship Council (MSC)/Aquaculture Stewardship Council (ASC) chain of custody audit and checklist. This has at its core, 5 key principles that are audited, generally at a frequency of annually, to ensure that anyone handling certified product is able to demonstrate traceability. The key elements adapted from certified to verified are:

- Verified Supply
- Identifiable along the supply chain
- Separation from non-verified product
- Traceable and recorded
- Good Management

A modified version of the MSC/ASC chain of custody checklist is contained in the Appendix for Monterey Bay Aquarium Verified Product. This consists of three sections:

1. Quality Management System Questions – Appendix I
2. Mass Balance Template – Appendix II
3. Traceability Template – Appendix III

This follows the same procedure as the MSC/ASC chain of custody with some modification to take into consideration verified instead of certified product.

3.2 Monterey Bay Aquarium Verified Farms Production Template

The Monterey Bay Aquarium Verified Farms Production Template is attached in Appendix IV and is completed by the Processor of verified product on a monthly basis. This is a declaration of all products identified as verified and demonstrating traceability back to verified farms.

4. Methodology

The methodology for checking traceability of product from the Verification Platform verified is three-fold:

- Monthly Declaration
- Annual chain of custody audit
- Unannounced chain of custody audit

4.1 Monthly Declaration

All processors shall complete a monthly declaration of all product that is processed from Verified Yellow or Green farms using the Monterey Bay Aquarium Verified Farms Production Template. This template requires the listing of all farms used in the production of identified verified product. These monthly declarations shall be submitted to verificationplatform@mbayaq.org within 5 working days of each month.

4.2 Annual Chain of Custody Audit

All processors shall undergo an annual Chain of Custody Audit by an accredited Certification Body for MSC/ASC Chain of Custody. These reports shall be submitted to verificationplatform@mbayaq.org within 10 working days of the audit date.

4.3 Unannounced Chain of Custody Audit

All processors shall undergo an annual Chain of Custody Audit by an accredited Certification Body for MSC/ASC Chain of Custody. These reports shall be submitted to verificationplatform@mbayaq.org within 10 working days of the audit date.

4.4 Findings and Sanctions

Where a processor is found to have:

- Not submitted monthly declarations
- Incorrectly sourced from non-verified farms
- Identified and sold product as verified

They shall be immediately suspended from the Verification Program, pending a full investigation. The Investigation shall be conducted by an accredited Certification Body appointed by the Monterey Bay Aquarium at the expense of the processor.

5. Appendices

5.1 Appendix 1 — Quality Management System Questions

No	Indicator	Question	Suggested Verification
1	**1.1**	Does the organization have a process to ensure that all verified products can only be purchased from Verified Farms?	Verify: - What is the process for purchasing Verified products? - How are supplier lists maintained?
2	**1.2**	Does the organisation have a process to confirm the Verified status of products upon receipt?	Verify - What is the process for confirming the Verified status of products? - Are staff that receive products familiar with this process? What happens if the product cannot be confirmed as verified upon receipt?
3	**1.3**	If there is Verified product onsite at the initial audit, was this purchased from a verified supplier? Can the organisation demonstrate that products meet all	Verify - Is the product traceable back to a verified source? - Is the product clearly identified as verified and segregated from any non-verified material? Evidence

		relevant sections of this standard if they will be sold as verified?	- Describe the identification system used and details of the products onsite
4	**2.1**	Can Verified products be identified as Verified at all stages of purchasing, receiving, storage, processing, packing, labelling, selling and delivery?	Verify: - Review identification of a sample product/s (this can be done in combination with the traceability test). Consider all stages of the product flow. Check identification of physical products as well as procedures if possible. Evidence: - Name of product/s sampled and description of identification system used
5	**2.2**	Can the organisation show that all products sold as verified are identified on the line item of the invoice, or if all products on the invoice are verified, the identification is on the line item or whole invoice?	Verify: - Review a sample of invoices
6	**2.3**	Is there a system that ensures packaging, labels, and other materials identified as verified can only be used for verified products?	Verify: - Check a sample of packaging with the logo (can be done in combination with the traceability test). How does the organisation ensure verified materials aren't used for non-verified products? Evidence: - Description of procedures in place, details of packaging reviewed

7	**2.3.1**	Does the organisation have a process to ensure that verified products are not mislabelled by species?	Verify: - What systems ensure that species identification at dispatch/sale is aligned with that at receipt/purchase? - Where common names are used, how does the organisation ensure that these are aligned with legislation in the market they are selling to? Evidence: - Procedures for label design and selection - Interview people responsible for species identification on pack or dispatch documents e.g. invoice. NB. Select 'N/A' if species is not identified e.g. catering/restaurant servings.
8	**2.3.2**	If origin is identified on products, does the organisation have a process to ensure that verified products are not mislabelled by origin?	Verify: - What systems ensure that origin or catch area identification at dispatch/sale is aligned with that at receipt/purchase? Evidence: - Procedures for label design and selection - Interview people responsible for origin identification on pack or dispatch documents NB. Select 'N/A' if origin is not identified.

9	**3.1**	Can the organisation demonstrate there are systems in place to prevent substitution of verified and non-verified seafood?	Verify:
			- What systems are in place to avoid substitution? Are these sufficient and working in practice? Verify also during personnel interviews where relevant.
			- Conduct an annual volume reconciliation in case of concern.
			
			Evidence:
			- Name of product sampled
			- Description of processes
			  - How is raw material received
			  - How is raw material stored
			  - How is raw material
			  - Describe the system that is in place to prevent mixing if both verified

			and non-verified products are being handled at the same time
10	**3.2**	Are there adequate systems or procedures in place to prevent mixing between verified and non-verified products (except for specific cases of non-verified ingredients)?	Verify: - What measures are taken by the organisation to segregate and prevent mixing between verified and non-verified seafood? Evidence: - Description of products reviewed and the segregation procedures
11	**4.1.a**	Is the traceability system sufficient to allow tracing of verified products from point of sale or serving back to a verified supplier?	Verify: - Complete traceability tests on a batch/es of product (refer to traceability test tab)- Cross-check a sample of purchase records with delivery records and where possible against the actual product received. Evidence: - Description of the traceability system. Record evidence from traceability tests in the separate template, but record the overall outcome (Pass/Pass with Observation/Minor/Major/Suspension) in this tab.
12	**4.1.b**	Is the traceability system sufficient to allow tracing of verified products from point of purchase forward to point of sale?	Verify: - Is the traceability system effective for tracing verified products forward from point of purchase to sale? Evidence: - Brief description of traceability system. Results of forward traceability test if carried out.

13	**4.2**	Are traceability records sufficient to link verified products at every stage between purchase and sale?	Verify: - Traceability system (as verified through traceability tests) allows linking of batches/lots at every step. Evidence: - Completed traceability test template with description of how batches are linked at each step. The overall outcome (Pass/Pass with Observation / Minor / Major / Suspension) to be recorded in this tab
14	**4.3.1**	Are verified product records accurate and complete, with any changes clearly documented?	Verify: - Are records complete and accurate? Were any changes recorded correctly? Evidence: - Sample of records reviewed
15	**4.4/4.4.1**	Do records allow quantities of verified products bought and sold to be calculated (with the exception of any sales to final consumers)?	Verify: - Complete an input-output reconciliation for a sample of products (see templates in this checklist) Evidence: - Record findings of the input-output reconciliation in the designated template(s). The overall outcome (Pass/Pass with Observation/Minor/Major/Suspension) should be recorded in this tab.
16	**4.5**	If processing or packing/repacking occurs, can conversion rates be calculated for verified products over any given batch or time period?	Verify: - Complete the template for input-output reconciliation (refer to Mass Balance Tab). Include calculation and justification of yield (conversion rate) if relevant Evidence: - Input-output template will include details of conversion rates and justification. The overall outcome (Pass/Pass with Observation/Minor/Major/Suspension) should be recorded in this tab.

17	**4.5.1**	Are conversion rates for verified products justifiable and accurate?	Verify:- Check conversion rates against product specifications, similar products being processed, or the organisation's historical processing records Evidence:- Record conversion rates and justification in the input-output reconciliation template. Record the overall conformity outcome in this tab.
18	**4.6**	Are only products included in scope sold as verified?	Verify: - Does the company sell products outside of their scope? If so, are they sold without references to verified status or trademarks? Evidence: - Description only if non-conformity found
19	**5.1.1**	Does the organisation operate a management system which addresses all of the requirements in the CoC Standard?	Verify: - There is an effective and implemented management system (e.g. policies and procedures) to address all relevant CoC requirements. - Who is in charge of the management system? - Is the system sufficient to ensure CoC conformity given the organisation's size, complexity, and any potential risks of mislabelling or substitution? Evidence: - Brief description of the management system, including any documented policies or procedures. Assessment of whether this management system is sufficient and working well.

20	**5.1.2**	Are responsible personnel adequately trained and competent in order to ensure conformity with Chain of Custody (CoC)?	Verify: - Which staff are considered responsible personnel with respect to the Chain of Custody? Who is in charge of training? How is training delivered, and how often? What is included in training? Talk to staff (see interview tab) and review any relevant training materials or records. Evidence: - Completed staff interviews (record on separate tab) - Names of trainers and their qualifications/experience - Documented training manuals and records (if relevant)
21	**5.1.3**	Are relevant records for verified products and CoC conformity kept for at least 3 years (or the shelf life of the product if longer)?	Verify: - Check historical records, and how records are stored, verify timeline for keeping records Evidence: - Sample of records reviewed
22	**5.1.4**	Has the organisation appointed an individual (CoC contact person) who will be responsible for all contact with the Monterey Bay Aquarium and for responding to any requests for documentation or information related to CoC conformity?	Verify: - Is there a COC contact person appointed? Is this information up-to-date? Evidence: - Name of contact person

23	**5.3.1**	Can the organisation demonstrate that all subcontractors handling verified products comply with the relevant requirements of the standard?	Verify: - How does the organisation ensure full control of each subcontractor? - Are there systems to ensure identification and traceability of verified products at point of dispatch and receipt to subcontractors? - Have non-verified contract processors been visited onsite before use (and annually thereafter?) - Have non-verified storage subcontractors handling verified products been visited if required? Evidence: - Procedures and records relating to subcontractor oversight- Subcontractor tab completed for each subcontractor visit
24	**5.3.2**	Is there an up-to-date record of all subcontractors handling verified products, excluding transport organisations?	Verify: - Does the subcontractor list include all relevant information? Evidence: - List of subcontractors
25	**5.3.4**	If subcontractors are used, can the organisation obtain records of verified products from the subcontractor or access to verified products at any time?	Verify: - How can the organisation ensure they have appropriate access to records and products at subcontractor storage? Review a sample of any subcontractor records and agreements in place if possible. Evidence: - Subcontractor agreements (if they exist), sample of records reviewed for verified product at storage facilities

26	**5.3.5**	Does the organisation have a signed agreement with all subcontractors that transform, process, or repack verified products? Does the agreement require the subcontractor to have systems that ensure traceability, segregation, and identification of verified products at every stage of handling?	Verify: - If relevant, are signed agreements in place that cover all points in 5.3.5? Were records provided or access granted if requested? Evidence: -Agreements reviewed
27	**5.4.1**	Is the organisation aware of how they need to handle non-conforming products?	Verify: -Does the organisation understand their obligations in case non-conforming product is discovered? -What processes are in place for non-conforming products? -Have there been any cases of non-conforming products in the past (if so, were procedures followed?) Evidence: -Brief description of level of knowledge, description of procedures if available-If a non-conforming product incident occurred, evidence of records showing appropriate response
28	**5.4.1.e**	If non-conforming product was detected after selling or shipping, were all impacted customers (excluding final consumers) notified within 4 working days?	Verify: -Does the organisation understand what to do in the case of non-conforming product having been shipped to their customer? Evidence: -If past incidents occurred, records of communications to customers

5.2 Appendix 2 — Traceability Template

Guidance

General guidance:
The traceability test is a record-based trace of a batch of verified product that was either sold by the organization or is ready for sale. This template is to be completed by the auditor, not by the client. The exercise should trace the selected product through every step of handling or storage back to its related purchase/s. The auditor will need to verify that traceability records are available and are sufficient to link the batch of product through each step, including handling by any subcontractors or off-site facilities. Important: samples for the traceability test need to be selected by the auditor on the day of the audit - including for remote or unannounced audits.

Determining the number of traceability tests:
The number of traceability tests is determined by the auditor and will need to consider the organization's range of different handling processes, species in scope, and number of responsible personnel. The sample size needs to be sufficient to provide confidence in the organization's overall chain of custody systems, ensure the traceability system is effective for all products in scope, and needs to include products handled by subcontractors and contract processors where relevant. It is recommended that the traceability test verifies traceability back to the Unit of Certification.

Recording results:
The traceability test is to be completed by the end of the audit. If additional traceability tests are carried out, please either make a copy of this tab to record data from additional traceability tests, OR add more traceability test tables to the right on this tab by copying and pasting or following the instructions in the comment in the top cell of column F on this tab to unhide more test tables. The results of each traceability test (Pass/Pass with Observation/Minor/Major/Suspension) are to be recorded.

Traceability Test 1

Product tested: (name, description, product form...)	
Species: (for products with mixed species record all species)	

Data		**Description**	**Explanation** (describe how codes or documents link product at different steps)
List all documents reviewed when conducting the traceability test. List all codes that allow a link to be made between the different documents. Start with the product tested, recording the identification code (e.g. product ID and batch number) in section A, then note the previous step in section B.... The last entry should record the point where raw material was received. Possible documents include: sales invoice, dispatch note, processing records, storage records, goods in records, purchase invoice...	A)		
	B)		
	C)		
	D)		
	E)		
	F)		
	G)		
	H)		
	I)		
	J)		

	K)		
	L)		
	M)		
	N)		
Rationale for selection of sample for Traceability Test			
Findings			

5.3 Appendix 3 — Mass Balance Template

Input - output sample 1		
Material/Product	**Details**	
Species	1	
Start Date (use date of batch purchase if reconciling by batch)	2	
End Date (use date of audit if reconciling by batch)	3	
Unit	4	
Batch number (if relevant)	5	
Total Product Weight' OR 'Seafood Ingredient Only' (select one)	6	
Raw material - Stock at start date (if not processing record all product stocks)	A	
Raw material - Stock purchased or received in period (or if not processing record all product purchases)	B	
Raw material - Stock sold during period (or if not processing, all product sales)	C	
Raw material - Stock used for processing	D	
Raw material - Stock at end date (or if not processing, all product stocks)	E	
Processing - Stock of processed product at start date	F	

Processing - Processed product produced during period (i.e. weight of output from processing)	G	
Processing - Processed product sold or dispatched during period	H	
Processing - Stock of processed product at end date	I	
Processing - Stock of partially processed product at end date	J	
Raw material: Total in = (A + B)	K	
Raw material: Total out = (C + D + E)	L	
Raw material: Difference = (K - L)	M	
Processing: Processed product inputs from start date = (F + G + J)	N	
Processing: Processed product sold and stored at end date = (H + I)	O	
Processing: Difference = (N - O)	P	
Conversion Rate (Yield). Calculated as a percentage of G/D.	Q	
Approximate % weight gains (e.g. added ingredients in recipes, glaze)	R	
Approximate % weight losses (e.g. due to freezing, skinning, filleting)	S	
Approximate % increase in yield due to added weight gains and losses: = (R-S)	T	
Volume of raw material converted to a non-certified status	U	
Volume into processing then converted to a non-certified status	V	

Volume of processed product then converted to a non-certified status	W	
Findings or explanations on any variances		

5.4 Appendix 4 — Monterey Bay Aquarium Verified Farms Production Template

Month Declaration of Production Using Verified Farms			
PO/Exporting lot		Factory PO.	
Exporter			
Importer			
Destination			
Shipment date		Container No.	
Quantity (containers)		Seal No.	
cartons		Bill of Lading No.	
Kilogram			
Factory Code			
Product code(s)			
Packaging			
Size			
Carton code	Numbers of carton		

Composition			
Number of raw material lots			
Raw material lot code			
List of collectors (code)			
List of farms			
Lot No.1		Lot No.2	
Farm Code In Verification Platform	Farm ID of Partner/Processor	Farm Code In Verification Platform	Farm ID of Partner/Processor