ASC Audit Report - Opening

General Requirements

C1 Audit reports shall be written in English and in the most common language spoken in the areas where the operation is located.

C2 Audit reports may contain confidential annexes for commercially sensitive information.

C2.1 The CAB shall agree the content of any commercially sensitive information with the applicant, which can still be accessible by the ASC and the appointed accreditation body upon request as stipulated in the certification contract.

C2.2 The public report shall contain a clear overview of the items which are in the confidential annexes.

C2.3 Except for the annexes that contain commercially sensitive information all audit reports will be public.

C3 The CAB is solely responsible for the content of all reports, including the content of any confidential annexes.

C4 Reporting Deadlines for certification and re-certification audit reports (in working day)

C4.1 Within thirty (30) days of the completing of the audit the CAB shall submit a draft report in English and the national or most common language spoken in the area where the operation is located.

C4.2 Within five (5) days the ASC should post the draft report to the ASC website.

C4.3 The CAB shall allow stakeholders and interested parties to comment on the report for fifteen (15) days.

C4.4 Within twenty (20) days of the close of comments, the CAB shall submit the final report to the ASC in English and the national or most common language spoken in the area where the operation is located.

C4.5 Within five (5) days the ASC should post the final report to the ASC website.

C4.6 Audit reports shall contain accurate and reproducable results.

C5 Reporting Deadlines* for surveillance audit reports

C5.1 Within ninety (90) days of the completing of the audit the CAB shall submit a final report in English and the national or most common language spoken in the area where the operation is located.

C5.2 Within five (5) days the ASC should post the final report to the ASC website.

C5.3 Audit reports shall contain accurate and reproducable results.

1 Title Page

1.1	Name of Applicant	Marine Harvest Canada
1.2	Report Title [e.g. Public Draft Certification Report/ Final certification report/Surveillance report]	Surveillance report
1.3	CAB name	ACOURA
1.4	Name of Lead Auditor	Paul Casburn
1.5	Names and positions of report authors and reviewers	Authors: Paul Casburn, Lead Auditor and Leon Reed, social auditor. Technical Review Paul Macintyre, Aquaculture Director.
1.6	Client's Contact person: Name and Title	Katherine Dolmage, Certification Manager.
1.7	Date	29/09/2018

2 Table of Contents

Section 1 - Title Page. Section 2 - Table of Contents. Section 3 - Glossary.

3 Glossary

Terms and abbreviations that are specific to this audit report and that are not otherwise defined in the ASC glossary	GMO = Genetically modified Organism. ISA=Infectious salmonic anemia. PRV=Piscine rheovirus. BKD = Bacterial Kidney disease. DFO = Department of fisheries and Oceans. BAP = Best Aquaculture practice. PAR = Pacific Aquaculture regulation. DATS = Digital Action Tracking system. HDPE = High density polyethelene.

4 Summary

A concise summary of the report and findings. The summary shall be written to be readable to the stakeholders and other interested parties.

4.1	A brief description of the scope of the audit (i*ncluding activities of the UoC being audited*)	The Scope is under the ASC salmon standard V1.1 and CAR V2.1 of the site called Shelter Pass in the Port Hardy area. The Scope includes all farming related activities of the farm site evaluating the Environmental and Social compliance of the farm site to the standard. The related managment systems are also within the Scope of Audit.
4.2	A brief description of the operations of the unit of certification	Farming of Atlantic salmon from smolt to harvest size.
4.3	Type of unit of certification (*select only one type of unit of certification in the list)*	Single site
4.4	Type of audit (*select all the types of audit that apply in the list)*	Surveillance 1

4.4.1 Number of sites included in the unit of certification

	Owned by client	Subcontracted by client
Initial audit - 04/2017	1	
Surveillance audit 1 - 09/ 2018	1	
Surveillance audit 2 - mm/ yyyy		
Recertification audit - mm/ yyyy		

4.5	A summary of the major findings	There was one major finding on indicator 6.5.1 around health and safety issues onsite. Details in the audit and summary of findings.
4.6	The Audit determination	Paul Macintyre

5 CAB Contact Information

5.1	CAB Name	Acoura Marine t/a Lloyd's Register
5.2	CAB Mailing Address	6 Redheughs Rigg, Edinburgh EH12 9DQ, UK
5.3	Email Address	asc@acoura.com
5.4	Other Contact Information	n/a

6 Background on the Applicant

6.1	Information on the Public Disclosure Form (Form 3) except 1.2-1.3. All information updated as necessary to reflect the audit as conducted.	Yes
6.2	A description of the unit of certification (*for intial audit)* / changes, if any (*for surveillance and recertification audits)*	Atlantic Salmon at Shelter Pass Salmon Farm, this consists of two 30mx30m steel cage groups of 12 cages each. All cages are now in the audit scope.
6.3	Other certifications currently held by the unit of certification	GAA BAP.
6.4	Other certification(s) obtained by the UoC before this audit	GAA BAP.

6.5	Estimated annual production volumes of the unit of certification of the current year	0
6.6	Actual annual production volumes of the unit of certification of the previous year *(mandatory for surveillance and recertification audits)*	3300 tonnes.
6.7	Production system(s) employed within the unit of certification *(select one or more in the list)*	Marine Pens
6.8	Number of employees working at the unit of certification (*see notes in comment to this cell*)	7
6.9	Size, and/or number of ponds, pens (if multi site, per site)	2 grids of 12 (30 x 30m steel) cages.

7 Scope

7.1	The Standard(s) against which the audit was conducted, including version number	ASC Salmon V1.1
7.2	The species produced at the applicant farm (*in English and Latin names)*	Atlantic salmon *Salmo salar*

7.3	A description of the scope of the audit including a description of whether the unit of certification covers all production or harvest areas (i.e. ponds) managed by the operation or located at the included sites, or whether only a sub-set of these are included in the unit of certification. If only a sub-set of production or harvest areas are included in the unit of certification these shall be clearly named.	The Scope includes all farming related activities of the farm site evaluating the Environmental and Social compliance of the farm site to the standard. The related managment systems are also within the Scope of Audit. All the pens harvested are covered by the Scope.
7.4	The names and addresses of any storage, processing, or distribution sites included in the operation (including subcontracted operations) that will potentially be handling certified products, up until the point where product enters further chain of custody.	Marine Harvest Canada have a processing unit in Port Hardy and this is where all the salmon from this site will be primarily processed, packed and sent to customers for onward distribution to the markets. Marine Harvest Canada, Port Hardy processing unit, 7200 Coho Rd, Port Hardy, BC V0N 2P0
7.5	Description of the receiving water body(ies).	Shelter Pass is located at the northern end of Queen Charlotte Strait. The site is in an area identified as a General Management Zone by the Marine Planning Partnership North Vancouver Island Marine Plan. The site is located near the entrance to Queen Charlotte Sound and in an area of strong current and water mixing.

8 Audit Plan

8.1	The names of the auditors and the dates when each of the following were undertaken or completed: conducting the audit, writing of the report, reviewing the report, and taking the certification decision.	Lead Auditor, Paul Casburn and Social Auditor, Leon Reed. On-site audit conducted 10th-14th September across a number of sites for Marine Harvest Canada, including Shelter Pass. Report drafted on 27/09/18 and prepared towards final report thereafter. ADD DATE OF TECHNICAL REVEIW AND CERTIFICATION DECISION

8.2 Previous Audits (if applicable):

	NC reference number	Standard clause reference	Closing deadline - status - closing date of each NC
8.2.1 Initial audit - 04/2017		2.1.1, 5.4.4, 8.4	2.1.1 closed 18/07/2018. 5.4.4 closed 18/12/17. 8.4 closed 27/04.2018.
Surveillance audit 1 - mm/ yyyy			
Surveillance audit 2 - mm/ yyyy			
Recertification audit - mm/ yyyy			
Unannounced audit - mm/ yyyy			
NC close-out audit - mm/ yyyyy			
Scope extention audit mm/ yyyy			

8.3 Audit plan as implemented including:

	Dates	Locations
8.3.1 Desk Reviews		
8.3.2 Onsite audits		Offices in Campbell River and the Site.
8.3.3 Stakeholder interviews and Community meetings		
8.3.4 Draft report sent to client		
8.3.5 Draft report sent to ASC		
8.3.6 Final report sent to Client and ASC		

8.4 Names and affiliations of individuals consulted or otherwise involved in the audit including: representatives of the client, employees, contractors, stakeholders and any observers that participated in the audit.

Katherine Dolmage, Certification Manager, Marine Harvest Canada.
Renee Hamel, Certification assistant, Marine Harvest Canada.
Mykolas Kamaitis, Veterinarian, Marine Harvest Canada
Mike Dodds, Community relations manager, Marine Harvest Canada
Aqua-Pak aquaculture contractors / suppliers
British Columbia Centre for Aquatic Health Sciences
British Columbia Parks government environment agency
British Columbia Salmon Farmers Association
Campbell River Council local government
Canadian Aquaculture Industry Alliance
Canadian Pacific Sustainability Fisheries Society
Coast Forestry Products Association
David Suzuki Foundation environmental protection
Ducks Unlimited environmental protection
Flurers Smokery aquaculture contractors / suppliers
Gwa'Sala-Nakwaxda'xw First Nation
Homalco First Nation First Nation
James Walkus Fishing Company
K'omoks First Nation First Nation

8.5 Stakeholder submissions, including written or other documented information and CAB written responses to each submission at different stages of the certification process (audit notification, during on-sitt audit, public comment period)

Name of stakeholder (if permission given to make name public)	Relevance to be contacted	Date of contact	CAB responded Yes/No	Brief summary of points Raised	Use of comment by CAB	Response sent to stakeholder
	no stakeholder comments recieved					

8.6 E5.1.i List of sites exempted from the scope of an initial audit and how they meet conditions in E5.1.i

NA

8.6.1	E5.1.ii Justification for auditing site(s) meeting conditions under E5.1.i	NA
8.7	E5.1.1.i List of sites removed after the initial audit	NA
8.7.1	E5.2.2 Reason for the removal of sites from the certificate.	NA
8.8	E5.4 Map of sites included in the unit of certification has been attached	NA
8.9	E5.5 Site(s) in fallowing period included in the audit (*only for surveillance and re-certification audits)*	NA

		Compliance Criteria (Required Client Actions):
1.1.1	**Indicator:** Presence of documents demonstrating compliance with local and national regulations and requirements on land and water use **Requirement:** Yes **Applicability:** All	a. Maintain digital or hard copies of applicable land and water use laws.
		b. Maintain original (or legalised copies of) lease agreements, land titles, or concession permit on file as applicable.
		c. Keep records of inspections for compliance with national and local laws and regulations (if such inspections are legally required in the country of operation).
		d. Obtain permits and maps showing that the farm does not conflict with national preservation areas.
1.1.2	**Indicator:** Presence of documents demonstrating compliance with all tax laws **Requirement:** Yes **Applicability:** All	a. Maintain records of tax payments to appropriate authorities (e.g. land use tax, water use tax, revenue tax). Note that CABs will not disclose confidential tax information unless client is required to or chooses to make it public.
		b. Maintain copies of tax laws for jurisdiction(s) where company operates.
		c. Register with national or local authorities as an “aquaculture activity".

1.1.3	**Indicator:** Presence of documents demonstrating compliance with all relevant national and local labor laws and regulations **Requirement:** Yes **Applicability:** All	a. Maintain copies of national labor codes and laws applicable to farm (scope is restricted to the farm sites within the unit certification.)
		b. Keep records of farm inspections for compliance with national labor laws and codes (only if such inspections are legally required in the country of operation).
1.1.4	**Indicator:** Presence of documents demonstrating compliance with regulations and permits concerning water quality impacts **Requirement:** Yes **Applicability:** All	a. Obtain permits for water quality impacts where applicable.
		b. Compile list of and comply with all discharge laws or regulations.
		c. Maintain records of monitoring and compliance with discharge laws and regulations as required.
		PRINCIPLE 2: CONSERVE NATURAL HABITAT, LOCAL
		Criterion 2.1 Benthic biodiversit
Footnote	[1] Closed production systems that can demonstrate that they collect and responsibly dispose of > 75% of solid nutrients from the pro	
	Instruction to Clients and CABs on Criterion 2.1 - Mod	
	For farms located in a jurisdiction where specific benthic sampling locations are required under law, clients may request to modify the benthic sampling methodology pr provide a full justification to the CAB for review. Requests for modification shall be supported by mapping of differences in sampling locations. In any ev CABs shall evaluate client requests to modify benthic methodology based on whether there is a risk that such changes would jeopardize the intent and rigor of the methodology are fully described and	
		Note: Under Indicator 2.1.1, farms can choose to measure redox po
		a. Prepare a map of the farm showing boundary of AZE (30 m) and GPS locations of all sediment collections stations. If the farm uses a site-specific AZE, provide justification [3] to the CAB.

2.1.1	**Indicator:** Redox potential or [2] sulphide levels in sediment outside of the Allowable Zone of Effect (AZE) [3], following the sampling methodology outlined in Appendix I-1 **Requirement:** Redox potential > 0 mV or Sulphide ≤ 1,500 µMol/L **Applicability:** All farms except as noted in [1]	b. If benthos throughout the full AZE is hard bottom, provide evidence to the CAB and request an exemption from 2.1.1c-f, 2.1.2 and 2.1.3.
		c. Inform the CAB whether the farm chose option #1 or option #2 to demonstrate compliance with the requirements of the Standard.
		d. Collect sediment samples in accordance with the methodology in Appendix I-1 (i.e. at the time of peak cage biomass and at all required stations).
		e. For option #1, measure and record redox potential (mV) in sediment samples using an appropriate, nationally or internationally recognized testing method.
		f. For option #2, measure and record sulphide concentration (µM) using an appropriate, nationally or internationally recognized testing method.
		g. Submit test results to ASC as per Appendix VI at least once for each production cycle. If site has hard bottom and cannot complete tests, report this to ASC.
Footnote	[2] Farm sites can choose whether to use redox or sulph	
Footnote	[3] Allowable Zone of Effect (AZE) is defined under this standard as 30 meters. For farm sites where a site-specific AZE has been defined usi	
		- Under Indicator 2.1.2, farms can choose one of four measurements to show compliance with t - If a farm is exempt due to hard

2.1.2	**Indicator:** Faunal index score indicating good [4] to high ecological quality in sediment outside the AZE, following the sampling methodology outlined in Appendix I-1 **Requirement:** AZTI Marine Biotic Index (AMBI [5]) score ≤ 3.3, or Shannon-Wiener Index score > 3, or Benthic Quality Index (BQI) score ≥ 15, or Infaunal Trophic Index (ITI) score ≥ 25 **Applicability:** All farms except as noted in [1]	a. Prepare a map showing the AZE (30 m or site specific) and sediment collections stations (see 2.1.1).
		b. Inform the CAB whether the farm chose option #1, #2, #3, or #4 to demonstrate compliance with the requirement.
		c. Collect sediment samples in accordance with Appendix I-1 (see 2.1.1).
		d. For option #1, measure, calculate and record AZTI Marine Biotic Index [5] score of sediment samples using the required method.
		e. For option #2, measure, calculate and record Shannon-Wiener Index score of sediment samples using the required method.
		f. For option #3, measure, calculate and record Benthic Quality Index (BQI) score of sediment samples using the required method.
		g. For option #4, measure, calculate and record Infaunal Trophic Index (ITI) score of sediment samples using the required method.
		h. Retain documentary evidence to show how scores were obtained. If samples were analyzed and index calculated by an independent laboratory, obtain copies of results.
		i. Submit faunal index scores to ASC (Appendix VI) at least once for each production cycle.
Footnote	[4] “Good” Ecological Quality Classification: The level of diversity and abundance of invertebrate taxa is slightly outside t	
Footnote	[5] http://www.azti.es/en/a	

2.1.3	**Indicator:** Number of macrofaunal taxa in the sediment within the AZE, following the sampling methodology outlined in Appendix I-1 **Requirement:** ≥ 2 highly abundant [6] taxa that are not pollution indicator species **Applicability:** All farms except as noted in [1]	a. Document appropriate sediment sample collection as for 2.1.1a and 2.1.1c, or exemption as per 2.1.1b.
		b. For sediment samples taken within the AZE, determine abundance and taxonomic composition of macrofauna using an appropriate testing method.
		c. Identify all highly abundant taxa [6] and specify which ones (if any) are pollution indicator species.
		d. Retain documentary evidence to show how taxa were identified and how counts were obtained. If samples were analyzed by an independent lab, obtain copies of results.
		e. Submit counts of macrofaunal taxa to ASC (Appendix VI) at least once for each production cycle.
Footnote	[6] Highly abundant: Greater than 100 organisms per square meter (or	
2.1.4	**Indicator:** Definition of a site-specific AZE based on a robust and credible [7] modeling system **Requirement:** Yes **Applicability:** All farms except as noted in [1]	a. Undertake an analysis to determine the site-specific AZE and depositional pattern.
		b. Maintain records to show how the analysis (in 2.1.4a) is robust and credible based on modeling using a multi-parameter approach [7].
		c. Maintain records to show that modeling results for the site-specific AZE have been verified with > 6 months of monitoring data.
Footnote	[7] Robust and credible: The SEPA AUTODEPOMOD modeling system is considered to be an example of a credible and robust syster	
	Criterion 2.2 Water quality in and n	
	Compliance Criteria (Required Client Actions):	
Footnote	[8] See Appendix VI for transparency r	

2.2.1	**Indicator**: Weekly average percent saturation [9] of dissolved oxygen (DO) [10] on farm, calculated following methodology in Appendix I-4 **Requirement:** ≥ 70% [11] **Applicability:** All farms except as noted in [11]	**Instruction to Clients fo** Appendix I-4 presents the required methodology that farms mu - measuremen - eq - measurements are taken at least twice daily - sa - sampling should be done at 5 meters dep - each week, all DO If monitoring deviates from prescribed sampling methodology, the farm shall provide the au ap Exception [see footnote 12] If a farm does not meet the minimum 70 percent weekly average from the edge of the net pen array, in a location that is understood to follow similar patterns from coastal communities. For any such exceptions, th Note 1: *Percent saturation* is the amount of oxygen disso
		a. Monitor and record on-farm percent saturation of DO at a minimum of twice daily using a calibrated oxygen meter or equivalent method. For first audits, farm records must cover ≥ 6 months.
		b. Provide a written justification for any missed samples or deviations in sampling time.
		c. Calculate weekly average percent saturation based on data.

		d. If any weekly average DO values are < 70%, or approaching that level, monitor and record DO at a reference site and compare to on-farm levels (see Instructions).
		e. Arrange for auditor to witness DO monitoring and calibration while on site.
		f. Submit results from monitoring of average weekly DO as per Appendix VI to ASC at least once per year.
Footnote	[9] Percent saturation: Percent saturation is the amount of oxygen dissolved in the water sam	
Footnote	[10] Averaged weekly from two daily n	
Footnote	[11] An exception to this standard shall be made for farms that car	
2.2.2	**Indicator**: Maximum percentage of weekly samples from 2.2.1 that fall under 2 mg/L DO **Requirement:** 5% **Applicability:** All	a. Calculate the percentage of on-farm samples taken for 2.2.1a that fall under 2 mg/L DO.
		b. Submit results from 2.2.2a as per Appendix VI to ASC at least once per year.
2.2.3	**Indicator**: For jurisdictions that have national or regional coastal water quality targets [12], demonstration through third-party analysis that the farm is in an area recently [13] classified as having “good” or “very good” water quality [14] **Requirement:** Yes [15]	a. Inform the CAB whether relevant targets and classification systems are applicable in the jurisdiction. If applicable, proceed to "2.2.3.b". If not applicable, take action as required under 2.2.4
		b. Compile a summary of relevant national or regional water quality targets and classifications, identifying the third-party responsible for the analysis and classification.

	Applicability: All farms except as noted in [15]	c. Identify the most recent classification of water quality for the area in which the farm operates.
Footnote	[12] Related to nutrier	
Footnote	[13] Within the two	
Footnote	[14] Classifications of “good” and “very good” are used in the EU Water Framework Directive. Equ	
Footnote	[15] Closed production systems that can demonstrate the collection and responsible disposal of > 75% of solid nutrients as well	
2.2.4	**Indicator**: For jurisdictions without national or regional coastal water quality targets, evidence of monitoring of nitrogen and phosphorous [16] levels on farm and at a reference site, following methodology in Appendix I-5 **Requirement:** Consistency with reference site **Applicability:** All farms except as noted in [16]	a. Develop, implement, and document a weekly monitoring plan for N, NH4, NO3, total P, and ortho-P in compliance with Appendix I-5. For first audits, farm records must cover ≥ 6 months.
		b. Calibrate all equipment according to the manufacturer's recommendations.
		c. Submit data on N and P to ASC as per Appendix VI at least once per year.
Footnote	[16] Farms shall monitor total N, NH4, NO3, total P and Ortho-P in the water column.	

2.2.5	**Indicator**: Demonstration of calculation of biochemical oxygen demand (BOD [17]) of the farm on a production cycle basis **Requirement:** Yes **Applicability:** All	**Instructio** Biochemical Oxygen Demand (BOD) can be c BOD = ((to • A farm may deduct N or C that is captured, filtered or absorbed through approaches su captured/filt • Reference for calculation methodology: Boyd C. 2009. Estimating mechanical aeration re And: Global Aquaculture Performar Note 1: Calculation requires a full production cycle of data and is required beginning with the p Note 2: Farms may seek an exemption to Indicator 2.2.5 if: the farm collects BOD samples at le
		a. Collect data throughout the course of the production cycle and calculate BOD according to formula in the instruction box.
		b. Submit calculated BOD as per Appendix VI to ASC for each production cycle.
Footnote	[17] BOD calculated as: ((total N in feed – total N in fish)*4.57) + ((total C in feed – total C in fish)*2.67). A farm may deduct N or C that is captured, filtere calculation methodology: Boyd C. 2009. Estimating mechanical aeration requirement in shrimp ponds from the oxygen demand of feed. In: Proceeding available at http://web.uvic	
	Indicator: Appropriate controls are in place that maintain good culture and hygienic conditions on the farm which	a. Document control systems in good culture and hygene that includes all appropriate elements.

2.2.6	extends to all chemicals, including veterinary drugs, thereby ensuring that adverse impacts on environmental quality are minimised. **Requirement:** Yes **Applicability:** All	b. Apply the systems ensuring that staff are aware, qualified and trained to proberly implement them.
		-
		Criterion 2.3 Nutrient relea
		Compliance Criteria (Required Client Actions):
2.3.1	**Indicator**: Percentage of fines [18] in the feed at point of entry to the farm [20] (calculated following methodology in Appendix I-2) **Requirement:** < 1% by weight of the feed **Applicability:** All farms except as noted in [19]	Note: The methodology given in Appendix I-2 is used t
		a. Determine and document a schedule and location for quarterly testing of feed. If testing prior to delivery to farm site, document rationale behind not testing on site.
		b. If using a sieving machine, calibrate equipment according to manufacturer's recommendations.
		c. Conduct test according to detailed methodology in Appendix I-2 and record results for the pooled sample for each quarter. For first audits, farms must have test results from the last 3 months.
Footnote	[18] Fines: Dust and fragments in the feed. Particles that separate from feed with a diameter of 5 mm or less when sieved through a 1 mm sieve, or partic they are de	
Footnote	[19] To be measured every quarter or every three months. Samples that are measured shall be chosen randomly. Feed may be sampled immediately prior responsible disposal of > 75% of solid nutrients and > 50% of dissolved n	
		Criterion 2.4 Interaction with critical o
		Compliance Criteria (Required Client Actions):

2.4.1	**Indicator**: Evidence of an assessment of the farm's potential impacts on biodiversity and nearby ecosystems that contains at a minimum the components outlined in Appendix I-3 **Requirement:** Yes **Applicability:** All	Note: If a farm has previously undertaken an independent assessment of biodiversity impact
		a. Perform (or contract to have performed) a documented assessment of the farm's potential impact on biodiversity and nearby ecosystems. The assessment must address all components outlined in Appendix I-3.
		b. If the assessment (2.4.1a) identifies potential impact(s) of the farm on biodiversity or nearby critical, sensitive or protected habitats or species, prepare plan to address those potential impacts.
		c. Keep records to show how the farm implements plan(s) from 2.4.1b to minimize potential impacts to critical or sensitive habitats and species.

2.4.2	**Indicator**: Allowance for the farm to be sited in a protected area [20] or High Conservation Value Areas [21] (HCVAs) **Requirement:** None [22] **Applicability:** All farms except as noted in [22]	**Instruction to Clients for Indicat** Exception #1: For protected areas classified by the International Union for the Co Exception #2: For HCVAs if the farm can demonstrate that its environmental impacts are co Exception #3: For farms located in a protected area if it was designated as such after the fa protected area and it is in compliance with any relevant conditions or regulations placed on th Protected area: "A clearly defined geographical space, recognized, dedicated and ma High Conservation Value Areas (HCVA): Natural habitats where conservation values are consi identifying critical conservation values—both social and environme a. Provide a map showing the location of the farm relative to nearby protected areas or High Conservation Value Areas (HCVAs) as defined above (see also 1.1.1a). b. If the farm is not sited in a protected area or High Conservation Value Area as defined above, prepare a declaration attesting to this fact. In this case, the requirements of 2.4.2c-d do not apply.

		c. If the farm is sited in a protected area or HCVA, review the scope of applicability of Indicator 2.4.2 (see Instructions above) to determine if your farm is allowed an exception to the requirements. If yes, inform the CAB which exception (#1, #2, or #3) is allowed and provide supporting evidence.
		d. If the farm is sited in a protected area or HCVA and the exceptions provided for Indicator 2.4.2 do not apply, then the farm does not comply with the requirement and is ineligible for ASC certification.
Footnote	[20] Protected area: "A clearly defined geographical space, recognized, dedicated and managed through legal or other effective means, to achieve the long Management Categories, Gl	
Footnote	[21] High Conservation Value Areas (HCVA): Natural habitats where conservation values are considered to be of outstanding significance or critical impor environmental—and for planning ecosystem management in order to ensure that th	
Footnote	[22] The following exception: • For protected areas classified by the International Union for the Conservation of Nature (IUCN) as Categ • For HCVAs if the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the HCVA designation. T • For farms located in a protected area if it was designated as such after the farm was already in operation and provided the farm can demonstrate th regulations placed on the farm as a result of the formation/designation of the protected area. The burden of proof w	
	Criterion 2.5 Interaction with wildli	
		Compliance Criteria (Required Client Actions):
Footnote	[23] See Appendix VI for transparen	
	Indicator: Number of days in the production cycle when acoustic deterrent devices (ADDs) or acoustic harassment	a. Compile documentary evidence to show that no ADDs or AHDs have been used by the farm

2.5.1	devices (AHDs) were used **Requirement:** 0 **Applicability:** All	a. Compile documentary evidence to show that no ADDs or AHDs have been used by the farm.
		-
2.5.2	**Indicator**: Number of mortalities [25] of endangered or red-listed [26] marine mammals or birds on the farm **Requirement:** 0 (zero) **Applicability:** All	a. Prepare a list of all predator control devices and their locations.
		b. Maintain a record of all predator incidents.
		c. Maintain a record of all mortalities of marine mammals and birds on the farm identifying the species, date, and apparent cause of death.
		d. Maintain an up-to-date list of endangered or red-listed marine mammals and birds in the area (see 2.4.1)
		-
Footnote	[25] Mortalities: Includes animals intentionally killed through lethal a	
Footnote	[26] Species listed as endangered or critically endang	
	Indicator: Evidence that the following steps were taken prior to lethal action [27] against a predator: 1. All other avenues were pursued prior to using lethal	a. Provide a list of all lethal actions that the farm took against predators during the previous 12-month period. Note: "lethal action" is an action taken to deliberately kill an animal, including marine mammals and birds.

2.5.3	action 2. Approval was given from a senior manager above the farm manager 3. Explicit permission was granted to take lethal action against the specific animal from the relevant regulatory authority **Requirement:** Yes [28] **Applicability:** All except cases where human safety is endangered as noted in [28]	b. For each lethal action identified in 2.5.4a, keep record of the following: 1) a rationale showing how the farm pursued all other reasonable avenues prior to using lethal action; 2) approval from a senior manager above the farm manager of the lethal action; 3) where applicable, explicit permission was granted by the relevant regulatory authority to take lethal action against the animal. c. Provide documentary evidence that steps 1-3 above (in 2.5.4b) were taken prior to killing the animal. If human safety was endangered and urgent action necessary, provide documentary evidence as outlined in [28].
Footnote	[27] Lethal action: Action taken to deliberately	
Footnote	[28] Exception to these conditions may be made for a rare situation where human safety is endangered. Should thi	
	Instruction to Clients and CABs on Indicators 2.5.4, 2.5.5, and 2.5.6 The ASC Salmon Standard has defined "Lethal incident" to include all lethal actions as well as entanglements or other accidental mortalities of non-salmonids [footnote definition fu Total number of lethal Incidents = sum of all non-salmonid deaths arising There should be a 1:1 relationship between the number of animal deaths and the number of lethal incidents reported by the farm. For example, if a farm has taken on period. The term "non-salmonid" was intended to cover any predatory animals which are likely to tr	
	Indicator: Evidence that information about any lethal incidents [29] on the farm has been made easily publicly	a. For all lethal actions (see 2.5.3), keep records showing that the farm made the information available within 30 days of occurrence.

2.5.4	incidents [30] on the farm has been made easily publicly available [29] **Requirement:** Yes **Applicability:** All	a. For all lethal actions (see 2.5.3), keep records showing that the farm made the information available within 30 days of occurrence.
		b. Ensure that information about all lethal actions listed in 2.5.4a are made easily publicly available (e.g. on a website).
Footnote	[29] Posting results on a public website is an example of "easily publicly available." Shall be r	
2.5.5	**Indicator**: Maximum number of lethal incidents [30] on the farm over the prior two years **Requirement:** < 9 lethal incidents [31], with no more than two of the incidents being marine mammals **Applicability:** All	a. Maintain log of lethal incidents (see 2.5.3a) for a minimum of two years. For first audit, > 6 months of data are required.
		b. Calculate the total number of lethal incidents and the number of incidents involving marine mammals during the previous two year period.
		c. Send ASC the farm's data for all lethal incidents [30] of any species other than the salmon being farmed (e.g. lethal incidents involving predators such as birds or marine mammals). Data must be sent to ASC on an ongoing basis (i.e. at least once per year and for each production cycle).
Footnote	[30] Lethal incident: Includes all lethal actions as well as e	
Footnote	[31] Standard 2.5.6 applicable to incidents related to non-endangered and n	
2.5.6	**Indicator**: In the event of a lethal incident, evidence that an assessment of the risk of lethal incident(s) has been undertaken and demonstration of concrete steps taken by the farm to reduce the risk of future incidences **Requirement:** Yes **Applicability:** All	a. Keep records showing that the farm undertakes an assessment of risk following each lethal incident and how those risk assessments are used to identify concrete steps the farm takes to reduce the risk of future incidents.
		b. Provide documentary evidence that the farm implements those steps identified in 2.5.6a to reduce the risk of future lethal incidents.
PRINCIPLE 3: PROTECT THE HEALTH AND GENE		
Criterion 3.1 Introduced or amplified po		
	Compliance Criteria (Required Client Actions):	
Footnote	[32] Farm sites for which there is no release of water that may contain pathogens into the	

Footnote		[33] See Appendix VI for transparency requ
		Instruction to Clients and CABs on According to footnote [32], farm sites for which there is no release of water that may contain pathogens into the natural (freshwater or marine) environment are exe following h 1) the farm does not release any water 2) any effluent released by the farm to the natural environment has been effectively treated to kill p Auditors shall fully document the rationale for a
3.1.1	**Indicator**: Participation in an Area-Based Management (ABM) scheme for managing disease and resistance to treatments that includes coordination of stocking, fallowing, therapeutic treatments and information-sharing. Detailed requirements are in Appendix II-1. **Requirement:** Yes **Applicability:** All except farms that release no water as noted in [32]	a. Keep record of farm's participation in an ABM scheme.
		b. Submit to the CAB a description of how the ABM (3.1.1a) coordinates management of disease and resistance to treatments, including: - coordination of stocking; - fallowing; - therapeutic treatments; and - information sharing.
		c. Provide the CAB access to documentation which is sufficient for the auditor to evaluate the ABM's compliance with all requirements in Appendix II-1, including definition of area, minimum % participation in the scheme, components, and coordination requirements.
		d. Submit dates of fallowing period(s) as per Appendix VI to ASC at least once per year.
		Note: Indicator 3.1.2 requires that farms demonstrate a commitment to collaborate with NGOs, academics and governments on areas of mutually agreed research to measure possible impacts on wild stocks. If the farm does not receive any requests to collaborate on such research projects, the farm may demonstrate compliance by showing evidence of commitment through other proactive means such as published policy statements or directed

3.1.2	**Indicator**: A demonstrated commitment [34] to collaborate with NGOs, academics and governments on areas of mutually agreed research to measure possible impacts on wild stocks **Requirement:** Yes **Applicability:** All except farms that release no water as noted in [32]	a. Retain records to show how the farm and/or its operating company has communicated with external groups (NGOs, academics, governments) to agree on and collaborate towards areas of research to measure impacts on wild stocks, including records of requests for research support and collaboration and responses to those requests.
		b. Provide non-financial support to research activities in 3.1.2a by either: - providing researchers with access to farm-level data; - granting researchers direct access to farm sites; or - facilitating research activities in some equivalent way.
		c. When the farm and/or its operating company denies a request to collaborate on a research project, ensure that there is a written justification for rejecting the proposal.
		d. Maintain records from research collaborations (e.g. communications with researchers) to show that the farm has supported the research activities identified in 3.1.2a.
Footnote	[34] Commitment: At a minimum, a farm and/or its operating company must demonstrate this commitment through providi	
3.1.3	**Indicator**: Establishment and annual review of a maximum sea lice load for the entire ABM and for the individual farm as outlined in Appendix II-2 **Requirement:** Yes	a. Keep records to show that a maximum sea lice load has been set for: - the entire ABM; and - the individual farm.
		b. Maintain evidence that the established maximum sea lice load (3.1.3a) is reviewed annually as outlined in Appendix II-2, incorporating feedback from the monitoring of wild salmon where applicable (See 3.1.6).

	Applicability: All except farms that release no water as noted in [32]	c. Provide the CAB access to documentation which is sufficient for the auditor to evaluate whether the ABM has set (3.1.3a) and annually reviewed (3.1.3.b) maximum sea lice load in compliance with requirements in Appendix II-2.
		d. Submit the maximum sea lice load for the ABM to ASC as per Appendix VI at least once per year.
3.1.4	**Indicator**: Frequent [35] on-farm testing for sea lice, with test results made easily publicly available [36] within seven days of testing **Requirement:** Yes **Applicability:** All except farms that release no water as noted in [32]	a. Prepare an annual schedule for testing sea lice that identifies timeframes of routine testing frequency (at a minimum, monthly) and for high-frequency testing (weekly) due to sensitive periods for wild salmonids (e.g. during and immediately prior to outmigration of juveniles).
		b. Maintain records of results of on-farm testing for sea lice. If farm deviates from schedule due to weather [35] maintain documentation of event and rationale.
		c. Document the methodology used for testing sea lice ('testing' includes both counting and identifying sea lice). The method must follow national or international norms, follows accepted minimum sample size, use random sampling, and record the species and life-stage of the sea lice. If farm uses a closed production system and would like to use an alternate method (i.e. video), farm shall provide the CAB with details on the method and efficacy of the method.
		d. Make the testing results from 3.1.4b easily publicly available (e.g. posted to the company's website) within seven days of testing. If requested, provide stakeholders access to hardcopies of test results.
		e. Keep records of when and where test results were made public.
		f. Submit test results to ASC (Appendix VI) at least once per year.
Footnote	[35] Testing must be weekly during and immediately prior to sensitive periods for wild salmonids, such as outmigration of wild juvenile salmon. Testing degrees C). Within closed production systems, alternative met	

Footnote		[36] Posting results on a public website
3.1.5	**Indicator**: In areas with wild salmonids [37], evidence of data [38] and the farm's understanding of that data, around salmonid migration routes, migration timing and stock productivity in major waterways within 50 kilometers of the farm **Requirement:** Yes **Applicability:** All farms operating in areas with wild salmonids except farms that release no water as noted in [32]	**Instruction to** In writing this indicator, the SAD Steering Committee concluded that relevant data sets on wil government sources or from research institutions. Therefore farms are not responsible for con to make man This Indicator requires collection and understanding of general data for the major watersheds should relate to the wild fish stock level, which implies that the population is more or less appropriate fish stock-level definition. However, it mu For purposes of these standards, "areas with wild salmonids" are defined as areas within 75 hemisphere [39]. Potentially affected species in these areas are salmonids (i.e. including all trou salmon have esca Farms do not need to conduct research on migration routes, timing and the health of wild stock populations in their region, as such information is needed to make management decisions
		a. Identify all salmonid species that naturally occur within 75 km of the farm through literature search or by consulting with a reputable authority. If the farm is not in an area with wild salmonids, then 3.1.5b and c do not apply.
		b. For species listed in 3.1.5a, compile best available information on migration routes, migration timing (range of months for juvenile outmigration and returning salmon), life history timing for coastal resident salmonids, and stock productivity over time in major waterways within 50 km of the farm.
		c. From data in 3.1.5b, identify any sensitive periods for wild salmonids (e.g. periods of outmigration of juveniles) within 50 km of the farm.
		-

Footnote	[37] For purposes of these standards, “areas with wild salmonids” are defined as areas within 75 kilometers of a wild salmonid mig	
Footnote	[38] Farms do not need to conduct research on migration routes, timing and the health of wild stocks under this standard if general information is alread needed to make management decisions relat	
3.1.6	**Indicator**: In areas of wild salmonids, monitoring of sea lice levels on wild out-migrating salmon juveniles or on coastal sea trout or Arctic char, with results made publicly available. See requirements in Appendix III-1. **Requirement:** Yes **Applicability:** All farms operating in areas with wild salmonids except farms that release no water as noted in [32]	a. Inform the CAB if the farm operates in an area of wild salmonids. If not, then Indicator 3.1.6 does not apply.
		b. Keep records to show the farm participates in monitoring of sea lice on wild salmonids.
		c. Provide the CAB access to documentation which is sufficient for the auditor to evaluate whether the methodology used for monitoring of sea lice on wild salmonids is in compliance with the requirements in Appendix III-1.
		d. Make the results from 3.1.6b easily publicly available (e.g. posted to the company's website) within eight weeks of completion of monitoring.
		e. Submit to ASC the results from monitoring of sea lice levels on wild salmonids as per Appendix VI.
3.1.7	**Indicator**: In areas of wild salmonids, maximum on-farm lice levels during sensitive periods for wild fish [39]. See detailed requirements in Appendix II, subsection 2. **Requirement:** 0.1 mature female lice per farmed fish **Applicability:** All farms operating in areas with wild salmonids except farms that release no water as noted in [32]	a. Inform the CAB if the farm operates in an area of wild salmonids. If not, then Indicator 3.1.7 does not apply.
		b. Establish the sensitive periods [39] of wild salmonids in the area where the farm operates. Sensitive periods for migrating salmonids is during juvenile outmigration and approximately one month before.
		c. Maintain detailed records of monitoring on-farm lice levels (see 3.1.4) during sensitive periods as per Appendix II-2.

	[32]	d. Provide the CAB with evidence there is a 'feedback loop' between the targets for on-farm lice levels and the results of monitoring of lice levels on wild salmonids (Appendix II-2).
Footnote		[39] Sensitive periods for migrating salmonids is during
		Criterion 3.2 Introduction o
		Compliance Criteria (Required Client Actions):
3.2.1	**Indicator**: If a non-native species is being produced, demonstration that the species was widely commercially produced in the area by the date of publication of the ASC Salmon standard **Requirement:** Yes [40] **Applicability:** All farms except as noted in [40]	Note: For the purposes of Indicator 3.2.1, "area" is defined as a contiguous body of water v Canada). Appendix II-1A elaborates further on this definition: "The boundaries of an area sh ecosystem structure and function." The intent is that the area relates to t a. Inform the CAB if the farm produces a non-native species. If not, then Indicator 3.2.1 does not apply. b. Provide documentary evidence that the non-native species was widely commercially produced in the area before June 13, 2012. c. If the farm cannot provide evidence for 3.2.1b, provide documentary evidence that the farm uses only 100% sterile fish that includes details on accuracy of sterility effectiveness.

		d. If the farm cannot provide evidence for 3.2.1b or 3.2.1c, provide documented evidence that the production system is closed to the natural environment and for each of the following: 1) non-native species are separated from wild fish by effective physical barriers that are in place and well maintained; 2) barriers ensure there are no escapes of reared fish specimens that might survive and subsequently reproduce [40]; and 3) barriers ensure there are no escapes of biological material [40] that might survive and subsequently reproduce (e.g. UV or other effective treatment of any effluent water exiting the system to the natural environment).
		-
Footnote	[40] Exceptions shall be made for production systems that use 100 percent sterile fish or systems that demonstrate separation from the wild by effectiv rep	
3.2.2	**Indicator**: If a non-native species is being produced, evidence of scientific research [41] completed within the past five years that investigates the risk of establishment of the species within the farm's jurisdiction and these results submitted to ASC for review [42] **Requirement:** Yes	**Instruction to C** Farms have had five years to demonstrate complian Farms are exempt from this standard if they are in a jurisdiction where the non-native speci environmental effects; the introduction took plac Note: For the
		a. Inform the ASC of the species in production (Appendix VI).
		b. Inform the CAB if the farm produces a non-native species. If not, then Indicator 3.2.2 does not apply.

	Applicability: All [43]	c. If yes to 3.2.2b, provide evidence of scientific research completed within the past five years that investigates the risk of establishment of the species within the farm's jurisdiction. Alternatively, the farm may request an exemption to 3.2.2c (see below).
		d. If applicable, submit to the CAB a request for exemption that shows how the farm meets all three conditions specified in instruction box above.
		e. Submit evidence from 3.2.2c to ASC for review.
Footnote	[41] The research must at a minimum include multi-year monitoring for non-nati	
Footnote	[42] If the review demonstrates there is increased risk, the ASC will consider prohibiting the certification of farming of non-native salmon in that jurisdicti native salmon in that jurisdiction. The ASC intends to bring this evidence into fut	
Footnote	[43] Farms are exempt from this standard if they are in a jurisdiction where the non-native species became established prior to farming activities in the ar 1993 (when the Convention on Biological Diversit	
3.2.3	**Indicator**: Use of non-native species for sea lice control for on-farm management purposes **Requirement:** None **Applicability:** All	a. Inform the CAB if the farm uses fish (e.g. cleaner fish or wrasse) for the control of sea lice.
		b. Maintain records (e.g. invoices) to show the species name and origin of all fish used by the farm for purposes of sea lice control.
		c. Collect documentary evidence or first hand accounts as evidence that the species used is not non-native to the region.
		Criterion 3.3 Introduction o
		Compliance Criteria (Required Client Actions):

3.3.1	**Indicator**: Use of transgenic [44] salmon by the farm **Requirement:** None **Applicability:** All	a. Prepare a declaration stating that the farm does not use transgenic salmon.
		b. Maintain records for the origin of all cultured stocks including the supplier name, address and contact person(s) for stock purchases.
		c. Ensure purchase documents confirm that the culture stock is not transgenic.
Footnote	[44] Transgenic: Containing genes altered by insertion of DNA from an unrelated organism. Taking genes from one species and inserting them into another species to get	
		Criterion 3.4 Esc
		Compliance Criteria (Required Client Actions):
Footnote		[45] See Appendix VI for transparen
3.4.1	**Indicator**: Maximum number of escapees [46] in the most recent production cycle **Requirement:** 300 [47] **Applicability:** All farms except as noted in [47]	a. Maintain monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapees.
		b. Aggregate cumulative escapes in the most recent production cycle.
		c. Maintain the monitoring records described in 3.4.1a for at least 10 years beginning with the production cycle for which farm is first applying for certification (necessary for farms to be eligible to apply for the exception noted in [47]).
		d. If an escape episode occurs (i.e. an incident where > 300 fish escaped), the farm may request a rare exception to the Standard [47]. Requests must provide a full account of the episode and must document how the farm could not have predicted the events that caused the escape episode.

		e. Submit escape monitoring dataset to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle).
Footnote	[46] Farms shall report all escapes; the total aggregate number of escapees per production cycle must be less than 300 fish. D	
Footnote	[47] A rare exception to this standard may be made for an escape event that is clearly documented as being outside the farm's control. Only one such exce farm is applying for certification. The farmer must demonstrate that there was no reasonab	
3.4.2	**Indicator**: Accuracy [48] of the counting technology or counting method used for calculating stocking and harvest numbers **Requirement:** ≥ 98% **Applicability:** All	a. Maintain records of accuracy of the counting technology used by the farm at times of stocking and harvest. Records include copies of spec sheets for counting machines and common estimates of error for hand-counts.
		b. If counting takes place off site (e.g. pre-smolt vaccination count), obtain and maintain documents from the supplier showing the accuracy of the counting method used (as above).
		c. During audits, arrange for the auditor to witness calibration of counting machines (if used by the farm).
		-
		e. Submit counting technology accuracy to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle).
Footnote	[48] Accuracy shall be determined by the spec sheet for counting	

3.4.3	**Indicator**: Estimated unexplained loss [49] of farmed salmon is made publicly available **Requirement:** Yes **Applicability:** All	**Instructio** The Estimated Unex EUL Units for input variables are number of fish (i.e. counts) per production cycle. Where p
		a. Maintain detailed records for mortalities, stocking count, harvest count, and escapes (as per 3.4.1).
		b. Calculate the estimated unexplained loss as described in the instructions (above) for the most recent full production cycle. For first audit, farm must demonstrate understanding of calculation and the requirement to disclose EUL after harvest of the current cycle.
		c. Make the results from 3.4.3b available publicly. Keep records of when and where results were made public (e.g. date posted to a company website) for all production cycles.
		d. Submit estimated unexplained loss to ASC as per Appendix VI for each production cycle.
		-
Footnote	[49] Calculated at the end of the production cycle as: Unexplained loss = Stocking count – harvest count – mortalities – other known escapes. Where possible, use of the pre-smolt vaccination count as the stocking count is preferred.	

3.4.4	**Indicator**: Evidence of escape prevention planning and related employee training, including: net strength testing; appropriate net mesh size; net traceability; system robustness; predator management; record keeping and reporting of risk events (e.g., holes, infrastructure issues, handling errors, reporting and follow up of escape events); and worker training on escape prevention and counting technologies **Requirement:** Yes **Applicability:** All	a. Prepare an Escape Prevention Plan and submit it to the CAB before the first audit. This plan may be part of a more comprehensive farm planning document as long as it addresses all required elements of Indicator 3.4.4.
		b. If the farm operates an open (net pen) system, ensure the plan (3.4.4a) covers the following areas: - net strength testing; - appropriate net mesh size; - net traceability; - system robustness; - predator management; - record keeping; - reporting risk events (e.g. holes, infrastructure issues, handling errors); - planning of staff training to cover all of the above areas; and - planning of staff training on escape prevention and counting technologies.
		c. If the farm operates a closed system, ensure the plan (3.4.4a) covers the following areas: - system robustness; - predator management; - record keeping; - reporting risk events (e.g. holes, infrastructure issues, handling errors); - planning of staff training to cover all of the above areas; and - planning of staff training on escape prevention and counting technologies.
		d. Maintain records as specified in the plan.
		e. Train staff on escape prevention planning as per the farm's plan.
		-
PRINCIPLE 4: USE RESOURCES IN AN ENVIRONMENTALLY EFFICIENT AND RESPONSIBLE MANNER		
		Criterion 4.1 Traceability of r
		Compliance Criteria (Required Client Actions):

Instruction to Clients for Indicators 4.1.1 through 4.4.2 -

Farms must show that all feeds used by the farm are produced in compliance with the requirements of Indicators 4.1.1 through 4.4.4. To do so, farms must obtain docu
a recognized standard which substantially incorporate requirements for traceability. Acceptable certification schemes include GlobalGAP or other schemes that hav
information handling processes to allow the feed producers to be able to bring forward accurate information about their production and supply chains. Declarations fr
that all of their feed producers are duly informed of the requirements of the ASC Salmon St

In addition to the above, farms must also show that their feed suppliers comply with the more detailed requirements for traceability and ingredient sourcing that are
producer

Method #1: Farms may choose to source feed from feed producers who used only those ingredients allowed under the ASC Salmon Standards during the productior
producer will independently verify that manufacturing pr

Method #2: Farms may choose to source feed from feed producers who demonstrate compliance using a "mass-balance" method. In this method, feed producers show
into the general silos and production lines is allowed during manufacturing. Audits of the feed producer will independently verify that manufacturing processes are in c
manufacturing (purchasing of raw materials, processing to finished fe

Note 1: The term "feed producer" is used here to identify the organization that produces the fish feed (i.e. it is the "feed manufacturer"). In most cases, the organizatio
directly responsible for feed production. Regardless of whether the farm sources feeds directly from a feed producer or indirectly through an

	Indicator: Evidence of traceability, demonstrated by the feed producer, of feed ingredients that make up more than 1% of the feed [50].	a. Maintain detailed records of all feed suppliers and purchases including contact information and purchase and delivery records.
		b. Inform each feed supplier in writing of ASC requirements pertaining to production of salmon feeds and send them a copy of the ASC Salmon Standard.
		c. For each feed producer used by the farm, confirm that an audit of the producer was recently done by an audit firm or CAB against an ASC-acknowledged certification scheme. Obtain a copy of the most recent audit report for each feed producer.

4.1.1	**Requirement:** Yes **Applicability:** All	d. For each feed producer, determine whether the farm will use method #1 or method #2 (see Instructions above) to show compliance of feed producers. Inform the CAB in writing.
		e. Obtain declaration from feed supplier(s) stating that the company can assure traceability of all feed ingredients that make up more than 1% of the feed to a level of detail required by the ASC Salmon Standard [50].
		-
Footnote	[50] Traceability shall be at a level of detail that permits the feed producer to demonstrate compliance with the standards in this document (i.e., ma documentation of the ingred	
		Criterion 4.2 Use of wild
		Compliance Criteria (Required Client Actions):
Footnote		[51] See Appendix VI for transpar
4.2.1	**Indicator**: Fishmeal Forage Fish Dependency Ratio (FFDRm) for grow-out (calculated using formulas in Appendix IV- 1) **Requirement:** < 1.2	Farms must calculate the Fishmeal Forage Fish Dependency Ration (FFDRm) according to f information in order to make an accurate calculation of FFDRm as outlined below. For first audi - the client maintains all information nee - the client can show how feed used for t
		a. Maintain a detailed inventory of the feed used including: - Quantities used of each formulation (kg); - Percentage of fishmeal in each formulation used; - Source (fishery) of fishmeal in each formulation used; - Percentage of fishmeal in each formulation derived from trimmings; and - Supporting documentation and signed declaration from feed supplier.

	Applicability: All	b. For FFDRm calculation, exclude fishmeal derived from rendering of seafood by-products (e.g. the "trimmings" from a human consumption fishery.
		c. Calculate eFCR using formula in Appendix IV-1 (use this calculation also in 4.2.2 option #1).
		d. Calculate FFDRm using formulas in Appendix IV-1.
		e. Submit FFDRm to ASC as per Appendix VI for each production cycle.
4.2.2	**Indicator**: Fish Oil Forage Fish Dependency Ratio (FFDRo) for grow-out (calculated using formulas in Appendix IV- 1), or, Maximum amount of EPA and DHA from direct marine sources [52] (calculated according to Appendix IV-2) **Requirement:** FFDRo < 2.52 or (EPA + DHA) < 30 g/kg feed **Applicability:** All	Note: Under Indicator 4.2.2, farms can choose to calculate FFDRo (Option #1) or EPA
		a. Maintain a detailed inventory of the feed used as specified in 4.2.1a.
		b. For FFDRo and EPA+DHA calculations (either option #1 or option #2), exclude fish oil derived from rendering of seafood by-products (e.g. the "trimmings" from a human consumption fishery.
		c. Inform the CAB whether the farm chose option #1 or option #2 to demonstrate compliance with the requirements of the Standard.
		d. For option #1, calculate FFDRo using formulas in Appendix IV-1 and using the eFCR calculated under 4.2.1c.
		e. For option #2, calculate amount of EPA + DHA using formulas in Appendix IV-2.
		f. Submit FFDRo or EPA & DHA to ASC as per Appendix VI for each production cycle.

Footnote	[52] Calculation excludes DHA and EPA derived from fisheries by-products and trimmings. Trimmings are defined as by-products when fish are processed with regard to fish suita Fishmeal and fish oil that are produced from trimmings can be excluded from the calculation as long as the origin of the trimmings is not any s	
	Criterion 4.3 Source of ma	
		Compliance Criteria (Required Client Actions):
4.3.1	**Indicator**: Timeframe for all fishmeal and fish oil used in feed to come from fisheries [53] certified under a scheme that is an ISEAL member [54] and has guidelines that specifically promote responsible environmental management of small pelagic fisheries **Requirement:** Not required **Applicability:** N/A	**NA**
Footnote	[53] This standard and standard 4.3.2 applies to fishmeal and oil from forage fisheries, pelagic fisheries, c	
Footnote	[54] Meets ISEAL guidelines as demonstrated through full membership in the ISE	
	Indicator: Prior to achieving 4.3.1, the FishSource score	**Instruct** To determine - type -confirm that the search identifie For first audits, farms mu Note: Indicator 4.3.2 applies to fishmeal and oil from forage fisherie

4.3.2	**Indicator**: Prior to achieving 4.3.1, the FishSource score [55] for the fishery(ies) from which all marine raw material in feed is derived **Requirement:** All individual scores ≥ 6, and biomass score ≥ 6 **Applicability:** All	a. Record FishSource score for each species from which fishmeal or fish oil was derived and used as a feed ingredient (all species listed in 4.2.1a).
		b. Confirm that each individual score ≥ 6 and the biomass score is ≥ 6.
		c. If the species is not on the website it means that a FishSource assessment is not available. Client can then take one or both of the following actions: 1. Contact FishSource via Sustainable Fisheries Partnerships to identify the species as a priority for assessment. 2. Contract a qualified independent third party to conduct the assessment using the FishSource methodology and provide the assessment and details on the third party qualifications to the CAB for review.
		-
Footnote		[55] Or equivalent score using the same methodolog
4.3.3	**Indicator**: Prior to achieving 4.3.1, demonstration of third-party verified chain of custody and traceability for the batches of fishmeal and fish oil which are in compliance with 4.3.2. **Requirement:** Yes **Applicability:** All	**Instruct** Indicator 4.3.3 requires that farms show that their feed producers can demonstrate chain of c systems are in compliance. Alternatively, farms may show that their feed producers comply Fishmeal and Fish Oil Organization's G For the first audit, a minimum
		a. Obtain from the feed supplier documentary evidence that the origin of all fishmeal and fish oil used in the feed is traceable via a third-party verified chain of custody or traceability program.
		b. Ensure evidence covers all the species used (as consistent with 4.3.2a, 4.2.1a, and 4.2.2a).

4.3.4	**Indicator**: Feed containing fishmeal and/or fish oil originating from by-products [56] or trimmings from IUU [57] catch or from fish species that are categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species [58], whole fish and fish meal from the same species and family as the species being farmed **Requirement:** None [59] **Applicability:** All except as noted in [59]	a. Compile and maintain, consistent with 4.2.1a and 4.2.2a, a list of the fishery of origin for all fishmeal and fish oil originating from by-products and trimmings.
		b. Obtain a declaration from the feed supplier stating that no fishmeal or fish oil originating from IUU catch was used to produce the feed.
		c. Obtain from the feed supplier declaration that the meal or oil did not originate from a species categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species [58] and explaining how they are able to demonstrate this (i.e. through other certification scheme or through their independent audit).
		d. If meal or oil originated from a species listed as “vulnerable” by IUCN, obtain documentary evidence to support the exception as outlined in [59].
4.3.5	**Indicator:** Presence and evidence of a responsible sourcing policy for the feed manufacturer for marine ingredients that includes a commitment to continuous improvement of source fisheries **Requirement:** Yes **Applicability:** All	a. Request a link to a public policy from the feed manufacturer stating the company's support of efforts to shift feed manufacturers purchases of fishmeal and fish oil to fisheries certified under a scheme that is an ISEAL member and has guidelines that specifically promote responsible environmental management of small pelagic fisheries and committing to continuous improvement of source fisheries.
		b. Prepare a letter stating the farm's intent to source feed containing fishmeal and fish oil originating from fisheries certified under the type of certification scheme noted in indicator 4.3.1.
		c. Compile a list of the origin of all fish products used as feed ingredients in all feed.

Footnote	[56] Trimmings are defined as by-products when fish are processed for human consumption or if whole fish is rejected for use of human	
Footnote	[57] IUU: Illegal, Unr	
Footnote	[58] The International Union for the Conservation of Na	
Footnote	[59] For species listed as “vulnerable” by IUCN, an exception is made if a regional population of the species has been assessed to be not vulnerable in a N accordance with IUCN guidelines, an exception is allowed when an assessment is con	
	Criterion 4.4 Source of non-mari	
		Compliance Criteria (Required Client Actions):
4.4.1	**Indicator**: Presence and evidence of a responsible sourcing policy for the feed manufacturer for feed ingredients that comply with recognized crop moratoriums [60] and local laws [61] **Requirement:** Yes **Applicability:** All	a. Compile and maintain a list of all feed suppliers with contact information. (See also 4.1.1a)
		b. Obtain from each feed manufacturer a copy of the manufacturer's responsible sourcing policy for feed ingredients showing how the company complies with recognized crop moratoriums and local laws.
		c. Confirm that third party audits of feed suppliers (4.1.1c) show evidence that supplier's responsible sourcing policies are implemented.
Footnote	[60] Moratorium: A period of time in which there is a suspension of a specific activity until future events warrant a removal of the suspension or issues reg r	
Footnote	[61] Specifically, the policy shall include that vegetable ingredients, or products derived from vegetable ingredients, must not come from areas of the Ama this specific requirem	
	Indicator: Percentage of soya or soya-derived ingredients in the feed that are certified by the Roundtable for Responsible Soy (RTRS) or equivalent [62]	a. Prepare a policy stating the company's support of efforts to shift feed manufacturers' purchases of soya to soya certified under the Roundtable for Responsible Soy (RTRS) or equivalent.
		b. Prepare a letter stating the farm's intent to source feed containing soya certified under the RTRS (or equivalent)

4.4.2	**Requirement:** 100% **Applicability:** All	c. Notify feed suppliers of the farm's intent (4.4.2b).
		d. Obtain and maintain declaration from feed supplier(s) detailing the origin of soya in the feed.
		e. Provide evidence that soya used in feed is certified by the Roundtable for Responsible Soy (RTRS) or equivalent [62]
Footnote	[62] Any alternate certification scheme would have to be ap	
4.4.3	**Indicator**: Evidence of disclosure to the buyer [63] of the salmon of inclusion of transgenic [64] plant raw material, or raw materials derived from transgenic plants, in the feed **Requirement:** Yes, for each individual raw material containing > 1% transgenic content [65] **Applicability:** All	a. Obtain from feed supplier(s) a declaration detailing the content of soya and other plant raw materials in feed and whether it is transgenic.
		b. Disclose to the buyer(s) a list of any transgenic plant raw material in the feed and maintain documentary evidence of this disclosure. For first audits, farm records of disclosures must cover > 6 months.
		c. Inform ASC whether feed contains transgenic ingredients (yes or no) as per Appendix VI for each production cycle.
Footnote	[63] The company or entity to which the farm or the producing company is directly selling its product. Th	
Footnote	[64] Transgenic: Containing genes altered by insertion of DNA from an unrelated organism. Taking g	
Footnote	[65] See Appendix VI for tra	
	Criterion 4.5 Non-biological w	
	Compliance Criteria (Required Client Actions):	
	Indicator: Presence and evidence of a functioning policy for proper and responsible [66] treatment of non-	a. Prepare a policy stating the farm's commitment to proper and responsible treatment of non-biological waste from production. It must explain how the farm's policy is consistent with best practice in the area of operation.

4.5.1	for proper and responsible [66] treatment of non-biological waste from production (e.g., disposal and recycling) **Requirement:** Yes **Applicability:** All	b. Prepare a declaration that the farm does not dump non-biological waste into the ocean.
		c. Provide a description of the most common production waste materials and how the farm ensures these waste materials are properly disposed of.
		d. Provide a description of the types of waste materials that are recycled by the farm.
Footnote	[66] Proper and responsible disposal will vary based on facilities available in the region and remoteness of farm sites. Disposal of non-biological waste sha d	
4.5.2	**Indicator**: Evidence that non-biological waste (including net pens) from grow-out site is either disposed of properly or recycled **Requirement:** Yes **Applicability:** All	a. Provide a description of the most common production waste materials and how the farm ensures these waste materials are properly disposed of. (see also 4.5.1c)
		b. Provide a description of the types of waste materials that are recycled by the farm. (See also 4.5.1d)
		c. Inform the CAB of any infractions or fines for improper waste disposal received during the previous 12 months and corrective actions taken..
		d. Maintain records of disposal of waste materials including old nets and cage equipment.
		Criterion 4.6 Energy consumption and gree
		Compliance Criteria (Required Client Actions):
Footnote		[67] See Appendix VI for transparen

4.6.1	**Indicator**: Presence of an energy use assessment verifying the energy consumption on the farm and representing the whole life cycle at sea, as outlined in Appendix V- 1 **Requirement:** Yes, measured in kilojoule/t fish produced/production cycle **Applicability:** All	I Indicator 4.6.1 requires that farms must have an assessment to verify energy consumption. T should correspond to the sources of Scope 1 and Scope 2 emissions (see Appendix V-1). Energy Committee encoura For the purposes of calculating energy consumption, the duration of the production cycle is the portion of energy consumption if possible. Quantities of energy (fuel and electricity) are conve
		a. Maintain records for energy consumption by source (fuel, electricity) on the farm throughout each production cycle.
		b. Calculate the farm's total energy consumption in kilojoules (kj) during the last production cycle.
		c. Calculate the total weight of fish in metric tons (t) produced during the last production cycle.
		d. Using results from 4.6.1b and 4.6.1c, calculate energy consumption on the farm as required, reported as kilojoule/mt fish/production cycle.
		e. Submit results of energy use calculations (4.6.1d) to ASC as per Appendix VI for each production cycle.
		f. Ensure that the farm has undergone an energy use assessment that was done in compliance with requirements of Appendix V-1.

4.6.2	**Indicator**: Records of greenhouse gas (GHG [68]) emissions [69] on farm and evidence of an annual GHG assessment, as outlined in Appendix V-1 **Requirement:** Yes **Applicability:** All	**I** Indicator 4.6.2 requires that farms must have an annual Greenhouse Gas (GHG) assessment. site(s) that is applying for certification. However the SAD Steering Committee encourages comp GHG Proto Note: For the purposes of this standard, GHGs are defined as the six gases listed in the Kyo
		a. Maintain records of greenhouse gas emissions on the farm.
		b. At least annually, calculate all scope 1 and scope 2 GHG emissions in compliance with Appendix V-1.
		c. For GHG calculations, select the emission factors which are best suited to the farm's operation. Document the source of those emissions factors.
		d. For GHG calculations involving conversion of non-CO_2 gases to CO_2 equivalents, specify the Global Warming Potential (GWP) used and its source.
		e. Submit results of GHG calculations (4.6.2d) to ASC as per Appendix VI at least once per year.
		f. Ensure that the farm undergoes a GHG assessment as outlined in Appendix V-1 at least annually.
Footnote	[68] For the purposes of this standard, GHGs are defined as the six gases listed in the Kyoto Protocol: carbon dioxide (C	
Footnote	[69] GHG emissions must be recorded using recognized	

4.6.3	**Indicator**: Documentation of GHG emissions of the feed [70] used during the previous production cycle, as outlined in Appendix V, subsection 2 **Requirement:** Yes **Applicability:** All	Indicator 4.6.3 requires that farms document the greenhouse gas emissions (GHG) associated w of Feed GHG emissions throughout all production cycles. Th - the farm provides its feed suppliers with detaile - t - the farm explains to feed su Note1: Farms may calculate GHG emissions of feed using the av Note2: Feed supplier's calculations
		a. Obtain from feed supplier(s) a declaration detailing the GHG emissions of the feed (per kg feed).
		b. Multiply the GHG emissions per unit feed by the total amount of feed from each supplier used in the most recent completed production cycle.
		c. If client has more than one feed supplier, calculate the total sum of emissions from feed by summing the GHG emissions of feed from each supplier.
		d. Submit GHG emissions of feed to ASC as per Appendix VI for each production cycle.
Footnote	[70] GHG emissions from feed can be given based on the average raw material composition used to produce the salmon (by weight) and not as documen then shall use that information to calculate GHG emission	
		Criterion 4.7 Non-therapeutic
		Compliance Criteria (Required Client Actions):
Footnote	[71] Closed production systems that do not use nets and do not use a	
Footnote	[72] See Appendix VI for transparen	

4.7.1	**Indicator**: For farms that use copper-treated nets [73], evidence that nets are not cleaned [74] or treated in situ in the marine environment **Requirement:** Yes **Applicability:** All farms except as noted in [71]	a. Prepare a farm procedure for net cleaning and treatment that describes techniques, technologies, use of off-site facilities, and record keeping.
		b. Maintain records of antifoulants and other chemical treatments used on nets.
		c. Declare to the CAB whether copper-based treatments are used on nets.
		d. If copper-based treatments are used, maintain documentary evidence (see 4.7.1b) that farm policy and practice does not allow for heavy cleaning of copper-treated nets in situ.
		e. Inform ASC whether copper antifoulants are used on farm (yes or no) as per Appendix VI for each production cycle.
Footnote	[73] Under the SAD, “copper-treated net” is defined as a net that has been treated with any copper-containing substance (such as a copper-based antifou some point prior in their lifespan, been treated with copper may still consider nets as untreated so long as sufficient time and cleaning	
Footnote	[74] Light cleaning of nets is allowed. Intent of the standard is that, for example, the high-pressure underwater washers could not be us	
4.7.2	**Indicator**: For any farm that cleans nets at on-land sites, evidence that net-cleaning sites have effluent treatment [75] **Requirement:** Yes **Applicability:** All farms except as noted in [71]	a. Declare to the CAB whether nets are cleaned on-land.
		b. If nets are cleaned on-land, obtain documentary evidence from each net-cleaning facility that effluent treatment is in place.
		c. If yes to 4.7.2b, obtain evidence that effluent treatment used at the cleaning site is an appropriate technology to capture of copper in effluents.

Footnote		[75] Treatment must have appropriate technologies in
4.7.3	**Indicator**: For farms that use copper nets or copper-treated nets, evidence of testing for copper level in the sediment outside of the AZE, following methodology in Appendix I-1 **Requirement:** Yes **Applicability:** All farms except as noted in [71]	Note: If the benthos throughout and immediately outs
		a. Declare to the CAB whether the farm uses copper nets or copper-treated nets. (See also 4.7.1c). If "no", Indicator 4.7.3 does not apply.
		b. If "yes" in 4.7.3a, measure and record copper in sediment samples from the reference stations specified in 2.1.1d and 2.1.2c which lie outside the AZE.
		c. If "yes" in 4.7.3a, maintain records of testing methods, equipment, and laboratories used to test copper level in sediments from 4.7.3b.
4.7.4	**Indicator**: Evidence that copper levels [76] are < 34 mg Cu/kg dry sediment weight, or, in instances where the Cu in the sediment exceeds 34 mg Cu/kg dry sediment weight, demonstration that the Cu concentration falls within the range of background concentrations as measured at three reference sites in the water body **Requirement:** Yes **Applicability:** All farms except as noted in [71] and excluding those farms shown to be exempt from Indicator 4.7.3	a. Inform the CAB whether: 1) farm is exempt from Indicator 4.7.4 (as per 4.7.3a), or 2) Farm has conducted testing of copper levels in sediment.
		b. Provide evidence from measurements taken in 4.7.3b that copper levels are < 34 mg Cu/kg dry sediment weight.
		c. If copper levels in 4.7.4b are ≥ 34 mg Cu/kg dry sediment weight, provide evidence the farm tested copper levels in sediments from reference sites as described in Appendix I-1 (also see Indicators 2.1.1 and 2.1.2).
		d. Analyze results from 4.7.4c to show the background copper concentrations as measured at three reference sites in the water body.
		e. Submit data on copper levels in sediments to ASC as per Appendix VI for each production cycle.
Footnote		[76] According to testing required under 4.7.3. The standards related to testing of

4.7.5	**Indicator**: Evidence that the type of biocides used in net antifouling are approved according to legislation in the European Union, or the United States, or Australia **Requirement:** Yes **Applicability:** All farms except as noted in [71]	a. Identify all biocides used by the farm in net antifouling.
		b. Compile documentary evidence to show that each chemical used in 4.7.5a is approved according to legislation in one or more of the following jurisdictions: the European Union, the United States, or Australia.
PRINCIPLE 5: MANAGE DISEASE AND PARASITES IN AN ENVIRONMENTALLY RESPONSIBLE MANNER		
		Criterion 5.1 Survival and hea
		Compliance Criteria (Required Client Actions):
Footnote		[77] See Appendix VI for transparen
5.1.1	**Indicator**: Evidence of a fish health management plan for the identification and monitoring of fish diseases, parasites and environmental conditions relevant for good fish health, including implementing corrective action when required **Requirement:** Yes **Applicability:** All	a. Prepare a fish health management plan that incorporates components related to identification and monitoring of fish disease and parasites. This plan may be part of a more comprehensive farm planning document.
		b. Ensure that the farm's current fish health management plan was reviewed and approved by the farm's designated veterinarian [78].
5.1.2	**Indicator**: Site visits by a designated veterinarian [78] at least four times a year, and by a fish health manager [79] at least once a month **Requirement:** Yes **Applicability:** All	a. Maintain records of visits by the designated veterinarian [78] and fish health managers [82]. If schedule cannot be met, a risk assessment must be provided.
		b. Maintain a current list of personnel who are employed as the farm's designated veterinarian(s) [78] and fish health manager(s) [79].
		c. Maintain records of the qualifications of persons identified in 5.1.2b.
Footnote	[78] A designated veterinarian is the professional responsible for health management on the farm who has the legal authority to diagnose disease and pres veterinarian for purposes of these standards. This definition applie	

Footnote	[79] A fish health manager is someone with professional expertise in managing fish health, who may work fo	
5.1.3	**Indicator**: Percentage of dead fish removed and disposed of in a responsible manner **Requirement:** 100% [80] **Applicability:** All	a. Maintain records of mortality removals to show that dead fish are removed regularly and disposed of in a responsible manner.
		b. Collect documentation to show that disposal methods are in line with practices recommended by fish health managers and/or relevant legal authorities.
		c. For any exceptional mortality event where dead fish were not collected for post-mortem analysis, keep a written justification.
Footnote	[80] The SAD recognizes that not all mortality events will result in dead fish present for colle	
5.1.4	**Indicator**: Percentage of mortalities that are recorded, classified and receive a post-mortem analysis **Requirement:** 100% [81]	Note: Farms are required to maintain mortality records from It is recommended tha
		a. Maintain detailed records for all mortalities and post-mortem analyses including: - date of mortality and date of post-mortem analysis; - total number of mortalities and number receiving post-mortem analysis; - name of the person or lab conducting the post-mortem analyses; - qualifications of the individual (e.g. veterinarian [78], fish health manager [79]); - cause of mortality (specify disease or pathogen) where known; and - classification as 'unexplained' when cause of mortality is unknown (see 5.1.6).
		b. For each mortality event, ensure that post-mortem analyses are done on a statistically relevant number of fish and keep a record of the results.

	Applicability: All	c. If on-site diagnosis is inconclusive and disease is suspected or results are inconclusive over a 1-2 week period, ensure that fish are sent to an off-site laboratory for diagnosis and keep a record of the results (5.1.4a).
		d. Using results from 5.1.3a-c, classify each mortality event and keep a record of those classifications.
		e. Provide additional evidence to show how farm records in 5.1.4a-d cover all mortalities from the current and previous two production cycles (as needed).
		f. Submit data on numbers and causes of mortalities to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle).
Footnote	[81] If on-site diagnosis is inconclusive, this standard requires off-site laboratory diagnosis. A qualified professional must conduct all diagnosis. One hund shall b	
5.1.5	**Indicator**: Maximum viral disease-related mortality [82] on farm during the most recent production cycle **Requirement:** ≤ 10% **Applicability:** All	a. Calculate the total number of mortalities that were diagnosed (see 5.1.4) as being related to viral disease.
		b. Combine the results from 5.1.5a with the total number of unspecified and unexplained mortalities from the most recent complete production cycle. Divide this by the total number of fish produced in the production cycle (x100) to calculate percent maximum viral disease-related mortality.
		c. Submit data on total mortality and viral disease-related mortality to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle).
Footnote	[82] Viral disease-related mortality count shall include unspeci	

5.1.6	**Indicator**: Maximum unexplained mortality rate from each of the previous two production cycles, for farms with total mortality > 6% **Requirement:** ≤ 40% of total mortalities **Applicability:** All farms with > 6% total mortality in the most recent complete production cycle.	a. Use records in 5.1.4a to calculate the unexplained mortality rate (%) for the most recent full production cycle. If rate was ≤ 6%, then the requirement of 5.1.6 does not apply. If total mortality rate was > 6%, proceed to 5.1.6b.
		b. Calculate the unexplained mortality rate (%) for each of the two production cycles immediately prior to the current cycle. For first audit, calculation must cover one full production cycle immediately prior to the current cycle.
		c. Submit data on maximum unexplained mortality to ASC as per Appendix VI for each production cycle.
5.1.7	**Indicator**: A farm-specific mortalities reduction program that includes defined annual targets for reductions in mortalities and reductions in unexplained mortalities **Requirement:** Yes **Applicability:** All	Note: Farms have the option to integra
		a. Use records in 5.1.4a to assemble a time-series dataset on farm-specific mortalities rates and unexplained mortality rates.
		b. Use the data in 5.1.7a and advice from the veterinarian and/or fish health manager to develop a mortalities-reduction program that defines annual targets for reductions in total mortality and unexplained mortality.
		c. Ensure that farm management communicates with the veterinarian, fish health manager, and staff about annual targets and planned actions to meet targets.
		Criterion 5.2 Therapeutic
		Compliance Criteria (Required Client Actions):
Footnote		[83] See Appendix VI for transparency r

	Instruction to Clients and CABs for Criterion 5.2 - F Indicator 5.2.1 requires that farms maintain detailed record of all chemical and therapeutant use. Those records maintained for compliance with 5.2.1, if all	
5.2.1	**Indicator**: On-farm documentation that includes, at a minimum, detailed information on all chemicals [84] and therapeutants used during the most recent production cycle, the amounts used (including grams per ton of fish produced), the dates used, which group of fish were treated and against which diseases, proof of proper dosing, and all disease and pathogens detected on the site **Requirement:** Yes **Applicability:** All	a. Maintain a detailed record of all chemical and therapeutant use that includes: - name of the veterinarian prescribing treatment; - product name and chemical name; - reason for use (specific disease) - date(s) of treatment; - amount (g) of product used; - dosage; - t of fish treated; - the WHO classification of antibiotics (also see note under 5.2.8); and - the supplier of the chemical or therapeutant.
		b. If not already available, assemble records of chemical and therapeutant use to address all points in 5.2.1a for the previous two production cycles. For first audits, available records must cover one full production cycle immediately prior to the current cycle.
		c. Submit information on therapeutant use (data from 5.2.1a) to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle).
Footnote		[84] Chemicals used
	Indicator: Allowance for use of therapeutic treatments	a. Prepare a list of therapeutants, including antibiotics and chemicals, that are proactively banned for use in food fish for the primary salmon producing and importing countries listed in [86].

5.2.2	that include antibiotics or chemicals that are banned [85] in any of the primary salmon producing or importing countries [86] **Requirement:** None **Applicability:** All	b. Maintain records of voluntary and/or mandatory chemical residue testing conducted or commissioned by the farm from the prior and current production cycles. -
Footnote	[85] “Banned” means proactively prohibited by a government entity because of concerns around the substance. A substance banned in any of the primar destination of the product. The SAD recommend	
Footnote	[86] For purposes of this standard, those countries are Nor	
5.2.3	**Indicator**: Percentage of medication events that are prescribed by a veterinarian **Requirement:** 100% **Applicability:** All	a. Obtain prescription for all therapeutant use in advance of application from the farm veterinarian (or equivalent, see [78] for definition of veterinarian). b. Maintain copies of all prescriptions and records of veterinarian responsible for all medication events. Records can be kept in conjunction with those for 5.2.1 and should be kept for the current and two prior production cycles.
5.2.4	**Indicator**: Compliance with all withholding periods after treatments **Requirement:** Yes	a. Incorporate withholding periods into the farm's fish health management plan (see 5.1.1a). b. Compile and maintain documentation on legally-required withholding periods for all treatments used on-farm. Withholding period is the time interval after the withdrawal of a drug from the treatment of the salmon before the salmon can be harvested for use as food.

	Applicability: All	c. Show compliance with all withholding periods by providing treatment records (see 5.2.1a) and harvest dates for the most recent production cycle.
5.2.5	**Indicator**: Maximum farm level cumulative parasiticide treatment index (PTI) score as calculated according to the formula in Appendix VII **Requirement:** PTI score ≤ 13 **Applicability:** All	a. Using farm data for therapeutants usage (5..2.1a) and the formula presented in Appendix VII, calculate the cumulative parasiticide treatment index (PTI) score for the most recent production cycle. Calculation should be made and updated on an ongoing basis throughout the cycle by farm manager, fish health manager, and/or veterinarian.
		b. Provide the auditor with access to records showing how the farm calculated the PTI score.
		c. Submit data on farm level cumulative PTI score to ASC as per Appendix VI for each production cycle.
5.2.6	**Indicator**: For farms with a cumulative PTI ≥ 6 in the most recent production cycle, demonstration that parasiticide load [87] is at least 15% less that of the average of the two previous production cycles **Requirement:** Yes **Applicability:** All farms with a cumulative PTI ≥ 6 in the most recent production cycle	a. Review PTI scores from 5.2.5a to determine if cumulative PTI ≥ 6 in the most recent production cycle. If yes, proceed to 5.2.6b; if no, Indicator 5.2.6 does not apply.
		b. Using results from 5.2.5 and the weight of fish treated (kg), calculate parasiticide load in the most recent production cycle [90].
		c. Calculate parasiticide load in the two previous production cycles as above (5.2.6b) and compute the average. Calculate the percent difference in parasiticide load between current cycle and average of two previous cycles. For first audit, calculation must cover one full production cycle immediately prior to the current cycle.
		d. As applicable, submit data to ASC on parasiticide load for the most recent production cycle and the two previous production cycles (Appendix VI).
Footnote	[87] Parasiticide load = Sum (kg of fish treated x PTI). Reduction in load required regardless of whether production increases on the site. Farms tha	

5.2.7	**Indicator**: Allowance for prophylactic use of antimicrobial treatments [88] **Requirement:** None **Applicability:** All	a. Maintain records for all purchases of antibiotics (invoices, prescriptions) for the current and prior production cycles.
		b. Maintain a detailed log of all medication-related events (see also 5.2.1a and 5.2.3)
		c. Calculate the total amount (g) and treatments (#) of antibiotics used during the current and prior production cycles (see also 5.2.9).
Footnote		[88] The designated veterinarian must certify that a pa
5.2.8	**Indicator**: Allowance for use of antibiotics listed as critically important for human medicine by the World Health Organization (WHO [89]) **Requirement:** None [90] **Applicability:** All	Note 1: Farms have the option to certify only a portion of the fish or farm site when WHO-liste audit and provide sufficie Note 2: It is recommended that the farm veterinarian review the WHO lis
		a. Maintain a current version of the WHO list of antimicrobials critically and highly important for human health [89].
		b. If the farm has <u>not</u> used any antibiotics listed as critically important (5.2.8a) in the current production cycle, inform the CAB and proceed to schedule the audit.
		c. If the farm <u>has</u> used antibiotics listed as critically important (5.2.8a) to treat any fish during the current production cycle, inform the CAB prior to scheduling audit.
		d. If yes to 5.2.8c, request an exemption from the CAB to certify only a portion of the farm. Prior to the audit, provide the CAB with records sufficient to establish details of treatment, which pens were treated, and how the farm will ensure full traceability and separation of treated fish through and post- harvest.
Footnote		[89] The fifth edition of the WHO list of critically and highly important antimicrobials was releas

Footnote		[90] If the antibiotic treatment is applied to only a portion of the pens on a far
5.2.9	**Indicator**: Number of treatments [91] of antibiotics over the most recent production cycle **Requirement:** ≤ 3 **Applicability:** All	Note: for the purposes of Indicator 5.2.9, "treatment" means a single cour
		a. Maintain records of all treatments of antibiotics (see 5.2.1a). For first audits, farm records must cover the current and immediately prior production cycles in a verifiable statement.
		b. Calculate the total number of treatments of antibiotics over the most recent production cycle and supply a verifiable statement of this calculation.
Footnote		[91] A treatment is a single course medication given to adc
5.2.10	**Indicator**: If more than one antibiotic treatment is used in the most recent production cycle, demonstration that the antibiotic load [92] is at least 15% less that of the average of the two previous production cycles **Requirement:** Yes [93] **Applicability:** All	Note: Indicator 5.2.10 requires that farms must demonstrate a reduction in load required, rega
		a. Use results from 5.2.9b to show whether more than one antibiotic treatment was used in the most recent production cycle. If not, then the requirement of 5.2.10 does not apply. If yes, then proceed to 5.2.10b.
		b. Calculate antibiotic load (antibiotic load = the sum of the total amount of active ingredient of antibiotic used in kg) for most recent production cycle and for the two previous production cycles. For first audit, calculation must cover one full production cycle immediately prior to the current cycle.
		c. Provide the auditor with calculations showing that the antibiotic load of the most recent production cycle is at least 15% less than that of the average of the two previous production cycles.
		d. Submit data on antibiotic load to ASC as per Appendix VI (if applicable) for each production cycle.
Footnote		[92] Antibiotic load = the sum of the total ar

Footnote	[93] Reduction in load required, regardless of whether production increases on the site. Farms that consolidate productio	
5.2.11	**Indicator**: Presence of documents demonstrating that the farm has provided buyers [94] of its salmon a list of all therapeutants used in production **Requirement:** Yes **Applicability:** All	a. Prepare a procedure which outlines how the farm provides buyers [94] of its salmon with a list of all therapeutants used in production (see 4.4.3b). b. Maintain records showing the farm has informed all buyers of its salmon about all therapeutants used in production.
Footnote	[94] Buyer: The company or entity to which the farr	
	Criterion 5.3 Resistance of parasites, viruses	
		Compliance Criteria (Required Client Actions):
5.3.1	**Indicator**: Bio-assay analysis to determine resistance when two applications of a treatment have not produced the expected effect **Requirement:** Yes **Applicability:** All	**Instruction to Cli** Indicator 5.3.1 requires that farms identify treatments that have not produced the expected e auditors will need to review the pre The SAD SC recommends that a typical baseline for effectiveness of emamectin benzoate is a r must review pre- and post-treatment lice counts. If the calculated percent reduction in lice is Note: If field-based bio-assays for determining resistance are ineffective or unavailable, the far assays were deemed ir a. In addition to recording all therapeutic treatments (5.2.1a), keep a record of all cases where the farm uses two successive medicinal treatments.

		b. Whenever the farm uses two successive treatments, keep records showing how the farm evaluates the observed effect of treatment against the expected effect of treatment.
		c. For any result of 5.3.1b that did not produce the expected effect, ensure that a bio-assay analysis of resistance is conducted.
		d. Keep a record of all results arising from 5.3.1c.
5.3.2	**Indicator**: When bio-assay tests determine resistance is forming, use of an alternative, permitted treatment, or an immediate harvest of all fish on the site **Requirement:** Yes **Applicability:** All	a. Review results of bio-assay tests (5.3.1d) for evidence that resistance has formed. If yes, proceed to 5.3.2b. If no, then Indicator 5.3.2 is not applicable.
		b. When bio-assay tests show evidence that resistance has formed, keep records showing that the farm took one of two actions: - used an alternative treatment (if permitted in the area of operation); or - immediately harvested all fish on site.
		Criterion 5.4 Biosecurity r
		Compliance Criteria (Required Client Actions):
Footnote		[95] See Appendix VI for transpar
5.4.1	**Indicator**: Evidence that all salmon on the site are a single-year class [96] **Requirement:** 100% [97] **Applicability:** All farms except as noted in [97]	a. Keep records of the start and end dates of periods when the site is fully fallow after harvest.
		b. Provide evidence of stocking dates (purchase receipts, delivery records) to show that there were no gaps > 6 months for smolt inputs for the current production cycle.
		-
Footnote		[96] Gaps of up to six months between inputs of smolts derived from the same stripping ar

Footnote		[97] Excepti 1) farm sites that have closed, contained production units where there is complete separation of v 2) farm sites that have ≥95% water recirculation, a pre-entry disease screening protocol, dedicated quarantine capability and biosecurity measu
5.4.2	**Indicator**: Evidence that if the farm suspects an unidentifiable transmissible agent, or if the farm experiences unexplained increased mortality, [98] the farm has: 1. Reported the issue to the ABM and to the appropriate regulatory authority 2. Increased monitoring and surveillance [99] on the farm and within the ABM 3. Promptly [100] made findings publicly available **Requirement:** Yes **Applicability:** All	a. For mortality events logged in 5.1.4a, show evidence that the farm promptly evaluated each to determine whether it was a statistically significant increase over background mortality rate on a monthly basis [98]. The accepted level of significance (for example, $p < 0.05$) should be agreed between farm and CAB. b. For mortality events logged in 5.1.4a, record whether the farm did or did not suspect (yes or no) an unidentified transmissible agent. c. Proceed to 5.4.2d if, during the most recent production cycle, either: - results from 5.4.2a showed a statistically significant increase in unexplained mortalities; or - the answer to 5.4.2b was 'yes'. Otherwise, Indicator 5.4.2 is not applicable. d. If required, ensure that the farm takes and records the following steps: 1) Report the issue to the ABM and to the appropriate regulatory authority; 2) Increase monitoring and surveillance [99] on the farm and within the ABM; and 3) Promptly (within one month) make findings publicly available. e. As applicable, submit data to ASC as per Appendix VI about unidentified transmissible agents or unexplained increases in mortality. If applicable, then data are to be sent to ASC on an ongoing basis (i.e. at least once per year and for each production cycle).
Footnote		[98] Increased mortality: A statistically significa
Footnote		[99] Primary aim of monitoring and surveillance is to inves

Footnote		[100] Wit
5.4.3	**Indicator**: Evidence of compliance [101] with the OIE Aquatic Animal Health Code [102] **Requirement:** Yes **Applicability:** All	**Instruction to C** Indicator 5.4.3 requires that farms show evidence of compliance with the OIE Aquatic Animal H ASC Salmon Standard, this means that the farm must have written procedures stating how the eradicated (area declared fre - implementation of quarantin To demonstrate compliance with Indicator 5.4.3, clients have the to option to describe how fa Note: The Steering Committee recognizes that establishment of quarantine z
		a. Maintain a current version of the OIE Aquatic Animal Health Code on site or ensure staff have access to the most current version.
		b. Develop policies and procedures as needed to ensure that farm practices remain consistent with the OIE Aquatic Animal Health Code (5.4.3a) and with actions required under indicator 5.4.4.
		-
Footnote	[101] Compliance is defined as farm practices consistent with the intentions of the Code, to be further outlined in auditing guidance. For purposes of this implementation of quarantine zones in accordance with guidelines from OIE for the specific pathogen. Quarantine zones will likely incorporate mandatory been fully eradicated (area	
Footnote	[102] OIE 2011. Aquatic Animal Health	

5.4.4	**Indicator**: If an OIE-notifiable disease [103] is confirmed on the farm, evidence that: 1. the farm has, at a minimum, immediately culled the pen(s) in which the disease was detected 2. the farm immediately notified the other farms in the ABM [104] 3. the farm and the ABM enhanced monitoring and conducted rigorous testing for the disease 4. the farm promptly [105] made findings publicly available **Requirement:** Yes **Applicability:** All	a. Ensure that farm policies and procedures in 5.4.3a describe the four actions required under Indicator 5.4.4 in response to an OIE-notifiable disease on the farm. b. Inform the CAB if an OIE-notifiable disease has been confirmed on the farm during the current production cycle or the two previous production cycles. If yes, proceed to 5.4.4c. If no, then 5.4.4c an 5.4.4d do not apply. c. If an OIE-notifiable disease was confirmed on the farm (see 5.4.4b), then retain documentary evidence to show that the farm: 1) immediately culled the pen(s) in which the disease was detected; 2) immediately notified the other farms in the ABM [104] 3) enhanced monitoring and conducted rigorous testing for the disease; and 4) promptly (within one month) made findings publicly available. d. As applicable, submit data to ASC as per Appendix VI about any OIE-notifiable disease that was confirmed on the farm. If applicable, then data are to be sent to ASC on an ongoing basis (i.e. at least once per year and for each production cycle). -
Footnote	[103] At the time of publication of the final draft standards, OIE-notifiable diseases relevant to salmon aquaculture were: Epizootic haematopoietic nec	
Footnote	[104] This is in addition to any notifications to regulatory bo	
Footnote	[105] Wit	
Social requirements in the standards shall be audited by an individual who		
PRINCIPLE 6: DEVELOP AND OPERATE FARMS		
6.1 Freedom of association and c		
	Compliance Criteria	

Footnote	[106] Bargain collectively: A voluntary negotiation between employers and organizations of workers i	
6.1.1	**Indicator:** Evidence that workers have access to trade unions (if they exist) and union representative(s) chosen by themselves without managerial interference **Requirement:** Yes **Applicability:** All	a. Workers have the freedom to join any trade union, free of any form of interference from employers or competing organizations set up or backed by the employer. Farms shall prepare documentation to demonstrate to the auditor that domestic regulation fully meets these criteria. b. Union representatives (or worker representatives) are chosen by workers without managerial interference. ILO specifically prohibits “acts which are designated to promote the establishment of worker organizations or to support worker organizations under the control or employers or employers’ organizations." c. Trade union representatives (or worker representatives) have access to their members in the workplace at reasonable times on the premises. d. Be advised that workers and union representatives (if they exist) will be interviewed to confirm the above.
6.1.2	**Indicator:** Evidence that workers are free to form organizations, including unions, to advocate for and protect their rights **Requirement:** Yes **Applicability:** All	a. Employment contract explicitly states the worker's right of freedom of association. b. Employer communicates that workers are free to form organizations to advocate for and protect work rights (e.g. farm policies on Freedom of Association; see 6.12.1). c. Be advised that workers will be interviewed to confirm the above.
6.1.3	**Indicator:** Evidence that workers are free and able to bargain collectively for their rights **Requirement:** Yes	a. Local trade union, or where none exists a reputable civil-society organization, confirms no outstanding cases against the farm site management for violations of employees’ freedom of association and collective bargaining rights. a. Local trade union, or where none exists a reputable civil-society organization, confirms no outstanding cases against the farm site management for violations of employees’ freedom of association and collective bargaining rights. b. Employer has explicitly communicated a commitment to ensure the collective

	Applicability: All	bargaining rights of all workers. c. There is documentary evidence that workers are free and able to bargain collectively (e.g. collective bargaining agreements, meeting minutes, or complaint resolutions).
		Criterion 6.2 Ch
6.2.1	**Indicator:** Number of incidences of child [107] labor [108] **Requirement:** None **Applicability:** All except as noted in [107]	a. In most countries, the law states that minimum age for employment is 15 years. There are two possible exceptions: - in developing countries where the legal minimum age may be set to 14 years (see footnote 108); or - in countries where the legal minimum age is set higher than 15 years, in which case the legal minimum age of the country is followed. If the farm operates in a country where the legal minimum ages is not 15, then the employer shall maintain documentation attesting to this fact. b. Minimum age of permanent workers is 15 or older (except in countries as noted above). c. Employer maintains age records for employees that are sufficient to demonstrate compliance.
Footnote	[107] Child: Any person under 15 years of age. A higher age would apply if the minimum age law of an area stipulates a higher age for w	
Footnote	[108] Child Labor: Any work by a child younge	
6.2.2	**Indicator:** Percentage of young workers [109] that are protected [110] **Requirement:** 100% **Applicability:** All	a. Young workers are appropriately identified in company policies & training programs, and job descriptions are available for all young workers at the site. b. All young workers (from age 15 to less than 18) are identified and their ages are confirmed with copies of IDs. c. Daily records of working hours (i.e. timesheets) are available for all young workers. d. For young workers, the combined daily transportation time and school time and work time does not exceed 10 hours. e. Young workers are not exposed to hazards [111] and do not perform hazardous work [112]. Work on floating cages in poor weather conditions shall be considered hazardous. f. Be advised that the site will be inspected and young workers will be interviewed to confirm compliance.
Footnote	[109] Young Worker: Any worker between the ag	

Footnote	[110] Protected: Workers between 15 and 18 years of age will not be exposed to hazardous health and safety conditions; working hours
Footnote	[111] Hazard: The inherent potential to cause injury or damage to a person's health (e.g., u
Footnote	[112] Hazardous work: Work that, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or

Criterion 6.3 Forced, bonded

		Compliance Criteria
6.3.1	**Indicator:** Number of incidences of forced, [113] bonded [114] or compulsory labor **Requirement:** None **Applicability:** All	a. Contracts are clearly stated and understood by employees. Contracts do not lead to workers being indebted (i.e. no 'pay to work' schemes through labor contractors or training credit programs). b. Employees are free to leave workplace and manage their own time. c. Employer does not withhold employee's original identity documents. d. Employer does not withhold any part of workers' salaries, benefits, property or documents in order to oblige them to continue working for employer. e. Employees are not to be obligated to stay in job to repay debt. f. Maintain payroll records and be advised that workers will be interviewed to confirm the above.

Footnote	[113] Forced (Compulsory) labor: All work or service that is extracted from any person under the menace of any penalty for which a person has not o punishment, or the loss of rights and privileges or restri
Footnote	[114] Bonded labor: When a person is forced by the employer

Criterion 6.4 Discrim

Footnote	[115] Discrimination: Any distinction, exclusion or preference that has the effect of nullifying or impairing equality of opportunity or treatment. Not every Positive discrimination in favor of people from certain

6.4.1	**Indicator:** Evidence of comprehensive [116] and proactive anti-discrimination policies, procedures and practices **Requirement:** Yes **Applicability:** All	a. Employer has written anti-discrimination policy in place, stating that the company does not engage in or support discrimination in hiring, remuneration, access to training, promotion, termination or retirement based on race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation, age or any other condition that may give rise to discrimination. b. Employer has clear and transparent company procedures that outline how to raise, file, and respond to discrimination complaints. c. Employer respects the principle of equal pay for equal work and equal access to job opportunities, promotions and raises. d. All managers and supervisors receive training on diversity and non-discrimination. All personnel receive non-discrimination training. Internal or external training acceptable if proven effective.
Footnote	[116] Employers shall have written anti-discrimination policies stating that the company does not engage in or support discrimination in hiring, remun membership, political affiliation, age or any o	
6.4.2	**Indicator:** Number of incidences of discrimination **Requirement:** None **Applicability:** All	a. Employer maintains a record of all discrimination complaints. These records do not show evidence for discrimination. b. Be advised that worker testimonies will be used to confirm that the company does not interfere with the rights of personnel to observe tenets or practices, or to meet needs related to race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation or any other condition that may give rise to discrimination.
		Criterion 6.5 Work environm

6.5.1	**Indicator:** Percentage of workers trained in health and safety practices, procedures [117] and policies on a yearly basis **Requirement:** 100% **Applicability:** All	a. Employer has documented practices, procedures (including emergency response procedures) and policies to protect employees from workplace hazards and to minimize risk of accident or injury. The information shall be available to employees. b. Employees know and understand emergency response procedures. c. Employer conducts health and safety training for all employees on a regular basis (once a year and immediately for all new employees), including training on potential hazards and risk minimization, Occupational Safety and Health (OSH) and effective use of PPE.
Footnote		[117] Health and safety training shall includ

6.5.2	**Indicator:** Evidence that workers use Personal Protective Equipment (PPE) effectively **Requirement:** Yes **Applicability:** All	a. Employer maintains a list of all health and safety hazards (e.g. chemicals). b. Employer provides workers with PPE that is appropriate to known health and safety hazards. c. Employees receive annual training in the proper use of PPE (see 6.5.1c). For workers who participated in the initial training(s) previously an annual refreshment training may suffice, unless new PPE has been put to use. d. Be advised that workers will be interviewed to confirm the above.
6.5.3	**Indicator:** Presence of a health and safety risk assessment and evidence of preventive actions taken **Requirement:** Yes **Applicability:** All	a. Employer makes regular assessments of hazards and risks in the workplace. Risk assessments are reviewed and updated at least annually (see also 6.5.1a). b. Employees are trained in how to identify and prevent known hazards and risks (see also 6.5.1c). c. Health and safety procedures are adapted based on results from risk assessments (above) and changes are implemented to help prevent accidents.
	Indicator: Evidence that all health- and safety-related accidents and violations are recorded and corrective actions are taken when necessary	a. Employer records all health- and safety-related accidents. b. Employer maintains complete documentation for all occupational health and safety violations and investigations. c. Employer implements corrective action plans in response to any accidents that occur. Plans

6.5.4	**Requirement:** Yes **Applicability:** All	are documented and they include an analysis of root cause, actions to address root cause, actions to remediate, and actions to prevent future accidents of similar nature. d. Employees working in departments where accidents have occurred can explain what analysis has been done and what steps were taken or improvements made.
6.5.5	**Indicator:** Evidence of employer responsibility and/or proof of insurance (accident or injury) for 100% of worker costs in a job-related accident or injury when not covered under national law **Requirement:** Yes **Applicability:** All	a. Employer maintains documentation to confirm that all personnel are provided sufficient insurance to cover costs related to occupational accidents or injuries (if not covered under national law). Equal insurance coverage must include temporary, migrant or foreign workers. Written contract of employer responsibility to cover accident costs is acceptable evidence in place of insurance.
6.5.6	**Indicator:** Evidence that all diving operations are conducted by divers who are certified **Requirement:** Yes **Applicability:** All	Note: If the farm outsources its diving operations to an independent company, the farm shall e with Indicator 6.5.6. It is the farm's responsibility to obtain copies o a. Employer keeps records of farm diving operations and a list of all personnel involved. In case an external service provider was hired, a statement that provider conformed to all relevant criteria must be made available to the auditor by this provider. b. Employer maintains evidence of diver certification (e.g. copies of certificates) for each person involved in diving operations. Divers shall be certified through an accredited national or international organization for diver certification.
		Criterion 6.6 V
	Indicator: The percentage of workers whose basic wage	a. Employer keeps documents to show the legal minimum wage in the country of operation. If there is no legal minimum wage in the country, the employer keeps documents to show the

6.6.1	[118] (before overtime and bonuses) is below the minimum wage [119] **Requirement:** 0 (None) **Applicability:** All	industry-standard minimum wage. b. Employer's records (e.g. payroll) confirm that worker's wages for a standard work week (≤ 48 hours) always meet or exceed the legal minimum wage. If there is no legal minimum wage, the employer's records must show how the current wage meets or exceeds industry standard. If wages are based on piece-rate or pay-per-production, the employer's records must show how workers can reasonably attain (within regular working hours) wages that meet or exceed the legal minimum wage. c. Maintain documentary evidence (e.g. payroll, timesheets, punch cards, production records, and/or utility records) and be advised that workers will be interviewed to confirm the above.
Footnote		[118] Basic wage: The wages paid for a st
Footnote		[119] If there is no legal minimum wage in a country, b
6.6.2	**Indicator:** Evidence that the employer is working toward the payment of basic needs wage [120] **Requirement:** Yes **Applicability:** All	a. Proof of employer engagement with workers and their representative organizations, and the use of cost of living assessments from credible sources to assess basic needs wages. Includes review of any national basic needs wage recommendations from credible sources such as national universities or government. b. Employer has calculated the basic needs wage for farm workers and has compared it to the basic (i.e. current) wage for their farm workers. c. Employer demonstrates how they have taken steps toward paying a basic needs wage to their workers.
Footnote		[120] Basic needs wage: A wage that covers the basic needs of an individual or family, including housing, food and tran
6.6.3	**Indicator:** Evidence of transparency in wage-setting and rendering [121] **Requirement:** Yes **Applicability:** All	a. Wages and benefits are clearly articulated to workers and documented in contracts. b. The method for setting wages is clearly stated and understood by workers. c. Employer renders wages and benefits in a way that is convenient for the worker (e.g. cash, check, or electronic payment methods). Workers do not have to travel to collect benefits nor do they receive promissory notes, coupons or merchandise in lieu of payment. d. Be advised that workers will be interviewed to confirm the above.
Footnote		[121] Payments shall be rendere
		Criterion 6.7 Contracts (labor) i

6.7.1	**Indicator:** Percentage of workers who have contracts [122] **Requirement:** 100% **Applicability:** All	a. Employer maintains a record of all employment contracts. b. There is no evidence for labor-only contracting relationships or false apprenticeship schemes. c. Be advised that workers will be interviewed to confirm the above.
Footnote	[122] Labor-only contracting relationships or false apprenticeship schemes are not acceptable. This includes revolving/consecutive labor contracts to deny the apprenticeship or wages under contract. It is a "false" apprenticeship if its purpose is to underpay people, avoid legal obligations or employ underage payment of regular wages or the provision of legally	
6.7.2	**Indicator:** Evidence of a policy to ensure social compliance of its suppliers and contractors **Requirement:** Yes **Applicability:** All	a. Farm has a policy to ensure that all companies contracted to provide supplies or services (e.g. divers, cleaning, maintenance) have socially responsible practices and policies. b. Producing company has criteria for evaluating its suppliers and contractors. The company keeps a list of approved suppliers and contractors. c. Producing company keeps records of communications with suppliers and subcontractors that relate to compliance with 6.7.2.
		Criterion 6.8 Conflic
		Compliance Criteria
6.8.1	**Indicator:** Evidence of worker access to effective, fair and confidential grievance procedures **Requirement:** Yes **Applicability:** All	a. Employer has a clear labor conflict resolution policy for the presentation, treatment, and resolution of worker grievances in a confidential manner. b. Workers are familiar with the company's labor conflict policies and procedures. There is evidence that workers have fair access. c. Maintain documentary evidence (e.g. complaint or grievance filings, minutes from review meetings) and be advised that workers will be interviewed to confirm the above.
6.8.2	**Indicator:** Percentage of grievances handled that are addressed [123] within a 90-day timeframe **Requirement:** 100%	a. Employer maintains a record of all grievances, complaints and labor conflicts that are raised. b. Employer keeps a record of follow-up (i.e. corrective actions) and timeframe in which grievances are addressed. c. Maintain documentary evidence and be advised that workers will be interviewed to confirm that grievances are addressed within a 90-day

	Applicability: All	timeframe.
Footnote	[123] Addressed: Acknowledged and received, moving through the c	
		Criterion 6.9 Disciplir
		Compliance criteria
6.9.1	**Indicator:** Incidences of excessive or abusive disciplinary actions **Requirement:** None **Applicability:** All	a. Employer does not use threatening, humiliating or punishing disciplinary practices that negatively impact a worker's physical and mental health or dignity. b. Allegations of corporeal punishment, mental abuse [124], physical coercion, or verbal abuse will be investigated by auditors. c. Be advised that workers will be interviewed to confirm there is no evidence for excessive or abusive disciplinary actions.
Footnote	[124] Mental Abuse: Characterized by the intentional use of power, including verb	
6.9.2	**Indicator:** Evidence of a functioning disciplinary action policy whose aim is to improve the worker [125] **Requirement:** Yes **Applicability:** All	a. Employer has written policy for disciplinary action which explicitly states that its aim is to improve the worker [125]. b. Maintain documentary evidence (e.g. worker evaluation reports) and be advised that workers will be interviewed to confirm that the disciplinary action policy is fair and effective.
Footnote	[125] If disciplinary action is required, progressive verbal and written warnings shall be engaged. The aim shall always be to improve the worker; dismissa basic wage deductions shall not	
		Criterion 6.10 Working ho
		Compliance criteria
		Note: Working hours, night work and rest periods for workers in agriculture should be in acco found
6.10.1	**Indicator:** Incidences, violations or abuse of working hours and overtime laws [126]	a. Employer has documentation showing the legal requirements for working hours and overtime in the region where the farm operates. If local legislation allows workers to exceed internationally accepted recommendations (48 regular hours, 12 hours overtime) then requirements of the international standards apply. b. Records (e.g. time sheets and payroll)

	Requirement: None **Applicability:** All	requirements of the international standards apply. b. Records (e.g. time sheets and payroll) show that farm workers do not exceed the number of working hours allowed under the law. c. If an employer requires employees to work shifts at the farm (e.g. 10 days on and six days off), the employer compensates workers with an equivalent time off in the calendar month and there is evidence that employees have agreed to this schedule (e.g. in the hiring contract). d. Be advised that workers will be interviewed to confirm there is no abuse of working hours and overtime laws.
Footnote		[126] In cases where local legislation on working hours and overtime exceed internationally acce
6.10.2	**Indicator:** Overtime is limited, voluntary [127], paid at a premium rate [128] and restricted to exceptional circumstances **Requirement:** Yes **Applicability:** All except as noted in [130]	a. Payment records (e.g. payslips) show that workers are paid a premium rate for overtime hours. b. Overtime is limited and occurs in exceptional circumstances as evidenced by farm records (e.g. production records, time sheets, and other records of working hours). c. Be advised that workers will be interviewed to confirm that all overtime is voluntary except where there is a collective bargaining agreement which specifically allows for compulsory overtime.
Footnote		[127] Compulsory overtime is permitted if previou
Footnote		[128] Premium rate: A rate of pay higher than the regular work week r
		Criterion 6.11 Educatio
		Compliance criteria
6.11.1	**Indicator:** Evidence that the company regularly performs training of staff in fish husbandry, general farm and fish escape management and health and safety procedures **Requirement:** Yes **Applicability:** All	a. Company has written policies related to continuing education of workers. Company provides incentives (e.g. subsidies for tuition or textbooks, time off prior to exams, flexibility in work schedule) that encourage workers to participate in educational initiatives. Note that such offers may be contingent on workers committing to stay with the company for a pre-arranged time. b. Employer maintains records of worker participation in educational opportunities as evidenced by course documentation (e.g. list of courses, curricula, certificates, degrees). c. Be advised that workers will be interviewed to confirm that educational initiatives are encouraged and supported by the company.
		Criterion 6.12 Corporate policies for social responsibility
		Compliance criteria

6.12.1	**Indicator:** Demonstration of company-level [129] policies in line with the standards under 6.1 to 6.11 above **Requirement:** Yes **Applicability:** All	a. Company-level policies are in line with all social and labor requirements presented in 6.1 through 6.11. b. Company-level policies (see 6.12.1a) are approved by the company headquarters in the region where the site applying for certification is located. c. The scope of corporate policies (see 6.12.1a) covers all company operations relating to salmonid production in the region (i.e. all smolt production facilities, grow-out facilities and processing plants). d. The site that is applying for certification provides auditors with access to all company-level policies and procedures as are needed to verify compliance with 6.12.1a (above).
Footnote	[129] Applies to the headquarters of the company in a region or country where the site applying for certification is located. The pol	
	Social requirements in the standards shall be audited by an individual who	
	PRINCIPLE 7: BE A GOOD NEIGHBOR	
	Criterion 7.1 Communi	
7.1.1	**Indicator:** Evidence of regular and meaningful [130] consultation and engagement with community representatives and organizations **Requirement:** Yes **Applicability:** All	a. The farm pro-actively arranges for consultations with the local community at least twice every year (bi-annually). b. Consultations are meaningful. OPTIONAL: the farm may choose to use participatory Social Impact Assessment (pSIA) or an equivalent method for consultations. c. Consultations include participation by representatives from the local community who were asked to contribute to the agenda. d. Consultations include communication about, or discussion of, the potential health risks of therapeutic treatments (see Indicator 7.1.3). e. Maintain records and documentary evidence (e.g. meeting agenda, minutes, report) to demonstrate that consultations comply with the above. f. Be advised that representatives from the local community and organizations may be interviewed to confirm the above.

Footnote	[130] Regular and meaningful: Meetings shall be held at least bi-annually with elected representatives of affected communities. The agenda for the	
7.1.2	**Indicator:** Presence and evidence of an effective [131] policy and mechanism for the presentation, treatment and resolution of complaints by community stakeholders and organizations **Requirement:** Yes **Applicability:** All	a. Farm policy provides a mechanism for presentation, treatment and resolution of complaints lodged by stakeholders, community members, and organizations. b. The farm follows its policy for handling stakeholder complaints as evidenced by farm documentation (e.g. follow-up communications with stakeholders, reports to stakeholder describing corrective actions). c. The farm's mechanism for handling complaints is effective based on resolution of stakeholder complaints (e.g. follow-up correspondence from stakeholders). d. Be advised that representatives from the local community, including complaintants where applicable, may be interviewed to confirm the above.
Footnote	[131] Effective: In order to demonstrate that the mechanis	
7.1.3	**Indicator:** Evidence that the farm has posted visible notice [132] at the farm during times of therapeutic treatments and has, as part of consultation with communities under 7.1.1, communicated about potential health risks from treatments **Requirement:** Yes **Applicability:** All	a. Farm has a system for posting notifications at the farm during periods of therapeutic treatment. (use of aneastatic baths is not regarded a therapeutant) b. Notices (above) are posted where they will be visible to affected stakeholders (e.g. posted on waterways for fishermen who pass by the farm). c. Farm communicates about the potential health risks from treatments during community consultations (see 7.1.1) d. Be advised that members of the local community may be interviewed to confirm the above.
Footnote	[132] Signage shall be visible to mariners an	
	Criterion 7.2 Respect for indigenous and aborig	
	Compliance Criteria	

Instruction to Clients and CABs on Criterion 7.2 - T

The ASC Salmon Standard requires that farms must be respectful of the traditional territiories of indigenous groups. The Indicators listed under Criterion 7.2 were de boundaries of indigenous groups have a defined legal status according to local or national law. In such cases, it is straightforward to know whether a farm is operatin whether the farm is operating in close proximity to indigeno

The intent behind the ASC Salmon Standard is that the farm will identify all neighboring groups who are potentially negatively impacted by the farm's activities. The act neighbors. Effective community consultations are one of the best ways to identify such impacts to neighbor groups. Through a transparent process of consultation, i consultations between farm and neighbors should create a for

7.2.1	**Indicator:** Evidence that indigenous groups were consulted as required by relevant local and/or national laws and regulations **Requirement:** Yes **Applicability:** All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [133]	a. Documentary evidence establishes that the farm does or does not operate in an indigenous territory (to include farms that operate in proximity to indigenous or aboriginal people [133]). If not then the requirements of 7.2.1 do not apply. a. Documentary evidence establishes that the farm does or does not operate in an indigenous territory (to include farms that operate in proximity to indigenous or aboriginal people [133]). If not then the requirements of 7.2.1 do not apply. b. Farm management demonstrates an understanding of relevant local and/or national laws and regulations that pertain to consultations with indigenous groups. c. As required by law in the jurisdiction: - farm consults with indigenous groups and retains documentary evidence (e.g. meeting minutes, summaries) to show how the process complies with 7.2.1b; OR - farm confirms that government-to-government consultation occurred and obtains documentary evidence. d. Be advised that representatives from indigenous groups may be interviewed to confirm the above.
7.2.2	**Indicator:** Evidence that the farm has undertaken proactive consultation with indigenous communities **Requirement:** Yes [133] **Applicability:** All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [133]	a. See results of 7.2.1a (above) to determine whether the requirements of 7.2.2 apply to the farm. b. Be advised that representatives from indigenous communities may be interviewed to confirm that the farm has undertaken proactive consultations.
Footnote		[133] All standards related to indigenous rights only appl

7.2.3	**Indicator:** Evidence of a protocol agreement, or an active process [134] to establish a protocol agreement, with indigenous communities **Requirement:** Yes **Applicability:** All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [133]	a. See results of 7.2.1a (above) to determine whether the requirements of 7.2.3 apply to the farm. b. Maintain evidence to show that the farm has either: 1) reached a protocol agreement with the indigenous community and this fact is documented; or 2) continued engagement in an active process [134] to reach a protocol agreement with the indigenous community. c. Be advised that representatives from indigenous communities may be interviewed to confirm either 7.2.3b1 or b2 (above) as applicable.
Footnote	[134] To demonstrate an active process, a farm must show ongoing efforts to communicate with indigenous communities, an underst	
		Criterion 7.3 Access
		Compliance Criteria
7.3.1	**Indicator:** Changes undertaken restricting access to vital community resources [135] without community approval **Requirement:** None **Applicability:** All	a. Resources that are vital [135] to the community have been documented and are known by the farm (i.e. through the assessment process required under Indicator 7.3.2). b. The farm seeks and obtains community approval before undertaking changes that restrict access to vital community resources. Approvals are documented. c. Be advised that representatives from the community may be interviewed to confirm that the farm has not restricted access to vital resources without prior community approval.
Footnote	[135] Vital community resources can include freshwater, land or other natural resources that communities rely on for their livelihood. If a farm site	
7.3.2	**Indicator:** Evidence of assessments of company's impact on access to resources **Requirement:** Yes **Applicability:** All	a. There is a documented assessment of the farm's impact upon access to resources. Can be completed as part of community consultations under 7.1.1. b. Be advised that representatives from the community may be interviewed to generally corroborate the accuracy of conclusions presented in 7.3.2a.

INDICATORS AND STANDARDS F A farm seeking certification must have documentation from all of its smolt suppliers to demonstrate compliance with the following standards. The requirements are, in applied to open systems (net pens), and to closed and semi-c		
Footnote	[136] The SAD SC proposes this approach to addressing environmental and social performance during the smolt phase of production. In the medium ter necessary documentation to demonstrate compliance with the standards.	
SECTION 8: STANDARDS FOR SUPPLIERS OF SMOLT		
		Standards related t
		Compliance Criteria (Required Client Actions):
8.1	**Indicator**: Compliance with local and national regulations on water use and discharge, specifically providing permits related to water quality **Requirement:** Yes **Applicability:** All Smolt Producers	a. Identify all of the farm's smolt suppliers. For each supplier, identify the type of smolt production system used (e.g. open, semi or closed systems) and submit this information to ASC (Appendix VI).
		b. Where legal authorisation related to water quality are required, obtain copies of smolt suppliers' permits.
		c. Obtain records from smolt suppliers showing monitoring and compliance with discharge laws, regulations, and permit requirements as required.
		-
8.2	**Indicator**: Compliance with labor laws and regulations **Requirement:** Yes **Applicability:** All Smolt Producers	a. Obtain declarations from smolt suppliers affirming compliance with labor laws and regulations.
		b. Keep records of supplier inspections for compliance with national labor laws and codes (only if such inspections are legally required in the country of operation; see 1.1.3a)
		Standards related t
		Compliance Criteria (Required Client Actions):

8.3	**Indicator**: Evidence of an assessment of the farm's potential impacts on biodiversity and nearby ecosystems that contains the same components as the assessment for grow-out facilities under 2.4.1 **Requirement:** Yes **Applicability:** All Smolt Producers	Note: If the smolt facility has previously undertaken an independent assessment of biodiversity impact (e.g. as part of the regulatory permitting process), the farm may obtain and use such documents as evidence to demonstrate compliance with Indicator 8.3 as long as all components are covered
		a. Obtain from the smolt supplier(s) a documented assessment of the smolt site's potential impact on biodiversity and nearby ecosystems. The assessment must address all components outlined in Appendix I-3.
		b. Obtain from the smolt supplier(s) a declaration confirming they have developed and are implementing a plan to address potential impacts identified in the assessment.
8.4	**Indicator**: Maximum total amount of phosphorus released into the environment per metric ton (mt) of fish produced over a 12-month period (see Appendix VIII-1) **Requirement:** 4 kg/mt of fish produced over a 12-month period **Applicability:** All Smolt Producers	**Instruction to Client** Farms must confirm that each of their smolt suppliers complies with the requirement of indicat over a 12-month period. The requirement is set at 4 kg/mt. The calculati If applicable, farms may take accou - the smolt supplier has re - the supplier determined phosph - the sludge was pro
		a. Obtain records from smolt suppliers showing amount and type of feeds used for smolt production during the past 12 months.
		b. For all feeds used by the smolt suppliers (result from 8.4a), keep records showing phosphorus content as determined by chemical analysis or based on feed supplier declaration (Appendix VIII-1).
		c. Using the equation from Appendix VIII-1 and results from 8.4a and b, calculate the total amount of phosphorus added as feed during the last 12 months of smolt production.

		d. Obtain from smolt suppliers records for stocking, harvest and mortality which are sufficient to calculate the amount of biomass produced (formula in Appendix VIII-1) during the past 12 months.
		e. Calculate the amount of phosphorus in fish biomass produced (result from 8.4d) using the formula in Appendix VIII-1.
		f. If applicable, obtain records from smolt suppliers showing the total amount of P removed as sludge (formula in Appendix VIII-1) during the past 12 months.
		g. Using the formula in Appendix VIII-1 and results from 8.4a-f (above), calculate total phosphorus released per ton of smolt produced and verify that the smolt supplier is in compliance with requirements.
		Standards related t
		Compliance Criteria (Required Client Actions):
8.5	**Indicator**: If a non-native species is being produced, the species shall have been widely commercially produced in the area prior to the publication of the ASC Salmon Standard	a. Obtain written evidence showing whether the smolt supplier produces a non-native species or not. If not, then Indicator 8.5 does not apply.
		b. Provide the farm with documentary evidence that the non-native species was widely commercially produced in the area before publication of the ASC Salmon Standard. (See definition of area under 3.2.1).
		c. If the smolt supplier cannot provide the farm with evidence for 8.5b, provide documentary evidence that the farm uses only 100% sterile fish.

8.5	**Requirement:** Yes [137] **Applicability:** All Smolt Producers except as noted in [137]	d. If the smolt supplier cannot provide the farm with evidence for 8.5b or 8.5c, provide documented evidence for each of the following: 1) non-native species are separated from wild fish by effective physical barriers that are in place and well maintained; 2) barriers ensure there are no escapes of reared fish specimens that might survive and subsequently reproduce; and 3) barriers ensure there are no escapes of biological material that might survive and subsequently reproduce.
		e. Retain evidence as described in 8.5a-d necessary to show compliance of each facility supplying smolt to the farm.
Footnote	[137] Exceptions shall be made for production systems that use 100 percent sterile fish or systems that demonstrate separation from the wild by effectiv re	
8.6	**Indicator**: Maximum number of escapees [138] in the most recent production cycle **Requirement:** 300 fish [139] **Applicability:** All Smolt Producers except as noted in [139]	a. Obtain documentary evidence to show that smolt suppliers maintained monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapees.
		b. Using smolt supplier records from 8.6a, determine the total number of fish that escaped. Verify that there were fewer than 300 escapees from the smolt production facility in the most recent production cycle.
		c. Inform smolt suppliers in writing that monitoring records described in 8.6a must be maintained for at least 10 years beginning with the production cycle for which the farm is first applying for certification (necessary for farms to be eligible to apply for the exception noted in [139]).
		d. If an escape episode occurs at the smolt production facility (i.e. an incident where > 300 fish escaped), the farm may request a rare exception to the Standard [139]. Requests must provide a full account of the episode and must document how the smolt producer could not have predicted the events that caused the escape episode.

Footnote	[138] Farms shall report all escapes; the total aggregated number of escapees per production cycle must be less than 300 fish.	
Footnote	[139] A rare exception to this standard may be made for an escape event that is clearly documented as being outside of the farm's control. Only one such e the farm is applying for certification. The farmer must demonstrate that there was no reasonable way to predict the events that caused the episode. Ex	
8.7	**Indicator**: Accuracy [140] of the counting technology or counting method used for calculating the number of fish **Requirement:** ≥98% **Applicability:** All Smolt Producers	a. Obtain records showing the accuracy of the counting technology used by smolt suppliers. Records must include copies of spec sheets for counting machines and common estimates of error for hand-counts. B. Review records to verify that accuracy of the smolt supplier's counting technology or counting method is ≥ 98%.
Footnote	[140] Accuracy shall be determined by the spec sheet for counting	
	Standards related t	
	Compliance Criteria (Required Client Actions):	
8.8	**Indicator**: Evidence of a functioning policy for proper and responsible treatment of non-biological waste from production (e.g., disposal and recycling) **Requirement:** Yes **Applicability:** All Smolt Producers	a. From each smolt supplier obtain a policy which states the supplier's commitment to proper and responsible treatment of non-biological waste from production. It must explain how the supplier's policy is consistent with best practice in the area of operation.
	Indicator: Presence of an energy-use assessment verifying the energy consumption at the smolt production facility (see Appendix V subsection 1 for guidance and required	a. Obtain records from the smolt supplier for energy consumption by source (fuel, electricity) at the supplier's facility throughout each year. b. Confirm that the smolt supplier calculates total energy consumption in kilojoules (kj) during the last year.

8.9	components of the records and assessment) **Requirement:** Yes, measured in kilojoule/mt fish/production cycle **Applicability:** All Smolt Producers	c. Obtain records to show the smolt supplier calculated the total weight of fish in metric tons (mt) produced during the last year.
		d. Confirm that the smolt supplier used results from 8.9b and 8.9c to calculate energy consumption on the supplier's facility as required and that the units are reported as kilojoule/mt fish/production cycle.
		e. Obtain evidence to show that smolt supplier has undergone an energy use assessment in compliance with requirements of Appendix V-1. Can take the form of a declaration detailing a-e.
8.10	**Indicator**: Records of greenhouse gas (GHG [141]) emissions [142] at the smolt production facility and evidence of an annual GHG assessment (See Appendix V, subsection 1) **Requirement:** Yes **Applicability:** All Smolt Producers	
		a. Obtain records of greenhouse gas emissions from the smolt supplier's facility.
		b. Confirm that, on at least an annual basis, the smolt supplier calculates all scope 1 and scope 2 GHG emissions in compliance with Appendix V-1.
		c. For GHG calculations, confirm that the smolt supplier selects the emission factors which are best suited to the supplier's operation. Confirm that the supplier documents the source of the emissions factors.
		d. For GHG calculations involving conversion of non-CO2 gases to CO2 equivalents, confirm that the smolt suppliers specify the Global Warming Potential (GWP) used and its source.
		e. Obtain evidence to show that the smolt supplier has undergone a GHG assessment in compliance with requirements Appendix V-1 at least annually.

Footnote	[141] For the purposes of this standard, GHGs are defined as the six gases listed in the Kyoto Protocol: carbon dioxide (C	
Footnote	[142] GHG emissions must be recorded using recognize	
	Standards related t	
		Compliance Criteria (Required Client Actions):
8.11	**Indicator**: Evidence of a fish health management plan, approved by the designated veterinarian, for the identification and monitoring of fish diseases and parasites **Requirement:** Yes **Applicability:** All Smolt Producers	a. Obtain a copy of the supplier's fish health management plan for the identification and monitoring of fish disease and parasites.
		b. Keep documentary evidence to show that the smolt supplier's health plans were approved by the supplier's designated veterinarian.
8.12	**Indicator**: Percentage of fish that are vaccinated for selected diseases that are known to present a significant risk in the region and for which an effective vaccine exists [143] **Requirement:** 100% **Applicability:** All Smolt Producers	a. Maintain a list of diseases that are known to present a significant risk in the region, developed by farm veterinarian and supported by scientific evidence.
		b. Maintain a list of diseases for which effective vaccines exist for the region, developed by the farm veterinarian and supported by scientific evidence.
		c. Obtain from the smolt supplier(s) a declaration detailing the vaccines the fish received.
		d. Demonstrate, using the lists from 8.12a-c above, that all salmon on the farm received vaccination against all selected diseases known to present a significant risk in the regions for which an effective vaccine exists.
Footnote	[143] The farm's designated veterinarian is responsible for undertaking and providing written documentation of the analysis of the diseases that pose a ris is consistent	

8.13	**Indicator**: Percentage of smolt groups [144] tested for select diseases of regional concern prior to entering the grow-out phase on farm **Requirement:** 100% **Applicability:** All Smolt Producers	**Instru** The farm is responsible for developing and maintaining a list of diseases of regional concern sea The designated veterinarian to the smolt supplier is required to evaluate, based on scientific c carrier state in fresh water is deemed to have a negative impact on th Note: A "smolt group" is defined as a population that shares d
		a. Obtain from the smolt supplier a list of diseases of regional concern for which smolt should be tested. List shall be supported by scientific analysis as described in the Instruction above.
		b. Obtain from the smolt supplier(s) a declaration and records confirming that each smolt group received by the farm has been tested for the diseases in the list (8.13a).
Footnote	[144] A smolt group is any population that shares disease risk, including environment, husbandry and host factors that might contribute to sharing disease originating in freshwater should be on the list of diseases tested. The designated veterinarian to the smolt farm is required to evaluate, based on scientific carrier state in fresh water is deemed to have a negative impact on the grow-out phase, thereby disqua	

8.14	**Indicator**: Detailed information, provided by the designated veterinarian, of all chemicals and therapeutants used during the smolt production cycle, the amounts used (including grams per ton of fish produced), the dates used, which group of fish were treated and against which diseases, proof of proper dosing and all disease and pathogens detected on the site **Requirement:** Yes **Applicability:** All Smolt Producers	a. Obtain from the smolt supplier(s) a detailed record of all chemical and therapeutant use for the fish sold to the farm that is signed by their veterinarian and includes: - name of the veterinarian prescribing treatment; - product name and chemical name; - reason for use (specific disease) - date(s) of treatment; - amount (g) of product used; - dosage; - mt of fish treated; - the WHO classification of antibiotics (also see note under 5.2.8); and - the supplier of the chemical or therapeutant.
8.15	**Indicator**: Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [145] in any of the primary salmon producing or importing countries [146] **Requirement:** Yes **Applicability:** All Smolt Producers	a. Provide to the smolt supplier the list (see 5.2.2a) of therapeutants, including antibiotics and chemicals, that are proactively banned for use in food fish for the primary salmon producing and importing countries listed in [146]. b. Inform smolt supplier that the treatments on the list cannot be used on fish sold to a farm with ASC certification. c. Compare therapeutant records from smolt supplier (8.14) to the list (8.15a) and confirm that no therapeutants appearing on the list (8.15a) were used on the smolt purchased by the farm.
Footnote		[145] "Banned" means proactively prohibited by a gov
Footnote		[146] For purposes of this standard, those countries are No
8.16	**Indicator**: Number of treatments of antibiotics over the most recent production cycle	a. Obtain from the smolt supplier records of all treatments of antibiotics (see 8.14a).

8.16	**Requirement:** ≤ 3 **Applicability:** All Smolt Producers	b. Calculate the total number of treatments of antibiotics from their most recent production cycle.
8.17	**Indicator**: Allowance for use of antibiotics listed as critically important for human medicine by the WHO [147] **Requirement:** None [148] **Applicability:** All Smolt Producers	a. Provide to smolt supplier(s) a current version of the WHO list of antimicrobials critically and highly important for human health [147]. b. Inform smolt supplier that the antibiotics on the WHO list (8.17a) cannot be used on fish sold to a farm with ASC certification. c. Compare smolt supplier's records for antibiotic usage (8.14, 8.15a) with the WHO list (8.17a) to confirm that no antibiotics listed as critically important for human medicine by the WHO were used on fish purchased by the farm.
Footnote	[147] The 3rd edition of the WHO list of critically and highly important antimicrobials was re	
Footnote	[148] If the antibiotic treatment is applied to only a portion of the pens on a far	
8.18	**Indicator**: Evidence of compliance [149] with the OIE Aquatic Animal Health Code [150] **Requirement:** Yes **Applicability:** All Smolt Producers	Note: see instructions for Indicator 5.4.3 regarding evidence of compliance with the OIE Aquatic Animal Health Code. a. Provide the smolt supplier with a current version of the OIE Aquatic Animal Health Code (or inform the supplier how to access it from the internet). b. Inform the supplier that an ASC certified farm can only source smolt from a facility with policies and procedures that ensure that its smolt production practices are compliant with the OIE Aquatic Animal Health Code. c. Obtain a declaration from the supplier stating their intent to comply with the OIE code and copies of the smolt suppliers policies and procedures that are relevant to demonstrate compliance with the OIE Aquatic Animal Health Code.
Footnote	[149] Compliance is defined as farm practices consistent with the intentions of the Code, to be further outlined in auditing guidance. For purposes of this implementation of quarantine zones in accordance with guidelines from OIE for the specific pathogen. Ex	

Footnote		[150] OIE 2011. Aquatic Animal Health
		Standards related t
		Compliance Criteria (Required Client Actions):
8.19	**Indicator**: Evidence of company-level policies and procedures in line with the labor standards under 6.1 to 6.11 **Requirement:** Yes **Applicability:** All Smolt Producers	a. Obtain copies of smolt supplier's company-level policies and procedures and a declaration of compliance with the labor standards under 6.1 to 6.11.
		b. Review the documentation and declaration from 8.19a to verify that smolt supplier's policies and procedures are in compliance with the requirements of labor standards under 6.1 to 6.11.
		Standards related t
		Compliance Criteria (Required Client Actions):
8.20	**Indicator**: Evidence of regular consultation and engagement with community representatives and organizations **Requirement:** Yes **Applicability:** All Smolt Producers	**Instruction to Client** Farms must comply with Indicator 7.1.1 which requires that farms engage in regular consultati an equivalent requirement. Farms are obligated to maintain evidence that is sufficient to - the smolt supplier engage - the supplier's consultations v - the supplier's consultations included part
		a. From each smolt supplier obtain documentary evidence of consultations and engagement with the community.
		b. Review documentation from 8.20a to verify that the smolt supplier's consultations and community engagement complied with requirements.

8.21	**Indicator**: Evidence of a policy for the presentation, treatment and resolution of complaints by community stakeholders and organizations **Requirement:** Yes **Applicability:** All Smolt Producers	a. Obtain a copy of the smolt supplier's policy for presentation, treatment and resolution of complaints by community stakeholders and organizations.
8.22	**Indicator**: Where relevant, evidence that indigenous groups were consulted as required by relevant local and/or national laws and regulations **Requirement:** Yes **Applicability:** All Smolt Producers	a. Obtain documentary evidence showing that the smolt supplier does or does not operate in an indigenous territory (to include farms that operate in proximity to indigenous or aboriginal people (see Indicator 7.2.1). If not then the requirements of 8.22 do not apply.
		b. Obtain documentation to demonstrate that, as required by law in the jurisdiction: smolt supplier consulted with indigenous groups and retains documentary evidence (e.g. meeting minutes, summaries) to show how the process complies with 7.2.1b; OR smolt supplier confirms that government-to-government consultation occurred and obtains documentary evidence.
8.23	**Indicator**: Where relevant, evidence that the farm has undertaken proactive consultation with indigenous communities **Requirement:** Yes **Applicability:** All Smolt Producers	a. See results of 8.22a (above) to determine whether the requirements of 8.23 apply to the smolt supplier.
		b. Where relevant, obtain documentary evidence that smolt suppliers undertake proactive consultations with indigenous communities.
		ADDITIONAL REQUIREMENTS FOR OPEN (In addition to the requirements above, if the smolt is produced in an ope
		Instruction to Clients for Indicators 8.24 through 8.31 - R Client shall provide documentary evidence to the CAB about the production system(s) from which they source smolt. If smolt used by the farm

	Indicator: Allowance for producing or holding smolt in net pens in water bodies with native salmonids **Requirement:** None **Applicability:** All Smolt Producers Using Open Systems	a. Obtain a declaration from the farm's smolt supplier stating whether the supplier operates in water bodies with native salmonids.
		b. Request smolt suppliers to identify all water bodies in which they operate net pens for producing smolt and from which facilities they sell to the client.
		c. For any water body identified in 8.24b as a source of smolt for the farm, determine if native salmonids are present by doing a literature search or by consulting with a reputable authority. Retain evidence of search results.
8.25	**Indicator**: Allowance for producing or holding smolt in net pens in any water body **Requirement:** Yes **Applicability:** All Smolt Producers Using Open Systems	a. Take steps to ensure that the farm does not source smolt that was produced or held in net pens.
8.26	**Indicator**: Evidence that carrying capacity (assimilative capacity) of the freshwater body has been established by a reliable entity [151] within the past five years [152] and total biomass in the water body is within the limits established by that study (see Appendix VIII-5 for minimum requirements) **Requirement:** Yes **Applicability:** All Smolt Producers Using Open Systems	a. For the water body(s) where the supplier produces smolt for the client (see 8.24b), obtain a copy of the most recent assessment of assimilative capacity.
		b. Identify which entity was responsible for conducting the assessment (8.26a) and obtain evidence for their reliability.
		c. Review the assessment (8.26a) to confirm that it establishes a carrying capacity for the water body, it is less than five years old, and it meets the minimum requirements presented in Appendix VIII-5.
		d. Review information to confirm that the total biomass in the water body is within the limits established in the assessment (8.26a).

		e. If the study in 8.26a is more than two years old and there has been a significant increase in nutrient input to the water body since completion, request evidence that an updated assessment study has been done.
Footnote		[151] E.g., Government
Footnote		[152] If the study is older than two years, and there has been a significant increase in nutrien
8.27	**Indicator**: Maximum baseline total phosphorus concentration of the water body (see Appendix VIII-6) **Requirement:** ≤ 20 µg/l [153] **Applicability:** All Smolt Producers Using Open Systems	**Instruction to Clients for I** Farms must confirm that any smolt supplier using an open (net-pen) system is also engaged in only re-stated briefly here. Monitoring shall sample total phosphorus (TP) and dissolved oxy Samples are submitted to an accredited laboratory for analysis - all stations are ide - stations are at the limit of the - the - sampling is done at le - samples are also collec Note: Some flexibility on the exact location and metho
		a. Obtain documentary evidence to show that smolt suppliers conducted water quality monitoring in compliance with the requirements of Appendix VIII-6.
		b. Obtain from smolt suppliers a map with GPS coordinates showing the sampling locations.
		c. Obtain from smolt suppliers the TP monitoring results for the past 12 months and calculate the average value at each sampling station.

		d. Compare results to the baseline TP concentration established below (see 8.29) or determined by a regulatory body.
		e. Confirm that the average value for TP over the last 12 months did not exceed 20 ug/l at any of the sampling stations nor at the reference station.
Footnote		[153] This concentration is equivalent to the upper limit of the M
8.28	**Indicator**: Minimum percent oxygen saturation of water 50 centimeters above bottom sediment (at all oxygen monitoring locations described in Appendix VIII-6) **Requirement:** ≥ 50% **Applicability:** All Smolt Producers Using Open Systems	a. Obtain evidence that smolt supplier conducted water quality monitoring in compliance with the requirements (see 8.27a).
		b. Obtain from smolt suppliers the DO monitoring results from all monitoring stations for the past 12 months.
		c. Review results (8.28b) to confirm that no values were below the minimum percent oxygen saturation.
8.29	**Indicator**: Trophic status classification of water body remains unchanged from baseline (see Appendix VIII-7) **Requirement:** Yes **Applicability:** All Smolt Producers Using Open Systems	a. Obtain documentary evidence from the supplier stating the trophic status of water body if previously set by a regulator body (if applicable).
		b. If the trophic status of the waterbody has not been classified (see 8.29a), obtain evidence from the supplier to show how the supplier determined trophic status based on the concentration of TP.
		c. As applicable, review results from 8.29b to verify that the supplier accurately assigned a trophic status to the water body in accordance with the table in Appendix VIII-7 and the observed concentration of TP over the past 12 months.
		d. Compare the above results (8.29c) to trophic status of the water body as reported for all previous time periods. Verify that there has been no change.

8.30	**Indicator**: Maximum allowed increase in total phosphorus concentration in lake from baseline (see Appendix VIII-7) **Requirement:** 25% **Applicability:** All Smolt Producers Using Open Systems	a. Determine the baseline value for TP concentration in the water body using results from either 8.29a or 8.29b as applicable.
		b. Compare the baseline TP concentration (result from 8.30a) to the average observed TP concentration over the past 12 months (result from 8.27e).
		c. Verify that the average observed TP concentration did not increase by more than 25% from baseline TP concentration.
8.31	**Indicator**: Allowance for use of aeration systems or other technological means to increase oxygen levels in the water body **Requirement:** None **Applicability:** All Smolt Producers Using Open Systems	a. Obtain a declaration from the farm's smolt supplier stating that the supplier does not use aeration systems or other technological means to increase oxygen levels in the water bodies where the supplier operates.
		ADDITIONAL REQUIREMENTS FOR SEMI-CLOSED
		Additionally, if the smolt is produced in a closed or semi-closed system (flow through or recirculation
		Instructions to Client for Indicators 8.32-8.35 - Requi
		Client shall provide documentary evidence to the CAB about th
		-If smolt used by the farm are not produced, for part or all of the growth phase from a
		-If the production system is closed or semi-closed and does not discharge into freshwater, Indicators 8.32 - 8.35 are not applicable to smolt producers as per [154]. For report.
Footnote		[154] Production systems that don't discharge
	Indicator: Water quality monitoring matrix completed and submitted to ASC (see Appendix VIII-2)	a. Obtain records from smolt suppliers showing that water quality monitoring was conducted at least quarterly (i.e. once every 3 months) over the last 12 months.

8.32	**Requirement:** Yes [155] **Applicability:** All Smolt Producers Using Semi-Closed or Closed Production Systems	b. Obtain water quality monitoring matrix from smolt suppliers and review for completeness.
		c. Submit the smolt supplier's water quality monitoring matrix to ASC as per Appendix VIII-2 and Appendix VI at least once per year.
Footnote	[155] See Appendix VI for tra	
8.33	**Indicator**: Minimum oxygen saturation in the outflow (methodology in Appendix VIII-2) **Requirement:** 60% [156,157] **Applicability:** All Smolt Producers Using Semi-Closed or Closed Production Systems	a. Obtain the water quality monitoring matrix from each smolt supplier (see 8.32b).
		b. Review the results (8.33a) for percentage dissolved oxygen saturation in the effluent to confirm that no measurements fell below 60% saturation.
		c. If a single DO reading (as reported in 8.33a) fell below 60%, obtain evidence that the smolt supplier performed daily continuous monitoring with an electronic probe and recorder for a least a week demonstrating a minimum 60% saturation at all times (Appendix VIII-2).
Footnote	[156] A single oxygen reading below 60 percent would require daily continuous monitoring with an ele	
Footnote	[157] See Appendix VI for tra	
8.34	**Indicator**: Macro-invertebrate surveys downstream from the farm's effluent discharge demonstrate benthic health that is similar or better than surveys upstream from the discharge (methodology in Appendix VIII-3) **Requirement:** Yes **Applicability:** All Smolt Producers Using Semi-Closed or Closed Production Systems	a. Obtain documentation from smolt supplier(s) showing the results of macro-invertebrate surveys.
		b. Review supplier documents (8.34a) to confirm that the surveys followed the prescribed methodology (Appendix VIII-3).
		c. Review supplier documents (8.34a) to confirm the survey results show that benthic health is similar to or better than upstream of the supplier's discharge.
	Indicator: Evidence of implementation of biosolids	a. Maintain a copy of smolt supplier's biosolids (sludge) management plan and confirm that the plan addresses all requirements in Appendix VIII-2.

8.35	**Indicator:** Evidence of implementation of biosolids (sludge) Best Management Practices (BMPs) (Appendix VIII-4) **Requirement:** Yes **Applicability:** All Smolt Producers Using Semi-Closed or Closed Production Systems	b. Obtain from smolt suppliers a process flow diagram (detailed in Appendix VIII-2) showing how the farm is dealing with biosolids responsibly.
		c. Obtain a declaration from smolt supplier stating that no biosolids were discharged into natural water bodies in the past 12 months.
		d. Obtain records from smolt suppliers showing monitoring of biosolid (sludge) cleaning maintenance, and disposal as described in Appendix VIII-2.

11 indings

11.1 LETE ANY COLUMN
11.2 ly populated from the species checklist/audit manual
11.3 andard indicator or a CAR requirement
11.4 o your liking (e.g. grading, status, closure deadline, etc.)
11.5 new rows as needed
11.6 ide as needed - to show the whole text

NC reference	Indicator	Grade of NC	Description of NC	Evidence	Date of detection	Status	Related VR (#)	Root cause (by client)	Corrective/ preventive actions proposed by UoC and accepted by CAB	Deadline for NC close-out	Evaluation by CAB (including evidence)	Actual date of close-out	Date request for delay received	Justification for delay	Next deadline	Request evaluation by CAB	Date request approved
1	2.2.6	Minor	The contracted net washing boat had bulk oils that were not bunded and the retaining railing on the boat was damaged.	All chemicals observed were bunded and controlled. The MSD sheets were in place. Staff are trained on the DATS system in relation to chemical handling and health and safety. Company SOP's include: Handling hazardous Materials SOP DOC ID S/FW902. Materials storage, Handling and waste disposal plan Marine and freshwater Doc ID S/FW 963. Recycling procedure Doc ID S/FW903.	14/09/2018	Open	NA			14/12/18 or by agreed plan.							
2	2.4.1	Minor	The site has changed position prior to the current cycle and from steel cages to circles. There is no document to show if the farm has reviewed the risk to sensitive species since the change in site layout.	The company has a wildlife interaction plan ID SW965 that is a BAP requirement for its certification. The plan was put in place several years ago, but the current update is dated February 9th, 2018. Risks include fish mortalities as an attractant, and the control measures include routine mort retrieval, appropriate mort disposal and containment and mortalities stored away from the main production area. Mortality records are in place on the farm site. All records are added to the company's database, and records for disposal are documented. The site has changed position prior to the current cycle and from steel cages to circles. There is no document to show if the farm has reviewed the risk to sensitive species since the change in site layout.	14/09/2018	Open	NA			14/12/18 or by agreed plan.							
3	3.4.2	Minor	The EUL reported in 3.4.3 was above the 2% stated in counting accuracy.	The counters used are VAKI and Aquascan counters. Records are kept of counting accuracy on a freshwater production spreadsheet. There is a new SOP reference FW269 called Smolt Inventory control. This provides guidelines as to which count to use. The smolt suppliers are all MHC owned. Both off-site and onsite counting takes place. There are various counts such as Hatchery book count, Hatchery dispatch count and smolt input count as well as vaccination counts. Witnessed calibration not done as there was no well boat available on the day of the site visit. Protocols on calibration are used from the VAKI manual and followed by relevant staff. VAKI manuals can be accessed online at www.vaki.com. Spec sheet from VAKI was stating an accuracy of over 99%. The Aquascan states accuracy between 98% and 100%. The EUL reported in 3.4.3 was above the 2% stated in counting accuracy. Common estimates of error for any hand-counts. The site has split fish into 3 other sites possibly multiplying the count error. The reported EUL on the companies dashboard does not show the split counts that might account for the finding. The EUL reported in 3.4.3 was above the 2% stated in counting accuracy.	14/09/2018	Open	NA			14/12/18 or by agreed plan.							
4	3.4.4	Minor	Its not clear in the documented service record, if the minimum required strength is for the average test or the individual tests on nets. Its not clear if there is a decision process of when a net, that passes the strength test, will still be above the minimum test following its use on the site for up to 12 months.	As part of the PAR licence (Pacific aquaculture regulation), there is an escape prevention plan SW 951. There is also a fish containment plan for SW 962. There is an Escape response flowchart located on the sites. The staff were questioned on the escape prevention plan, and there is regular training for onsite staff in relation to implementing the escape prevention plan including annual DATS training online. The site has an escape prevention box with netting, needles, weights, ropes etc. and once per year, there is a mock escape drill. There is specific site escape risk analysis detailing the history of escapes in the area. Escape prevention kits and they were inspected on the site. Cameras that pan and tilt are in each cage with excellent resolutions monitor the behaviour of the fish. The diver checks the cages every 60 days on every site and updates the net log as to what was found. The minimum allowed strength for nets is 156lbs above and 169lbs below the water line. Net ID G120-1705 on Pen 2 was reviewed. It was manufactured in March 2017 and had an initial strength of 400lbs breaking tension.	14/09/2018	Open	NA			14/12/18 or by agreed plan.							
5	6.5.1	Major	Noted on site tour 1. The contractors for net cleaning were observed conducting unsafe working practises. The head of the net washing machine was being pulled out of the water while still under pressure. 2. The contractor crew could not provide and SOP for the process of net cleaning 3. High pressure lines on the contractor boat were absents of whip checks. Ste Observations NC's 4. Site entrance ladders are flexible at the top due to the type on manufacturing and present an unsafe entry to the site. 5. Whip checks missing for compressed line on the cages. 6. Life jackets had been damage and integrity compromised. Knifes have been fitted by putting wholes and cable ties through the life jackets.	The facility has established procedures and policies to protect employees. These are communicated within the Human Resources policy and the Marine Harvest Code of Conduct section 4.1. Employees are trained in emergency response procedures. The training has been recorded in the onsite training systems (DATS) and displayed on the employee notice boards. Health and safety training is carried out by an external company every year. Ongoing training carried out on an online training software management systems. Marine Harvest tries to ensure that the overall training levels are above 75 percent. It is the responsibility of the site managers to ensure that this level is achieved. The marine Harvest Code of Conduct section 4.1 sets out the Health & Safety rules All sites shall establish annual safety targets with action plans (what, who, when) • All sites shall have high standards of housekeeping • All managers shall carry out safety walks (Walk – Observe – Communicate) • All employees shall participate in safety meetings on a regular basis • The use of personal protective equipment and life jackets shall be specified for employees, contractors and visitors • A risk assessment concerning safety shall be made for all jobs, equipment, and potentially hazardous materials, with an annual review made of those, considered most critical • A work permit system shall be in place, to include lock-out tag-out procedures and to safeguard work in confined spaces • An approval system for contractors shall be in place • All accidents and near-misses shall be reported and investigated, to include root-cause analysis, and with the subsequent implementation of corrective actions within the planned time • An emergency response plan shall be in place and tested at least once every year • All Business Units shall have a safety committee, to include site managers and other members, to reflect a safety focus throughout the organization • A programme for systematic and regular safety training shall be in place	14/09/2018	Open	NA			14/12/18 or by agreed plan.							

ASC Audit Report - Traceablity

10	Traceability Factor	Description of risk factor if present.	Describe any traceability, segregation, or other systems in place to manage the risk.
10.1	The possibility of mixing or substitution of certified and non-certified product, including product of the same or similar appearance or species, produced within the same operation.	There are adequate controls in place to prevent accidental substitution and although deliberate substitution could take place, staff are well trained, and the risk is low. The company is listed on the stock exchange and substituion if it was discovered, would have severe consequences for the company.	The company runs a product CV that accompanies the fish whenever they are moved from a cage including harvest. The CV has all the history for the fish in that cage including hatchery of origin, any medications or treatments, the feed that was used and any other relevant historical information eg family history.
10.2	The possibility of mixing or substitution of certified and non-certified product, including product of the same or similar appearance or species, present during production, harvest, transport, storage, or processing activities.	Only deliberate substitution could take place, staff are well trained. No fish are sold as ASC certified.	Unlikely due to system in place at central harvest facility.The fish are killed on site and are transferred to the harvest unit directly using Refridgerated seawater vessels RSW's. The processing unit is based in Port Hardy and is owned by Marine Harvest. Only Marine harvest fish are harvested and processed in this processing unit. The site fills in a drug declaration sheet at harvest and its given to the Well Boat. The Well Boat also gives a copy of the quantity of fish harvested to the site before it leaves for the processsing unit. It is possible, though unlikely, that the harvest boat would have a different site load in seperate holds.
10.3	The possibility of subcontractors being used to handle, transport, store, or process certified products.	The fishing company owned by and called J. Walkus is used to harvest however they only harvest for Marine Harvest Canada.	The same trace system is used as described earlier in the audit. The fish are still under the control of Marine Harvest. The processing unit is also owned by Marine Harvest.
10.4	Any other opportunities where certified product could potentially be mixed, substituted, or mislabelled with non-certified product before the point where product enters the chain of custody.	No other opportunities.	None.

Owned by client **Subcontracted by client**

10.4.a	Total number of sites owned/subcontracted by client producing the same species that is included in the scope of certification	1	0
	Number of sites included in the unit of certification	1	0

		Site name(s)	Reason(s)
10.4.b	Site(s) within UoC that has product to be excluded from entering the chain of custody	NA	NA

10.5	Detail description of the flow of certified product within the operation and the associated traceability system which allows product to be traced from final sale back to the unit of certification	The fish are harvested on site and transported to the Port Hardy processing plant by James Walkus fishing company. There are 3 harvest / killing boats which are the Nicole Joye, Amarissa Joye and the Serina Joye. There are 2 other RSW boats that transport the fish from the point of harvest to the processing plant. They are the Pacific Joye and the Island Joye. The traceability system consisits of a 3 copy document that is filled in on the harvest boat that describes the site, cage number, date, time and fish number harvested plus any other comments. One copy is left on the farm, one copy is left on the harvest baot and the last copy goes to the Processing plant. A further 3 copy document is filled in by the farm itemising the last treatments of anasthetic, antibiotics and lice treatments if any. This document details the withdrawl of any therapeutants of chemicals and is used in the history of the harvest fish. Again the farm keeps a copy, the harvest boat keeps a copy and the processing plant does not procede with processing without their copy.

10.6 **Traceablity Determination:**

10.6.1	The traceability and segregation systems in the operation are sufficient to ensure all products identified and sold as certified by the operation originate from the unit of certification, or	The company has GAA BAP certification for all its sites including the processing facility. The processing facility also has ASC CoC certification.
10.6.2	The traceability and segregation systems are not sufficient and a separate chain of custody certification is required for the operation before products can be sold as ASC-certified or can be eligible to carry the ASC logo.	The farm does not sell the fish as ASC certified. There is a requirement for a chain of custody for when the fish are no longer in the control of the farm.

10.6.3	The point from which chain of custody is required to begin	As it is possible that the Harvest Boat could pick up a part load of fish from a site with no ASC certification there could be a mixed batch of fish on board in separate holds. For this reason the point at which chain of custody should begin before the Harvest boat offloads.
10.6.4	If a sepearate chain of custody certificate is required for the unit of certification	The processor has ASC CoC and BAP Processing. The company is not selling any produce as ASC certified.

For Multi-site clients

ASC Audit Report - Closing

12 Evaluation Results

12.1	A report of the results of the audit of the operation against the specific elements in the standard and guidance documents	The audit was comprehensive and well executed. The operation understands the ASC requirements and standard. The evaluation of the company`s compliance to the requirements in the ASC Salmon Standard and all references and findings is described in detail in the report section II Audit template and section IV.

12.2	A clear statement on whether or not the audited unit of certification has the capability to consistently meet the objectives of the relevant standard(s)	The unit of certification has the capability to consistently meet the objectives of the relevant standard.
123	In cases where BEIA or PSIA is available, it shall be added in full to the audit report. IF these documents are not in English, then a synopsis in English shall be added to the report.	NA

13 Decision

13.1	Has a certificate been issued? (yes/no)	Certificate issued following Initial Audit process on 23 August 2017.
13.2	The Eligiblity Date (if applicable)	The Eligiblity Date will be the date of original certification.
13.3	Is a separate CoC certificte required for the producer? (yes/no)	No, not for the unit of certification. A separate ASC CoC certification is needed as specified earlier in the report for activities e.g slaughtering, processing and trading of certified products performed after the ASC Salmon Standard certificate scope stops.

13.4	If a certificate has been issued this section shall include:	
13.4.1	The date of issue and date of expiry of the certificate.	date of issue 23 August 2017, valid from 18 August 2018, date of expiry 17 August 2020.
13.4.2	The scope of the certificate	Production of Atlantic salmon (Salmo salar) at Marine Harvest Canada Shelter Pass farm.
13.4.3	Instructions to stakeholders that any complaints or objections to the CAB decision are to be subject to the CAB's complaints procedure. This section shall include information on where to review the procedure and where further information on complaints can be found.	Charlotte to copy from annotated report template.

14 Surveillence

14.1	Next planned Surveillance	
14.1.1	Planned date	June-August 2019.
14.1.2	Planned site	Shelter Pass
14.2	Next audit type	
14.2.1	Surveillence 1	no
14.2.2	Surveillance 2	yes
14.2.3	Re-certification	no
14.2.4	Other (specify type)	no