Form 3 - Public Disclosure Form

*This form shall be submitted by the CAB no less than thirty (30) working days prior to any onsite audit *. Any changes to this information shall be submitted to the ASC within five (5) days of the change and not later than 10 days before the planned audit. If later, a new announcement is submitted and another 30 days rule will apply.*

*The information on this form shall be public * and should be posted on the ASC website within three (3) days of submission.*

This form shall be written to be readable to the stakeholders and other interested parties.

This form should be translated into local languages when appropriate

PDF 1 Public Disclosure Form

PDF 1.1 Name of CAB	Acoura Marine Ltd.
PDF 1.2 Date of Submission	14-Sep-17
PDF 1.3 CAB Contact Person	
PDF 1.3.1 Name of Contact Person	Pamela Kynoch-Taylor
PDF 1.3.2 Position in the CAB's-organisation	Aquaculture Schemes Coordinator
PDF 1.3.3 Mailing address	6 Redheughs Rigg, Edinburgh, EH12 9DQ, UK
PDF 1.3.4 Email address	asc@acoura.com
PDF 1.3.5 Phone number	+44 131 3356620
PDF 1.3.6 Other	n/a
PDF 1.4 ASC Name of Client	
PDF 1.4.1 Name of Company	Marine Harvest Canada
PDF 1.4.2 Name of Contact Person	Katherine Dolmage
PDF 1.4.3 Position in the client's organisation	Certification Manager
PDF 1.4.4 Mailing address	124-1334 Island Hwy Campbell River, British Columbia, V9W 8C9, Canada
PDF 1.4.5 Email address	katherine.dolmage@marineharvest.com
PFD 1.4.6 Phone number	+1 250-850-3276
PDF 1.4.7 Other	n/a
PDF 1.5 Unit of Certification	
PDF 1.5.1 Single Site	Yes
PDF 1.5.2 Multi-site	no
PDF 1.5.3 Group certification	no

PDF 1.6 Sites to be audited

Site Name	GPS Coordinates	Other Location Information	Planned Site Audit(s)	Date of planned audit
Alexander Inlet	52°40.612, -128°34.521		Initial Audit	06-Nov-17

PDF 1.7 Species and Standards

Standard	Species (scientific name) produced	Included in scope (Yes/No)	ASC endorsed standard to be used	Version Number
Salmon	Atlantic Salmon (Salmo salar)	Yes	ASC Salmon Standard	v1.1 April 2017

* Except unannounced audits, for which this form will be sent to the ASC and AAB without being published

PDF 1.8 Planned Stakeholder Consultation(s) and How Stakeholders can Become Involved

Name/organisation	Relevance for this audit	How to involve this stakeholder (in-person/phone interview/input submission)	When stakeholder may be contacted	How this stakeholder will be contacted
ASC	scheme owner	email	public disclosure, draft reports, final reports	email
Living Oceans Society	environmental protection group	email	public disclosure, draft reports, final reports	email
Port Hardy Council	local government	email	public disclosure, and if become involved, reports	email
Campbell River Council	local government	email	public disclosure, draft reports, final reports	email
Sayward Town Council	local government	email	public disclosure, and if become involved, reports	email
K'omoks	First Nation	email	public disclosure, draft reports, final reports	email
We Wai Kai & Wei Wai Kum	First Nations	email	public disclosure, draft reports, final reports	email
Homalco	First Nation	email	public disclosure, draft reports, final reports	email
Gwa'Sala-Nakwaxda'xw	First Nation	email	public disclosure, draft reports, final reports	email
Ducks Unlimited	environmental protection group	email	public disclosure, and if become involved, reports	email
Pacific Salmon Foundation	environmental protection group	email	public disclosure, and if become involved, reports	email
David Suzuki Foundation	environmental protection group	email	public disclosure, and if become involved, reports	email
BC Salmon Farmers Association	aquaculture	email	public disclosure, and if become involved, reports	email
Canadian Aquaculture Industry Association	aquaculture	email	public disclosure, draft reports, final reports	email
James Walkus Fishing Company	aquaculture suppliers	email	public disclosure, and if become involved, reports	email
Flurers Smokery	aquaculture suppliers	email	public disclosure, and if become involved, reports	email
Noboco	aquaculture suppliers	email	public disclosure, and if become involved, reports	email
Coast Forestry Products Association	forestry	email	public disclosure, and if become involved, reports	email
Canadian Pacific Sustainability Fisheries Society	fisheries	email	public disclosure, and if become involved, reports	email
Vancouver Island North Tourism	tourism	email	public disclosure, and if become involved, reports	email
BC Centre for Aquatic Health Sciences	research	email	public disclosure, and if become involved, reports	email
United Steelworkers	workers union	email	public disclosure, and if become involved, reports	email
Aqua-Pak	contractors/suppliers	email	public disclosure, draft reports, final reports	email
WWF Canada	environmental protection group	email	public disclosure, draft reports, final reports	email

PDF 1.9 Proposed Timeline

PDF 1.9.1	Contract Signed:	18/09/2017
PDF 1.9.2	Start of audit:	Oct-17
PDF 1.9.3	Onsite Audit(s):	06/11/2017.
PDF 1.9.4	Determination/Decision:	09-Mar-18

PDF 1.10 Audit Team

	Column1	Name	ASC Registration Reference
PDF 1.10.1	Lead Auditor	Matthew James	
PDF 1.10.2	Technical Experts	Francisco Padilla Magan	
PDF 1.10.3	Social Auditor	Leon Reed	

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

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 Certification Report]	Initial Audit Report
1.3 CAB name	Acoura Marine Ltd.
1.4 Name of Lead Auditor	Matthew James
1.5 Names and positions of report authors and reviewers	Matthew James - Acoura Marine - Lead Auditor and report author Paul MacIntyre - Acoura Marine - Aquaculture Director and report reviewer
1.6 Client's Contact person: Name and Title	Katherine Dolmage, Certification Manager
1.7 Date	22-Dec-17

2 Table of Contents

3 Glossary

Terms and abbreviations that are specific to this audit report and that are not otherwise defined in the ASC glossary

MHC: Marine Harvest Canada
BC: British Columbia
PAR: Pacific Aquaculture Regulations
DFO: Department of Fisheries and Oceans
HR: Human Resources
IBA: Impact and Benefit agreement
CEAA: Canadian Environmental Assessment Agency
FHMP: Fish Health Management Plan
IUCN: International Union for the Conservation of Nature
ROV: Remotely Operated Vehicle
UPEI: University of Prince Edward Island
PFRCC: Pacific Fisheries Resource Conservation Council
BAP: Best Aquaculture Practices
IUU: Illegal, Unreported and Unregulated (fishing)
CFIA: Canadian Food Inspection Agency
OIE: Office Internationale des Epizooites (World Organisation for Animal Health)
OSH: Occupational Safety and Health
BOD: Biochemical Oxygen Demand
PFMA:PAcific Fishery Management Area
UOC: Unit of Certification

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	The production of Atlantic Salmon (Salmo salar) at Marine Harvest Canada's Alexander Inlet sea farm operation.
4.2	A brief description of the operations of the unit of certification	Ongrowing of Atlantic Salmon in steel sea cages
4.3	Type of unit of certification (*select only one type of unit of certification in the list)*	Single farm
4.4	Type of audit (*select all the types of audit that apply in the list)*	Assesment
4.5	A summary of the major findings	The audit process involved three auditors with two (lead auditor Matthew James and technical expert Fransisco Padilla), covering the first five Principles and the non-social related aspects of section eight (This involved document review, staff interviews and a visit to the sea site to confirm some of the working practices). The SA8000 auditor (Leon Reed) covered Principles six and seven (and relevant parts of section 8) by initially attending the central offices in Campbell river to conduct a combination of document reviews and staff interviews and then attending the site with the Lead Auditor to carry out site staff interviews. The audit findings were then summarised in a closing meeting on Thursday 9th November. The evaluation of Marine Harvest Canada's Alexander Inlet site demonstrated a good overall level of compliance to the ASC salmon standard version 1.1 and benefited from previous audits carried out for Marine Harvest Canada on other sites; efficient preparation and good document control was evident. Four minor and three major non-conformances were raised. At the time of the draft report publication there have been no stakeholder communications. It should be noted that Marine Harvest Canada elected not to redact any information (no information excluded due to confidentiality) from the audit report therefore there is no separate 'redacted' version or Confidential Annexes.
4.6	The Audit determination	09-Mar-18

5 CAB Contact Information

5.1	CAB Name	Acoura Marine Ltd.
5.2	CAB Mailing Address	6 Redheughs Rigg, Edinburgh, EH12
5.3	Email Address	asc@acoura.com
5.4	Other Contact Information	Acoura Marine Ltd., 6 Redheughs Rigg, Edinburgh EH12 9DQ, UK

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.	Information as declared on Public disclosure form.
6.2	A description of the unit of certification (*for intial audit)* / changes, if any (*for surveillance and recertification audits)*	Alexander Inlet production site, Klemtu BC. Lat: 52 40.612 '. Long: 128 34.521'
6.3	Other certifications currently held by the unit of certification	Best Aquaculture Practice (BAP) for the farm site, Marine Harvest Canada hold four star BAP certification
6.4	Other certification(s) obtained before this audit	n/a
6.5	Estimated annual production volumes of the unit of certification of the current year	3,679 Tonnes
6.6	Actual annual production volumes of the unit of certification of the previous year *(mandatory for surveillance and recertification*	Assessment Audit
6.7	Production system(s) employed within the unit of certification *(select one or more in the list)*	The site use a feed barge supplying 8 x 120m circular cages in a grid mooring system (2 lines of four pens each) with each having a suspended containment net to a side depth of 15m extending to @22m at the centre of the base.
6.8	Number of employees working at the unit of certification	6

7 Scope

7.1	The Standard(s) against which the audit was conducted, including version number	ASC Salmon Standard, V1.1
7.2	The species produced at the applicant farm	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.	Scope of the audit covers all production located only at the Alexander Inlet site.
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	Kitasoo Seafoods (Klemtu, BC) and Port Hardy Processing (Coho Road, Port Hardy BC) - both ASC certified
7.5	Description of the receiving water body(ies).	Tolmie Channel in the Central Coast (Klemtu) region of British Columbia

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.

Matthew James - Lead Auditor, Leon Reed - Social Auditor, Francisco Padilla - Technical expert
Prior to the audit several days were taken analysing information submitted prior to the on-site and office visits. The 30th October - 9th November were spent in BC with a visit to each site with the remaining time auditing the various principles from the central offices. Further collation of information and report writing took place over a number of days prior to the draft report being completed.

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 - mm/yyyy			N/A Assessment Audit
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			

8.4 Audit plan as implemented including:

	Dates	Locations
8.4.1 Desk Reviews		Oct-17
8.4.2 Onsite audits		Monday 6th - Thursday 9th November 2017
8.4.3 Stakeholder interviews and Community meetings		N/A
8.4.4 Draft report sent to client		15/11/2017
8.4.5 Draft report sent to ASC		22/12/2017
8.5.5 Final report sent to Client and ASC		09-Mar-18

8.7 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; Renee Hamel, Certification Administrator; Leith Paganoni, First Nations and Community Relations Manager; Dean Dobrinsky, HR Director; Blaine Trembley, H&S Manager; Duane Yates, Site Manager

8.8 Stakeholder submissions, including written or other documented information and CAB written responses to each submission.

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
ASC	scheme owner	02/01/2018	Yes	Asked to include a more detailed description of the Unit of Certification and its operations.	MJ added more detail into the Audit Report Opening section.	Amended report sent to ASC on 05/01/2018

Living Oceans	environmental protection group	30/01/2018	yes	Living Oceans finds that Acoura Marine has failed to comply with the ASC Certification and Accreditation Requirements. CAR v2.1 requirements 17.1, 17.1.2, 17.1.2.1, 17.3.1, 17.4.5 and comments on Salmon Standard v2.1 indicators 2.1.1, 2.1.2, 2.1.3, 2.2.3, 2.2.4, 2.5.6, 3.1.7, 3.2.2, 3.4.1, 3.4.3, 4.2.1, 4.2.2, 5.1.4, 5.1.5, 5.1.6, 5.2.1, 5.2.3, 5.2.5, 5.2.7, 5.2.9, 5.3.1, 5.4.4, 8.22, 8.23 and VR 198.	Further information provided to the stakeholder as clarification	07/02/2018

AUDIT MANUAL - ASC Salmon Standard v1.1
Scope: species belonging to the genus *Salmo* and *Oncorhynchus*

INSTRUCTION TO FARMS/AUDITORS:
This audit manual was developed to accompany version 1.1 of the ASC Salmon Standard.

References in this Audit Manual to Appendices can be found in the ASC Salmon Standard document.

PRINCIPLE 1: COMPLY WITH ALL APPLICABLE NATIONAL LAWS AND LOCAL REGULATION!						
Criterion 1.1 Compliance with all applicable local and national legal requirements and regulations						
		Compliance Criteria (Required Client Actions):	**A. Review compliance with applicable land and water use laws.**	**Evaluation** (Per indicator, select one category in the drop-down menu)	**Description of NC** Provide an explanation of the reason(s) for the classification of any NCs or non-	**Value/ Metric** Provide values - if applicable for the respective Indicator
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.	A. The PAR license for Alexander Inlet (Facility Number 7714 is AQFF115508 2016/2022. Landfile 1414384 PFMA 6-25. Expires June 3oth 2046 B. Navigable waters protection act. License of occupation. Forestry land and ministry of lands and natural resources license number 1414384. No expiry. C. DFO auditing and enforcement activities will confirm GPS co-ordinates, Lice monitoring fish health record, FHMP compliance, Benthic surveys and site debris. The latest information is available on the DFO website: http://www.pac.dfo-mpo.gc.ca/aquaculture/reporting-rapports/index-eng.html. Pacific Fishery Managemetn Area 6, Pacific Fishery Management Sub-Area 25. Combined Peak Biomass 4000. D. Marine Plan Partnership (MaPP) for BC Central Area confirms that Alexander is not located in a conservation area this has been signed off by the Province of BC, and involved many stakeholders. Alexander inlet site is included in a protection management zone in which finfish aquaculture is included. Visual confirmation is available at www.mappocean.org.	Compliant		
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".	A and B.Marine Harvest is listed on the Oslo Stock Exchange (OSE) and its shares also trade on the US OTC market with registered Canadian NAICS code 112510 - Aquaculture. Typical Canadian taxes include federal corporate income tax, federal and provincial consumer taxes, payroll taxes, property taxes most are filed monthly except the property taxes which are on an annual basis. A report from an independent company was easily retrievable both for taxes and for insurance purposes. The farm is assessed for Tax rates on land use below the water. The footprint of the accommodation and the cages. The demand for taxes shows that MHC Campbell river is classed as a fish farmer of Atlantic salmon.	Compliant		
1.1.3	**Indicator:** Presence of documents demonstrating compliance with all relevant national and local labour laws and regulations **Requirement:** Yes **Applicability:** All	a. Maintain copies of national labour 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 labour laws and codes (only if such inspections are legally required in the country of operation).	A. The BC Employment Standards Act - this details minimum wages and rights for employees and collective agreements and bargaining. The Minister of Labour, Citizens Services and Open Government is the relevant Authority. The minimum wage is $11.35/hour and the minimum work age is 15 B. NA - Inspections are not required in BC	Compliant		
	Indicator: Presence of documents demonstrating	a. Obtain permits for water quality impacts where applicable.	A. There is no separate permit required to demonstrate water quality impact for the marine sites in the licenses required.			

1.1.4	**Indicator:** Presence of documents demonstrating compliance with regulations and permits concerning water quality impacts **Requirement:** Yes **Applicability:** All	b. Compile list of and comply with all discharge laws or regulations.	B There is a government database showing all the companies in Canada that discharge into the water . C. Listed are the only relevant hatchery Ocean Falls, and permit and regulation numbers. The database can be accessed on www.gov.bc.ca Section 8 of this audit confirms discharges for the hatchery. Ocean Falls site discharges directly into the ocean; there is no freshwater environmental impact, in addition any treatments that would be administered will be prescribed by the company vet.	Compliant		
		c. Maintain records of monitoring and compliance with discharge laws and regulations as required.				

PRINCIPLE 2: CONSERVE NATURAL HABITAT, LOCAL BIODIVERSITY AND ECOSYSTEM FUNCTION						
Criterion 2.1 Benthic biodiversity and benthic effects [1]						
Footnote	[1] Closed production systems that can demonstrate that they collect and responsibly dispose of > 75% of solid nutrients from the production system are exempt from standards under Criterion 2.1. See Appendix VI for requirements on transparency for 2.1.1, 2.1.2 and 2.1.3.					
Instruction to Clients and CABs on Criterion 2.1 - Modification of the Benthic Sampling Methodology For farms located in a jurisdiction where specific benthic sampling locations are required under law, clients may request to modify the benthic sampling methodology prescribed in Appendix I-1 to allow for sampling at different locations and/or changes in the total number of samples. Where modifications are sought, farms shall provide a full justification to the CAB for review. Requests for modification shall be supported by mapping of differences in sampling locations. In any event, the sampling locations must at a minimum include samples from the cage edge and samples taken from inside and outside of a defined AZE. 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 ASC Salmon Standard. If the CAB determines that proposed modifications are low risk, the CAB shall ensure that details of the modified benthic sampling methodology are fully described and justified in the audit report.						
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]	Note: Under Indicator 2.1.1, farms can choose to measure redox potential (Option #1) or sulphide concentration (Option #2). Farms do not have to demonstrate that they meet both threshold values. 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. 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.	A. Provided justification for the AZE, by Environmental Assessment Biologist, for the 1 gr carbon/ day profile. A 30 days of current records from a ADCP is used. Evidence of sampling locations shown in monitoring report for 2015 baseline. B. Evidence of benthic type. There are rocks in 3 points under the cages. Video recording to happen in 2 weeks. C The option of Sulphides monitoring has been communicated to the CAB D .The site has not reached peak biomass, therefore the appropriate benthic samples for chemical and biological analysis cannot be collected. Peak biomass will happen in March 2018. .E. Evidence of adequate sampling locations presented by Environmental Assessment Biologist in the depomod software and satisfactory explained. DFO and ASC regulations for sampling stations are followed, regarding to distance, current direction and a maximum depth difference of 25%. (according to DFO). .Marine Harvest contract the sample with Mainstream biological consulting, Licensed professional Rp--1755. .Written procedures for calibration of sulphides present in Fisheries Canada Aquaculture Monitoring Standard. 2015. F. No sulphide measurements available. Samples have not been taken . G. .Evidence of that the client has submitted test results to ASC within the required transparency data submission.	Minor	The site has not reached peak biomass, therefore the appropriate benthic samples for chemical and biological analysis cannot be collected	
Footnote	[2] Farm sites can choose whether to use redox or sulphide. Farms do not have to demonstrate that they meet both.					
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 using a robust and credible modelling system such as the SEPA AUTODEPOMOD and verified through monitoring, the site-specific AZE shall be used.					

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]	Notes: - Under Indicator 2.1.2, farms can choose one of four measurements to show compliance with the faunal index Requirement: AMBI (Option #1); Shannon-Wiener Index (Option #2); BQI (Option #3); or ITI (Option #4). Farms do not have to demonstrate that they meet all four threshold values. - If a farm is exempt due to hard bottom benthos (see 2.1.1b), then 2.1.2 does not apply and this shall be noted in the audit report .				
		a. Prepare a map showing the AZE (30 m or site specific) and sediment collections stations (see 2.1.1).	Assessment audit, sampling has not taken place. Sampling by grab from pre-determined locations with subsequent Shannon-Weiner analysis (option #2) will occur in two weeks from audit date.	Minor	Sample to be completed in 2 weeks from audit date	
		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 analysed 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 the range associated with the type-specific conditions. Most of the sensitive taxa of the type-specific communities are present.					
Footnote	[5] http://www.azti.es/en/ambi-azti-marine-biotic-index.html.					
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.	Assessment audit, sampling has not taken place. Sampling by grab from pre-determined locations with subsequent Shannon-Weiner analysis will occur in two weeks from audit date.	Minor	Sample to be completed in 2 weeks from audit date	
		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 analysed 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 equally high to reference site(s) if natural abundance is lower than this level).					

2.1.4	**Indicator:** Definition of a site-specific AZE based on a robust and credible [7] modelling 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 modelling using a multi-parameter approach [7]. c. Maintain records to show that modelling results for the site-specific AZE have been verified with > 6 months of monitoring data.	A. Evidence of documentation of analysis of the AZE, presented by Environmental Assessment Biologist. The inputs for the model are 30 days of current records, bathymetry data, feed information (digestibility, feed waste, % carbon, settling velocity etc.). The input information is considered robust. .Evidence of validation of the model by the Fisheries and Oceans Canada presented, http://www.dfo-mpo.gc.ca/csas-sccs/Publications/ResDocs-DocRech/2005/2005_035-eng.htm. . Accessed from http://waves-vagues.dfo-mpo.gc.ca/Library/316638.pdf B. The conclusion of the report are: "Significant relationships were demonstrated between predicted carbon flux (no resuspension) and several measures of benthic impact, namely sediment sulphide concentration, species diversity, Infaunal trophic index (ITI) and faunal abundance. The sediment chemistry and biology showed the site to be compliant with government requirements. Findings of the analyses relate carbon flux and ITI. At a predicted carbon flux of <1 g C m-2 d-1, the ITI scores were generally high (> 50) indicating a healthy 'unimpacted' benthic faunal community. A decline in ITI was observed in most samples where predicted carbon flux was > 1 g C m-2 d-1 within the AZE. This range straddles the approximate 1 g C m-2 d-1 threshold between oxic and anoxic sediments determined by the carbon flux to the sediments (Hargrave, 1994). These findings will justify the company selection of the 1gr C profile for the definition of the AZE. The DFO has identified key limitations of the model as: uncertainty surrounding model parameter settings and simulation of resuspension processes. Several recommendations for further research and testing of the model are made by the DFO.	Compliant		

Footnote	[7] Robust and credible: The SEPA AUTODEPOMOD modelling system is considered to be an example of a credible and robust system. The model must include a multi-parameter approach. Monitoring must be used to ground-truth the AZE proposed through the model.					
Criterion 2.2 Water quality in and near the site of operation [8]						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB Actions):**			
Footnote	[8] See Appendix VI for transparency requirements for 2.2.1, 2.2.2, 2.2.3 and 2.2.5.					
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 for Indicator 2.2.1 - Monitoring Average Weekly Percent Saturation of Dissolved Oxygen** Appendix I-4 presents the required methodology that farms must follow for sampling the average weekly percent saturation of dissolved oxygen (DO). Key points of the method are as follows: - measurements may be taken with a handheld oxygen meter or equivalent chemical method; - equipment is calibrated according to manufacturer's recommendations; - measurements are taken at least twice daily: once in the morning (6 -9 am) and once in the afternoon (3-6 pm) as appropriate for the location and season; - salinity and temperature must also be measured when DO is sampled; - sampling should be done at 5 meters depth in water conditions that would be experienced by fish (e.g. at the downstream edge of a net pen array): - each week, all DO measurements are used in the calculation of a weekly average percent saturation. If monitoring deviates from prescribed sampling methodology, the farm shall provide the auditor with a written justification (e.g. when samples are missed due to bad weather). In limited and well-justified situations, farms may request that the CAB approve reduction of DO monitoring frequency to one sample per day. Exception [see footnote 12]If a farm does not meet the minimum 70 percent weekly average saturation requirement, the farm must demonstrate the consistency of percent saturation with a reference site. The reference site shall be at least 500 meters from the edge of the net pen array, in a location that is understood to follow similar patterns in upwelling to the farm site and is not influenced by nutrient inputs from anthropogenic causes including aquaculture, agricultural runoff or nutrient releases from coastal communities. For any such exceptions, the auditor shall fully document in the audit report how the farm has demonstrated consistency with the reference site. Note 1: *Percent saturation* is the amount of oxygen dissolved in the water sample compared to the maximum amount that could be present at the same temperature and salinity.				
		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.	A .Evidence of records presented for in excel file: oxygen and temperature by week. B. No missing samples are detected. C. Evidence shown in monthly report for September. Evidence presented for week 32. average 67.64% D. Evidence of calculation shown for a week with 67% in excel file. Reference site sample present. E. Calibration procedure presented during visual inspection, including salinity correction. Evidence shown by Tech 4 employee. F. Evidence of data sent to ASC present in the ASC transparency report.	Compliant		
		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 sample compared to the maximum amount that could be present at the same temperature and salinity.					
Footnote	[10] Averaged weekly from two daily measurements (proposed at 6 am and 3 pm).					
Footnote	[11] An exception to this standard shall be made for farms that can demonstrate consistency with a reference site in the same water body.					

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.	A. Evidence confirming that the that data does not fall under 2 mg/l shown in weekly DO report. All number between 6.24 and 10.93 B. Evidence of submitted results to ASC present in the ASC transparency report.	Compliant		
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] **Applicability:** All farms except as noted in [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. c. Identify the most recent classification of water quality for the area in which the farm operates.	. A. The Canadian water quality guidelines are applicable. B. The specified parameter for marine water quality is nitrate and ammonia; with the following reference limit numbers: Nitrate= 3.7 mg/litre, Ammonia= 1.34 mg/litre. C. Evidence of third party responsible analysis and classification, present in report from Global aquafoods development corporation. Date April 2017. Region Klemtu. Nitrate= 0.17 mg/litre, Ammonia= 0.11 mg/litre. Alexander Inlet comfortably meets the parameters, and we can consider it as "good" quality of water.	Compliant		
Footnote	[12] Related to nutrients (e.g., N, P, chlorophyll A).					
Footnote	[13] Within the two years prior to the audit.					
Footnote	[14] Classifications of "good" and "very good" are used in the EU Water Framework Directive. Equivalent classification from other water quality monitoring systems in other jurisdictions are acceptable.					
Footnote	[15] Closed production systems that can demonstrate the collection and responsible disposal of > 75% of solid nutrients as well as > 50% of dissolved nutrients (through biofiltration, settling and/or other technologies) are exempt from standards 2.2.3 and 2.2.4.					
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.	N/A, covered by monitoring of Nitrate levels for Marine Area water quality guidelines	N/A		
Footnote	[16] Farms shall monitor total N, NH4, NO3, total P and Ortho-P in the water column. Results shall be submitted to the ASC database. Methods such as a Hach kit are acceptable.					
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	**Instruction to Clients for Indicator 2.2.5 - Calculating Biochemical Oxygen Demand** Biochemical Oxygen Demand (BOD) can be calculated based on cumulative inputs of N and C to the environment over the course of the production cycle. BOD = ((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, filtered or absorbed through approaches such as IMTA or through direct collection of nutrient wasted. In this equation, "fish" refers to harvested fish. In this case, farm must submit breakdown of N & C captured/filtered/absorbed to ASC along with method used to estimate nutrient reduction. • Reference for calculation methodology: Boyd C. 2009. Estimating mechanical aeration requirement in shrimp ponds from the oxygen demand of feed. In: Proceedings of the World Aquaculture Society Meeting; Sept 25-29, 2009; Veracruz, Mexico. And: Global Aquaculture Performance Index BOD calculation methodology available at http://web.uvic.ca/~gapi/explore-gapi/bod.html. Note 1: Calculation requires a full production cycle of data and is required beginning with the production cycle first undergoing certification. If it is the first audit for the farm, the client is required to demonstrate to the CAB that data is being collected and an understanding of the calculations. Note 2: Farms may seek an exemption to Indicator 2.2.5 if: the farm collects BOD samples at least once every two weeks, samples are independently analysed by an accredited laboratory, and the farm can show that BOD monitoring results do not deviate significantly from calculated annual BOD load.				

		a. Collect data throughout the course of the production cycle and calculate BOD according to formula in the instruction box.	N/A Assessment audit. Records will be completed and calculated at the end of the cycle.	N/A		
		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, filtered or absorbed through approaches such as IMTA or through direct collection of nutrient wasted. In this equation, "fish" refers to harvested fish. Reference for calculation methodology: Boyd C. 2009. Estimating mechanical aeration requirement in shrimp ponds from the oxygen demand of feed. In: Proceedings of the World Aquaculture Society Meeting; Sept 25-29, 2009; Veracruz, Mexico. And: Global Aquaculture Performance Index BOD calculation methodology available at http://web.uvic.ca/~gapi/explore-gapi/bod.html.					
2.2.6	**Indicator**: Appropriate controls are in place that maintain good culture and hygienic conditions on the farm which extends to all chemicals, including veterinary drugs, thereby ensuring that adverse impacts on environmental quality are minimised. **Requirement:** Yes **Applicability:** All	a. Document control systems in good culture and hygiene that includes all appropriate elements.	A. Document control system is in place. Evidence fo documented procedures: Handling Hazardous materials, last update June -2016. Including, storage, transport, fuel transport. secondary containment, disposal and record keeping. B. Evidence of staff awareness and qualifications not fully present. Training level for the site staff shows areas where the expected company targets for training in some areas including chemical handling are not being met; See Major NC at 6.5.1	Compliant	See Major at 6.5.1	
		b. Apply the systems ensuring that staff are aware, qualified and trained to properly implement them.				
		-				
Criterion 2.3 Nutrient release from production						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB 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 to determine the fines (dust and small fragments) in finished product of fish feed which has a diameter of 3 mm or more.				
		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.	All. Skretting is managing this for the company as per Marine Harvest's applied variance request (reference VR260). Last sample from the 3rd quarter of 2017, fines of 0,025%. A minor is raised due to the sampling not taking place at site as currently required by the standard and the submitted VR 260 awaits approval	Minor	A minor is raised due to the sampling not taking place at site as currently required by the standard and the submitted VR awaits approval	
		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 particles that separate from feed with a diameter greater than 5 mm when sieved through a 2.36 mm sieve. To be measured at farm gate (e.g., from feed bags after they are delivered to farm).					
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 to delivery to farm for sites with no feed storage where it is not possible to sample on farm. Closed production systems that can demonstrate the collection and responsible disposal of > 75% of solid nutrients and > 50% of dissolved nutrients (through biofiltration, settling and/or other technologies) are exempt.					
Criterion 2.4 Interaction with critical or sensitive habitats and species						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB Actions):**			
		Note: If a farm has previously undertaken an independent assessment of biodiversity impact (e.g. as part of the regulatory permitting process), the farm may use such documents as evidence to demonstrate compliance with Indicator 2.4.1 as long as all components in Appendix I-3 are explicitly covered.				

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	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.	A. Risk assessment present in the site location considerations confirming that the site does not compromise nearby ecosystems. The relevant information is provided in the assessment required for the licensing of the site. B. Site survey carried out to the specific marine finfish aquaculture application requirements C. Measures implemented, confirmed during site inspection.	Compliant		
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 Indicator 2.4.2 - Exceptions to Requirements that Farms are not sited within Protected Areas or HCVAs** The following exceptions shall be made for Indicator 2.4.2: Exception #1: For protected areas classified by the International Union for the Conservation of Nature (IUCN) as Category V or VI (these are areas preserved primarily for their landscapes or for sustainable resource management). Exception #2: For HCVAs if the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the HCVA designation. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the core reason an area has been identified as a HCVA. Exception #3: 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 that its environmental impacts are compatible with the conservation objectives of the protected area and it is in compliance with any relevant conditions or regulations placed on the farm as a result of the formation/designation of the protected area. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the core reason an area has been protected. **Definitions** Protected area: "A clearly defined geographical space, recognized, dedicated and managed through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values." High Conservation Value Areas (HCVA): Natural habitats where conservation values are considered to be of outstanding significance or critical importance. HCVA are designated through a multi-stakeholder approach that provides a systematic basis for identifying critical conservation values—both social and environmental—and for planning ecosystem management in order to ensure that these high conservation values are maintained or enhanced				
		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.	A. Alexander Inlet is within a general management area, holding no enhanced status relevant to conservation area. The MaPP states that "This PMZ encompasses Myers Passage and Alexander Inlet. It supports a variety of invertebrate species and includes multiple kelp beds that support herring spawn. The area provides important at-sea habitat for Marbled Murrelets. Meyers Passage isa Sea Cucumber refugia, which acts as a larval source for adjacent areas. The area is also culturally significant to local First Nations. There is a concern with the following habitat and species: benthic habitat, herring and Sea Cucumber populations" (p. 87). Finfish aquaculture is conditionally accepted in this management area, and the site was licensed with the assumption that there would not be a negative effect on the species considered of high conservation value in this region. Local First Nations support the siting of the farm. B. Richard Opala, Regulatory affairs manager statement dated 16th April 2014 specifies that governmental restriction would not permit such activity to take place, also confirmed by examination of BC Government maps showing restricted areas and farms indicated to be	Compliant		

		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.	out with these. C. N/A Site is within a general management area, holding no enhanced status relevant to conservation area. D. N/A Site is within a general management area, holding no enhanced status relevant to conservation area.			
Footnote	[20] Protected area: "A clearly defined geographical space, recognized, dedicated and managed through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values." Source: Dudley, N. (Editor) (2008), Guidelines for Applying Protected Area Management Categories, Gland, Switzerland: IUCN. x + 86pp.					
Footnote	[21] High Conservation Value Areas (HCVA): Natural habitats where conservation values are considered to be of outstanding significance or critical importance. HCVA are designated through a multi-stakeholder approach that provides a systematic basis for identifying critical conservation values—both social and environmental—and for planning ecosystem management in order to ensure that these high conservation values are maintained or enhanced (http://www.hcvnetwork.org/).					
Footnote	[22] The following exceptions shall be made for Standard 2.4.2: • For protected areas classified by the International Union for the Conservation of Nature (IUCN) as Category V or VI (these are areas preserved primarily for their landscapes or for sustainable resource management). • For HCVAs if the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the HCVA designation. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the core reason an area has been identified as a HCVA. • 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 that its environmental impacts are compatible with the conservation objectives of the protected area and it is in compliance with any relevant conditions or regulations placed on the farm as a result of the formation/designation of the protected area. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the core reason an area has been protected.					
Criterion 2.5 Interaction with wildlife, including predators [23]						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB Actions):**			
Footnote	[23] See Appendix VI for transparency requirements for 2.5.2, 2.5.5 and 2.5.6.					

2.5.1	**Indicator**: Number of days in the production cycle when acoustic deterrent devices (ADDs) or acoustic harassment 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. -	N/A No ADD Use on sites as specifically prohibited by Government	N/A		
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) -	A. Each cage has a protective predator exclusion net. Net maintenance by divers (SW957) and non-diver (i.e. Lifting) procedure SW958 specified. Replacement policy for predator nets confirmed in place. Electric fences and top nets are also deployed for predator exclusion. B. No predator incidents recorded which if present would raise concerns relating to possible fish escapes. C. No marine mammal or bird mortalities recorded for this site, records checked for the previous year of the monthly ASC implementation sheet confirms this as stated. D. Listing of species within the wildlife interaction plan (as per BAP requirement) SW 965 including Cetaceans, other marine mammals and birds listed by species. Confirmed through DFO ''public reporting of aquaculture'' website that no marine mammals or bird mortalities within the categories stated occurred.	Compliant		
Footnote	[25] Mortalities: Includes animals intentionally killed through lethal action as well as accidental deaths through entanglement or other means.					
Footnote	[26] Species listed as endangered or critically endangered by the IUCN or on a national endangered species list.					
2.5.3	**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 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]	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. 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].	A. No lethal actions confirmed during the previous 12 month period. Specific MH Canada policy in place (Predator avoidance plan SW137 (last update November 2015, originated 2012) prohibiting the deliberate killing of any marine mammals or birds, specifically stating a No Kill policy covering seals and sea lions. B. N/A see above. C. Marine Harvest has a predator avoidance procedure, specifying that lethal action is only in case of risk to human life. Previous approval of the senior manager is required, and explicit permission from the relevant regulatory authority.	Compliant		
Footnote	[27] Lethal action: Action taken to deliberately kill an animal, including marine mammals and birds.					
Footnote	[28] Exception to these conditions may be made for a rare situation where human safety is endangered. Should this be required, post-incident approval from a senior manager should be made and relevant authorities must be informed.					

Instruction to Clients and CABs on Indicators 2.5.4, 2.5.5, and 2.5.6 - Clarification about the ASC Definition of "Lethal Incident"

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 29]. For the purpose of assisting farms and auditors with understanding how to evaluate compliance with Indicators 2.5.4, 2.5.5, and 2.5.6, ASC has clarified this definition further:

Total number of lethal Incidents = sum of all non-salmonid deaths arising from all lethal actions taken by the farm during a given time period

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 one (1) lethal action in past last two years and that single lethal action resulted in killing three (3) birds, it is considered three (3) lethal incidents within a two year period.

The term "non-salmonid" was intended to cover any predatory animals which are likely to try to feed upon farmed salmon. In practice these animals will usually be seals or birds.

2.5.4	**Indicator**: Evidence that information about any lethal 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.	N/A see above.	N/A		
		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 made available within 30 days of the incident and see Appendix VI for transparency requirements.					
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.	A. First ASC production cycle. B. No mammals or birds killed since site stocked.	Compliant		
		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 entanglements or other accidental mortalities of non-salmonids.					
Footnote	[31] Standard 2.5.6 applicable to incidents related to non-endangered and non-red-listed species. This standard complements, and does not contradict, 2.5.3.					
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.	N/A as no lethal incidents recorded.	N/A		
		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 GENETIC INTEGRITY OF WILD POPULATIONS						
Criterion 3.1 Introduced or amplified parasites and pathogens [34, 35]						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB Actions):**			
Footnote	[32] Farm sites for which there is no release of water that may contain pathogens into the natural (freshwater or marine) environment are exempt from the standards under Criterion 3.1.					
Footnote	[33] See Appendix VI for transparency requirements for 3.1.1, 3.1.3, 3.1.4, 3.1.6 and 3.1.7.					

Instruction to Clients and CABs on Exemptions to Criterion 3.1 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 exempt from the requirements under Criterion 3.1. More specifically, farms are only eligible for exemption from Criterion 3.1 if it can be shown that either of the following holds: 1) the farm does not release any water to the natural environment; or 2) any effluent released by the farm to the natural environment has been effectively treated to kill pathogens (e.g. UV and/or chemical treatment of water with testing demonstrating efficacy). Auditors shall fully document the rationale for any such exemptions in the audit report.						
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.	A. Alexander Inlet is operated with Cougar Bay (not ASC certified and without fish at the moment). B. ''ABM'' is operated based on the Marine Harvest policies and managed from headquarters. The head office manages: stocking, fallowing, therapeutic treatments, information shared with Aquafarmer Maximum production limit is established for the area. D. First cycle, Stocking October 2016, will be submitted to ASC when required.	Compliant		
		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.				
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]	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 outreach to relevant organizations.				
		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.	A. Expertise and data sharing provided for the WWF Project (April 2013 - April 2014 - Advancing the science and management of cumulative impacts also part funded by MH Canada resulted in a report ''Cumulative effects in Marine Ecosystems'' also Sea lice research work carried out at the Vancouver Aquarium. Collaboration with UPEI, University of Toronto, DFO research; Broughton Archipelago Management Project published the 2015 paper “Spatial patterns of sea lice infection among wild and captive salmon in western Canada”, for Klemtu region, sampling conducted by Kitasoo/Xaixais First Nation and analysis conducted by Centre for Aquatic Health Sciences. 2017 was the 13th year for the program.Genome BC is looking at wild fish / farm fish interactions and MH Canada has involvement through Vincent Ernst and thesis ongoing. BC Salmon farmer science advisory for the marine environmental research program through MH Canada's Diane Morrison. B. Project (April 2013 - April 2014 - Advancing the science and management of cumulative impacts) funded by MH Canada resulted in a report ''Cumulative effects in Marine Ecosystems'' also Sea lice research work carried out at the Vancouver Aquarium. See also project detail noted above. C. No collaboration on projects relating to issues of wild stocks or Salmon farming in general are stated to have been rejected, no evidence to suggest otherwise. D. Confirmed as identified in 3.1.2 c	Compliant		
		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 providing farm-level data to researchers, granting researchers access to sites, or other similar non-financial support for research activities.					

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 **Applicability:** All except farms that release no water as noted in [32]	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). 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.	A. Lice loading for BC farms is hard to predict going forward due to the high numbers of wild fish in the locality at various times of year and consequently it is also difficult to estimate when the maximum load for the farm is likely to be. The farm is able to produce site lice load calculations from their Aquafarmer data. As the ABM for the farm is now in place this requirement is in place, the farms in the area are Cougar Bay and Alexander Inlet.. B. Company aligns lice load review with DFO (current level of 3 motile Lepeophtheirus sp. has been in place since DFO took over the regulation in 2010) who enforce the current levels in relation to treatment timing. Combined maximum sea lice load for this area is 3,237,861. C. see 3.1.3a above D. see 3.1.3a above	Compliant		
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.	A. Monitoring carried out by farm on a weekly basis for all sites as a company policy basis as evidenced by Aquafarmer records and confirmed by farm checks on paper records but increased to weekly during the sensitive period as defined by ASC (government requirement for period is twice monthly). B. Lice count records provided, signed of by staff involved, training of staff by 6 month shadowing prior to carrying out themselves. e.g. Farm Technician training logged for sea lice id with sea lice monitoring. On site training also delivered by Fish health team for each team member C. SOP SW 822 provided and modelled on requirements of the Federal Government determining the requirements stated. D.01 October 2017 monitoring results provided. 3.39 motile L salmonids, 1,12, motile clemensi and 2.5 attached chalimus per fish Records of training present for employee Tech 4. Last date for the lice monitoring training is May 2016. D. Results available in http://marineharvest.ca/globalassets/canada/pdf/asc-dashboard-2017/alexander-oct-7.pdf. F. Results confirmed as submitted in the ASC Transparency checklist previously referenced.	Compliant		
Footnote	[35] Testing must be weekly during and immediately prior to sensitive periods for wild salmonids, such as outmigration of wild juvenile salmon. Testing must be at least monthly during the rest of the year, unless water temperature is so cold that it would jeopardize farmed fish health to test for lice (below 4 degrees C). Within closed production systems, alternative methods for monitoring sea lice, such as video monitoring, may be used.					
Footnote	[36] Posting results on a public website is an example of “easily publicly available.”					

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 kilometres 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 Clients for Indicator 3.1.5 - Evidence for Wild Salmonid Health and Migratior** In writing this indicator, the SAD Steering Committee concluded that relevant data sets on wild salmonid health and migration are publicly available in the vast majority of, if not all, jurisdictions with wild salmonids. The information is likely to come from government sources or from research institutions. Therefore farms are not responsible for conducting this research themselves. However farms must demonstrate that they are aware of this basic information in their region, as such information is needed to make management decisions related to minimizing potential impact on those wild stocks. This Indicator requires collection and understanding of general data for the major watersheds within approximately 50 km of the farm. A farm does not need to demonstrate that there is data for every small river or tributary or subpopulation. Information should relate to the wild fish stock level, which implies that the population is more or less isolated from other stocks of the same species and hence self-sustaining. A "conservation unit" under the Canadian Wild Salmon Policy is an example of an appropriate fish stock-level definition. However, it must be recognized that each jurisdiction may have slight differences in how a wild salmonid stock is defined in the region. For purposes of these standards, "areas with wild salmonids" are defined as areas within 75 kilometres of a wild salmonid migration route or habitat. This definition is expected to encompass all, or nearly all, of salmon-growing areas in the northern hemisphere [39]. Potentially affected species in these areas are salmonids (i.e. including all trout species). Where a species is not natural to a region (e.g. Atlantic or Pacific Salmon in Chile) the areas are not considered as "areas with wild salmonids" even if salmon have escaped from farms and established themselves as a reproducing species in "the wild". Farms do not need to conduct research on migration routes, timing and the health of wild stocks under this standard if general information is already available. Farms must demonstrate an understanding of this information at the general level for salmonid populations in their region, as such information is needed to make management decisions related to minimizing potential impact on those stocks. Such "evidence" would consist of, for example, peer review studies; publicly available government monitoring and reporting.				
		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.	A. Report completed by Centre for Aquatic Health Science: http://marineharvest.ca/globalassets/canada/pdf/asc-dashboard-2017/klemtu-juvenile-salmonid-sea-lice-assesment-2017_interim.pdf Reference can also be made to DFO publications 'Preliminary 2017 Salmon Outlook' and 'Status of Pacific Salmon Resources in Southern BC and the Fraser River Basin' 2009. B. Migration routes relevant to farm within the documents supplied by the DFO covering 91 outlook sites. Identification of sensitive period confirmed as government determined and relates to Pink and Chum salmon as these are the smallest and determined to be most susceptible. The defined sensitive period is designed to overlap different species. ref Int Fish Man Plan; S Coast Salmon Report Labelle and Preliminary 2017 (published December 2016) Salmon Outlook C. Majority are Pink followed by Sockeye, Chum and Coho. Sensitive period determined by the Federal Government and adopted by MHC. D. Site staff interviewed were aware that the sensitive period is from March to June.	Compliant		
		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 kilometres of a wild salmonid migration route or habitat. This definition is expected to encompass all, or nearly all, of salmon-growing areas in the northern hemisphere.					
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 already available. Farms must demonstrate an understanding of this information at the general level for salmonid populations in their region, as such information is needed to make management decisions related to minimizing potential impact on those stocks.					

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.	A. See 3.1.5 B. Sampling and reporting from Sea Lice Monitoring Study for the Klemtu. Location of sampling confirmed for 22 sites around the farming area. Data provided from the DFO Preliminary 2017 Salmon Outlook Sampling was carried out by Kitasoo Xai'xais, reporting by Centre for Aquatic Health Sciences. Included in Klemtu area. Link for the report. http://marineharvest.ca/globalassets/canada/pdf/asc-dashboard-2017/klemtu-juvenile-salmonid-sea-lice-assesment-2017_interim.pdf C. Methodology is included in the CAHS report, 2016. D. Report dated August 2017, sampling carried out in May-June 2017. The 2017 sampling was carried out by Centre for Aquatic Health Sciences E. See 3.1.3d	Compliant		
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. 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).	A. See 3.1.5a. B. Federal Government (DFO) determined dates of 1st March to 30th June used. C. VR 141 Cited for this criterion; VR 141 accepts the DFO control strategy for lice, appendices paper supports difference between BC and other. D. Harvest patterns are on occasion adjusted / brought forward as appropriate to reduce the farm's potential lice load during sensitive periods	Compliant		
Footnote	[39] Sensitive periods for migrating salmonids is during juvenile outmigration and approximately one month before.					

Criterion 3.2 Introduction of non-native species						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB 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 with the bio-chemical and temperature profile required to support the farmed species' life and reproduction (e.g. the Northern Atlantic Coast of the U.S. and Canada). Appendix II-1A elaborates further on this definition: "The boundaries of an area should be defined, taking into account the zone in which key cumulative impacts on wild populations may occur, water movement and other relevant aspects of ecosystem structure and function." The intent is that the area relates to the spatial extent that is likely to be put at risk from the non-native salmon. Areas will only rarely coincide with the boundaries of countries.				
		a. Inform the CAB if the farm produces a non-native species. If not, then Indicator 3.2.1 does not apply.	A. M H Canada farm Atlantic Salmon (Salmo salar) on this site. Atlantic Salmon are not native to Pacific. Atlantic Salmon have been farmed commercially in British Columbia since 1980s (Ref Fisheries and Oceans Canada, 'Farming the seas-A Timeline)" B. Atlantic Salmon have been commercially farmed since the 1980's, more than 77, 800 tonnes produced in British Columbia in 2016. C. N/A evidence provided as stated above. D, N/A evidence provided as stated above. Compliance confirmed	Compliant		
		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 effective physical barriers that are in place and well-maintained to ensure no escapes of reared specimens or biological material that might survive and subsequently reproduce.					

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 **Applicability:** All [43]	**Instruction to Clients for Indicator 3.2.2 - Exceptions to Allow Production of Non-Native Species** Farms have had five years to demonstrate compliance with this standard from the time of publication of the ASC Salmon Standard (i.e. full compliance by June 13, 2017). 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 area and the following three conditions are met: eradication would be impossible or have detrimental environmental effects; the introduction took place prior to 1993 (when the Convention on Biological Diversity (CBD) was ratified); the species is fully self-sustaining. Note: For the purposes of Indicator 3.2.2, "jurisdiction" is defined the same as "area" in 3.2.1.				
		a. Inform the ASC of the species in production (Appendix VI).	A. Atlantic Salmon Confirmed in Audit Declaration B. Yes. C. N/A Covered by Canadian Technical Report of Fisheries and Aquatic Science 3061 - 2015 which summarises reported Atlantic Salmon catches and sightings in BC. D. Information provided as outlined. E. Referenced in ASC transparency submission.	Compliant		
		b. Inform the CAB if the farm produces a non-native species. If not, then Indicator 3.2.2 does not apply.				
		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-native farmed species, use credible methodologies and analysis, and undergo peer review.					
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 jurisdiction under this standard. In the event that the risk tools demonstrate "high" risks, the SAD expects that the ASC will prohibit the certification of farming of non-native salmon in that jurisdiction. The ASC intends to bring this evidence into future revision of the standard and those results taken forward into the revision process.					
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 area and the following three conditions are met: eradication would be impossible or have detrimental environmental effects; the introduction took place prior to 1993 (when the Convention on Biological Diversity (CBD) was ratified); the species is fully self-sustaining.					
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.	N/A Cleaner fish not in use	N/A		
		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 of transgenic species						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB Actions):**			
3.3.1	**Indicator**: Use of transgenic [44] salmon by the farm **Requirement:** None	a. Prepare a declaration stating that the farm does not use transgenic salmon.	A. Declaration provided (23 November 2015) Marine Harvest does not produce, farm or sell transgenic salmon. B. MH Canada has their own Broodstock and egg production.	Compliant		
		b. Maintain records for the origin of all cultured stocks including the supplier name, address and contact person(s) for stock purchases.				

	Applicability: All	c. Ensure purchase documents confirm that the culture stock is not transgenic.	C. N/A			
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					

Criterion 3.4 Escapes [47]						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB Actions):**			
Footnote	[45] See Appendix VI for transparency requirements for 3.4.1, 3.4.2 and 3.4.3.					
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).	A. Manager states no live fish escapes suspected, records and reporting requirements to DFO (Federal Government) support this. B to E N/A see above.	Compliant		
Footnote	[46] Farms shall report all escapes; the total aggregate number of escapees per production cycle must be less than 300 fish. Data on date of escape episode(s), number of fish escaped and cause of escape episode shall be reported as outlined in Appendix VI.					
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 exceptional episode is allowed in a 10-year period for the purposes of this standard. The 10-year period starts at the beginning of the production cycle for which the farm is applying for certification. The farmer must demonstrate that there was no reasonable way to predict the events that caused the episode. See auditing guidance for additional details.					
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).	A. Counting of incoming stock by Hatchery of origin and wellboats, Harvest reconciliation for end counts. Counter accuracy from records confirmed to be ≥ 98% for counters used. B. Document FW 269 covers counting (Smolt Inventory control) and specifies the < or = 2% anticipated counter accuracy, this is supported by supplier documentation. Aquascan counters were mostly used on the well boats with hatcheries using Vaki counters. C. Counting of incoming stock by Hatchery of origin and wellboats, Harvest reconciliation for end counts. Document FW 269 covers counting (Smolt Inventory control) and specifies the < or = 2% anticipated counter accuracy, this is supported by supplier documentation. Aquascan counters were mostly used on the well boats with hatcheries using Vaki counters. D. Confirmed as listed in ASC Transparency checklist	Compliant		
Footnote	[48] Accuracy shall be determined by the spec sheet for counting machines and through common estimates of error for any hand-counts.					

3.4.3	**Indicator**: Estimated unexplained loss [49] of farmed salmon is made publicly available **Requirement:** Yes **Applicability:** All	**Instruction to Clients for Indicator 3.4.3 - Calculation of Estimated Unexplained Loss** The Estimated Unexplained Loss (EUL) of fish is calculated at the end of each production cycle as follows: EUL = (stocking count) - (harvest count) - (mortalities) - (recorded escapes) Units for input variables are number of fish (i.e. counts) per production cycle. Where possible, farms should use the pre-smolt vaccination count as the stocking count. This formula is adapted from footnote 59 of the ASC Salmon Standard.				
		a. Maintain detailed records for mortalities, stocking count, harvest count, and escapes (as per 3.4.1).	A. Mortality Records on Aquafarmer provided, removal frequency of 5- 7 times per week noted, detail included for cause of mortality. B. Declared as falling within the 2% counter accuracy (+%) margins provided. C. Audit reports for ASC certified sites available at : http://marineharvest.ca/planet/salmon_certification/asc-certified-sites/ Information included in reports D. Confirmed as included in the ASC transparency submissions.	Compliant		
		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.	A. Escape Prevention and Response Plan provided (Document# SW951, 9 December 2014) ''escape kit'' present to rapidly cater for any discovered issues, risk assessments provided. Training records for site staff provided with quarterly drills for familiarisation covering various events including fish escape, site staff of 7 on site in two shifts all trained e.g. Farm Technician May 16th 2016 with quiz with two plus manager have completed drills(Document# SW951, April 2016). Escape prevention plan: . Nets removed and inspected every cycle. Inspected every 60 days on the site, and extra inspections after storms. .Cages. Inspected by divers every 60 days .Moorings. records in big food register. Inspections every 2 years for low energy sites and 1-year for high energy sites. .Design requirements. Mooring are designed by a qualified individual. MH implements the Norwegian safety standard. . Bathymetry is measured with multibeam prior installation .Currents records are used in the design phase, where the current is recorded at 5 meters and used to generate the model. A safety factor 1.85. is used. . A Subcontractors performs the installation. Evidence for Alexander Net register g30-2007. Evidence of training in escape prevention response for employee MT date October 18 2017. B. Staff training in Escape controls and drills confirmed. ''escape kit'' present to rapidly cater for any discovered issues, risk assessments provided. Net servicing carried out by Badinotti Net Services including disinfection to 70c for 1 hour. Net log for confirmation of	Compliant		
		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.	net location and service status. C. N/A Seawater farm site D.N/A Seawater farm site E. N/A Seawater farm site			
	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 raw materials in feed						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB Actions):**			
Instruction to Clients for Indicators 4.1.1 through 4.4.2 - Sourcing of Responsibly Produced Salmon Feeds 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 documentary evidence that the feed producers (see note 1) are audited at regular intervals by an independent auditing firm or a conformity assessment body against a recognized standard which substantially incorporate requirements for traceability. Acceptable certification schemes include Global GAP or other schemes that have been acknowledged by the ASC (see 4.1.1c below). Results from these audits shall demonstrate that feed producers have robust information systems and information handling processes to allow the feed producers to be able to bring forward accurate information about their production and supply chains. Declarations from the feed producer that are provided to the farm to demonstrate compliance with these indicators must be supported by the audits. Farms must also show that all of their feed producers are duly informed of the requirements of the ASC Salmon Standard relating to sourcing of responsibly produced salmon feed (see 4.1.1b below). 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 specified under indicators 4.1.1 through 4.4.2. The ASC Salmon Standard allows farms to use one of two different methods to demonstrate compliance of feed producers: Method #1: Farms may choose to source feed from feed producers who used only those ingredients allowed under the ASC Salmon Standards during the production of a given batch of feed. For example, the farm may request its feed supplier to produce a batch of feed according to farm specifications. Audits of the feed producer will independently verify that manufacturing processes are in compliance with ASC requirements. 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 that the balance of all ingredients (both amount and type) used during a given feed production period meets ASC requirements. However, mixing of ingredients into the general silos and production lines is allowed during manufacturing. Audits of the feed producer will independently verify that manufacturing processes are in compliance with ASC requirements. The mass balance method can be applied, for example, to integrated feed production companies that handle all steps of feed manufacturing (purchasing of raw materials, processing to finished feed, and sales) under the management of a single legal entity. 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 organization supplying feed to a farm (i.e. the feed supplier) will be the same organization that produced the feed, but there may be instances where feed suppliers are not directly responsible for feed production. Regardless of whether the farm sources feeds directly from a feed producer or indirectly through an intermediary organization, it remains the farm's obligation to show evidence that all feeds used are in compliance with requirements.					
4.1.1	**Indicator**: Evidence of traceability, demonstrated by the feed producer, of feed ingredients that make up more than 1% of the feed [50]. **Requirement:** Yes **Applicability:** All	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. 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]. -	A. Skretting Canada are the sole supplier, records of supply and usage covered by invoicing and site Aquafarmer records. B. Skretting Canada previously informed of the requirement when previous farms put forward for certification. C. Skretting Canada audit report for BAP provided (Registration M10017 expiry 22nd October 2018) D. Method # 2 (mass balance) selected for compliance. E. Feed label declarations and recipe information confirms traceability requirement backed up by traceability and systems management components of audits carried out. Confirmed within BAP feed mill audit. (traceability from feed suppliers)	Compliant		
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., marine raw ingredients must be traced back to the fishery, soy to the region grown, etc.). Feed manufacturers will need to supply the farm with third-party documentation of the ingredients covered under this standard.					
Criterion 4.2 Use of wild fish for feed [51]						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB Actions):**			
Footnote	[51] See Appendix VI for transparency requirements for 4.2.1 and 4.2.2.					

4.2.1	**Indicator**: Fishmeal Forage Fish Dependency Ratio (FFDRm) for grow-out (calculated using formulas in Appendix IV- 1) **Requirement:** < 1.2 **Applicability:** All	**Instruction to Clients for Indicator 4.2.1 - Calculation of FFDRm** Farms must calculate the Fishmeal Forage Fish Dependency Ration (FFDRm) according to formula presented in Appendix IV-1 using data from the most recent complete production cycle. Farms must also show that they have maintained sufficient information in order to make an accurate calculation of FFDRm as outlined below. For first audits, farms may be exempted from compliance with Indicator 4.2.1 for the most recent complete production cycle (i.e. if the FFDRm of the most recent crop was > 1.2) if the farm can satisfactorily demonstrate to the auditor that: - the client understands how to accurately calculate FFDRm; - the client maintains all information needed to accurately calculate FFDRm (i.e. all feed specs for > 6 months) for the current production cycle; and - the client can show how feed used for the current production cycle will ensure that the farm will meet requirements at harvest (i.e. FFDRm < 1.2).				
		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.	A. Feed batch numbers are logged on PC, Aquafarmer records track usage by pen. Feed bag labels display basic ingredient infromation. Skretting has supplied lists of species used in fish meal and fish oil production including the species used in by-products by emailed document dated 23rd May 2017. Fourteen different species listed include European Sprat, Lesser Sand eel, Norway pout (all North Sea origin). Gulf Menhaden from the Gulf of Mexico, European Pilchards - North Africa and others B. Statement April 17th 2014 from Skretting states exclusion of meal and oil from trimmings. C. eFCR not calculated.. The site in first ASC production cycle so there is no submitted eFCR value, level of margin of compliance for other sites and similarity of feed types used suggest site will be compliant going forward. D. Calculations for completed cycle not available as fist cycle, FCR values for site to date give values below the 0.6 value calculated for Alexander Inlet. E. Will be submitted on completion of cycle.	Compliant		
		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 & DHA (Option #2). Farms do not have to demonstrate that they meet both threshold values. Client shall inform the CAB which option they will use.				
		a. Maintain a detailed inventory of the feed used as specified in 4.2.1a.	A. Feed records provided in Aquafarmer and through invoicing B. Trimmings values provided by Skretting and confirmed as being excluded from the calculation. C. MH Canada opt to use option #1 D. No full cycle complete to date, calculations using part cycle data would indicate compliance will be achieved for the completed cycle. E. N/A as farm elected to use FFDRo results. F. N/A first cycle.	Compliant		
		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 for human consumption or if whole fish is rejected for use of human consumption because the quality at the time of landing does not meet official regulations with regard to fish suitable for human consumption. 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 species that are classified as critically endangered, endangered or vulnerable in the IUCN Red List of Threatened Species (http://www.iucnredlist.org).					

Criterion 4.3 Source of marine raw materials						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB 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	"Marine Harvest Corporate Policy on sustainable salmon feed (8th November 2013) covers the requirement.		Compliant		
Footnote	[53] This standard and standard 4.3.2 applies to fishmeal and oil from forage fisheries, pelagic fisheries, or fisheries where the catch is directly reduced (including krill) and not to by-products or trimmings used in feed.					
Footnote	[54] Meets ISEAL guidelines as demonstrated through full membership in the ISEAL Alliance, or equivalent as determined by the Technical Advisory Group of the ASC.					
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	**Instruction to Clients for Indicator 4.3.2 - FishSource Score of Fish Used in Feed** To determine FishSource scores of the fish species used as feed ingredients, do the following: -go to http://www.fishsource.org/ - type the species into the search function box and choose the accurate fishery -confirm that the search identifies the correct fishery then scroll down or click on the link from the menu on the left reads "Scores" For first audits, farms must have scoring records that cover all feeds purchased during the previous 6-month period. Note: Indicator 4.3.2 applies to fishmeal and oil from forage fisheries, pelagic fisheries, or fisheries where the catch is directly reduced (including krill) and not to by-products or trimmings used in feed.				
		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).	A. Fish Source scores have been provided covering the mass balance derived quantities of fish meal and fish oil required to produce ASC approved feed. All submitted scores were in compliance with the required criteria. B. Skretting corporate document dated July 2017 covers the requirement, in addition a cross check on listed species (e.g. European Sprat- origin North Sea scoring 10 for Biomass as listed and Menhaden - origin Gulf of Mexico Scoring 10 for current and future as listed, both with all other scores above the threshold of 6 as required). It is noted that the scores listed dated from July 2017. Skretting provide a list of potential purchase stock for production and from this a confirmation of those species actually used for the production period.Origin of fish meal used does not vary appreciably with pellet size C. No species submitted to cover the mass balance requirement were either not listed or marked as not assessed. D. No submitted species listed were seen to be unscored or marked N/A	Compliant		
		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 methodology. See Appendix IV-3 for explanation of FishSource scoring.					

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	**Instruction to Clients for Indicator 4.3.3 - Third-Party Verification of Traceability** Indicator 4.3.3 requires that farms show that their feed producers can demonstrate chain of custody and traceability as verified through third-party audits. Farms may submit reports from audits of feed producers (see 4.1.1c) as evidence that traceability systems are in compliance. Alternatively, farms may show that their feed producers comply with traceability requirements of Indicator 4.3.3 by submitting evidence that suppliers, and the batches of fishmeal and oil, are certified to the International Fishmeal and Fish Oil Organization's Global Standard for Responsible Supply or to the Marine Stewardship Council Chain of Custody Standard. For the first audit, a minimum of 6 months of data on feed is required and evidence shall relate to species used in said dataset.				
		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.	A. Covered by Marine Harvest Corporate policy on Sustainable Salmon Feed requirements (13th April 2015).Confirmed by traceability component of BAP certification (Registration M10017 expiry 22nd October 2018) B. Species used for ASC feed production via mass balance calculation confirmed as covered.	Compliant		
		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.	A. Origin of all trimmings-related fish meal and oils stated to be retained at time of purchase. B. Skretting declaration confirms that no fish meal or fish oil used originates from IUU caught fish and confirms suppliers are required to sign up to this. Covered by Marine Harvest Corporate policy on Sustainable Salmon Feed requirements (April 2015). C. Skretting declaration confirms that no fish meal or fish oil used originates from fish species that are categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species D. N/A see above.	Compliant		
		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.	A. Covered in the supplier code of conduct document provided (June 2014) B. Obtained a copy of the client's letter of intent. C. Skretting provide list of feed ingredients 24th May 2017 for general origins with further detail supplied in the Skretting corporate document dated July 2017 detailed in 4.3.2	Compliant		
		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 consumption because the quality at the time of landing does not meet official regulations with regard to fish suitable for human consumption.					
Footnote	[57] IUU: Illegal, Unregulated and Unreported.					
Footnote	[58] The International Union for the Conservation of Nature reference can be found at http://www.iucnredlist.org/.					

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 National Red List process that is managed explicitly in the same science-based way as IUCN. In cases where a National Red List doesn’t exist or isn’t managed in accordance with IUCN guidelines, an exception is allowed when an assessment is conducted using IUCN’s methodology and demonstrates that the population is not vulnerable.					
Criterion 4.4 Source of non-marine raw materials in feed						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB 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.	A. Only Skretting compound feeds used by MH Canada. Contact information provided. B. Skretting supplier declarations cover relevant sourcing requirements C. Covered by BAP audit, certification until 22nd October 2018	Compliant		
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 regarding the activity have been resolved. In this context, moratoriums may refer to suspension of the growth of defined agricultural crops in defined geographical regions.					
Footnote	[61] Specifically, the policy shall include that vegetable ingredients, or products derived from vegetable ingredients, must not come from areas of the Amazon Biome that were deforested after July 24, 2006, as geographically defined by the Brazilian Soy Moratorium. Should the Brazilian Soy Moratorium be lifted, this specific requirement shall be reconsidered.					

4.4.2	**Indicator**: Percentage of soya or soya-derived ingredients in the feed that are certified by the Roundtable for Responsible Soy (RTRS) or equivalent [62] **Requirement:** 100% **Applicability:** All	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) 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]	A. Corporate policy statements restrict any use of soya to RTRS or equivalent (e.g. Proterra) however Skretting state they do not use soya in their compound salmon feed products (replaced as a potential ingredient by Canola oil). B. Corporate policy statements restrict any use of soya to RTRS or equivalent (e.g. Proterra) however Skretting state they do not use soya in their compound salmon feed products. C. Skretting state they do not use soya in their compound salmon feed products. D. Skretting state they do not use soya in their compound salmon feed products. E. N/A as MH Canada do not use Soya in feed (replaced as a potential ingredient by Canola oil).	Compliant		
Footnote	[62] Any alternate certification scheme would have to be approved as equivalent by the Technical Advisory Group of the ASC.					
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.	A. Email declarations received from Skretting stating separately that: no soya is used in the feed supplied, and Canola oil and Corn Gluten are used and these products may contain >1% transgenic content. B. Canola oil and Corn Gluten are stated to be used and stated these products may contain >1% transgenic content. C. Confirmed as included in the submitted ASC transparency checklist.	Compliant		
Footnote	[63] The company or entity to which the farm or the producing company is directly selling its product. This standard requires disclosure by the feed company to the farm and by the farm to the buyer of their salmon.					
Footnote	[64] 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 that trait expressed in the offspring.					
Footnote	[65] See Appendix VI for transparency requirement for 4.4.3.					
	Criterion 4.5 Non-biological waste from production					
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB Actions):**			
4.5.1	**Indicator**: Presence and evidence of a functioning policy for proper and responsible [66] treatment of non-biological waste from production (e.g., disposal and recycling) **Requirement:** Yes **Applicability:** All	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. 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.	A. Materials storage, handling and waste disposal plan in plan SW 963 (last review October 2nd 2017) covers required elements. B. Included within the above SW 963 Document C. Confirmed as included within the 'materials storage, handling and waste disposal plan. D. Recycling for plastic / glass / paper on site, also feed bags and pallets. Waste uplift by Shearwater. Feed delivery companies are contracted as part of the service to remove recyclable waste. Skretting confirms waste is picked up by Global Wood Waste inc for processing	Compliant		
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 shall be done in a manner consistent with best practice in the area. Dumping of non-biological waste into the ocean does not represent “proper and responsible” disposal.					
	Indicator: Evidence that non-biological waste (including	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)	A. Waste oil is disposed of to Hetherington in Port Alberni, nets are usually put to landfill with the policy now to buy longer lasting nets to reduce wastage. Mortalities are sent to ''Renewable Resources'' or ''SeaSoil''. Renewable Resources Ltd is regulated by CFIA.			

4.5.2	net pens) from grow-out site is either disposed of properly or recycled **Requirement:** Yes **Applicability:** All	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.	Registration # 2009041D . Recyclables as detailed above. B. Recycling for plastic / glass / paper on site, also feed bags and pallets. Feed delivery companies are contracted as part of the service to remove recyclable waste. Skretting Sales Manager confirms waste is picked up by Global Wood Waste inc for processing C. Katherine Dolmage, Certification Manager states that there have been no such fines imposed within the stated period. D. Waste Management of Canada Corp confirmed to dispose of any commercial and industrial waste.	Compliant		

Criterion 4.6 Energy consumption and greenhouse gas emissions on farms [67]						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB Actions):**			
Footnote	[67] See Appendix VI for transparency requirements for 4.6.1, 4.6.2 and 4.6.3.					
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	**Instruction to Clients for Indicator 4.6.1 - Energy Use Assessment** Indicator 4.6.1 requires that farms must have an assessment to verify energy consumption. The scope of this requirement is restricted to operational energy use for the farm site(s) that is applying for certification. Boundaries for operational energy use should correspond to the sources of Scope 1 and Scope 2 emissions (see Appendix V-1). Energy use corresponding to Scope 3 emissions (i.e. the energy used to fabricate materials that are purchased by the farm) is not required. However the SAD Steering Committee encourages companies to integrate energy use assessments across the board in the company. For the purposes of calculating energy consumption, the duration of the production cycle is the entire life cycle "at sea" - it does not include freshwater smolt production stages. Farms that have integrated smolt rearing should break out the grow-out stage portion of energy consumption if possible. Quantities of energy (fuel and electricity) are converted to kilojoules. Verification is done by internal or external assessment following either the GHG Protocol Corporate Standard or ISO 14064-1 (see Appendix V-1 for more details).				
		a. Maintain records for energy consumption by source (fuel, electricity) on the farm throughout each production cycle.	A. Records present The information is captured in a monthly basis. B. N/A first cycle.. The information will be summarize after completing the cycle. C. See 4.6.1.b. D. See 4.6.1.b. E. See 4.6.1.b. F. See 4.6.1.b.	Compliant		
		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	**Instruction to Clients for Indicator 4.6.2 - Annual GHG Assessment** Indicator 4.6.2 requires that farms must have an annual Greenhouse Gas (GHG) assessment. Detailed instructions are presented in Appendix V-1 and references therein. The scope of this requirement is restricted to operational boundaries for the farm site(s) that is applying for certification. However the SAD Steering Committee encourages companies to integrate GHG accounting practices across the board in the company. Verification may be done by internal or external assessment following either the GHG Protocol Corporate Standard or ISO 14064-1 (see Appendix V-1 for more details). Note: For the purposes of this standard, GHGs are defined as the six gases listed in the Kyoto Protocol: carbon dioxide (CO_2); methane (CH_4); nitrous oxide (N_2O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF_6).				
		a. Maintain records of greenhouse gas emissions on the farm.	A. Records of GHG emissions present. Values confirmed as calculated on a monthly update basis. "Diesel , Propane, Gasoline are considered. Electricity is generated by diesel generators. B. Total GHG for Alexander Inlet will be provided at the end of the production cycle. C. See 4.6.2.b. D. See 4.6.2.b. E. See 4.6.2.b. F. See 4.6.2.b.	Compliant		
		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 (CO_2); methane (CH4); nitrous oxide (N_2O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF_6).					
Footnote	[69] GHG emissions must be recorded using recognized methods, standards and records as outlined in Appendix V.					
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	**Instruction to Clients for Indicator 4.6.3 - GHG Emissions of Feed** Indicator 4.6.3 requires that farms document the greenhouse gas emissions (GHG) associated with any feeds used during salmon production. Farms will need to obtain this information from their feed supplier(s) and thereafter maintain a continuous record of Feed GHG emissions throughout all production cycles. This requirement applies across the entire previous production cycle. Therefore farms should inform their feed supplier(s) and: - the farm provides its feed suppliers with detailed information about the requirements including a copy of the methodology outlined in Appendix V, subsection 2; - the farm explain what analyses must be done by feed suppliers; and - the farm explains to feed suppliers what documentary evidence will be required by the farm to demonstrate compliance. Note1: Farms may calculate GHG emissions of feed using the average raw material composition used to produce the salmon (by weight) rather than using feed composition on a lot-by-lot basis. Note2: Feed supplier's calculations must include Scope 1, Scope 2, and Scope 3 GHG emissions as specified in Appendix V, subsection 2.				
		a. Obtain from feed supplier(s) a declaration detailing the GHG emissions of the feed (per kg feed).	A. 46.2 kgs CO2 equivalent per metric tonne of feed stated by Skretting B. 219,191 kgs CO2 Equivalent (feed used 4,744 tonnes) C. Only Skretting used for feed supply. D. Included in transparency documents May 2017 to ASC .	Compliant		
		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 documentation linked to each single product used during the production cycle. Feed manufacturer is responsible for calculating GHG emissions per unit feed. Farm site then shall use that information to calculate GHG emissions for the volume of feed they used in the prior production cycle.					
Criterion 4.7 Non-therapeutic chemical inputs [71,72]						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB Actions):**			
Footnote	[71] Closed production systems that do not use nets and do not use antifoulants shall be considered exempt from standards under Criterion 4.7.					
Footnote	[72] See Appendix VI for transparency requirements for 4.7.1, 4.7.3 and 4.7.4.					
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.	No copper treated nets used by MH Canada, policy in place since 2012.	N/A		
		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 antifoulant) during the previous 18 months, or has not undergone thorough cleaning at a land-based facility since the last treatment. Farms that use nets that have, at some point prior in their lifespan, been treated with copper may still consider nets as untreated so long as sufficient time and cleaning has elapsed as in this definition. This will allow farms to move away from use of copper without immediately having to purchase all new nets.
Footnote	[74] Light cleaning of nets is allowed. Intent of the standard is that, for example, the high-pressure underwater washers could not be used on copper treated nets under this standard because of the risk of copper flaking off during this type of heavy or more thorough cleaning.

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.	A. Nets are cleaned in situ with mechanical cleaners during their use at sea, only standard biological debris cleaned off by Badinotti net services pre-servicing and re-issue with any biological debris removed confirmed to put to '7 mile' landfill site in the district of Strathcona. B. Nets are cleaned in situ with mechanical cleaners, Only standard biological debris cleaned off by Badinotti net services pre-servicing. C. Nets are cleaned in situ with mechanical cleaners, Only standard biological debris cleaned off by Badinotti net services pre-servicing.	Compliant		
Footnote	[75] Treatment must have appropriate technologies in place to capture copper if the farm uses copper-treated nets.					
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 outside the full AZE is hard bottom, provide evidence to the CAB and request an exemption from Indicator 4.7.3 (see 2.1.1c).				
		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.	No copper treated nets used by MH Canada, policy in place since 2012.	N/A		
		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.	No copper treated nets used by MH Canada, policy in place since 2012.	N/A		
		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. Analyse 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 copper are only applicable to farms that use copper-based nets or copper-treated nets.					
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.	No antifouling of any type stated to be used to treat nets, no indication of any such products being used during site inspection.	N/A		
		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 health of farmed fish [77]						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB Actions):**			
Footnote	[77] See Appendix VI for transparency requirements for 5.1.4, 5.1.5 and 5.1.6.					

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].	A. Alexander Inlet is a new ASC site. There is a general Fish health management plan for MHC. Includes disease and Lice count (lice count happens weekly) . Updated in August 2016. B. Salmonid Health Management Plan, updated August 2016 and reviewed by Diane Morrison Health Department personal for back up mortality events determination present. Manager and staff trained and experienced.	Compliant		
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.	A. Regular visits by vet and health team confirmed through visitor log checks as meeting the ASC requirement, it is noted that some visits of the vet and health technicians occur on the same day. Health manager visit happens every 1 month by Brad (Senior fish health technician. Evidenced in FHRS (fish health report system). B. Diane Morrison Doctor of Veterinary Medicine with support from Senior Fish Health Technician and Fish Health Technician. Veterinarian visit evidenced every 4 months in FHRS. C. Diane Morrison qualified from the Ontario Veterinary College 1992 and has worked with Marine Harvest since September 2000, The Senior Fish Health Technician and Fish Health Technician are both BSc. Graduates	Compliant		
Footnote	[78] A designated veterinarian is the professional responsible for health management on the farm who has the legal authority to diagnose disease and prescribe medication. In some countries such as Norway, a fish health biologist or other professional has equivalent professional qualifications and is equivalent to a veterinarian for purposes of these standards. This definition applies to all references to a veterinarian throughout the standards document.					
Footnote	[79] A fish health manager is someone with professional expertise in managing fish health, who may work for a farming company or for a veterinarian, but who does not necessarily have the authority to prescribe medicine.					
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.	A. Mortality records in Aquafarmer checked and confirm appropriate details included B. Mortality removals observed during on-site inspection, dead fish are stored in sealed tubs prior to uplift and disposal by approved contractor Shearwater Marine, covered by MH SOP SW 124 with uplift @ marine shipping work orders provided. C. The range of mortality events sampled included transfer related mortalities, this site has had no specific raised mortality levels, these levels are reportable to DFO if over 4,000kg or 2% of site in 24 hours or 10,000 kg or 5% over five days.	Compliant		
Footnote	[80] The SAD recognizes that not all mortality events will result in dead fish present for collection and removal. However, such situations are considered the exception rather than the norm.					

5.1.4	**Indicator**: Percentage of mortalities that are recorded, classified and receive a post-mortem analysis **Requirement:** 100% [81] **Applicability:** All	Note: Farms are required to maintain mortality records from the current and two previous production cycles. For first audit, records for the current and prior production cycle are required. It is recommended that farms maintain a compiled set of records to demonstrate compliance with 5.1.3 - 5.1.6.				
		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).	A. Mortality records were examined and a mortality uplift of several pens to remove dead fish was observed. The farm worker who carried out the operation internally examined each fish (the fish sampled were relatively fresh and supported the farms attestation for daily removal) and recorded his interpretation of cause for the database. Should sampling raise any concerns these would be passed on to the fish health team B. MH Canada Lab back up based in Campbell River. Third Party assistance available from the Provincial Animal Health Centre located in Abbotsford, listed as a fully accredited Laboratory of the American Association of Veterinary Laboratory Diagnosticians : http://www.aavld.org/accredited-laboratories. Further support is available from the Centre for Aquatic Health Sciences located in D. Mortalities confirmed as logged in Aquafarmer by cause, specific mortality events covered by vet diagnosis as required. E. Aquafarmer records confirmed to record the mortality details for the site for the cycle from input to date. F. Mortalities with cause of death covered in the ASC Transparency submissions.	Compliant		
		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.				
		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 hundred percent of mortality events shall receive a post-mortem analysis, not necessarily every fish. A statistically relevant number of fish from the mortality event shall be analysed.					
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.	A. No mortalities were specifically diagnosed with viral disease. B. The site shows a % calculation of 2.71% of possible viral disease related mortality or unexplained mortality. C. Mortallity to be sent at the end of the cycle.	Compliant		
		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 unspecified and unexplained mortality as it could be related to viral disease.					

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.	N/A First cycle is not completed.	N/A		
		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 integrate their farm-specific mortality reduction program into the farm's fish health management plan (5.1.1).				
		a. Use records in 5.1.4a to assemble a time-series dataset on farm-specific mortalities rates and unexplained mortality rates.	A. Records and trends present in aquafarmer. B. Target is 90% survival. Captured in the KPI for saltwater. Actions have been taken related to predator nets, plankton mitigation system, deterrent electric fenceraound the cage perimeter, oxygen monitoring. Uplift helps to reduce mortality. Camera checks every day. A specific reduction plan is not applicable for Alexander Inlet, as it it's first cycle. C. Staff awareness of practices and targets demonstrated.	Compliant		
		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 treatments [83]						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB Actions):**			
Footnote	[83] See Appendix VI for transparency requirements for 5.2.1, 5.2.5, 5.2.6 and 5.2.10.					
Instruction to Clients and CABs for Criterion 5.2 - Records Related to Therapeutic Treatments 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 consolidated into a single place, can be used to demonstrate performance against subsequent Indicators (5.2.1 through 5.2.10) under Criterion 5.2.						
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.	A. Therapeutant usage listed for the batch Is: .Peroxide 2 treatments. Prescription by Diane Morrison.50%- 1200 mg/L for 20 minutes. .Aquaflor (florfenicol) 2 treatments. For Mouth Mycobacterial. Prescription from Diane Morrison. B. N/A first cycle. C. Confirmed as included in the submitted ASC transparency checklist.	Compliant		
		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 for the treatment of fish.					

5.2.2	**Indicator**: Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [85] in any of the primary salmon producing or importing countries [86] **Requirement:** None **Applicability:** All	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]. b. Maintain records of voluntary and/or mandatory chemical residue testing conducted or commissioned by the farm from the prior and current production cycles. -	A. Marine Harvest maintains a global register of the therapeutants and other chemicals permitted and banned along with withdrawal period requirements and residue limits, this is monitored and updated regularly B. Maxxam Analytics (ISO 17025 certified) carry out pre-harvest testing for sites for a range of possible contaminants and possible treatment residues e.g. May 2016 report R3996794 for Amphenicols. All therapeutant use confirmed to be vet prescribed and recorded in the Aquafarmer system. No banned substances recorded or suspected to have been used.	Compliant		
Footnote	[85] "Banned" means proactively prohibited by a government entity because of concerns around the substance. A substance banned in any of the primary salmon-producing or importing countries, as defined here, cannot be used in any salmon farm certified under the SAD, regardless of country of production or destination of the product. The SAD recommends that ASC maintain a list of a banned therapeutants.					
Footnote	[86] For purposes of this standard, those countries are Norway, the UK, Canada, Chile, the United States, Japan and France.					
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.	A. Prescription records are retained on site as required by the DFO as part of their licence conditions in the Drug Treatment Record, Treatment of peroxide and florfenicol prescribed by Diane Morrison. B. Confirmed as above, also recorded in Aquafarmer database.	Compliant		
5.2.4	**Indicator**: Compliance with all withholding periods after treatments **Requirement:** Yes **Applicability:** All	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. c. Show compliance with all withholding periods by providing treatment records (see 5.2.1a) and harvest dates for the most recent production cycle.	A, Included in the Drug Treatment Record - Salt Water B. Canadian Government website covers therapeutants permitted for use and includes details of withdrawal periods. http://www.hc-sc.gc.ca/dhp-mps/vet/legislation/pol/aquaculture_anim-eng.php C. Covered by Aquafarmer controls which block release of fish populations for harvest if any withdrawal period has not been completed			
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.	PTI=0. Only 2 peroxide baths are registered.			

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).	N/A as the PTI=0.	Compliant		
Footnote	[87] Parasiticide load = Sum (kg of fish treated x PTI). Reduction in load required regardless of whether production increases on the site. Farms that consolidate production across multiple sites within an ABM can calculate reduction based on the combined parasiticide load of the consolidated sites.					
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).	A. No prophylactic use of antimicrobial treatments stated or suspected. Logistics constrains force the prescription of the florfenicol in advance of the reception of the fish. B. Treatment records checked, detailed as above. C. A total of 2 treatments of florfenicol have been used for this batch.	Compliant		
Footnote	[88] The designated veterinarian must certify that a pathogen or disease is present before prescribing medication.					
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-listed [89] antibiotics have been used at the production facility (see 5.2.8d). To pursue this option, farms must request an exemption from the CAB in advance of the audit and provide sufficient records giving details on which pens were treated and traceability of those treated fish. Note 2: It is recommended that the farm veterinarian review the WHO list [see 89] in detail and be aware that the list is meant to show examples of members of each class of drugs, and is not inclusive of all drugs.				
		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.	A. ''critically important antimicrobials for human medicine'' 5th version 2016 available on the internet at the farm, link checked. B. Treatment records checked and show no use of any Antibiotics recorded for site. C. N/A D. N/A	Compliant		
Footnote	[89] The fifth edition of the WHO list of critically and highly important antimicrobials was released in 2009 and is available at: http://www.who.int/foodsafety/publications/antimicrobials-fifth/en/.					
Footnote	[90] If the antibiotic treatment is applied to only a portion of the pens on a farm site, fish from pens that did not receive treatment are still eligible for certification.					
	Indicator: Number of treatments [91] of antibiotics over	Note: for the purposes of Indicator 5.2.9, "treatment" means a single course of medication given to address a specific disease issue and that may last a number of days and be applied in one or more pens (or cages).				

5.2.9	the most recent production cycle **Requirement:** ≤ 3 **Applicability:** All	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.	A. Records presented during inspection. B. Treatment records checked and show 2 treatments.	Compliant		
		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 address a specific disease issue and that may last a number of days.					
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, regardless of whether production increases on the site. Farms that consolidate production across multiple sites within an ABM can calculate reduction based on the combined antibiotic load of the consolidated sites.				
		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.	N/A as the first production cycle has not been completed.	N/A		
		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 amount of active ingredient of antibiotics used (kg).					
Footnote	[93] Reduction in load required, regardless of whether production increases on the site. Farms that consolidate production across multiple sites within an ABM can calculate reduction based on the combined antibiotic load of the consolidated sites.					
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).	A. An annually updated document listing the therapeutant options (shown 2017 list) employed for treatments by the company is provided to customers B. Marine Harvest Canada undertake to update their suppliers with a listing of any potential treatments that might be used on fish sold to them. All potential treatments are confirmed as approved by the CFIA. Customers may and do request specific information from this data and email submissions confirm this is an active practice.	Compliant		
		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 farm or the producing company is directly selling its product.					
Criterion 5.3 Resistance of parasites, viruses and bacteria to medicinal treatments						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB 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 Clients for Indicator 5.3.1 - Identifying the 'Expected Effect' of Medicinal Treatment** Indicator 5.3.1 requires that farms identify treatments that have not produced the expected effect. The SAD Steering Committee recognizes that the "expected effect" will vary with health condition and type of medicinal treatment. Therefore farms and auditors will need to review the pre- and post-treatment condition of fish in order to understand and evaluate the impact of treatment. <u>Example: sea lice treatment with emamectin benzoate</u> The SAD SC recommends that a typical baseline for effectiveness of emamectin benzoate is a minimum of 90 percent reduction in abundance of lice on the farmed fish. To determine whether treatment has produced the expected effect, farm and auditor must review pre- and post-treatment lice counts. If the calculated percent reduction in lice is < 90% then the treatment did not produce the expected effect and a bio-assay should be performed to determine whether sea lice have developed resistance. Note: If field-based bio-assays for determining resistance are ineffective or unavailable, the farm shall have samples analysed by an independent laboratory to determine resistance formation. The auditor shall record in the audit report why field-based bio-assays were deemed ineffective and shall include results from the laboratory analyses of resistance formation.				
		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.	A. Treatments of florfenicol happening December 2016 and February 2017. B. Number of mortality show a normal evolution around 200 fish a day to zero. The company considered the treatments as effective. C. N/A see 5.3.1.b. D. N/A see 5.3.1.b.	Compliant		
		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.	N/A for Alexander inlet as treatments are effective, no sign of resistance forming.	N/A		
		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 management [95]						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB Actions):**			
Footnote	[95] See Appendix VI for transparency requirements for 5.4.2 and 5.4.4.					
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.	A. First cycle, stocking 17th October 2016 B. Stocking confirmed 17th to 20th October 2016.Note: Reporting dates in ASC document showing an error in the input date, 2017 instead of 2016.	Compliant		
		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 are acceptable as long as there remains a period of time when the site is fully fallow after harvest.					
Footnote	[97] Exception is allowed for: 1) farm sites that have closed, contained production units where there is complete separation of water between units and no sharing of filtration systems or other systems that could spread disease, or, 2) farm sites that have ≥95% water recirculation, a pre-entry disease screening protocol, dedicated quarantine capability and biosecurity measures for waste to ensure there is no discharge of live biological material to the natural environment (e.g. UV or other effective treatment of effluent) .					

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.	A. No suspected mortality events with ''unidentified transmissible agent'' B. N/A. C. N/A. D. N/A.. E. N/A.	Compliant		
		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 significant increase over background rate on a monthly basis.					
Footnote	[99] Primary aim of monitoring and surveillance is to investigate whether a new or adapted disease is present in the area.					
Footnote	[100] Within one month.					
		Instruction to Clients for Indicator 5.4.3 - Compliance with the OIE Aquatic Animal Health Code Indicator 5.4.3 requires that farms show evidence of compliance with the OIE Aquatic Animal Health Code (see http://www.oie.int/index.php?id=171). Compliance is defined as farm practices consistent with the intentions of the Code. For purposes of the ASC Salmon Standard, this means that the farm must have written procedures stating how the farm will initiate an aggressive response to detection of an exotic OIE-notifiable disease on the farm ['exotic' = not previously found in the area or had been fully eradicated (area declared free of the pathogen)]. An aggressive response will involve, at a minimum, the following actions: - depopulation of the infected site; - implementation of quarantine zones (see note below)in accordance with guidelines from OIE for the specific pathogen; and - additional actions as required under Indicator 5.4.4. To demonstrate compliance with Indicator 5.4.3, clients have the to option to describe how farm practices are consistent with the intentions of the OIE Aquatic Animal Health Code by developing relevant policies and procedures and integrating them into the farm's fish health management plan. Note: The Steering Committee recognizes that establishment of quarantine zones will likely incorporate mandatory depopulation of sites close to the infected site and affect some, though not necessarily all, of the ABM.				
	Indicator: Evidence of compliance [101] with the OIE Aquatic Animal Health Code [102]	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.				

5.4.3	**Requirement:** Yes **Applicability:** All	-	A. SharePoint site includes links to the OIE website B. Marine Harvest Canada's Fish Health Management plan incorporates elements consistent with the OIE Code. Staff appear competent through on-site discussions relating to e.g. Biosecurity and mortality handling.	Compliant		
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 standard, this includes an aggressive response to detection of an exotic OIE-notifiable disease on the farm, which includes depopulating the infected site and implementation of quarantine zones in accordance with guidelines from OIE for the specific pathogen. Quarantine zones will likely incorporate mandatory depopulation of sites close to the infected site and affect some, though not necessarily all, of the ABM. Exotic signifies not previously found in the area or had been fully eradicated (area declared free of the pathogen).					
Footnote	[102] OIE 2011. Aquatic Animal Health Code. http://www.oie.int/index.php?id=171.					

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). -	A. Confirmed through examination of Mortality records that no OIE notifiable diseases have been recorded for this site. B. N/ A. C. N/A D. N/A	Compliant		
Footnote	[103] At the time of publication of the final draft standards, OIE-notifiable diseases relevant to salmon aquaculture were: Epizootic haematopoietic necrosis, Infectious haematopoietic necrosis (IHN), Infectious salmon anaemia (ISA), Viral haemorrhagic septicaemia (VHS) and Gyrodactylosis (Gyrodactylus salaris).					
Footnote	[104] This is in addition to any notifications to regulatory bodies required under law and the OIE Aquatic Animal Health Code.					
Footnote	[105] Within one month.					
Social requirements in the standards shall be audited by an individual who is a lead auditor in conformity with SAAS Procedure 200 section 3.1.						
PRINCIPLE 6: DEVELOP AND OPERATE FARMS IN A SOCIALLY RESPONSIBLE MANNER						
6.1 Freedom of association and collective bargaining [106]						
		Compliance Criteria				
Footnote	[106] Bargain collectively: A voluntary negotiation between employers and organizations of workers in order to establish the terms and conditions of employment by means of collective (written) agreements.					
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	There is a Code of Conduct, which is provided to all employees and they are tested to show they have understood the Code of conducts. The Code of Conduct is accessible via intranet, which also allows access to human resources Policy & Procedure Manual. Code of Conduct section 5.3. Relates to this area and states ""Marine Harvest recognises the right of all workers and employees freely to form and join groups for the promotion and defence of their occupational interests, including the right to engage in collective bargaining"". The workers confirmed that that the above information was provided to them.		Compliant		
6.1.2	**Indicator:** Evidence that workers are free to form organizations, including unions, to advocate for and protect their rights **Requirement:** Yes	The worker's right to freedom of association is Stated in the contract of employment and within 5.3 of the code of conduct. Employees sign to state that they have been trained and tested on the Code of Conduct. The workers confirmed that the Code of Conduct was provided to them and that they had been trained and tested. The training records show that training happened, and the results are available on the training systems.		Compliant		

	Applicability: All				

6.1.3	**Indicator:** Evidence that workers are free and able to bargain collectively for their rights **Requirement:** Yes **Applicability:** All	No outstanding cases against the farm site management for violations of employees' freedom of association and collective bargaining rights. The employer has explicitly communicated a commitment to ensure the collective bargaining rights of all workers as stated in 6.1.1 & 6.1.2. The documentary evidence shows that workers are free and able to bargain collectively. Detailed in the Code of Conduct and training records.	Compliant		
Criterion 6.2 Child labour					
		Compliance Criteria			
6.2.1	**Indicator:** Number of incidences of child [107] labour [108] **Requirement:** None **Applicability:** All except as noted in [107]	Ages of all workers stored on Human Resources management system. There are no persons employed under the age of 15. Marine Harvest state in section 5.4 of the code of conduct. Marine Harvest is committed to the abolition of child labour, and all forms of forced or compulsory labour. Marine Harvest considers the minimum age for employment as not lower than the age of completion of compulsory schooling as set by national law, and in any event not lower than 15 years of age. Identification is held on file for all farm employees and is signed and verified by senior Management at the point of employment.	Compliant		
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 work or mandatory schooling. Minimum age may be 14 if the country allows it under the developing country exceptions in ILO convention 138.				
Footnote	[108] Child Labour: Any work by a child younger than the age specified in the definition of a child.				
6.2.2	**Indicator:** Percentage of young workers [109] that are protected [110] **Requirement:** 100% **Applicability:** All	There is a policy stating the rules on employing young workers. The Marine Harvest code of conduct section 5.4 sets out the main rules. Young workers risk assessments are carried out and displayed within the working areas. All young workers assessed before employment commences. All workers including young workers have the working hours recorded on a time management system. No young workers employed at the time of the audit.	Compliant		
Footnote	[109] Young Worker: Any worker between the age of a child, as defined above, and under the age of 18.				
Footnote	[110] Protected: Workers between 15 and 18 years of age will not be exposed to hazardous health and safety conditions; working hours shall not interfere with their education and the combined daily transportation time and school time, and work time shall not exceed 10 hours.				
Footnote	[111] Hazard: The inherent potential to cause injury or damage to a person's health (e.g., unequipped to handle heavy machinery safely, and unprotected exposure to harmful chemicals).				
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 morals of workers (e.g., heavy lifting disproportionate to a person's body size, operating heavy machinery, exposure to toxic chemicals).				

Criterion 6.3 Forced, bonded or compulsory labour					
		Compliance Criteria			
6.3.1	**Indicator:** Number of incidences of forced, [113] bonded [114] or compulsory labour **Requirement:** None **Applicability:** All	All employees are provided with contracts of employment. Workers have signed all contracts of employment. Through documentation checks, it confirmed that all working hours are conducted on a voluntary basis. The employer does not withhold employee's original identity documents. The employer does not withhold any part of workers' salaries, benefits, property or documents to oblige them to continue working for the employer. No employees are repaying debt. All of the above was confirmed by the employees within the interviews.	Compliant		
Footnote	[113] Forced (Compulsory) labour: All work or service that is extracted from any person under the menace of any penalty for which a person has not offered himself/herself voluntarily or for which such work or service is demanded as a repayment of debt. "Penalty" can imply monetary sanctions, physical punishment, or the loss of rights and privileges or restriction of movement (e.g., withholding of identity documents).				
Footnote	[114] Bonded labour: When a person is forced by the employer or creditor to work to repay a financial debt to the crediting agency.				
Criterion 6.4 Discrimination [118]					
		Compliance Criteria			
Footnote	[115] Discrimination: Any distinction, exclusion or preference that has the effect of nullifying or impairing equality of opportunity or treatment. Not every distinction, exclusion or preference constitutes discrimination. For instance, a merit- or performance-based pay increase or bonus is not by itself discriminatory. Positive discrimination in favour of people from certain underrepresented groups may be legal in some countries.				
6.4.1	**Indicator:** Evidence of comprehensive [116] and proactive anti-discrimination policies, procedures and practices **Requirement:** Yes **Applicability:** All	Stated in Marine Harvest Code of conduct section 5.2 & 6.1. The anti-discrimination policy that is in place, states 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. Discrimination complaints are dealt with through the grievance procedures. Grievance procedures are communicated to all workers. All employees are respected with regards equal treatment. All managers have been trained in equality and diversity.	Compliant		
Footnote	[116] Employers shall have written anti-discrimination policies 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.				
6.4.2	**Indicator:** Number of incidences of discrimination **Requirement:** None **Applicability:** All	The facility has a procedure in place to document of all discrimination complaints. To date, there have not been any complaints. There is no evidence of discrimination. Workers interviewed stated that the company did not discriminate against them. Workers interviewed had not experienced or heard of any issues with regards to discrimination.	Compliant		

Criterion 6.5 Work environment health and safety					
		Compliance Criteria			
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	"The facility has established procedures and policies to protect employees. Employees are trained in emergency response procedures. The training has been recorded within the onsite training systems and displayed on the employee notice boards. Health and safety training is carried 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 however, it was noted on the site tour that 1. The training updates percentage is at 61% for the site and the site manager has achieved only 35 percent. 2. The training that is detailed on the software is not being fully implemented 3. Equipment throughout the farm is lifted with rope instead of certified lifting straps 4. Generator exhaust leaking and poorly repaired 5. Feed pipes from the feed system are secured with ropes. Site manager stated that there are problems with the clamps that are used. 6. Feed barge has a ladder secured with rope at the entrance to the barge. 7. Feed barge has a fire exit that cannot be used. This was identified in June and has not been corrected. 8. General mess throughout the site that create health & safety risks 9. Three life vests found to be in unuseable condition The operations barge 1. Equipment throughout the farm is lifted with rope instead of certified lifting straps 2. Exposed wiring in the stairwell to the living area 3. Smoked detectors missing 4. Eyewash missing from the station 5. General mess throughout the site that create health & safety risks 6. Two life vest found to be in poor condition. 7. Operations boat had no procedures available on the boat.	Major	Details as recorded opposite	
Footnote	[117] Health and safety training shall include emergency response procedures and practices.				
6.5.2	**Indicator:** Evidence that workers use Personal Protective Equipment (PPE) effectively **Requirement:** Yes **Applicability:** All	A full list of MSDS is available within the health and safety standards documentation and stored on all site computers. The site has carried out risk assessments for all operations and has identified the PPE required for each task. The site uses the risk assessment to understand the risks and eliminate the risks were possible. The site understands that Personal Protective Equipment should only be used where it is not possible to reduce the risk without the use of Personal Protective Equipment. Employees all receive induction training which includes the correct and proper use of Personal Protective Equipment. There are modules that are built into the online health & Safety management system that employees have to completed each year. The site manager ensures this training is carried out and recorded. Workers confirmed within interview process that Personal Protective Equipment was provided and training was provided if required.	Compliant		
6.5.3	**Indicator:** Presence of a health and safety risk assessment and evidence of preventive actions taken **Requirement:** Yes **Applicability:** All	Site specific risk assessments have not been carried out. No up to date training has been carried out on how to identify risk. Monthly safety checks are not being completed correctly as demonstrated by the observations noted on the site tour. The findings that are noted in the monthly safety meetings are not being closed or monitored.	Major	Details as recorded opposite	
6.5.4	**Indicator:** Evidence that all health- and safety-related accidents and violations are recorded and corrective actions are taken when necessary **Requirement:** Yes	Facility records all health & safety related accidents. Accidents are investigated by the Health & Safety Manager. Monitoring systems have been implemented to review year on year results. The facility has systems to maintain documentation for all occupational health and safety violations and investigations. Employees stated within the interview process that accidents were investigated and steps were taken and improvements made if required.	Compliant		

	Applicability: All				
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	Insurance is available for all workers to ensure that they are compensated to cover costs related to occupational accidents. Public liability insurance is also available to cover all over parties.	Compliant		
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 ensure that auditors have access to specified information sufficient to demonstrate compliance with Indicator 6.5.6. It is the farm's responsibility to obtain copies of relevant documentation (e.g. certificates) from the dive company. Employer keeps records of farm diving operation. All external divers are given full details of the operations that are required. All diving certification was provided. All divers have the required accreditations. Licensed checked every 60 days,	Compliant		
Criterion 6.6 Wages					
		Compliance Criteria			
6.6.1	**Indicator:** The percentage of workers whose basic wage [118] (before overtime and bonuses) is below the minimum wage [119] **Requirement:** 0 (None) **Applicability:** All	Wages are recorded on an electronic accounting system and verified. All pay is in line or above minimum wage requirements. All workers confirmed that wages are paid correctly.	Compliant		
Footnote	[118] Basic wage: The wages paid for a standard working week (no more than 48 hours).				
Footnote	[119] If there is no legal minimum wage in a country, basic wages must meet the industry-standard minimum wage.				
6.6.2	**Indicator:** Evidence that the employer is working toward the payment of basic needs wage [120] **Requirement:** Yes **Applicability:** All	MHC use Hays group to assist with setting pay levels and carry out here own reviews to ensure that levels are correct. There are details of living wages for BC available which states the living wage is $20.62 MHC starting wage is above the legal requirement	Compliant		
Footnote	[120] Basic needs wage: A wage that covers the basic needs of an individual or family, including housing, food and transport. This concept differs from a minimum wage, which is set by law and may or may not cover the basic needs of workers.				
6.6.3	**Indicator:** Evidence of transparency in wage-setting and rendering [121] **Requirement:** Yes **Applicability:** All	Wages and benefits are documented before the point of employment. Wages have also been agreed with the union and are documented the collective bargaining agreement. Employees are paid monthly by electronic bank transfer. Employees confirmed within interview process that information was available and electronic transfer payments are made directly to their bank accounts.	Compliant		

Footnote	[121] Payments shall be rendered to workers in a convenient manner.				
Criterion 6.7 Contracts (labour) including subcontracting					
		Compliance Criteria			
6.7.1	**Indicator:** Percentage of workers who have contracts [122] **Requirement:** 100% **Applicability:** All	All employees are provided with a contract of employment, and a copy of the contract was available in the personnel files. There was no evidence of Labor only contracts or false apprenticeships. Employees confirmed that there are no, Labor only contracts or false apprenticeships.	Compliant		
Footnote	[122] Labour-only contracting relationships or false apprenticeship schemes are not acceptable. This includes revolving/consecutive labour contracts to deny benefit accrual or equitable remuneration. False Apprenticeship Scheme: The practice of hiring workers under apprenticeship terms without stipulating terms of the apprenticeship or wages under contract. It is a "false" apprenticeship if its purpose is to underpay people, avoid legal obligations or employ underage workers. Labour-only contracting arrangement: The practice of hiring workers without establishing a formal employment relationship for the purpose of avoiding payment of regular wages or the provision of legally required benefits, such as health and safety protections.				
6.7.2	**Indicator:** Evidence of a policy to ensure social compliance of its suppliers and contractors **Requirement:** Yes **Applicability:** All	Where Marine Harvest uses subcontractors, they check that the companies have socially responsible practices and policies. Marine Harvest keeps a list of approved suppliers and contractors. Marine Harvest keeps records of communications with suppliers and subcontractors.	Compliant		
Criterion 6.8 Conflict resolution					
		Compliance Criteria			
6.8.1	**Indicator:** Evidence of worker access to effective, fair and confidential grievance procedures **Requirement:** Yes **Applicability:** All	There is a complaint procedure detailed in the HR Policy which explains the reporting procedure including bullying and harassment and confidentiality policy. All employees have access to policies through the intranet. This was confirmed through employee interviews. All communication such as Complaints, grievances and discipline is recorded within the employee personnel file. All communications are detailed in writing with the employee personnel files.	Compliant		
6.8.2	**Indicator:** Percentage of grievances handled that are addressed [123] within a 90-day timeframe **Requirement:** 100% **Applicability:** All	The established grievance policy and procedures are well documented. Any grievances that are raised are documented in the employee personnel files and have agreed on action plans if required. None of the workers interviewed had any grievances so unable to confirm. The company policy is to respond to each stage of the process within 14 days. Also, see 6.8.1.	Compliant		
Footnote	[123] Addressed: Acknowledged and received, moving through the company's process for grievances, corrective action taken when necessary.				
Criterion 6.9 Disciplinary practices					
		Compliance criteria			
6.9.1	**Indicator:** Incidences of excessive or abusive disciplinary actions **Requirement:** None **Applicability:** All	None of the policies or procedures used is threatening, humiliating or has any punishing disciplinary practices. The practice of the disciplinary does not impact the workers physical or mentally.	Compliant		
Footnote	[124] Mental Abuse: Characterized by the intentional use of power, including verbal abuse, isolation, sexual or racial harassment, intimidation or threat of physical force.				

6.9.2	**Indicator:** Evidence of a functioning disciplinary action policy whose aim is to improve the worker [125] **Requirement:** Yes **Applicability:** All	The company has written policy disciplinary action that ""explicitly"" states to improve the worker. The company does have performance management policy, so this should be noted alongside the disciplinary policy. None of the workers had been involved with a disciplinary procedure but confirmed workers are regularly evaluated and reviewed.	Compliant		
Footnote	[125] If disciplinary action is required, progressive verbal and written warnings shall be engaged. The aim shall always be to improve the worker; dismissal shall be the last resort. Policies for bonuses, incentives, access to training and promotions are clearly stated and understood, and not used arbitrarily. Fines or basic wage deductions shall not be acceptable disciplinary practices.				

Criterion 6.10 Working hours and overtime					
		Compliance criteria			
6.10.1	**Indicator:** Incidences, violations or abuse of working hours and overtime laws [126] **Requirement:** None **Applicability:** All	Note: Working hours, night work and rest periods for workers in agriculture should be in accordance with national laws and regulations or collective agreements (e.g. The Safety and Health in Agriculture Convention, 2001). Additional information can be found on the website of the International Labour Organization (www.ilo.org).			
		The company holds document for Employment Standards Act for BC for working regulations. The working shift pattern is carried out over two weeks. The shift pattern consists of 8 days on and 6 days off for the farm workers. These are averaged hours over the 2 weeks is 40 hours per week. The Operation team work a shift pattern that is not compliant with the ILO. The shift consists of 15 days on and 13 days off. Working hours are provided by site managers to the payroll and working hours' department. The workers confirm that working hours are correct before this. Records on Time Solutions system show that workers are not exceeding the working hours that are allowed. The shift pattern is agreed before the commencement of employment. The contract of employment clearly stated the contracted working hours. Workers confirmed that the facility did not abuse the working hour's regulations and laws.	Major	The Operation team for the site work a shift pattern that is not compliant with the ILO. The shift consists of 15 days on and 13 days off.	
Footnote	[126] In cases where local legislation on working hours and overtime exceed internationally accepted recommendations (48 regular hours, 12 hours overtime), the international standards will apply.				
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]	The employees are paid a premium rate for overtime hours they are paid 150% for the first 2 hours and 200% for any hours worked after that. The Time Solutions System confirmed that overtime is infrequent. The employees confirmed that overtime is rare and is voluntary.	Compliant		
Footnote	[127] Compulsory overtime is permitted if previously agreed to under a collective bargaining agreement.				
Footnote	[128] Premium rate: A rate of pay higher than the regular work week rate. Must comply with national laws/regulations and/or industry standards.				
Criterion 6.11 Education and training					
		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	The company encourages employees to increase knowledge and participate in training courses and supports the workers in doing this. As stated in HR policy section 9 Employee training and development bad education assistance programs. All training records are maintained on the DATS system. Workers confirmed that they are encouraged to learn and be involved with training courses. Other than compulsory health and safety training workers dictate the speed of additional training.	Compliant		
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	The Code of Conduct Policy and also the HR Policy are in line with all social and labour requirements. The Senior Management Team approves corporate policy in Campbell River. The scope of all corporate policies cover all company operations. All documentation was provided and reviewed.	Compliant		

	Applicability: All				
Footnote	[129] Applies to the headquarters of the company in a region or country where the site applying for certification is located. The policy shall relate to all of the company's operations in the region or country, including grow-out, smolt production and processing facilities.				
Social requirements in the standards shall be audited by an individual who is a lead auditor in conformity with SAAS Procedure 200 section 3.1.					

PRINCIPLE 7: BE A GOOD NEIGHBOR AND CONSCIENTIOUS CITIZEN					
Criterion 7.1 Community engagement					
		Compliance Criteria			
7.1.1	**Indicator:** Evidence of regular and meaningful [130] consultation and engagement with community representatives and organizations **Requirement:** Yes **Applicability:** All	There is a community engagement letter it is an invitation sent to the mayor of each community it covers the direction of the company and initiatives that are being developed. There is an agreement in place with the FN in this area. The company recently sent out communication to all the local communities with details on new technology, Therapeutic Treatments, opportunities for future growth and information regarding certification. The community engagement letter states the agenda. Notes are taken during the meeting and follow up emails are sent out to stake holders No representatives made themselves available to the auditors.	Compliant		
Footnote	[130] Regular and meaningful: Meetings shall be held at least bi-annually with elected representatives of affected communities. The agenda for the meetings should in part be set by the community representatives. Participatory Social Impact Assessment methods may be one option to consider here.				
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	"Marine Harvest has a policy Doc#5/FW905 External Complaint resolution. External complaints are logged by Communications Manager Ian Roberts. A log has been created. The Log details who raised the complaint and the nature of the complaint. The company policy is all complaints are passed to the communications manager and then forwarded to senior management should it be required. The complaints procedure is detailed and sets out the requirements for handling each complaint No stakeholders, representatives from the local community requested any form of engagement with the auditors "	Compliant		
Footnote	[131] Effective: In order to demonstrate that the mechanism is effective, evidence of resolutions of complaints can be given.				
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	Notices are posted on the site if Therapeutic Treatments are being carried out. The signage that is used was seen during the farm inspection. The signage used is clear and can be seen by anyone passing the farm. Notices are posted on the side farm house so that it can be seen by anyone entering the site. This has been communicated in the engagement letter as detailed 7.1.1 No stakeholders, representatives from the local community requested any form of engagement with the auditors	Compliant		
Footnote	[132] Signage shall be visible to mariners and, for example, to fishermen passing by the farm.				

Criterion 7.2 Respect for indigenous and aboriginal cultures and traditional territories					
		Compliance Criteria			
Instruction to Clients and CABs on Criterion 7.2 - Traditional Territories of Indigenous Groups The ASC Salmon Standard requires that farms must be respectful of the traditional territories of indigenous groups. The Indicators listed under Criterion 7.2 were designed to fulfil this purpose in a manner consistent with the United Nations Declaration on the Rights of Indigenous Peoples. In many locales, the territorial 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 operating in close proximity to indigenous people. However, when boundaries of indigenous territories are undefined or unknown, there is no simple way to establish whether the farm is operating in close proximity to indigenous groups. Here ASC provides the following guidance. The intent behind the ASC Salmon Standard is that the farm will identify all neighbouring groups who are potentially negatively impacted by the farm's activities. The actual physical distance between the farm and an indigenous group is less important than understanding whether the farm is having a detrimental impact upon its neighbours. Effective community consultations are one of the best ways to identify such impacts to neighbour groups. Through a transparent process of consultation, indigenous groups who are put under "stress" by the farm will identify themselves and voice their concerns about the nature of the farm's impacts. Continued consultations between farm and neighbours should create a forum where any key issue can be discussed and resolved.					
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]	Marine Harvest is operating in some indigenous territories and has several agreements (IBA) in place with FN groups. MHC operates Alexander site on behalf of the Kitasoo First Nation. Kitasoo hold the tenure for the site, and the groups have a protocol agreement in place. It is also not possible to operate in an indigenous territory as the government liaise withFN groups before issuing a licence to operate. The agreements demonstrate that Marine Harvest is aware of Local, national laws and regulations for each FN group. There is a spreadsheet detailing agreements with each FN. There is also a log sheet that records all meetings, calls and communication. No indigenous representatives requested meeting the auditors.	Compliant		
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]	Marine Harvest is operating in some indigenous territories and have several agreements (IBA) in place with FN. Alexander Inlet site Tenure is held by Kitasoo, the site is operated by MHC on their behalf. No indigenous groups requested any form of engagement with the auditors.	Compliant		
Footnote	[133] All standards related to indigenous rights only apply where relevant, based on proximity of indigenous territories.				
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]	MHC are operating in some indigenous territories and have several agreements (IBA) in place with FN. Alexander Inlet site Tenure is held by Kitasoo, the site is operated by MHC on their behalf.The agreements demonstrate that MHC are aware of Local/national laws and regulations for each FN.There are agreements in place as detailed in 7.2.1a and continuous engagements as detailed 7.2.1c No indigenous groups requested any form of engagement with the auditors	Compliant		
Footnote	[134] To demonstrate an active process, a farm must show ongoing efforts to communicate with indigenous communities, an understanding of key community concerns and responsiveness to key community concerns through adaptive farm management and other actions.				
Criterion 7.3 Access to resources					
		Compliance Criteria			
7.3.1	**Indicator:** Changes undertaken restricting access to vital community resources [135] without community approval **Requirement:** None	Application document reviews resource access, Kitasoo involved in site application and agree with site location (tenure in their name). There is no restriction of access and report notes that the FN has no issues with the use of the location. No stakeholders, representatives from the local community requested any form of engagement with the auditors	Compliant		

	Applicability: All				
Footnote	[135] Vital community resources can include freshwater, land or other natural resources that communities rely on for their livelihood. If a farm site were to block, for example, a community's sole access point to a needed freshwater resource, this would be unacceptable under the Dialogue standard.				

7.3.2	**Indicator:** Evidence of assessments of company's impact on access to resources **Requirement:** Yes **Applicability:** All	Application document reviews resource access, Kitasoo involved in site application and agree with site location (tenure in their name). It is noted in the report that FN have no issues with license application. B,. No stakeholders, representatives from the local community requested any form of engagement with the auditors		Compliant		
INDICATORS AND STANDARDS FOR SMOLT PRODUCTION A farm seeking certification must have documentation from all of its smolt suppliers to demonstrate compliance with the following standards. The requirements are, in general, a subset of the standards in Principles 1 through 7, focusing on the impacts that are most relevant for smolt facilities. In addition, specific standards are applied to open systems (net pens), and to closed and semi-closed systems (recirculation and flow-through). [136]						
Footnote	[136] The SAD SC proposes this approach to addressing environmental and social performance during the smolt phase of production. In the medium term, the SC anticipates a system to audit smolt production facilities on site. In the meantime, farms will need to work with their smolt suppliers to generate the necessary documentation to demonstrate compliance with the standards. The documentation will be reviewed as part of the audit at the grow-out facility.					
SECTION 8: STANDARDS FOR SUPPLIERS OF SMOLT						
Standards related to Principle 1						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB 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. -	A. Smolt suppliers are all MH Canada Ocean Falls Ocean Falls Authorisation number 17135 controlling document is the Environmental Management act (Land based finfish waste control regulation BC Reg 68/94 o.c.276/94) Which determines total Phosphorous and 'non-filtrable residue' to be the indicators, monthly monitoring with annual reporting confirmed. B. Fisheries & Oceans Canada Facility Reference1689 - Ocean Falls - Licence no. AQFW 112568 2015 Expiry June 18th 2024 BC Provincial Aquaculture Licence 5406670 expiry 30th June 2027. C. Smolt producing Farm is part of Marine Harvest Canada	Compliant		
8.2	**Indicator**: Compliance with labour laws and regulations **Requirement:** Yes **Applicability:** All Smolt Producers	a. Obtain declarations from smolt suppliers affirming compliance with labour laws and regulations. b. Keep records of supplier inspections for compliance with national labour laws and codes (only if such inspections are legally required in the country of operation; see 1.1.3a)	A and B. Smolt producing Farm is part of Marine Harvest Canada	Compliant		

Standards related to Principle 2						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB 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.	A. Assessment carried out by Mainstream Biological Consulting for MH Canada November 2014 Ocean Falls hatcheries., Shift to recirculation units from flow-through confirmed by BC Ministry of Environment to be a reduction of environmental impact. Plan to realign with this method of production stated to be ongoing. B. Confirmed to be have been completed January 2015.	Compliant		
		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 Clients for Indicator 8.4 - Calculating Total Phosphorus Released per Ton of Fish Produced** Farms must confirm that each of their smolt suppliers complies with the requirement of indicator 8.4. This specifies the maximum amount of phosphorus that a smolt production facility can release into the environment per metric ton (MT) of fish produced over a 12-month period. The requirement is set at 4 kg/mt. The calculation of total phosphorus released is made using a "mass balance" approach. Detailed instructions and formulas are given in Appendix VIII-1. If applicable, farms may take account of any physical removals of phosphorus in the form of sludge provided there is evidence to show: - the smolt supplier has records showing the total quantity of sludge removed from site over the relevant time period; - the supplier determined phosphorus concentration (% P) in removed sludge by sampling and analysing representative batches; and - the sludge was properly disposed off site and in accordance with the farm's biosolid management plan.				
		a. Obtain records from smolt suppliers showing amount and type of feeds used for smolt production during the past 12 months.	A. Confirmed on MHC aquafarmer database B. Feed supplied by Skretting Canada (XT range) in the main with a small percentage from Skretting France (SP range) C. Total Phosphorous in feed calculated for Ocean Falls as 5.42 metric tonnes (1.4% of feed fed as an average across the content for feed sizes used) D. Total Biomass produced calculated for Ocean Falls as 455 metric tonnes E. Total Phosphorous in fish Biomass for Ocean Falls calculated as 1.96 metric tonnes F. Total Phosphorous removed as sludge is zero. G. The calculated value for phosphorous released for the Ocean Falls site is 7.6 kgs/m tonne however as this site discharges directly into the ocean there is no freshwater environmental impact. This is covered by a Marine Harvest VR for discharge to sea.	Compliant		
		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 to Principle 3						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB 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 **Requirement:** Yes [137] **Applicability:** All Smolt Producers except as noted in [137]	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. 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.	A. Atlantic Salmon are a non-native species to West Coast Canada B. Government website (DFO) states Atlantic Salmon were introduced @1985 from West Coast Scotland origin. C. N/A Fish are standard production fish D. Confirmed at audit. C. All suppliers internal.	Compliant		
Footnote	[137] Exceptions shall be made for production systems that use 100 percent sterile fish or systems that demonstrate separation from the wild by effective physical barriers that are in place and well-maintained to ensure no escapes of reared specimens or biological material that might survive and subsequently reproduce.					
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.	A. Smolt supply farm is flow through with multi-screen barriers, minimal risk of escape. No Escapes reported or suspected. B. Smolt supply farm is flow through with multi-screen barriers, minimal risk of escape. No Escapes reported or suspected. C. Smolt supply farm is flow through with multi-screen barriers, minimal risk of escape. No Escapes reported or suspected. DFO website holds records from 2011, previous to this reports are available internally supporting the statement. D. Smolt supply farm is flow through with multi-screen barriers, minimal risk of escape. No Escapes reported or suspected.	Compliant		
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 exceptional episode is allowed in a 10-year period for the purposes of this standard. The 10-year period starts at the beginning of the production cycle for which the farm is applying for certification. The farmer must demonstrate that there was no reasonable way to predict the events that caused the episode. Extreme weather (e.g., 100-year storms) or accidents caused by farms located near high-traffic waterways are not intended to be covered under this exception.					

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%.	A. Document FW 269 covers counting (Smolt Inventory control) and specifies the < or = 2% anticipated counter accuracy, this is supported by supplier documentation. Aquascan counters were mostly used on the well boats with hatcheries using Vaki counters. B. Counter accuracy from records works out at -0.48% for 2015, on the only occasions when the values were outside the 2% anticipated accuracy was recorded as being due to poor weather conditions.	Compliant		
Footnote	[140] Accuracy shall be determined by the spec sheet for counting machines and through common estimates of error for any hand counts.					

Standards related to Principle 4						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB 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.	A. Materials storage, handling and waste disposal plan in Document FW 963 covers required elements including e.g. procedure for disposal of expired feed, also handling hazardous materials S/FW 902 22nd June 2016	Compliant		
8.9	**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 components of the records and assessment) **Requirement:** Yes, measured in kilojoule/MT fish/production cycle **Applicability:** All Smolt Producers	Note: see instructions for Indicator 4.6.1.				
		a. Obtain records from the smolt supplier for energy consumption by source (fuel, electricity) at the supplier's facility throughout each year.	A. Energy consumption for Smolt suppliers held internally B. Calculations confirmed for Ocean Falls 10,052,738 mj C. Calculations confirmed for Ocean Falls 409 MT D. Calculations confirmed for Ocean Falls 24,594 mj/MT E. Energy consumption for Smolt suppliers held internally, values shown.	Compliant		
		b. Confirm that the smolt supplier calculates total energy consumption in kilojoules (kj) during the last year.				
		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	Note: see instructions for Indicator 4.6.2.				
		a. Obtain records of greenhouse gas emissions from the smolt supplier's facility.	A. GHG figures for Smolt suppliers held internally, values 1,219,951. B. GHG figures for Smolt suppliers held internally, values 1,219,951 C. Confirmed on examination of figures provided. D. GWP figures calculated using the UK Government factors for Company reporting 2013. E. Carried out as part of the company ASC processes.	Compliant		
		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 (CO_2); methane (CH_4); nitrous oxide (N2O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF_6).					
Footnote	[142] GHG emissions must be recorded using recognized methods, standards and records as outlined in Appendix V.					

Standards related to Principle 5						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB 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.	A. FHMP is a MH Canada document and is available for each Freshwater site B . Company vet is Diane Morrison who signs of company FHMP which links into the company fish health reporting system.,	Compliant		
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.	A. This is contained in the Fish Health Management plan. B. Vaccines available are overseen by the company vet. C. All transferred fish are vaccinated with Apex-IHN, Renogen and Forte Micro D. IHN, Furunculosis, Vibrio and BKD are considered to be the major risks and these are covered by the vaccinations delivered above.	Compliant		
Footnote	[143] The farm's designated veterinarian is responsible for undertaking and providing written documentation of the analysis of the diseases that pose a risk in the region and the vaccines that are effective. The veterinarian shall determine which vaccinations to use and demonstrate to the auditor that this decision is consistent with the analysis.					
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	**Instruction to Clients for Indicator 8.13-- Testing of Smolt for Select Diseases** The farm is responsible for developing and maintaining a list of diseases of regional concern for which each smolt group should be tested. The list of diseases shall include diseases that originate in freshwater and are proven or suspected to occur in seawater (and for which seawater fish-to-fish transmission is a concern). The designated veterinarian to the smolt supplier is required to evaluate, based on scientific criteria and publicly available information, which diseases should be tested for. This analysis shall include an evaluation of whether clinical disease or a pathogen carrier state in fresh water is deemed to have a negative impact on the grow-out phase, thereby disqualifying a smolt group from being transferred. The analysis must be available to the CAB upon request. Note: A "smolt group" is defined as a population that shares disease risk, including environment, husbandry, and host factors that might contribute to sharing disease agents for each group.				
		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).	A. Government identified list of six Viral, two bacterial and two protozoan pathogens. B. Above pathogens are tested to the 'schedule 2' requirements prior to moving smolts. Ocean falls to klemtu is within the same zone, therefore ITC permit is required (schedule II is still done on the fish group). These results are available.	Compliant		
Footnote	[144] A smolt group is any population that shares disease risk, including environment, husbandry and host factors that might contribute to sharing disease agents for each group. Only diseases that are proven, or suspected, as occurring in seawater (and for which seawater fish-to-fish transmission is a concern) but 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 criteria and publicly available information, which diseases should be tested for. This analysis shall include an evaluation of whether clinical disease or a pathogen carrier state in fresh water is deemed to have a negative impact on the grow-out phase, thereby disqualifying a smolt group from being transferred. A written analysis must be available to the certifier on demand.					

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.	All such treatments are recorded in the Aquafarmer database with required categories listed.	Compliant		
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.	A. All potential treatments are overseen by the company vet Diane Morrison who is aware of the requirements. B. Controlled internally. C. Control of therapeutants is all internal, logged within Aquafarmer.	Compliant		
Footnote	[145] "Banned" means proactively prohibited by a government entity because of concerns around the substance.					
Footnote	[146] For purposes of this standard, those countries are Norway, the UK, Canada, Chile, the United States, Japan and France.					
8.16	**Indicator**: Number of treatments of antibiotics over the most recent production cycle **Requirement:** ≤ 3 **Applicability:** All Smolt Producers	a. Obtain from the smolt supplier records of all treatments of antibiotics (see 8.14a). b. Calculate the total number of treatments of antibiotics from their most recent production cycle.	Smolt suppliers are MH Canada Ocean Falls, internal and confirms no antibiotic treatments	Compliant		
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.	Smolt suppliers are MH Canada Ocean Falls, internal and confirm no antibiotic treatments			
Footnote	[147] The 3rd edition of the WHO list of critically and highly important antimicrobials was released in 2009 and is available at: http://www.who.int/foodborne_disease/resistance/CIA_3.pdf.					
Footnote	[148] If the antibiotic treatment is applied to only a portion of the pens on a farm site, fish from pens that did not receive treatment are still eligible for certification.					
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.	A. Smolt suppliers are MH Canada Ocean Falls, internal. B. Covered by MH Canada's own internal policies. C. Covered by MH Canada's own internal policies.	Compliant		

		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 standard, this includes an aggressive response to detection of an exotic OIE-notifiable disease on the farm, which includes depopulating the infected site and implementation of quarantine zones in accordance with guidelines from OIE for the specific pathogen. Exotic signifies not previously found in the area or had been fully eradicated (area declared free of the pathogen).					
Footnote	[150] OIE 2011. Aquatic Animal Health Code. http://www.oie.int/index.php?id=171.					
Standards related to Principle 6						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB Actions):**			
8.19	**Indicator**: Evidence of company-level policies and procedures in line with the labour 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 labour 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 labour standards under 6.1 to 6.11.	All smolts are supplied internally.	Compliant		
Standards related to Principle 7						
		Compliance Criteria (Required Client Actions):	**Auditor Evaluation (Required CAB Actions):**			
8.20	**Indicator**: Evidence of regular consultation and engagement with community representatives and organizations **Requirement:** Yes **Applicability:** All Smolt Producers	**Instruction to Clients for Indicator 8.20 - Consultation and Engagement with Community Representatives** Farms must comply with Indicator 7.1.1 which requires that farms engage in regular consultation and engagement with community representatives and organizations. Under Indicator 8.20, farms must show how each of their smolt suppliers complies with an equivalent requirement. Farms are obligated to maintain evidence that is sufficient to show their suppliers remain in full compliance. Evidence shall be documentary (e.g. meeting agenda, minutes, report) and will substantiate the following: - the smolt supplier engaged in "regular" consultations with the local community at least twice every year (bi-annually); - the supplier's consultations were effective (e.g. using participatory Social Impact Assessment (pSIA) or similar methods); and - the supplier's consultations included participation by elected representatives from the local community who were asked to contribute to the agenda.				
		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.	All smolts are supplied internally.	Compliant		
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.	All smolts are supplied internally.	Compliant		

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.	All smolts are supplied internally.	Compliant		
		b. Where relevant, obtain documentary evidence that smolt suppliers undertake proactive consultations with indigenous communities.				

ADDITIONAL REQUIREMENTS FOR OPEN (NET-PEN) PRODUCTION OF SMOLT In addition to the requirements above, if the smolt is produced in an open system, evidence shall be provided that the following are met:						
Instruction to Clients for Indicators 8.24 through 8.31 - Requirements for Smolt Produced in Open Systems Client shall provide documentary evidence to the CAB about the production system(s) from which they source smolt. If smolt used by the farm are produced, for part or all of the growth phase from alevin to smolt, in open (net-pen) systems, indicators 8.24 - 8.31 are applicable.						
8.24	**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.	N/A all smolts are produced in flow through units.	N/A		
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.	N/A all smolts are produced in flow through units.	N/A		
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.	N/A all smolts are produced in flow through units.	N/A		
Footnote	[151] E.g., Government body or academic institution.					
Footnote	[152] If the study is older than two years, and there has been a significant increase in nutrient input to the water body since the completion of the study, a more recent assessment is required.					

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 Indicator 8.27 and 8.28 - Monitoring TP and DO in Receiving Water for Open Smolt Systems** Farms must confirm that any smolt supplier using an open (net-pen) system is also engaged in monitoring of water quality of receiving waters. Requirements for the supplier's water quality monitoring program are presented in detail in Appendix VIII-6 and only re-stated briefly here. Monitoring shall sample total phosphorus (TP) and dissolved oxygen (DO). TP is measured in water samples taken from a representative composite sample through the water column to a depth of the bottom of the cages. Samples are submitted to an accredited laboratory for analysis of TP to a method detection limit of < 0.002 mg/L. DO measurements will be taken at 50 centimetres from the bottom sediment. The required sampling regime is as follows: - all stations are identified with GPS coordinates on a map of the farm and/or available satellite imagery; - stations are at the limit of the farm management zone on each side of the farm, roughly 50 meters from the edge of enclosures; - the spatial arrangement of stations is shown in the table in Appendix VIII-6; - sampling is done at least quarterly (1X per 3 months) during periods without ice, including peak biomass; and - samples are also collected at two reference stations located ~ 1-2 km up current and down current from the farm. Note: Some flexibility on the exact location and method of sampling is allowed to avoid smolt suppliers needing to duplicate similar sampling for their local regulatory regime.				
		a. Obtain documentary evidence to show that smolt suppliers conducted water quality monitoring in compliance with the requirements of Appendix VIII-6.	N/A all smolts are produced in flow through units.	N/A		
		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 Mesotrophic Trophic Status classification as described in Appendix VIII-7.					
8.28	**Indicator**: Minimum percent oxygen saturation of water 50 centimetres above bottom sediment (at all oxygen monitoring locations described in Appendix VIII-6) **Requirement:** ≥ 50% **Applicability:** All Smolt Producers Using Open Systems	Note: see instructions for Indicator 8.27.				
		a. Obtain evidence that smolt supplier conducted water quality monitoring in compliance with the requirements (see 8.27a).	N/A all smolts are produced in flow through units.	N/A		
		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).	N/A all smolts are produced in flow through units.	N/A		
		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.	N/A all smolts are produced in flow through units.	N/A		
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.	N/A all smolts are produced in flow through units.	N/A		
ADDITIONAL REQUIREMENTS FOR SEMI-CLOSED AND CLOSED PRODUCTION OF SMOLTS Additionally, if the smolt is produced in a closed or semi-closed system (flow through or recirculation) that discharges into freshwater, evidence shall be provided that the following are met [157]:						
Instructions to Client for Indicators 8.32-8.35 - Requirement for smolts produced in open systems Client shall provide documentary evidence to the CAB about the production system(s) from which they source smolt. -If smolt used by the farm are not produced, for part or all of the growth phase from alevin to smolt, in open (net-pen) systems, indicators 8.32 - 8.35 are applicable. -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 such an exemption, farms must provide documentary evidence to the CAB. Auditors shall fully document their rationale for awarding exemptions in the audit report.						
Footnote	[154] Production systems that don't discharge into fresh water are exempt from these standards.					
8.32	**Indicator**: Water quality monitoring matrix completed and submitted to ASC (see Appendix VIII-2) **Requirement:** Yes [155]	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. 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.	As included in the ASC submission.	Compliant		
Footnote	[155] See Appendix VI for transparency requirements for 8.32.					
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).	As included in the ASC submission.	Compliant		
Footnote	[156] A single oxygen reading below 60 percent would require daily continuous monitoring with an electronic probe and recorder for at least a week demonstrating a minimum 60 percent saturation at all times.					
Footnote	[157] See Appendix VI for transparency requirements for 8.33.					

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.	N/A discharge in marine water in Ocean Falls	N/A		
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	a. Maintain a copy of smolt supplier's biosolids (sludge) management plan and confirm that the plan addresses all requirements in Appendix VIII-2. 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.	A. Biosolids management plan provided Schematic plans for each farm provided. C. Biosolids accumulated into settling ponds are not discharged into natural water bodies. D. Sludge disposal in terms of quantity and method are recorded. MH Canada use Renewable Resources LTD as the final point of disposal.	Compliant		

11 Findings

11.1 DO NOT DELETE ANY COLUMN
11.2 Columns B/C/D/E (in black) are automatically populated from the species checklist/audit manual
11.3 Each NC is raised against a standard indicator or a CAR requirement
11.4 Use the "sort" function for presenting the list to your liking (e.g. grading, status, closure deadline, etc.)
11.5 Add new rows as needed
11.6 Adjust the column wide 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 implemented	Deadline for NC close-out	Evaluation by CAB (including evidence)	Date request for delay received	Justification for delay	Next deadline	Request evaluation by CAB	Date request approved
	2.1.1	Minor	Benthic Samples not provided	The site has not reached peak biomass, therefore the appropriate benthic samples for chemical and biological analysis cannot be collected	07/11/2017	Closed	n/a	Site had not reached peak biomass at time of audit.	Sampling has now been conducted. Sampling conducted by Mainstream Biological November 12-13, 2017. Continued sampling at peak will allow for results to be available at future audits.	07/02/2018	Confirmation of sampling received					
	2.1.2	Minor	Sampling has not taken place	Benthic Samples not provided	07/11/2017	Closed	n/a	Site had not yet reached peak biomass.	Sampling has been conducted. Sampling conducted November 12-13, 2017 by Mainstream Biological Consulting.	07/02/2018	Confirmation of sampling received					
	2.1.3	Minor	Sampling has not taken place	Benthic Samples not provided	07/11/2017	Closed	n/a	Site had not yet reached peak biomass.	Sampling has now been completed. Sampling conducted November 12-13, 2017 by Mainstream Biological Consulting.	07/02/2018	Confirmation of sampling received November 2017					
	2.3.1	Minor	A minor is raised due to the sampling not taking place at site as currently required by the standard and the submitted VR awaits approval	Sampling set up to be taken prior to farm.	07/11/2017	Closed	VR246	Previous approval to sample fines off-site.	Fines being sampled off-site. VR submitted to ASC. MHC wil maintain feed samples should variance not be accepted by ASC in order to provide fines results should it be necessary.	07/02/2018	Variance request confirmed as approved by ASC					
	6.5.1	Major	Shortfalls in health and safety identified during site inspection demonstrated that workers training in health and safety practices, procedures and policies was not sufficient.	16 points as identified in the checklist.	08/11/2017	Closed	n/a	Lack of proper oversight in remote region and limited access to maintenance staff.	Full H&S assessment to be undertaken in the Klemtu area. H&S team to visit each site in Klemtu with operations and site management. Full analysis of all barges to be conducted. Full H&S training, including updated risk assessment training to be completed for all Klemtu staff, and then rolled out to other production areas.	07/02/2018	Confirmation actions described have been carried out for the site received 31/1/18					
	6.5.3	Major	Site specific risk assessment have not been carried out.	No up to date training has been carried out on how to identify risk. Monthly safety checks are not being completed correctly as demonstrated by the observations noted on the site tour. The findings that are noted in the monthly safety meetings are not being closed or monitored.	08/11/2017	Closed	n/a	Risk assessment training not conducted frequently enough, especially in remote areas.	Full H&S assessment and risk assessment training to be undertaken fro Klemtu area. H&S to visit Klemtu and roll out additional assessment training for all staff, this training to then be extended to all production areas.	07/02/2018	Confirmation actions described have been carried out for the site received 31/1/18.					

	6.10.1	Major	The Operation team who work at the site work a shift pattern that is not compliant with the ILO.	The shift consists of 15 days on and 13 days off.	08/11/2017	Closed	n/a	Long travel required to access remote locations requires longer shift patterns.	MHC is pursuing legal advice to ensure shift patterns meet ILO requirements as well as provincial and national regulations.	07/02/2018	Confirmation actions described have been carried out for the site received 31/1/18. Site workers confirmed as happy with the shift pattern during the audit process and Legal opinion sought confirms pattern as compliant with regulations.					

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 is deemed to be very low risk of mixing or substitution of certified with non-certified product either prior to or at harvesting as the whole farm site is within the unit of certification.	Computerised tracking of stock information from hatchery of origin to the point of Chain of Custody commencing, which is currently the MH Canada harvest, gutting and packing operation at Port Hardy or the MH Canada Kitasoo Seafoods processing plant in Klemtu which has also now gained ASC CoC Certification and is also used for sites in the area; the traceability aspects for both plants are similar.
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.	The auditor considers the opportunity to substitute certified with non-certified product throughout the harvest and processing activities to be minimal. The harvest / packing facility at Port Hardy handles both ASC certified and non-ASC salmon from MH Canada farms and the company identifies and segregates each harvest batch through their processes to afford product recall and traceability to comply with legal and customer requirements.	Each batch is run through the packing operations to completion and lines cleared before new batches are started. All finished product can be traced back to the farm and cage of origin by a unique identifier on the box label. MH Canada have a system for cross-checking customer and certification eligibility for any harvest batch, and this is linked to application of box labels.
10.3	The possibility of subcontractors being used to handle, transport, store, or process certified products.	The specialised harvesting vessel used is fully contracted to MH Canada and confirmed by interview that only fish from Alexander Inlet will be transported at any one time. All other activities within the processing system are also fully controlled by MH Canada up to the point of sale.	Wellboat loading plans and uplift / count records provide accurate information for volumes and numbers of fish transported to the CoC. Delivered fish numbers are reconciled back to the farm of origin once processed. Wellboat transfers are always from a single farm.
10.4	Any other opportunities where certified product could potentially be mixed, substituted, or mislabelled with non-certified product before the point where product	None identified.	Computerised tracking of stock information from hatchery of origin to the point of sale at the Port Hardy processing plant.

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 held at the Alexander Inlet site will be covered by ASC Certification should this be confirmed by the audit determination. These fish are uplifted and harvested aboard a vessel fully contracted to MH Canada and then transported to the Port Hardy processing facility. All activities are fully controlled by MH Canada using primarily computerised systems logging fish origin by cage through the process, with each batch accompanied by a EFBR (Electronic Fish Batch Record) that includes stock origin, dietary and as appropriate, treatment history for the stock concerned.

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 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.
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.	See above.
10.6.3 The point from which chain of custody is required to begin.	The chain of custody is required to begin from the Port Hardy processing facility. For the MH Canada Kitasoo Seafoods processing plant in Klemtu CoC starts at the delivery of salmon to this plant.
10.6.4 Is a sepearate chain of custody certificate required for the producer?	Yes

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.	See the Audit template section. Harvesting of salmon was not witnessed as the harvest cycle has not commenced when the audit took place, the site is due to commence harvesting in 2018. Marine Harvest Canada is intending to have certified product on the market when they harvest, and it is proposed that the harvesting process will be witnessed during the surveillance audit phase. It should be noted that Marine Harvest Canada elected not to redact any information (no information excluded due to confidentiality) from the audit report therefore there is no separate 'redacted' version or Confidential Annexes.
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 audit team are of the opinion that the unit of certification has the capability to consistently meet the objectives of the ASC Salmon Standard.
123 In cases where Biodiversity Environmental Impact Assessment (BEIA) or Participatory Social Impact Assessment (PSIA) is available, it	N/A no specific report available.

13 Decision

13.1 Has a certificate been issued? (yes/no)	Yes
13.2 The Eligiblity Date (if applicable)	N/A
13.3 Is a separate coc certificte required for the producer? (yes/no)	Yes, at their Port Hardy harvest and packing operation and the Kitasoo Seafoods processing plant in Klemtu.
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.	Issued 9 March 2018: Expires 9 March 2021
13.4.2 The scope of the certificate	Marine Harvest Canada - Alexander Inlet Farm. Single Site certification covering all production within the UOC.
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.	Complaints, objections, comments or submissions of further information may be passed to Acoura Marine Ltd either during the public comment period or afterwards throughout the validity of the certificate. This can be done via the Acoura website (www.Acoura.com), by email (asc@acoura.com) or by mail (Aquaculture Team, Acoura, 6 Redheughts Rigg, Edinburgh, UK). For complaints, please refer to Acoura's website (www.Acoura.com) for the complaints procedure within Acoura's Certification Regulations document. For other objections, comments or submissions, these will be passed on to the Lead Auditor and Aquaculture Director for consideration and decision on any necessary action. Complaints may also be submitted directly to the ASC at certification@asc-aqua.org, PO Box 19107, 3501 DC Utrecht, The Netherlands or NHK Utrecht Centraal, Arthur van Schendelstraat 650, 3511 MJ Utrecht, The Netherlands. ASI's dispute mechanism can be found on their website - www.accreditation-services.com - which includes information on the handling of incidents, complaints and appeals.

14 Surveillence

14.1 Next planned Surveillance

14.1.1 Planned date	Dec-18
14.1.2 Planned site	Alexander Inlet

14.2 Next audit type

14.2.1 Surveillence 1	yes
14.2.2 Surveillance 2	no
14.2.3 Re-certification	no
14.2.4 Other (specify ty	n/a