

Form 3 - Public Disclosure Form
Public Disclosure Form

Name of CAB	SAI Global
Date of Submission	4th November 2016
CAB Contact Person	
Name of Contact Person	Jean Ragg
Position in the CAB's-organisation	Program Administrator
Mailing address	3rd Floor, Block 3, Quayside Business Park, Mill street, Dundalk, Co. Louth
Email address	jean.ragg@saiglobal.com
Phone number	042 93 20912
Other	N/A
ASC Name of Client	
Name of Contact Person	Katherine Dolmage
Position in the client's organisation	Certification Manager
Mailing address	Marine Harvest Canada
Email address	katherine.dolmage@marineharvest.com
Phone number	250-850-3276 ex. 7228
Other	N/A
Unit of Certification	
Single Site	X
Multi-site	
Group certification	

Sites to be audited

Site Name	GPS Coordinates	Other Location Information	Planned Site Audit(s)	Date of planned audit
Phillips Arm	Lat 50 29.30N Long 125 21.11W	N/A	12-Dec-16	December 12-14, 2016

Species and Standards

Standard	Species (scientific name) produced	Included in scope (Yes/No)	ASC endorsed standard to be used	Version Number
Salmon	<i>Salmo Salar</i>	Yes	ASC Salmon Standard	Version 1.0 June 2012

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
Frank Voelker/Kwiakah First Nation	Farm situated in Kwiakah First Nation territory	In-person	8th Dec 2016	Via email
Campbell River Council	Government	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Sayward Town Council	Government	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
K'ómoks First Nation	First Nations	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
We Wai Kai & Wei Wai Kum First Nations	First Nations	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Homalco First Nation	First Nations	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Ducks Unlimited	Conservation	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Pacific Salmon Foundation	Conservation	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
David Suzuki Foundation	Conservation	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Living Oceans Society	Conservation	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Coast Forestry Products Association	Forestry	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Canadian Pacific Sustainable Fisheries Society	Fisheries	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email

Vancouver Island North Tourism	Tourism	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
James Walkus Fishing Company	Contractors/Suppliers	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Flurers Smokery	Contractors/Suppliers	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Skretting	Contractors/Suppliers	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Noboco	Contractors/Suppliers	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
BC Centre for Aquatic Health Sciences	Research	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
BC Salmon Farmers Association	Industry	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Canadian Aquaculture Industry Association	Industry	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
United Steelworkers	Industry	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email

Proposed Timeline

Contract Signed:

Aug-16

Start of audit:

12th December, 2016

Onsite Audit(s):

12th-14th December, 2016

Determination/Decision:

Mar-17

Audit Team

Title	Name	ASC Registration Reference
Lead Auditor (Social)	Leon Reed	N/A
Technical Auditor	Conrad Powell	N/A

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 reproducible 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 reproducible results.

1 Title Page

1.1 Name of Applicant	Marine Harvest Canada Inc.
1.2 Report Title [e.g. Public Certification Report]	Final Assessment Report
1.3 CAB name	SAI Global
1.4 Name of Lead Auditor	Leon Reed
1.5 Names and positions of report authors and reviewers	Conrad Powell - Technical Auditor; Leon Reed - Lead Auditor (Social)
1.6 Client's Contact person: Name and Title	Ms. Katherine Dolmage - Certification Manager
1.7 Date	14-Dec-16

2 Table of Contents

1 Title Page
2 Table of Contents
3 Glossary
4 Summary
5 CAB Contact Information
6 Background on the Applicant
7 Scope
8 Audit Plan
9 Audit Manual
10 Audit Report Traceability
11 Findings
12 Evaluation Results
13 Decision
14 Surveillance

3 Glossary

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

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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	Production of Atlantic salmon in netpens PA-0004 to PA-0010 at Phillip's Arm farm operated by Marine Harvest Canada
4.2	A brief description of the operations of the unit of certification	The unit of certification consists of seven 36m x 36m x 10m pens holding fish originating from Marine Harvest Canada broodstock and hatchery program. Three other pens (PA-0001, PA-0002 and PA-0003) have fish that spent time in Georgie Lake, and are not included in the unit of certification.
4.3	Type of unit of certification (<i>select only one type of unit of certification in the list</i>)	Single farm
4.4	Type of audit (<i>select all the types of audit that apply in the list</i>)	Initial
4.5	A summary of the major findings	The site had not reached peak biomass by time of audit and therefore the required data was not available for review.
4.6	The Audit determination	Certification granted 29th May 2017

5 CAB Contact Information

5.1	CAB Name	SAI Global
5.2	CAB Mailing Address	3rd Floor, Block 3, Quayside Business Park, Mill Street, Dundalk, Co.Louth, Ireland
5.3	Email Address	jean.ragg@saiglobal.com
5.4	Other Contact Information	042 932 0912

6 Background on the Applicant

<p>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.</p>	<p>See Form 3 - Public Disclosure</p>
<p>6.2 A description of the unit of certification (<i>for initial audit</i>) / changes, if any (<i>for surveillance and recertification audits</i>)</p>	<p>Seven pens (PA-0004, PA-0005, PA-0006, PA-0007, PA-0008, PA-0009 and PA-0010) of Atlantic salmon at Phillips Arm farm (Lat. 50 29.270; Long. 125 21.394) operating under Aquaculture Finifish Licence No. 11587 2016 issued by Department of Fisheries and Oceans</p>
<p>6.3 Other certifications currently held by the unit of certification</p>	<p>Global Aquaculture Alliance Best Aquaculture Practices</p>
<p>6.4 Other certification(s) obtained before this audit</p>	
<p>6.5 Estimated annual production volumes of the unit of certification of the <u>current</u> year</p>	<p>Licensed maximum biomass is 2,550 mt</p>
<p>6.6 <u>Actual</u> annual production volumes of the unit of certification of the <u>previous</u> year (<i>mandatory for surveillance and recertification</i>)</p>	<p>0</p>
<p>6.7 Production system(s) employed within the unit of certification (<i>select one or more in the list</i>)</p>	<p>Pen</p>
<p>6.8 Number of employees working at the unit of certification</p>	<p>Five</p>

7 Scope

<p>7.1 The Standard(s) against which the audit was conducted, including version number</p>	<p>ASC Salmon Standard version 1.0</p>
<p>7.2 The species produced at the applicant farm</p>	<p>Atlantic salmon (<i>Salmo salar</i>)</p>
<p>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.</p>	<p>The scope of the audit covers seven of ten pens at the Phillips Arm site. The pens covered in the scope are designated: PA-0004, PA-0005, PA-0006, PA-0007, PA-0008, PA-0009 and PA-0010. Pens designated PA-0001, PA-0002 and PA-0003 hold fish that spent time in freshwater body and thus are excluded from the scope of the audit.</p>
<p>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</p>	<p>Port Hardy Processing Plant, 7200 Coho Road, Port Hardy, BC V0N 2P0</p>
<p>7.5 Description of the receiving water body(ies).</p>	<p>The MHC salmon farm is the only such operation in the body of water known as Phillips Arm. The waters have proven historically to be suitable for rearing of Atlantic salmon.</p>

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.

Technical Auditor: Conrad Powell Social Auditor (Lead) : Leon Reed Conducting audit: 12th - 14th December 2016; Report writing: 12/19/16 - 01/23/17

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			
Surveillance audit 1 - mm/ yyyy			
Surveillance audit 2 - mm/ yyyy			
Recertification audit - mm/ yyyy			
Unannounced audit - mm/ yyyy			
NC close-out audit - mm/ yyyy			
Scope extension audit mm/ yyyy			

8.4 Audit plan as implemented including:

	Dates	Locations
8.4.1 Desk Reviews		
8.4.2 Onsite audits	December 12-14, 2016	Phillips Arm farm; Marine Harvest Canada offices, Campbell River
8.4.3 Stakeholder interviews and Community meetings	08-Dec-16	Meeting with Kwiahah FN held at Comfort Inn, Campbell River
8.4.4 Draft report sent to client	14th Feb 2017	
8.4.5 Draft report sent to ASC	23rd Feb 2017	
8.5.5 Final report sent to Client and ASC	31st May 2017	

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, MHC); Renee Hamel (Certification Administrator, MHC); Ian Roberts (Public Affairs Director, MHC); Tina Garlinski-Zonki (HR Manager, MHC); Blaine Trembley (Health & Safety Manager, MHC); Leith Paganoni (First Nation and Community Relations Manager, MHC); Paul Pattison (Site Manager, MHC); Ryan Wogan (Site Assistant Manager, MHC); Frank Voelker (Band Management and Economic Development, Kwiahah First Nation)

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
Kwiahah First Nation	First Nation	6th December 2016	Yes	See Letter at the end of this report		Yes
Living Oceans Society	Environmental Group	24th March 2017	Yes	See Letter at the end of this report		Yes

Nonconformity Report Form

CAB	NC Reference	NC01	
CAB	NC Detected by	Conrad Powell	
CAB	Date Detected	14/12/2016	
CAB	Audit Reference	ASC040	
	Has a variation or interpretation (Form 1) that relates to this NC been approved by ASC. If so include the ASC variation or interpretation log reference.		No
	Justification for applying the approved variation or interpretation.		NA
CAB	Status of NC	Open	
CAB		Closed	
CAB	Grade of NC	Major	
CAB		Minor	
CAB		Observation	
CAB	Deadline for closing the nonconformity		14th March 2017
CAB	Explanation for deadline for closing the nonconformity		3 months to close a Major non-conformity is ASAC requirement
CAB	Requirement Reference	Source Document	ASC Salmon Standard v1.0
CAB		Clause Number	2.1.1, 2.1.2 and 2.1.3
CAB		Text of Requirement	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).
CAB	Description of the nonconformity		Peak biomass sampling has not yet been carried out and the results cannot be reviewed.
CAB	Statement of evidence detected		There are no benthic results available for review from peak biomass sampling.
Client	Statement of any errors of fact in the nonconformity (include the name of the author and date submitted)		N/A (Katherine Dolmage 12/19/2016)
CAB	Response (include the name of the author and date submitted)		None
Client	Statement of the root cause of the nonconformity (include the name of the author and date submitted)		Site has not reached peak biomass, historical results not available as macrobenthic analysis not a requirement in BC (Katherine Dolmage 12/19/2016)
CAB	Response (include the name of the author and date submitted)		Reviewed and accepted 12/21/16. Conrad Powell

Client	Statement of the corrective actions proposed and taken (include the name of the author and date submitted)	Samples taken Nov 1-2 2016 for pre-peak analysis, and are now with Columbia Science. Results to be available February 2017 (Katherine Dolmage 12/19/2016)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Reviewed and accepted 12/21/16. Conrad Powell. Benthic report provided 02/21/17 verifies compliance with ASC criteria for sulfides, Infaunal Trophic Index and highly abundant macrofaunal species.
Client	Statement of the preventive actions proposed and taken (include the name of the author and date submitted)	Samples to be taken at peak and will provide historical data for future audits (Katherine Dolmage 12/19/2016)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Reviewed and accepted 12/21/16. Conrad Powell. Benthic report provided 02/21/17 verifies compliance with ASC criteria for sulfides, Infaunal Trophic Index and highly abundant macrofaunal species.
Client	Request to extend the implementation period for corrective action(s) until	N/A (Katherine Dolmage 12/19/2016)
	Justification for extension request	N/A
CAB	Extension request approval	N/A
	Reason(s) for approval/ disapproval	
	Date on which the nonconformity was closed	21st February 2017

Nonconformity Report Form

CAB	NC Reference	NC02	
CAB	NC Detected by	Conrad Powell	
CAB	Date Detected	14/12/2016	
CAB	Audit Reference	ASC041	
	Has a variation or interpretation (Form 1) that relates to this NC been approved by ASC. If so include the ASC variation or interpretation log reference.		No
	Justification for applying the approved variation or interpretation.		N/A
CAB	Status of NC	Open	
CAB		Closed	X
CAB	Grade of NC	Major	
CAB		Minor	X
CAB		Observation	
CAB	Deadline for closing the nonconformity		December 2017
CAB	Explanation for deadline for closing the nonconformity		First surveillance audit
CAB	Requirement Reference		ASC Salmon standard
		Source Document	
CAB		Clause Number	2.2.3c
CAB		Text of Requirement	Identify the most recent classification of water quality for the area in which the farm operates.
CAB	Description of the nonconformity		The water data classification has not been determined. MHC has submitted data to third party analyst and is awaiting report.
CAB	Statement of evidence detected		Water quality report not available at time of audit.
Client	Statement of any errors of fact in the nonconformity (include the name of the author and date submitted)		N/A (Katherine Dolmage 12/19/2016)
CAB	Response (include the name of the author and date submitted)		None
Client	Statement of the root cause of the nonconformity (include the name of the author and date submitted)		Third party analyst had not completed assessment of water quality data as of time of audit.
CAB	Response (include the name of the author and date submitted)		Reviewed and accepted 12/22/16. Conrad Powell.

Client	Statement of the corrective actions proposed and taken (include the name of the author and date submitted)	Water quality report to be provided when completed. Water quality report (Marine Harvest Nutrient Monitoring & Data Analysis April 2017) prepared by Global AquaFoods Development Corp. was provided 05/26/17.
CAB	Evaluation by CAB (include the name of the author and date submitted)	Reviewed and accepted 12/22/16. Conrad Powell.
Client	Statement of the preventive actions proposed and taken (include the name of the author and date submitted)	Continue collection of water quality data to be analysed by third party every second year.
CAB	Evaluation by CAB (include the name of the author and date submitted)	Reviewed and accepted 12/22/16. Conrad Powell. Water quality report (Marine Harvest Nutrient Monitoring & Data Analysis April 2017) prepared by Global AquaFoods Development Corp. was provided: temperature, DO, salinity and pH measurements indicate good growing conditions, and ammonia and nitrate concentrations are well within those required to protect marine life according to Nordin et al (2009). (Conrad Powell, 05/26/17)
Client	Request to extend the implementation period for corrective action(s) until	N/A (Katherine Dolmage 12/19/2016)
	Justification for extension request	N/A
CAB	Extension request approval	N/A
	Reason(s) for approval/ disapproval	
	Date on which the nonconformity was closed	05/26/17

Nonconformity Report Form

CAB	NC Reference	NC02	
CAB	NC Detected by	Conrad Powell	
CAB	Date Detected	14/12/2016	
CAB	Audit Reference	ASC040	
	Has a variation or interpretation (Form 1) that relates to this NC been approved by ASC. If so include the ASC variation or interpretation log reference.		No
	Justification for applying the approved variation or interpretation.		NA
CAB	Status of NC	Open	<input checked="" type="checkbox"/>
CAB		Closed	<input type="checkbox"/>
CAB	Grade of NC	Major	<input type="checkbox"/>
CAB		Minor	<input checked="" type="checkbox"/>
CAB		Observation	<input type="checkbox"/>
CAB	Deadline for closing the nonconformity		01-Dec-17
CAB	Explanation for deadline for closing the nonconformity		First surveillance audit
CAB	Requirement Reference	Source Document	ASC Salmon standard
CAB		Clause Number	4.5.2a
CAB		Text of Requirement	Provide a description of the most common production waste materials and how the farm ensures these waste materials are properly disposed of.
CAB	Description of the nonconformity		There are no records in place logging the disposal of waste such as feed bags and domestic waste.
CAB	Statement of evidence detected		The site lacks detailed records of waste disposal.
Client	Statement of any errors of fact in the nonconformity (include the name of the author and date submitted)		N/A (Katherine Dolmage 12/19/2016)
CAB	Response (include the name of the author and date submitted)		None
Client	Statement of the root cause of the nonconformity (include the name of the author and date submitted)		Waste pickup included with feed delivery contract, no prior need to enumerate waste (Katherine Dolmage 12/19/2016)
CAB	Response (include the name of the author and date submitted)		Reviewed and accepted 12/21/16. Conrad Powell

Client	Statement of the corrective actions proposed and taken (include the name of the author and date submitted)	Certification will work with production department to include enumeration of waste pickup on daily log sheets (Katherine Dolmage 12/19/2016)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Reviewed and accepted 12/21/16. Conrad Powell
Client	Statement of the preventive actions proposed and taken (include the name of the author and date submitted)	Enumeration of waste to be included on daily logs for all sea sites to ensure waste disposal is tracked (Katherine Dolmage 12/19/2016)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Reviewed and accepted 12/21/16. Conrad Powell
Client	Request to extend the implemetation period for corrective action(s) until	N/A (Katherine Dolmage 12/19/2016)
	Justification for extention request	N/A
CAB	Extention request approval	N/A
	Reason(s) for approval/ disapproval	
	Date on which the nonconformity was closed	Verify at next surveillance audit

Nonconformity Report Form

CAB	NC Reference	NC03	
CAB	NC Detected by	Conrad Powell	
CAB	Date Detected	14/12/2016	
CAB	Audit Reference	ASC040	
	Has a variation or interpretation (Form 1) that relates to this NC been approved by ASC. If so include the ASC variation or interpretation log reference.		No
	Justification for applying the approved variation or interpretation.		NA
CAB	Status of NC	Open	<input checked="" type="checkbox"/>
CAB		Closed	<input type="checkbox"/>
CAB	Grade of NC	Major	<input type="checkbox"/>
CAB		Minor	<input checked="" type="checkbox"/>
CAB		Observation	<input type="checkbox"/>
CAB	Deadline for closing the nonconformity		01-Dec-17
CAB	Explanation for deadline for closing the nonconformity		First surveillance audit
CAB	Requirement Reference	Source Document	ASC Salmon standard
CAB		Clause Number	4.6.1e
CAB		Text of Requirement	e. Submit results of energy use calculations (4.6.1d) to ASC as per Appendix VI for each production cycle.
CAB	Description of the nonconformity		Incorrect totals were submitted to ASC for the Kilojoules per metric ton produced.
CAB	Statement of evidence detected		Incorrect values detected during auditor review of calculations
Client	Statement of any errors of fact in the nonconformity (include the name of the author and date submitted)		N/A (Katherine Dolmage 12/19/2016)
CAB	Response (include the name of the author and date submitted)		None
Client	Statement of the root cause of the nonconformity (include the name of the author and date submitted)		Errors transferring information from spreadsheets to ASC submission (Katherine Dolmage 12/19/2016)
CAB	Response (include the name of the author and date submitted)		Reviewed and accepted 12/21/16. Conrad Powell

Client	Statement of the corrective actions proposed and taken (include the name of the author and date submitted)	Spreadsheets will be updated with proper information and resubmitted to ASC (Katherine Dolmage 12/19/2016)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Reviewed and accepted 12/21/16. Conrad Powell
Client	Statement of the preventive actions proposed and taken (include the name of the author and date submitted)	Verification of all data prior to submission to ASC (Katherine Dolmage 12/19/2016)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Reviewed and accepted 12/21/16. Conrad Powell
Client	Request to extend the implementation period for corrective action(s) until	N/A (Katherine Dolmage 12/19/2016)
	Justification for extension request	N/A
CAB	Extension request approval	N/A
	Reason(s) for approval/ disapproval	
	Date on which the nonconformity was closed	Verify at next surveillance audit

Nonconformity Report Form

CAB	NC Reference	NC04		
CAB	NC Detected by	Conrad Powell		
CAB	Date Detected	14/12/2016		
CAB	Audit Reference	ASC040		
	Has a variation or interpretation (Form 1) that relates to this NC been approved by ASC. If so include the ASC variation or interpretation log reference.	No		
	Justification for applying the approved variation or interpretation.	NA		
CAB	Status of NC	Open	<input checked="" type="checkbox"/>	
CAB		Closed	<input type="checkbox"/>	
CAB		Grade of NC	Major	<input type="checkbox"/>
CAB			Minor	<input checked="" type="checkbox"/>
CAB			Observation	<input type="checkbox"/>
CAB	Deadline for closing the nonconformity	Dec-17		
CAB	Explanation for deadline for closing the nonconformity	First surveillance audit		
CAB	Requirement Reference	Source Document	ASC Salmon Standard v1.0	
CAB		Clause Number	4.6.2e	
CAB		Text of Requirement	e. Submit results of GHG calculations (4.6.2d) to ASC as per Appendix VI at least once per year.	
CAB	Description of the nonconformity	Incorrect totals were submitted to ASC for the GHG emissions.		
CAB	Statement of evidence detected	Incorrect values detected during auditor review of calculations		
Client	Statement of any errors of fact in the nonconformity (include the name of the author and date submitted)	N/A (Katherine Dolmage 12/19/2016)		
CAB	Response (include the name of the author and date submitted)	None		
Client	Statement of the root cause of the nonconformity (include the name of the author and date submitted)	Errors transferring information from spreadsheets to ASC submission (Katherine Dolmage 12/19/2016)		
CAB	Response (include the name of the author and date submitted)	Reviewed and accepted 12/21/16. Conrad Powell		
Client	Statement of the corrective actions proposed and taken (include the name of the author and date submitted)	Spreadsheets will be updated with proper information and resubmitted to ASC (Katherine Dolmage 12/19/2016)		

CAB	Evaluation by CAB (include the name of the author and date submitted)	Reviewed and accepted 12/21/16. Conrad Powell
Client	Statement of the preventive actions proposed and taken (include the name of the author and date submitted)	Verification of all data prior to submission to ASC (Katherine Dolmage 12/19/2016)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Reviewed and accepted 12/21/16. Conrad Powell
Client	Request to extend the implemetation period for corrective action(s) until	N/A (Katherine Dolmage 12/19/2016)
	Justification for extention request	N/A
CAB	Extention request approval	N/A
	Reason(s) for approval/ disapproval	
	Date on which the nonconformity was closed	Verify at next surveillance audit

Nonconformity Report Form

CAB	NC Reference	NC05		
CAB	NC Detected by	Conrad Powell		
CAB	Date Detected	14/12/2016		
CAB	Audit Reference	ASC040		
	Has a variation or interpretation (Form 1) that relates to this NC been approved by ASC. If so include the ASC variation or interpretation log reference.		No	
	Justification for applying the approved variation or interpretation.		N/A	
CAB	Status of NC	Open	<input checked="" type="checkbox"/>	
CAB		Closed	<input type="checkbox"/>	
CAB		Grade of NC	Major	<input type="checkbox"/>
CAB			Minor	<input checked="" type="checkbox"/>
CAB			Observation	<input type="checkbox"/>
CAB	Deadline for closing the nonconformity		December 2017	
CAB	Explanation for deadline for closing the nonconformity		First surveillance audit	
CAB	Requirement Reference	Source Document	ASC Salmon standard	
CAB		Clause Number	8.4 g	
CAB		Text of Requirement	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.	
CAB	Description of the nonconformity	The level of phosphorus released to the environment for Dalrymple Creek in 2015 was -0.0017 kg/M produced using the ASC required sampling of Sludge.		
CAB	Statement of evidence detected	The calculation involves the measurement of Phosphorus in the Sludge. With the negative result its unclear that the measurement is accurate. This calculation showed that more Phosphorus was being removed than was being added by the farm site.		
Client	Statement of any errors of fact in the nonconformity (include the name of the author and date submitted)	N/A (Katherine Dolmage 12/19/2016)		
CAB	Response (include the name of the author and date submitted)	None		
Client	Statement of the root cause of the nonconformity (include the name of the author and date submitted)	Phosphorus concentration varies in sludge, and exact volume removed by septic trucks is not available, which results in errors in calculation of the amount of phosphorus removed in sludge (Katherine Dolmage 12/19/2016)		

CAB	Response (include the name of the author and date submitted)	Reviewed and accepted 12/21/16. Conrad Powell
Client	Statement of the corrective actions proposed and taken (include the name of the author and date submitted)	Variance request to be submitted to ASC to calculate phosphorus based on effluent levels, which are monitored more regularly and will result in a more accurate calculation (Katherine Dolmage 12/19/2016)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Reviewed and accepted 12/21/16. Conrad Powell
Client	Statement of the preventive actions proposed and taken (include the name of the author and date submitted)	Phosphorus in effluent measured monthly and total hatchery discharge to be calculated for future audits (Katherine Dolmage 12/19/2016)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Reviewed and accepted 12/21/16. Conrad Powell
Client	Request to extend the implementation period for corrective action(s) until	N/A (Katherine Dolmage 12/19/2016)
	Justification for extension request	N/A
CAB	Extension request approval	N/A
	Reason(s) for approval/ disapproval	
	Date on which the nonconformity was closed	Verify at next surveillance audit

Nonconformity Report Form

CAB	NC Reference	NC06		
CAB	NC Detected by	Conrad Powell		
CAB	Date Detected	14/12/2016		
CAB	Audit Reference	ASC040		
	Has a variation or interpretation (Form 1) that relates to this NC been approved by ASC. If so include the ASC variation or interpretation log reference.		No	
	Justification for applying the approved variation or interpretation.		NA	
CAB	Status of NC	Open	<input checked="" type="checkbox"/>	
CAB		Closed	<input type="checkbox"/>	
CAB		Grade of NC	Major	<input type="checkbox"/>
CAB			Minor	<input checked="" type="checkbox"/>
CAB			Observation	<input type="checkbox"/>
CAB	Deadline for closing the nonconformity		December 2017	
CAB	Explanation for deadline for closing the nonconformity		First surveillance audit	
CAB	Requirement Reference	Source Document	ASC Salmon standard	
CAB		Clause Number	8.33b	
CAB		Text of Requirement	b. Review the results (8.33a) for percentage dissolved oxygen saturation in the effluent to confirm that no measurements fell below 60% saturation.	
CAB	Description of the nonconformity	Dalrymple Creek Hatchery's water quality monitoring data for 2015 indicated dissolved oxygen levels less than 60% for the months of April to October.		
CAB	Statement of evidence detected	Records of % saturation dissolved oxygen revealed seven consecutive months of <60% beginning April 2016.		
Client	Statement of any errors of fact in the nonconformity (include the name of the author and date submitted)	N/A (Katherine Dolmage 12/19/2016)		
CAB	Response (include the name of the author and date submitted)	Reviewed and accepted 12/21/16. Conrad Powell		
Client	Statement of the root cause of the nonconformity (include the name of the author and date submitted)	Production changes have resulted in low DOs in effluent stream (Katherine Dolmage 12/19/2016)		
CAB	Response (include the name of the author and date submitted)	Reviewed and accepted 12/21/16. Conrad Powell		

Client	Statement of the corrective actions proposed and taken (include the name of the author and date submitted)	Raise discharge pipe and pass effluent through media to increase DO prior to exiting facility (Katherine Dolmage 12/19/2016)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Reviewed and accepted 12/21/16. Conrad Powell
Client	Statement of the preventive actions proposed and taken (include the name of the author and date submitted)	New effluent system under development to further increase DO levels in effluent, completion estimated late 2017 (Katherine Dolmage 12/19/2016)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Reviewed and accepted 12/21/16. Conrad Powell
Client	Request to extend the implementation period for corrective action(s) until	N/A (Katherine Dolmage 12/19/2016)
	Justification for extension request	N/A
CAB	Extension request approval	N/A
	Reason(s) for approval/ disapproval	
	Date on which the nonconformity was closed	Verify at next surveillance audit

AUDIT MANUAL - ASC Salmon Standard					
Created by the Salmon Aquaculture Dialogue					
Scope: species belonging to the genus <i>Salmo</i> and <i>Oncorhynchus</i>					
PRINCIPLE 1: COMPLY WITH ALL APPLICABLE NATIONAL LAWS AND LOCAL REGULATIONS					
Criterion 1.1 Compliance with all applicable local and national legal requirements and regulations					
	Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC or non-applicability	
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.	1. The PAR license in Philip Arm is AQFF 11587 2016/ Land file number is 2403170, expires in 18th December 2016; MHC is in process of obtaining new licence 2. Navigable waters protection act. License of occupation. Forestry land and ministry of lands and natural resources license number T728.2	Compliant	
		b. Maintain original (or legalised copies of) lease agreements, land titles, or concession permit on file as applicable.	Provincial Aquaculture License: 2403710 expires 30th June 2017		
		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).	DFO auditing and enforcement activities will confirm GPS co-ordinates, Lice monitoring fish health record, FHMP compliance, Benthic surveys and site debris.		
		d. Obtain permits and maps showing that the farm does not conflict with national preservation areas.	Marine Planning Partnership map showing the high protection areas. This site is not shown inside any protected areas although there are protected Rockfish and abalone populations in the Philips Arm area.		
		e. Others, please describe			
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.	Surveyor of taxes 2016 rural property tax demand dated 24/07/16 for Philips Arm registered as a fish farm facility.	Compliant	
		b. Maintain copies of tax laws for jurisdiction(s) where company operates.	The farm is assessed for Tax rates on land use below the water. The footprint of the accommodation and the cages.		
		c. Register with national or local authorities as an "aquaculture activity".	The demand for taxes shows that MHC is classed as a fish farmer of Atlantic salmon.		
		d. Others, please describe			
1.1.3	Indicator: Presence of documents demonstrating compliance with all relevant national and local labor laws and regulations Requirement: Yes Applicability: All	a. Maintain copies of national labor codes and laws applicable to farm (scope is restricted to the farm sites within the unit certification.)	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 \$10.85 per hour and the minimum work age is 15	Compliant	
		b. Keep records of farm inspections for compliance with national labor laws and codes (only if such inspections are legally required in the country of operation).	NA - Inspections are not required in BC		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence 1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below .	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
	Applicability: All	c. Others, please describe			
1.1.4	Indicator: Presence of documents demonstrating compliance with regulations and permits concerning water quality impacts Requirement: Yes Applicability: All	a. Obtain permits for water quality impacts where applicable.	There is no permit required to demonstrate requirements for water quality impacts for the marine sites in the licenses required.	Compliant	
		b. Compile list of and comply with all discharge laws or regulations.	The farm site does not fall under any discharge laws or regulations.		
		c. Maintain records of monitoring and compliance with discharge laws and regulations as required.	Section 8 of this audit confirms discharges for the hatcheries. There is no effluent for this farm site.		
		d. Others, please describe			
PRINCIPLE 2: CONSERVE NATURAL HABITAT, LOCAL BIODIVERSITY AND ECOSYSTEM FUNCTION					
<i>Criterion 2.1 Benthic biodiversity and benthic effects [1]</i>					
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 millivolts (mV) or Sulphide ≤ 1,500 microMoles / l Applicability: All farms except as noted in [1]	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.	The site was peak biomass sampled in 05/20/15 by Mainstream Biological consulting. The report, dated 06/03/15, contains a map of the site with sampling stations identified. The current crop is expected to have peak biomass in February 2017. The site was sampled by MHC at 70% peak in early November 2016 and faunal index scores will be available late January - early February 2017. The work is being done by Columbia Biosciences.	Major	Peak Biomass sampling has not yet taken place and therefore results could not be analysed or sent to ASC..
		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.	The bottom is soft.		
		c. Inform the CAB whether the farm chose option #1 or option #2 to demonstrate compliance with the requirements of the Standard.	Sulphides are measured.		
		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).	Sediment samples were last collected in May 2015. Peak biomass for current crop is due in February 2017. The sampling stations will be the same and the location is noted on the map in the report. The sampling is carried out at peak biomass as required by DFO as part of licencing requirements.		
		e. For option #1, measure and record redox potential (mV) in sediment samples using an appropriate, nationally or internationally recognized testing method.	Not applicable.		
		f. For option #2, measure and record sulphide concentration (uM) using an appropriate, nationally or internationally recognized testing method.	In the 2015 peak biomass survey, the mean sulphide concentrations at the two 125m stations were 188 uM and 358 uM. A DFO letter dated 06/19/15 indicates: "No further monitoring is required prior to fih entry at this facility." Sampling and testing methodology are specified in the PAR licence.		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
		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.	Not submitted as peak biomass has not been achieved yet. The samples will be submitted once the report and production cycle is complete.		
		h. Others, please describe			
2.1.2	Indicator: Faunal index score indicating good [4] to high ecological quality in sediment outside the AZE, following the sampling methodology outlined in Appendix I-1 Requirement: AZTI Marine Biotic Index (AMBI [5]) score ≤ 3.3, or Shannon-Wiener Index score > 3, or Benthic Quality Index (BQI) score ≥ 15, or Infaunal Trophic Index (ITI) score ≥ 25 Applicability: All farms except as noted in [1]	a. Prepare a map showing the AZE (30 m or site specific) and sediment collections stations (see 2.1.1).	The site was peak biomass sampled in 05/20/15 by Mainstream Biological consulting. The report , dated 06/03/15, contains a map of the site with sampling stations identified. The current crop is expected to have peak biomass in February 2017. The site was sampled by MHC at 70% peak in early November 2016 and faunal index scores will be available late January/early February 2017.	Major	Peak Biomass sampling has not yet taken place and therefore results could not be analysed or sent to ASC..
		b. Inform the CAB whether the farm chose option #1, #2, #3, or #4 to demonstrate compliance with the requirement.	Awaiting results from the sampling carried out in November. Due in late January/early February.		
		c. Collect sediment samples in accordance with Appendix I-1 (see 2.1.1).	Awaiting results from the sampling carried out in November. Due in late January/early February.		
		d. For option #1, measure, calculate and record AZTI Marine Biotic Index [5] score of sediment samples using the required method.	Awaiting results from the sampling carried out in November. Due in late January/early February.		
		e. For option #2, measure, calculate and record Shannon-Wiener Index score of sediment samples using the required method.	Awaiting results from the sampling carried out in November. Due in late January/early February.		
		f. For option #3, measure, calculate and record Benthic Quality Index (BQI) score of sediment samples using the required method.	Awaiting results from the sampling carried out in November. Due in late January/early February.		
		g. For option #4, measure, calculate and record Infaunal Trophic Index (ITI) score of sediment samples using the required method.	Awaiting results from the sampling carried out in November. Due in late January/early February.		
		h. Retain documentary evidence to show how scores were obtained. If samples were analyzed and index calculated by an independent laboratory, obtain copies of results.	Awaiting results from the sampling carried out in November. Due in late January/early February.		
		i. Submit faunal index scores to ASC (Appendix VI) at least once for each production cycle.	Awaiting results from the sampling carried out in November. Due in late January/early February.		
		j. Others, please describe			
	a. Document appropriate sediment sample collection as for 2.1.1a and 2.1.1c, or exemption as per 2.1.1b.	Awaiting results from the sampling carried out in November. Due in late January/early February.			
	b. For sediment samples taken within the AZE, determine abundance and taxonomic composition of macrofauna using an appropriate testing method.	Awaiting results from the sampling carried out in November. Due in late January/early February.			

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
2.1.3	<p>methodology outlined in Appendix 1</p> <p>Requirement: ≥ 2 highly abundant [6] taxa that are not pollution indicator species</p> <p>Applicability: All farms except as noted in [1]</p>	c. Identify all highly abundant taxa [6] and specify which ones (if any) are pollution indicator species.	Awaiting results from the sampling carried out in November. Due in late January/early February.	Major	Peak Biomass sampling has not yet taken place and therefore results could not be analysed or sent to ASC..
		d. Retain documentary evidence to show how taxa were identified and how counts were obtained. If samples were analyzed by an independent lab, obtain copies of results.	Awaiting results from the sampling carried out in November. Due in late January/early February.		
		e. Submit counts of macrofaunal taxa to ASC (Appendix VI) at least once for each production cycle.	Awaiting results from the sampling carried out in November. Due in January.		
		f. Others, please describe			
2.1.4	<p>Indicator: Definition of a site-specific AZE based on a robust and credible [7] modeling system</p> <p>Requirement: Yes, within three years of the publication [8] of the SAD standard (i.e. full compliance by June 13, 2015)</p> <p>Applicability: All farms except as noted in [1]</p>	a. Undertake an analysis to determine the site-specific AZE and depositional pattern before 3 years have passed since publication of the Standard on June 13, 2012.	Phillips Arm Autodepomod was carried out October 2016 following the 'Guide to the Pacific Marine Finfish application'. The company has used detailed bathymetry and chart data to computer model the site. Three measurements are used in the water column 15 metres from the surface, 5 meters from the bottom and the mid depth. Cage setup with FCR, Growth rate and Chart data are input. DFO have ground truthed the DEPOMOD on site in the area.	Compliant	
		b. Maintain records to show how the analysis (in 2.1.4a) is robust and credible based on modeling using a multi-parameter approach [7].	DEPOMOD has been used as per DFO requirements and in place since 2005/035 research document.		
		c. Maintain records to show that modeling results for the site-specific AZE have been verified with > 6 months of monitoring data.	Verified and accepted following DFO guides.		
		d. Others, please describe			
Criterion 2.2 Water quality in and near the site of operation [12]					
2.2.1	<p>Indicator: Weekly average percent saturation [13] of dissolved oxygen (DO) [14] on farm, calculated following methodology in Appendix I-4</p> <p>Requirement: ≥ 70% [15]</p> <p>Applicability: All farms except as noted in [15]</p>	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.	Six months of data is in place.	Compliant	
		b. Provide a written justification for any missed samples or deviations in sampling time.	No samples have been missed.		
		c. Calculate weekly average percent saturation based on data.	Weekly averages of <70% were encountered over period July -November 2016; the lowest weekly average was 53.25% for the week of September 7, 2017.		
		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).	Reference site was monitored once in each of July and August, and weekly commencing September 9, 2016. Monitoring showed the refernce station to have similar DO readings to the farm station: DO values ranged from 42% to 99%, and 11 of 16 samples had values <70%.		
		e. Arrange for auditor to witness DO monitoring and calibration while on site.	There are three AKVA oxygen sensors on site calibrated every six months under contract by AKVA. There is a backup Oxyguard hand held probe. The staff are capable of calibrating it as required.		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence 1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below .	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
		f. Submit results from monitoring of average weekly DO as per Appendix VI to ASC at least once per year.	Results have been submitted to ASC.		
		g. Others, please describe			
2.2.2	Indicator: Maximum percentage of weekly samples from 2.2.1 that fall under 2 mg/liter 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.	No samples showed <2 mg/liter. The lowest reading was 4.0 mg/liter on 08/24/16.	Compliant	
	b. Submit results from 2.2.2a as per Appendix VI to ASC at least once per year.	Results have been submitted to ASC.			
	c. Others, please describe				
2.2.3	Indicator: For jurisdictions that have national or regional coastal water quality targets [16], demonstration through third-party analysis that the farm is in an area recently [17] classified as having "good" or "very good" water quality [18] Requirement: Yes [19] Applicability: All farms except as noted in [19]	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	The CAB has been informed that the area has been classified and its applicable.	Compliant	
	b. Compile a summary of relevant national or regional water quality targets and classifications, identifying the third-party responsible for the analysis and classification.	In 2012, the Canadian Council of Ministers of the Environment (CCME) established the Canadian Water Quality Guidelines for the Protection of Aquatic Life. MHC has been taking water samples from every site in the Campbell River area from May 10th to October 7th and determining nitrogen, phosphorus, pH and silica. The data have been submitted to a third party analyst for verification against the levels established by the CCME. Sampling is not weekly, but is at a frequency of at least quarterly in line with Variance 198 (11/13/16).			
	c. Identify the most recent classification of water quality for the area in which the farm operates.	The water data classification has not been determined. MHC has submitted data to third party analyst and is awaiting report.			
	d. Others, please describe				
2.2.4	Indicator: For jurisdictions without national or regional coastal water quality targets, evidence of weekly monitoring of nitrogen and phosphorous [20] levels on farm and at a reference site, following methodology in Appendix I-5 Requirement: Yes Applicability: All farms except as noted in [19]	a. Develop, implement, and document a weekly monitoring plan for N, NH4, NO3, total P, and ortho-P in compliance with Appendix I-5, testing a minimum of once weekly in both locations. For first audits, farm records must cover ≥ 6 months.	See 2.2.3	N/A	
	b. Calibrate all equipment according to the manufacturer's recommendations.	See 2.2.3			
	c. Submit data on N and P to ASC as per Appendix VI at least once per year.	See 2.2.3			
	d. Others, please describe				

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
2.2.5	Indicator: Demonstration of calculation of biochemical oxygen demand (BOD [21]) of the farm on a production cycle basis Requirement: Yes Applicability: All	a. Collect data throughout the course of the production cycle and calculate BOD according to formula in the instruction box.	BOD for the cycle ending in 2015 is 3,725,257.1.	Compliant	
		b. Submit calculated BOD as per Appendix VI to ASC for each production cycle.	BOD for previous cycle has been submitted. BOD for the current cycle will be submitted following harvest.		
		c. Others, please describe			
Criterion 2.3 Nutrient release from production					
2.3.1	Indicator: Percentage of fines [22] in the feed at point of entry to the farm [23] (calculated following methodology in Appendix I-2) Requirement: < 1% by weight of the feed Applicability: All farms except as noted in [23]	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.	Tests are carried out as per the ASC requirements for each site.	Compliant	
		b. If using a sieving machine, calibrate equipment according to manufacturer's recommendations.	No machines are used. All tests are by hand sieving.		
		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.	Two lots of Skretting feed (636823 and 637453) were checked 08/02/16 and 10/10/16, and results 0.04% and 0.02%, respectively.		
		d. Others, please describe			
Criterion 2.4 Interaction with critical or sensitive habitats and species					
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.	MHC provided copy of the Screening Environmental Assessment Report produced by Transport Canada. The report, titled <i>Application for existing finfish facility at Phillips Arm, mouth of Phillips Arm, north of East Thurlow Island, B.C.</i> , was signed off 06/30/08 by Transport Canada.	Compliant	
		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.	The environmental assessment did not identify any significant adverse impacts and concluded that the farm by itself was "deemed to have negligible to low significant of residual adverse effects after consideration of mitigation" and the farm and other activities in the area (identified as other salmon farms, commercial and recreational vessel traffic and logging operations) were "not likely to result in significant adverse cumulative effects".		
		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.	Not applicable.		
		d. Others, please describe			

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC or non-applicability
2.4.2	Indicator: Allowance for the farm to be sited in a protected area [24] or High Conservation Value Areas [25] (HCVAs) Requirement: None [26] Applicability: All farms except as noted in [26]	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).	The farm is not located in an area that is deemed critical or sensitive habitat for wild salmon. Habitat concerns are considered in the aquaculture site application process. The applicant provided the North Vancouver Island Marine Plan 2015, a collaboration between the provincial government (represented by the Ministry of Forests, Lands and Natural Resources) and the Nanwakolas Council which is comprised of seven First Nations. The plan is one of four sub-regional plans developed under the Marine Planning Partnership for the North Pacific Coast (MaPP), a partnership of the provincial government and three organizations representing 18 First Nations, and which is supported by a multi-stakeholder Marine Planning Advisory Committee (MPAC). The plan does not identify any areas where current finfish aquaculture has significant negative socio-economic or environmental impacts. Finifish aquaculture is recognized as a "Conditionally Approved" activity in the areas where MHC has sites, the designation indicating that farms must operate under specific conditions, most of which are covered under its aquaculture license. An MHC representative sits on the MPAC.	Compliant	
		b. If the farm is <u>not</u> 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.	The site is not in a protected area or HCVA.		
		c. If the farm <u>is</u> 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.	The site is not in a protected area or HCVA.		
		d. If the farm is sited in a protected area or HCVA and the exceptions provided for Indicator 2.4.2 <u>do not apply</u> , then the farm does not comply with the requirement and is ineligible for ASC certification.	The site is not in a protected area or HCVA.		
		e. Others, please describe			
Criterion 2.5 Interaction with wildlife, including predators [27]					
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, within three years of the date of publication [28] of	a. Prepare a written statement affirming that the farm's management is committed to eliminate all usage of acoustic deterrent devices (ADDs) or acoustic harassment devices (AHDs) by June 13, 2015.	ADDs and AHDs are prohibited under 10.2 of the Finfish Aquaculture License (Pacific Aquaculture Regulations) where it is stated: "Marine mammal acoustical deterrent devices must not be used."	N/A	
		b. Compile documentary evidence to show that no ADDs or AHDs were used by the farm after June 13, 2015 (applicable only after the specified date).	ADDs and AHDs are prohibited under 10.2 of the Finfish Aquaculture License (Pacific Aquaculture Regulations) where it is stated: "Marine mammal acoustical deterrent devices must not be used."		
		-	The auditor did not observe any ADDs or AHDs at the farm site.		

	Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
	the SAD standard (i.e. full compliance by June 13, 2015)	d. Others, please describe		
2.5.2	<p>Indicator: Prior to the achievement of 2.5.1, if ADDs or AHDs are used, maximum percentage of days [29] in the production cycle that the devices are operational</p> <p>Requirement: ≤ 40%</p> <p>Applicability: All, until June 13, 2015</p>	<p>a. Maintain a log for the use of any ADDs or AHDs on farm that includes recording the number of days (24-hour cycles) during which the devices were used.</p> <p>b. Calculate the percentage of days in the production cycle that the devices were operational in the most recent complete production cycle.</p> <p>-</p> <p>d. Submit data on number of days that ADDs/AHDs were used to the ASC as per Appendix VI. Data must be sent to ASC on an ongoing basis (i.e. at least once per year and for each production cycle).</p> <p>e. Others, please describe</p>	<p>ADDs and AHDs are prohibited under 10.2 of the Finfish Aquaculture License (Pacific Aquaculture Regulations) where it is stated: "Marine mammal acoustical deterrent devices must not be used."</p> <p>ADDs and AHDs are prohibited under 10.2 of the Finfish Aquaculture License (Pacific Aquaculture Regulations) where it is stated: "Marine mammal acoustical deterrent devices must not be used."</p> <p>ADDs and AHDs are prohibited under 10.2 of the Finfish Aquaculture License (Pacific Aquaculture Regulations) where it is stated: "Marine mammal acoustical deterrent devices must not be used."</p> <p>ADDs and AHDs are prohibited under 10.2 of the Finfish Aquaculture License (Pacific Aquaculture Regulations) where it is stated: "Marine mammal acoustical deterrent devices must not be used."</p>	N/A
2.5.3	<p>Indicator: Number of mortalities [30] of endangered or red-listed [31] marine mammals or birds on the farm</p> <p>Requirement: 0 (zero)</p> <p>Applicability: All</p>	<p>a. Prepare a list of all predator control devices and their locations.</p> <p>b. Maintain a record of all predator incidents.</p> <p>c. Maintain a record of all mortalities of marine mammals and birds on the farm identifying the species, date, and apparent cause of death.</p> <p>d. Maintain an up-to-date list of endangered or red-listed marine mammals and birds in the area (see 2.4.1)</p> <p>-</p> <p>f. Others, please describe</p>	<p>Predator control is achieved with the use of predator nets, bird nets and electric fencing.</p> <p>There have been no incidents recorded in the past two years.</p> <p>Records in place. Under Section 10 of the Finfish Aquaculture Licence, marine mammal mortalities must be reported to DFO.</p> <p>MHC has a Wildlife Interaction Plan (SOP# SW965, 05/26/16) that contains a list of species that are red-listed (endangered) by the BC government. The list has been taken from the BC Species and Ecosystems Explorer website as owned by the Ministry of Environment.</p> <p>There have been no mortalities of endangered or red-listed mammals or birds on the farm.</p>	Compliant
	<p>Indicator: Evidence that the following steps were taken prior to lethal action [32] against a</p>	<p>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.</p>	<p>The applicant favors passive, non-lethal methods of predator control. Prior to 2012, the applicant exercised lethal methods of predator control only as a last resort. In Q4 2011, the applicant adopted a policy of no use of lethal deterrence and states in its Predator Avoidance Plan (SOP# SW137, 08/30/16): "Lethal measures are a when all available avenues have been exhausted." No lethal encounters have occurred at the site since the adoption of the no-kill policy.</p>	

	Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
2.5.4	<p>predator:</p> <p>1. All other avenues were pursued prior to using lethal action</p> <p>2. Approval was given from a senior manager above the farm manager</p> <p>3. Explicit permission was granted to take lethal action against the specific animal from the relevant regulatory authority</p> <p>Requirement: Yes [33]</p> <p>Applicability: All except cases where human safety is endangered as noted in [33]</p>	<p>b. For each lethal action identified in 2.5.4a, keep record of the following:</p> <p>1) a rationale showing how the farm pursued all other reasonable avenues prior to using lethal action;</p> <p>2) approval from a senior manager above the farm manager of the lethal action;</p> <p>3) where applicable, explicit permission was granted by the relevant regulatory authority to take lethal action against the animal.</p>	<p>The applicant favors passive, non-lethal methods of predator control. Prior to 2012, the applicant exercised lethal methods of predator control only as a last resort. In Q4 2011, the applicant adopted a policy of no use of lethal deterrence and states in its Predator Avoidance Plan (SOP# SW137, 08/30/16): "Lethal measures are a when all available avenues have been exhausted." No lethal encounters have occurred at the site since the adoption of the no-kill policy.</p>	Compliant
		<p>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 [33].</p>	<p>The applicant favors passive, non-lethal methods of predator control. Prior to 2012, the applicant exercised lethal methods of predator control only as a last resort. In Q4 2011, the applicant adopted a policy of no use of lethal deterrence and states in its Predator Avoidance Plan (SOP# SW137, 08/30/16): "Lethal measures are a when all available avenues have been exhausted." No lethal encounters have occurred at the site since the adoption of the no-kill policy.</p>	
		<p>d. Others, please describe</p>		
2.5.5	<p>Indicator: Evidence that information about any lethal incidents [35] on the farm has been made easily publicly available [34]</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. For all lethal actions (see 2.5.4), keep records showing that the farm made the information available within 30 days of occurrence.</p>	<p>Per MHC policy, no Lethal actions have been taken.</p>	N/A
		<p>b. Ensure that information about all lethal actions listed in 2.5.5a are made easily publicly available (e.g. on a website).</p>	<p>Per MHC policy, no Lethal actions have been taken.</p>	
		<p>c. Others, please describe</p>		
2.5.6	<p>Indicator: Maximum number of lethal incidents [35] on the farm over the prior two years</p> <p>Requirement: < 9 lethal incidents [36], with no more than two of the incidents being marine mammals</p> <p>Applicability: All</p>	<p>a. Maintain log of lethal incidents (see 2.5.4a) for a minimum of two years. For first audit, > 6 months of data are required.</p>	<p>Logs are in place and can be reviewed on the company's ASC dashboard. Marine mammal mortalities are publicly accessible in the DFO website.</p>	Compliant
		<p>b. Calculate the total number of lethal incidents and the number of incidents involving marine mammals during the previous two year period.</p>	<p>The farm has not had any lethal incidents in the previous two year period.</p>	
		<p>c. Send ASC the farm's data for all lethal incidents [35] 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).</p>	<p>Information has been submitted.</p>	
		<p>d. Others, please describe</p>		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
2.5.7	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.	The farm has not had any lethal incidents.	Compliant	
		b. Provide documentary evidence that the farm implements those steps identified in 2.5.7a to reduce the risk of future lethal incidents.	The farm has not had any lethal incidents.		
		c. Others, please describe			
PRINCIPLE 3: PROTECT THE HEALTH AND GENETIC INTEGRITY OF WILD POPULATIONS					
<i>Criterion 3.1 Introduced or amplified parasites and pathogens [38,39]</i>					
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 [38]	a. Keep record of farm's participation in an ABM scheme.	There are no other companies operating farms in the area. The Phillips Arm farm is the only farm in that body of water and it operates independently of other sites. The nearest farm is MHC's Sonora Island which is 8 km distant.	N/A	
		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.	There is no ABM.		
		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.	There is no ABM.		
		d. Submit dates of fallowing period(s) as per Appendix VI to ASC at least once per year.	The previous cycle was completed 06/08/15 and the current stock was entered 05/22/16.		
		e. Others, please describe			

	Compliance Criteria (Use as guidance for audit only)	Audit evidence 1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below .	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
3.1.2 Indicator: A demonstrated commitment [40] 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 [38]	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.	MHC has been involved in numerous collaborations, including. Together with DFO, the NGO group CAAR (Coastal Alliance for Aquaculture Reform) and scientists from Univeristy the Otago and University of Prince Edward Island, MHC participated in the Broughton Archipelago Management Plan (BAMP) which was a multi-year (2009-2012) study of sea lice in wild and farmed fish in the Broughton Archipelago. MHC is also active with Genome BC in its Strategic Salmon Health Initiative (SSHI) investigating microbes in wild salmon and possible links to farmed salmon. The lead groups in the SSHI are DFO and the Pacific Salmon Association. MHC is also an active member of the British Coloumbia Salmon Farmers Association (BCSFA) which has its own Marine Environmental Research Program (MERP) which accepts applications for reserach on issues associated with salmon aquaculture, wild fisheries and the environment. Details are available on the BCSFA website. One MERP project, the use of native perch as cleaner fish, is a collaboration of MHC and DFO, the BC Centre for Aquatic Health Sciences, Sea Pact and the Vancouver Aquarium Marine Science Centre.	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.	MHC lice data is provided to UPEI researchers as part of project to develop a database. Also, the auditor viewed the report <i>Spatial patterns of sea lice infection among wild and captive salmon in western Canada</i> which appeared in the July 2015 issue of the journal Landscape Ecology and was co-authored by Sharon DeDominicis, MHC Director of Environmental Performance and Certification.		
	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.	There are internal records available if there are any denials of collaboration. Most requests for collaboration are made to the BCSFA and denials are the decision of its Science Advisory Committee.		
	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.	Research in the BCSFA Marine Environmental Research Program will be published. There is \$1.5 million in the fund.		
	e. Others, please describe			
	a. Keep records to show that a maximum sea lice load has been set for: - the entire ABM; and - the individual farm.	The maximum sea lice load for Phillips Arm is 1,885, 206.		

	Compliance Criteria (Use as guidance for audit only)	Audit evidence 1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below .	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
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 [38]	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. e. Others, please describe	The sea lice load is reviewed annually. There is no ABM but the lice load is set by DFO based on the maximum number of fish permitted at the site times three (i.e., the DFO threshold for motile lice per fish). There is no ABM, but the company has submitted the load for Phillips Arm.	Compliant	
3.1.4 Indicator: Frequent [41] on-farm testing for sea lice, with test results made easily publicly available [42] within seven days of testing Requirement: Yes Applicability: All except farms that release no water as noted in [38]	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 [41] 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. g. Others, please describe	MHC has prepared a schedule for sea lice monitoring that has all its ASC sites conducting sea lice counts weekly beginning February 1 and ending June 30, which covers the period of out-migration for wild Pacific salmon and the mot h prior to the period. Lice monitoiring is bi-weekly at other times of the year. The site was stocked beginning 05/22/16. Weekly sampling took place from June20th until end of June. Lice counts began once three cages were stocked. Bimonthly counts have continued from July. SOP# SW822, Sea Lice Monitoring (04/19/16) describes the procedures by which samples are collected, fish sedated and lice are counted. The first cage stocked and two other cages are sampled, 20 fish per cage. The fish are placed in an anaesthetic bath and lice (motile Lepeophtherius salmonis, females, Chalimus and Caligus) are counted. When the samplin f for each pen is completed, the anaesthetic tank is examined for detached lice and these are counted and used in the calulation of total lice number and average count per fish. The results appear on the ASC dash board on the company's website. Records are maintained showing when the site was tested and when the results were posted. Results have been sent to ASC.	Compliant	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
3.1.5	Indicator: In areas with wild salmonids [43], evidence of data [44] and the farm's understanding of that data, around salmonid migration routes, migration timing and stock productivity in major waterways within 50 kilometers of the farm Requirement: Yes Applicability: All farms operating in areas with wild salmonids except farms that release no water as noted in [38]	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.	There are six salmonid species in the area. 5 are pacific salmon: chinook (<i>Oncorhynchus tshawytscha</i>); sockeye (<i>O. nerka</i>); coho (<i>O. kitsutch</i>); pink (<i>O. gurbuscha</i>); and, chum (<i>O. keta</i>). The sixth species is the rainbow trout or steelhead (<i>O. mykiss</i>).	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.	The sensitive period for this area is listed as March 1st to June 30th. DFO compiles an annual outlook for salmon stocks and posts same to its website. The <i>Preliminary 2016 Salmon Outlook</i> report dated November 2015 was viewed. Information is provided for individual river systems and for each of the five species of Pacific salmon.		
		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.	The sensitive period for this area is listed as March 1st to June 30th.		
		-	Farm personnel are aware of the sensitive periods.		
		e. Others, please describe			
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 Artic 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 [38]	a. Inform the CAB if the farm operates in an area of wild salmonids. If not, then Indicator 3.1.6 does not apply.	The three Atlantic salmon farming companies in BC and DFO use the services of the BC Centre for Aquatic Health Sciences (CAHS) to enumerate and identify sea lice on wild salmon.	Compliant	
		b. Keep records to show the farm participates in monitoring of sea lice on wild salmonids.	The three Atlantic salmon farming companies in BC and DFO use the services of the BC Centre for Aquatic Health Sciences (CAHS) to enumerate and identify sea lice on wild salmon. The CAHS Report on Sea Lice Assessment on Wild Salmon Collected in Strait of Georgia, Discovery Islands and Johnstone Strait, BC was viewed. The report contains the results of sampling of 541 pre-exposure and 496 post-exposure juvenile salmon from 20 different sampling sites in the Campbell River area.		
		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.	The methodology is in compliance with the Appendix III-1. Fish are captured with a seine net.		
		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.	The report is placed on the company's ASC dashboard.		
		e. Submit to ASC the results from monitoring of sea lice levels on wild salmonids as per Appendix VI.	The company has submitted a link to the report.		
		f. Others, please describe			
		a. Inform the CAB if the farm operates in an area of wild salmonids. If not, then Indicator 3.1.7 does not apply.	There are wild salmonids in the area.		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
3.1.7	Indicator: In areas of wild salmonids, maximum on-farm lice levels during sensitive periods for wild fish [45]. 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 [38]	b. Establish the sensitive periods [45] of wild salmonids in the area where the farm operates. Sensitive periods for migrating salmonids is during juvenile outmigration and approximately one month before.	Sensitive periods are from March 1st to June 30th.	Compliant	
		c. Maintain detailed records of monitoring on-farm lice levels (see 3.1.4) during sensitive periods as per Appendix II-2.	Records are recorded on the ASC dashboard. The ASC has granted Variance 88 (12/17/15) allowing the farm to use the DFO trigger level of three motile <i>Lepeophtherius salmonis</i> per fish rather than the ASC level of 0.1 female lice per fish. The highest average count was 06/20/16, and this was 0.65 motile <i>L. salmonis</i> per fish.		
		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).	Wild fish lice counts and farm lice counts are being looked at for trends and to date there has been no action needed. Lice levels on wild fish seem to be generally low.		
		e. Others, please describe			
Criterion 3.2 Introduction of non-native species					
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 SAD standard Requirement: Yes [47] Applicability: All farms except as noted in [47]	a. Inform the CAB if the farm produces a non-native species. If not, then Indicator 3.2.1 does not apply.	The farm produces Atlantic salmon (<i>Salmo salar</i>) which is a non-native species.	Compliant	
		b. Provide documentary evidence that the non-native species was widely commercially produced in the area before publication of the SAD Standard (i.e. before June 13, 2012).	The DFO website shows that Atlantic salmon eggs were first imported into British Columbia in 1985.		
		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.	Not applicable		
		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 [47]; and 3) barriers ensure there are no escapes of biological material [47] that might survive and subsequently reproduce (e.g. UV or other effective treatment of any effluent water exiting the system to the natural environment).	Not applicable		
		-	Evidence provided for 3.2.1 a and 3.2.1 b.		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
		f. Others, please describe			
3.2.2	Indicator: If a non-native species is being produced, evidence of scientific research [48] 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 [49] Requirement: Yes, within five years of publication of the SAD standard [50,51] Applicability: All	a. Inform the ASC of the species in production (Appendix VI).	The farm produces Atlantic salmon (<i>Salmo salar</i>) which is a non-native species.	Compliant	
		b. Inform the CAB if the farm produces a non-native species. If not, then Indicator 3.2.2 does not apply.	The farm produces Atlantic salmon (<i>Salmo salar</i>) which is a non-native species.		
		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).	Not applicable		
		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.	Not applicable		
		e. Submit evidence from 3.2.2c to ASC for review.	Not applicable		
		f. Others, please describe			
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.	The farm does not use fish for sea lice control.	Compliant	
		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.	The farm does not use fish for sea lice control.		
		c. Collect documentary evidence or first hand accounts as evidence that the species used is not non-native to the region.	The farm does not use fish for sea lice control.		
		d. Others, please describe			
Criterion 3.3 Introduction of transgenic species					
3.3.1	Indicator: Use of transgenic [53] salmon by the farm Requirement: None Applicability: All	a. Prepare a declaration stating that the farm does not use transgenic salmon.	MHC declaration dated 15th April 2016 states: "Marine Harvest does not produce, farm or sell transgenic salmon."	Compliant	
		b. Maintain records for the origin of all cultured stocks including the supplier name, address and contact person(s) for stock purchases.	All fish farmed by MHC are from MHC broodstock and hatcheries and can be traced to origin.		
		c. Ensure purchase documents confirm that the culture stock is not transgenic.	The farm does not use produce transgenic fish.		
		d. Others, please describe			
Criterion 3.4 Escapes [55]					

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
3.4.1	Indicator: Maximum number of escapees [56] in the most recent production cycle Requirement: 300 [57] Applicability: All farms except as noted in [57]	a. Maintain monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapees.	There have been no escapes from this site. Morts are collected daily and numbers entered to the Aquafarmer database. Final numbers on the site with assesment of unexplained loss is carried out following count at harvest.	Compliant	
		b. Aggregate cumulative escapes in the most recent production cycle.	There were no suspected 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 [57]).	Net checks are carried out by divers at least once every 60 days. There are cameras in every cage with excellent resolution and they can pan, tilt and go up and down in the cages for inspection purposes.		
		d. If an escape episode occurs (i.e. an incident where > 300 fish escaped), the farm may request a rare exception to the Standard [57]. 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.	The site has not had an escape of >300 fish.		
		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).	Escape monitoring data has been submitted.		
		f. Others, please describe			
3.4.2	Indicator: Accuracy [58] 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.	Vaki and AquaScan counters are used, and specifications indicate accuracies of 99% and 98-100%, respectively.	Compliant	
		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).	The well boat count, i.e., the count of fish being loaded onto the boat, is used.		
		c. During audits, arrange for the auditor to witness calibration of counting machines (if used by the farm).	Calibration takes place at the beginning of every pen transfer, and is performed by wellboat crew.		
		-	Vaki and AquaScan counters are used, and specifications indicate accuracies of 99% and 98-100%, respectively.		
		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).	Counting technology accuracy has been submitted.		

	Compliance Criteria (Use as guidance for audit only)	Audit evidence 1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below .	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
	f. Others, please describe			
3.4.3 Indicator: Estimated unexplained loss [59] of farmed salmon is made publicly available Requirement: Yes Applicability: All	a. Maintain detailed records for mortalities, stocking count, harvest count, and escapes (as per 3.4.1). b. Calculate the estimated unexplained loss as described in the instructions (above) for the most recent full production cycle. For first audit, farm must demonstrate understanding of calculation and the requirement to disclose EUL after harvest of the current cycle. c. Make the results from 3.4.3b available publicly. Keep records of when and where results were made public (e.g. date posted to a company website) for all production cycles. d. Submit estimated unexplained loss to ASC as per Appendix VI for each production cycle. - f. Others, please describe	Records are maintained on the Aquafarmer system EUL will be submitted at the end of the cycle MHC posts EUL information on the ACS dashboard on its website. EUL for the previous cycle has been submitted. Counts are within counting error.	Compliant	
Indicator: Evidence of escape prevention planning and related employee training, including: net strength testing; appropriate net mesh size; net traceability; system robustness; predator management;	a. Prepare an Escape Prevention Plan and submit it to the CAB before the first audit. This plan may be part of a more comprehensive farm planning document as long as it addresses all required elements of Indicator 3.4.4. b. If the farm operates an open (net pen) system, ensure the plan (3.4.4a) covers the following areas: - net strength testing; - appropriate net mesh size; - net traceability; - system robustness; - predator management; - record keeping; - reporting risk events (e.g. holes, infrastructure issues, handling errors); - planning of staff training to cover all of the above areas; and - planning of staff training on escape prevention and counting technologies.	The Finfish Aquaculture Licence contains detailed requirements for fish containment in the following: (1) Section 8: Escape Prevention, Reporting and Response; (2) Appendix VIII: Escape Prevention and Response Plan Guidance; (3) Appendix IX: Escape Notification Form. To comply, the applicant has developed and implemented: (1) Fish Containment Plan (SOP# SW 962); (2) Site Specific Escape Risk Analysis; (3) Escape and Investigation Report; (4) Net testing and maintenance procedures. Containment practices in place include: monthly net inspections; daily system inspections; mooring practices, including monthly mooring inspections; net strength tests prior to deployment; diver inspections of nets if increased predator activity observed, following storms with winds >55 knots and/or seas >2m, and for any nets >6 years old; and, staff training and escape response drills. The site has a Containment Kit with twine, needles, rope, netting and weights. The containment plan also has response procedures for known or suspected escapes, and communication of same to DFO. Predator avoidance measures are in place.		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
3.4.4	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	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.	The farm operates an open system.	Compliant	
		d. Maintain records as specified in the plan.	Records of daily net and system surface inspections and wildlife/predator interactions are found in the Daily Site Log. Net history and traceability records, include Net Service Record and Net Maintenance Logs, are held in binder on-site, as are records of net inspections by divers. Training and drill records are available. Copies of Monthly Escape Reports were provided as evidence of compliance with DFO reporting requirements.		
		e. Train staff on escape prevention planning as per the farm's plan.	The company has a DATS system to aid in the management of training activities. There is annual training on the escape plan for all staff, and Escape Response drills are conducted annually, most recently 06/28/16.		
		-	Interviews indicated appropriate level of knowledge re daily inspections, escape response procedures and use of Containment Kit.		
		g. Others, please describe			
PRINCIPLE 4: USE RESOURCES IN AN ENVIRONMENTALLY EFFICIENT AND RESPONSIBLE MANNER					
Criterion 4.1 Traceability of raw materials in feed					
4.1.1	Indicator: Evidence of traceability, demonstrated by the feed producer, of feed ingredients that make up more than 1% of the feed [62]. Requirement: Yes	a. Maintain detailed records of all feed suppliers and purchases including contact information and purchase and delivery records.	The feed supplier for all of the sites is Skretting Canada, based in Vancouver, BC. All delivery numbers are recorded into the Aquafarmer record system.	Compliant	
		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.	The feed supplier is aware of relevant ASC requirements.		
		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.	The feed mill is BAP-certified: certification No. BAP1451, expiring 22/10/17, BAP No. 10017.		
		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.	Method 2 is being used.		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
	Applicability: All	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 [62].	A Skretting Canada decalration dated 11/05/15 and signed by the Commercial Manager was available.		
		-	The company has ISO 9001:2008, BAP and Global GAP certificates.		
		g. Others, please describe			
Criterion 4.2 Use of wild fish for feed [63]					
4.2.1	Indicator: Fishmeal Forage Fish Dependency Ratio (FFDRm) for grow-out (calculated using formulas in Appendix IV- 1) Requirement: < 1.35 Applicability: All	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.	The feed company has provided information on the percentage of fishmeal in each formulation, the sources of fishmeal used and the percentage of fishmeal in each formulation derived from whole fish or trimmings. Farm records show the quantities of each formulation used.	Compliant	
		b. For FFDRm calculation, exclude fishmeal derived from rendering of seafood by-products (e.g. the "trimmings" from a human consumption fishery).	For the previous cycle, the FFDRm was 0.57		
		c. Calculate eFCR using formula in Appendix IV-1 (use this calculation also in 4.2.2 option #1).	eFCR for the previous cycle was 1.202		
		d. Calculate FFDRm using formulas in Appendix IV-1.	Calculations were done properly.		
		e. Submit FFDRm to ASC as per Appendix VI for each production cycle.	FFDRm was submitted.		
		f. Others, please describe			
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 [64] (calculated according to Appendix IV-2) Requirement: FFDRo < 2.95 or (EPA + DHA) < 30 g/kg feed	a. Maintain a detailed inventory of the feed used as specified in 4.2.1a.	Inventory of feed used is in the Aquafarmer system.	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).	By-products are excluded.		
		c. Inform the CAB whether the farm chose option #1 or option #2 to demonstrate compliance with the requirements of the Standard.	Option 1 is used.		
		d. For option #1, calculate FFDRo using formulas in Appendix IV-1 and using the eFCR calculated under 4.2.1c.	The FFDRo was 2.14. Calculations were done properly.		
		e. For option #2, calculate amount of EPA + DHA using formulas in Appendix IV-2.	Not applicable		
		f. Submit FFDRo or EPA & DHA to ASC as per Appendix VI for each production cycle.	FFDRo was submitted.		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
	Applicability: All	g. Others, please describe			
Criterion 4.3 Source of marine raw materials					
4.3.1	Indicator: Timeframe for all fishmeal and fish oil used in feed to come from fisheries [65] certified under a scheme that is an ISEAL member [66] and has guidelines that specifically promote responsible environmental management of small pelagic fisheries Requirement: < 5 years after the date of publication [67] of the SAD standards (i.e. full compliance by June 13, 2017) Applicability: All	a. Prepare a policy 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.	The Company has a policy on sustainable salmon feed dated April 2016 and states sourcing from IFFO and MSC.	N/A	
		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 4.3.1a	The feed company has previously been notified.		
		c. Starting on or before June 13, 2017, use feed inventory and feed supplier declarations in 4.2.1a to develop a list of the origin of all fish products used as feed ingredients.	This will be done following 06/12/17.		
		d. Starting on or before June 13, 2017, provide evidence that fishmeal and fish oil used in feed come from fisheries [65] certified under a scheme that is an ISEAL member [66] and has guidelines that specifically promote responsible environmental management of small pelagic fisheries.	This will be done following 06/12/17.		
		e. Others, please describe			
4.3.2	Indicator: Prior to achieving 4.3.1, the FishSource score [68] for the fishery(ies) from which all marine raw material in feed is derived Requirement: All individual scores ≥ 6, and biomass score ≥ 8 Applicability: All, until June 13, 2017	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).	The feed company has submitted FishSource scores for each species used in feed.	Compliant	
		b. Confirm that each individual score ≥ 6 and the biomass score is ≥ 8.	All are above the required metric. Gulf menhaden from the Gulf of Mexico and hake from FAO 67 and 77 have a score of 10.		
		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.	All species are on the FishSource website.		
		-	MHC complies.		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
		e. Others, please describe			
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, until June 13, 2017	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.	The feed mill has BAP and Global GAP certification.	Compliant	
		b. Ensure evidence covers all the species used (as consistent with 4.3.2a, 4.2.1a, and 4.2.2a).	All the species are covered in the certifications.		
		c. Others, please describe			
4.3.4	Indicator: Feed containing fishmeal and/or fish oil originating from by-products [69] or trimmings from IUU [70] catch or from fish species that are categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species [71] Requirement: None [72] Applicability: All except as noted in [72]	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.	Skretting Canada has provided a list of all species and fishery of origin for meal and oil derived from trimmings.	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.	The Nutreco Supplier Code of Conduct (June 2014) contains the following: "IUU fishing activity: Fishery material shall not be from illegal, unreported and unregulated (IUU) fishing activity."		
		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 [71] and explaining how they are able to demonstrate this (i.e. through other certification scheme or through their independent audit).	The Nutreco Supplier Code of Conduct (June 2014) contains the following: "Threatened species: Suppliers shall not process species or by-products from species that are classified as Critically Endangered or Endangered in the IUCN Red List. Species that are listed as Vulnerable are not eligible for use as byproduct, unless for fisheries from a discrete sub-population assessed to be responsibly managed."		
		d. If meal or oil originated from a species listed as "vulnerable" by IUCN, obtain documentary evidence to support the exception as outlined in [72].	Neither meal or oil are derived from species deemed vulnerable by IUCN.		
		e. Others, please describe			
Criterion 4.4 Source of non-marine raw materials in feed					
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 [75] and local laws [76] Requirement: Yes Applicability: All	a. Compile and maintain a list of all feed suppliers with contact information. (See also 4.1.1a)	Only Skretting feed is used by the Client.	Compliant	
		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.	Skretting are part of the Nutreco group and a vendor policy is in place where all suppliers must sign applicable declarations guaranteeing source.		
		c. Confirm that third party audits of feed suppliers (4.1.1c) show evidence that supplier's responsible sourcing policies are implemented.	Third-party audits of the feed supplier include review of responsible sourcing policy and implementation.		
		d. Others, please describe			

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
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 [77] Requirement: 100%, within five years of the publication [78] of the SAD standards Applicability: All, after June 13, 2017	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.	The feed supplier does not use soya.	N/A	
		b. Prepare a letter stating the farm's intent to source feed containing soya certified under the RTRS (or equivalent)	The feed supplier does not use soya.		
		c. Notify feed suppliers of the farm's intent (4.4.2b).	The feed supplier does not use soya.		
		d. Obtain and maintain declaration from feed supplier(s) detailing the origin of soya in the feed.	The feed supplier does not use soya.		
		e. Starting on or before June 13, 2017, provide evidence that soya used in feed is certified by the Roundtable for Responsible Soy (RTRS) or equivalent [77]	The feed supplier does not use soya.		
		f. Others, please describe			
4.4.3	Indicator: Evidence of disclosure to the buyer [79] of the salmon of inclusion of transgenic [80] plant raw material, or raw materials derived from transgenic plants, in the feed Requirement: Yes, for each individual raw material containing > 1% transgenic content [81] 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.	Declarations were supplied and were fully investigated. GMO canola and corn may be used. Soya is not used.	Compliant	
		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.	Mail dated 01/07/14 from Skretting states that the feed includes canola oil and corn gluten that are transgenic. There is no change in this.		
		c. Inform ASC whether feed contains transgenic ingredients (yes or no) as per Appendix VI for each production cycle.	ASC has been informed.		
		d. Others, please describe			
Criterion 4.5 Non-biological waste from production					
4.5.1	Indicator: Presence and evidence of a functioning policy for proper and responsible [83] 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.	The farm's commitment to the responsible disposal of non-biological waste is detailed in Document# S/FW 963, Materials Storage, Handling and Waste Disposal Plan - Marine and Freshwater Sites, and supported by recycling procedure (document# S/FW903). The plan covers household recyclables, household and production garbage, oil, fuel, antifoulants, therapeutants, chemical disinfectants, net cleaning, feed waste, empty feed bags, household grey water, human waste, printer cartiridges, retired technology, damaged and out-of-service production equipment.	Compliant	
		b. Prepare a declaration that the farm does not dump non-biological waste into the ocean.	The declaration is found in Document# S/FW 963, Materials Storage, Handling and Waste Disposal Plan - Marine and Freshwater Sites.		
		c. Provide a description of the most common production waste materials and how the farm ensures these waste materials are properly disposed of.	The most common waste materials are pallets, feed bags and domestic waste. Waste materials are sorted by type and are removed from site by the feed barge to be disposed of by the feed supplier.		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
		d. Provide a description of the types of waste materials that are recycled by the farm.	Everything is recycled where possible. Pallets are returned to the feed company.		
		e. Others, please describe			
4.5.2	Indicator: Evidence that non-biological waste (including net pens) from grow-out site is either disposed of properly or recycled Requirement: Yes Applicability: All	a. Provide a description of the most common production waste materials and how the farm ensures these waste materials are properly disposed of. (see also 4.5.1c)	The most common waste materials are pallets, feed bags and domestic waste. Waste materials are sorted by type and are removed from site by the feed barge to be disposed of by the feed supplier.	Minor	Waste logs do not identify all types of waste or quantities.
		b. Provide a description of the types of waste materials that are recycled by the farm. (See also 4.5.1d)	Everything is recycled where possible. Pallets are returned to the feed company. Pens are reused. Nets that have been taken out of service are available for purchase on the company website.		
		c. Inform the CAB of any infractions or fines for improper waste disposal received during the previous 12 months and corrective actions taken..	There have been no fines for improper waste disposal.		
		d. Maintain records of disposal of waste materials including old nets and cage equipment.	There are no records in place logging the disposal of waste such as feed bags and domestic waste.		
		e. Others, please describe			
Criterion 4.6 Energy consumption and greenhouse gas emissions on farms [84]					
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/mt fish/production cycle Applicability: All	a. Maintain records for energy consumption by source (fuel, electricity) on the farm throughout each production cycle.	All energy sources and consumption are recorded.	Minor	Energy consumption data was recalculated correctly at time of audit and is submitted in this report.
		b. Calculate the farm's total energy consumption in kilojoules (kj) during the last production cycle.	Total energy consumption during the last production cycle was 2,360,197,719 Kj.		
		c. Calculate the total weight of fish in metric tons (mt) produced during the last production cycle.	Harvest biomass was 2,851,305 kg. Biomass going into the site from the nursery site was 553,653 kg., Thus, production at the site was 2,297,653 kg, or 2.297. 65 mt.		
		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.	Energy consumption for the last cycle was 1,027,221 kj/mt.		
		e. Submit results of energy use calculations (4.6.1d) to ASC as per Appendix VI for each production cycle.	Incorrect totals were submitted to ASC for the Kilojoules per metric ton produced.		
		f. Ensure that the farm has undergone an energy use assessment that was done in compliance with requirements of Appendix V-1.	The international company has set up an Excel spreadsheet that each country uses to report the energy use.		
		g. Others, please describe			
	Indicator: Records of greenhouse gas (GHG [85]) emissions [86] on farm and evidence of an annual	a. Maintain records of greenhouse gas emissions on the farm.	Records are maintained using the DEFRA diagnostic tool database.		
		b. At least annually, calculate all scope 1 and scope 2 GHG emissions in compliance with Appendix V-1.	There is no scope 2. Scope 1 emissions was 159,548 CO2 equivalents. These are updated every 4 months.		
		c. For GHG calculations, select the emission factors which are best suited to the farm's operation. Document the source of those emissions factors.	All emissions factors are recorded on the GHG Energy Assesment Sheet.		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
4.6.2	GHG assessment, as outlined in Appendix V-1 Requirement: Yes Applicability: All	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. g. Others, please describe	1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below . The original GHG calculations and the GWP conversions all originated from DEFRA in the UK where Scotland has been using these calculations for longer than Canada. Incorrect totals were submitted to ASC for the GHG emissions. GHG assessments are done every four months.	Minor	Greenhouse gas emissions data was recalculated correctly at time of audit and is submitted in this report.
4.6.3	Indicator: Documentation of GHG emissions of the feed [87] used during the previous production cycle, as outlined in Appendix V, subsection 2 Requirement: Yes, within three years of the publication [88] of the SAD standards (i.e. by June 13, 2015) Applicability: All, after June 13, 2015	a. Obtain from feed supplier(s) a declaration detailing the GHG emissions of the feed (per kg feed). b. Multiply the GHG emissions per unit feed by the total amount of feed from each supplier used in the most recent completed production cycle. c. If client has more than one feed supplier, calculate the total sum of emissions from feed by summing the GHG emissions of feed from each supplier. d. Submit GHG emissions of feed to ASC as per Appendix VI for each production cycle. e. Others, please describe	The only feed supplier is Skretting Canada Inc. This will be submitted at the end of this production cycle. This is the farm's first audit. Only Skretting is used. Feed-related GHG emissions will be submitted at the end of the current cycle.	Compliant	
Criterion 4.7 Non-therapeutic chemical inputs [89,90]					
4.7.1	Indicator: For farms that use copper-treated nets [91], evidence that nets are not cleaned [92] or treated in situ in the marine environment Requirement: Yes Applicability: All farms except as noted in [89]	a. Prepare a farm procedure for net cleaning and treatment that describes techniques, technologies, use of off-site facilities, and record keeping. b. Maintain records of antifoulants and other chemical treatments used on nets. c. Declare to the CAB whether copper-based treatments are used on nets. d. If copper-based treatments are used, maintain documentary evidence (see 4.7.1b) that farm policy and practice does not allow for heavy cleaning of copper-treated nets in situ. e. Inform ASC whether copper antifoulants are used on farm (yes or no) as per Appendix VI for each production cycle. f. Others, please describe	MHC is not using copper-treated nets. MHC is not using copper-treated nets. MHC is not using copper-treated nets. MHC is not using copper-treated nets. MHC is not using copper-treated nets.	N/A	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence 1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below .	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
4.7.2	Indicator: For any farm that cleans nets at on-land sites, evidence that net-cleaning sites have effluent treatment [93] Requirement: Yes Applicability: All farms except as noted in [89]	a. Declare to the CAB whether nets are cleaned on-land.	Nets are cleaned in situ.	N/A	
		b. If nets are cleaned on-land, obtain documentary evidence from each net-cleaning facility that effluent treatment is in place.	Nets are cleaned in situ.		
		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.	Nets are cleaned in situ.		
		d. Others, please describe			
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 [89]	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.	MHC is not using copper nets or copper-treated nets.	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.	MHC is not using copper nets or copper-treated nets.		
		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.	MHC is not using copper nets or copper-treated nets.		
		d. Others, please describe			
4.7.4	Indicator: Evidence that copper levels [94] 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 [89] 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.	MHC is not using copper nets or copper-treated nets.	N/A	
		b. Provide evidence from measurements taken in 4.7.3b that copper levels are < 34 mg Cu/kg dry sediment weight.	MHC is not using copper nets or copper-treated nets.		
		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).	MHC is not using copper nets or copper-treated nets.		
		d. Analyze results from 4.7.4c to show the background copper concentrations as measured at three reference sites in the water body.	MHC is not using copper nets or copper-treated nets.		
		e. Submit data on copper levels in sediments to ASC as per Appendix VI for each production cycle.	MHC is not using copper nets or copper-treated nets.		
		f. Others, please describe			

		Compliance Criteria (Use as guidance for audit only)	Audit evidence 1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below .	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
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 [89]	a. Identify all biocides used by the farm in net antifouling.	Biocides are not being used.	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.	Biocides are not being used.		
		c. Others, please describe			
PRINCIPLE 5: MANAGE DISEASE AND PARASITES IN AN ENVIRONMENTALLY RESPONSIBLE MANNER					
<i>Criterion 5.1 Survival and health of farmed fish [95]</i>					
5.1.1	Indicator: Evidence of a fish health management plan for the identification and monitoring of fish diseases and parasites 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.	The Fish Health Management Plan (October 2015) covers both freshwater and marine operations. It covers the requirements of the Finfish Aquaculture Licence and references a comprehensive set of applicable SOPs.	Compliant	
		b. Ensure that the farm's current fish health management plan was reviewed and approved by the farm's designated veterinarian [96].	The FHMP was signed off by MHC veterinarian. Section 1.1.1 designates the veterinarian's duties and responsibilities, including the responsibility for overseeing matters of fish health management for Marine Harvest Canada.		
		c. Others, please describe			
5.1.2	Indicator: Site visits by a designated veterinarian [96] at least four times a year, and by a fish health manager [97] at least once a month Requirement: Yes Applicability: All	a. Maintain records of visits by the designated veterinarian [96] and fish health managers [97]. If schedule cannot be met, a risk assessment must be provided.	There have been three veterinarian visits to the farm since the stocking of fish in May 2016. Fish Health Technicians made three other visits. Reports for fish health visits June to November were viewed.	Compliant	
		b. Maintain a current list of personnel who are employed as the farm's designated veterinarian(s) [96] and fish health manager(s) [97].	A list of the Fish Health Management Team is in place. There are two veterinarians and three technicians.		
		c. Maintain records of the qualifications of persons identified in 5.1.2b.	The two veterinarians are listed as members on the website of the British Columbia College of Veterinarians.		
		d. Others, please describe			
5.1.3	Indicator: Percentage of dead fish removed and disposed of in a responsible manner Requirement: 100% [98]	a. Maintain records of mortality removals to show that dead fish are removed regularly and disposed of in a responsible manner.	Mortalities are stored in sealed and water-tight tote boxes on a designated Mort Float. As the totes become full, a contracted vessel removes them to shore where they are picked up by Renewable Resources Ltd., a composting facility in Campbell River. Invoice dated 07/14/16 from Renewable Resources Ltd. for 30 totes was viewed.	Compliant	
		b. Collect documentation to show that disposal methods are in line with practices recommended by fish health managers and/or relevant legal authorities.	Mortalities are used in compost.		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
	Applicability: All	c. For any exceptional mortality event where dead fish were not collected for post-mortem analysis, keep a written justification. d. Others, please describe	There have been no exceptional mortality events.		
5.1.4	Indicator: Percentage of mortalities that are recorded, classified and receive a post-mortem analysis Requirement: 100% [99] Applicability: All	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 [96], fish health manager [97]); - cause of mortality (specify disease or pathogen) where known; and - classification as 'unexplained' when cause of mortality is unknown (see 5.1.6). b. For each mortality event, ensure that post-mortem analyses are done on a statistically relevant number of fish and keep a record of the results. 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). g. Others, please describe	A report generated from Aquafarmer shows the numbers of mortalities by classification. About 50 reasons can be made for cause of death, including Predator, Transprt Loss, Gill Damage and Treatment Loss. Workers are trained in the classification of mortalities according to the SOP# SW816, Mortality Classification (10/27/15). Mortalities are removed twice per day, and each one is inspected for a cause of death and recorded into Aquafarmer. Laboratories used when mortality classification is inconclusive or disease is suspected are MHC's internal laboratory, the Centre for Aquatic Health Sciences, Campbell River, and the Animal Health Centre. Report 16-3837, dated 07/25/16, from the Animal Health Centre, indicated no signs of infectious disease in routine health samples tested histologically and for IHN, ISA and VHS. All mortalities to date have been classified and recorded. All records are maintained. Mortality numbers and post-mortem analysis data have been submitted.	Compliant	
		a. Calculate the total number of mortalities that were diagnosed (see 5.1.4) as being related to viral disease.	There were no viral detections of mortalities.		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
5.1.5	Indicator: Maximum viral disease-related mortality [100] on farm during the most recent production cycle Requirement: ≤ 10% Applicability: All	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.	The total of uncodeable mortalities in the last cycle was 8,996, or 1.73% .	Compliant	
		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).	Mortality data has been submitted.		
		d. Others, please describe			
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.	Total mortality in the previous cycle was 3.34%.	Compliant	
		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.	Not applicable		
		c. Submit data on maximum unexplained mortality to ASC as per Appendix VI for each production cycle.	Data on unexplained mortalities has been submitted.		
		d. Others, please describe			
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	a. Use records in 5.1.4a to assemble a time-series dataset on farm-specific mortalities rates and unexplained mortality rates.	The farm mortality records are detailed in the Aquafarmer database. This database does allow datasets to be compared and analysed.	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.	MHC has set the mortality rates for its farms at 90% survival over the period from 2016 to 2021. The last survival at this site was 96.34%		
		c. Ensure that farm management communicates with the veterinarian, fish health manager, and staff about annual targets and planned actions to meet targets.	Workers confirm that the Fish Health team liaises with them on mortality collection and classification.		
		d. Others, please describe			
Criterion 5.2 Therapeutic treatments [101]					

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
5.2.1	<p>Indicator: On-farm documentation that includes, at a minimum, detailed information on all chemicals [102] 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</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Maintain a detailed record of all chemical and therapeutant use that includes:</p> <ul style="list-style-type: none"> - 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. 	<p>The Aquafarmer database system is used to record all therapeutant use. Prescriptions are maintained at the farm as per DFO requirements. There was one SLICE treatment this cycle, under prescription numbers 16-111 and 16-112, both dated 11/21/16. All fish on site were treated and the treatment ended 12/11/16.</p>	Compliant	
		<p>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.</p>	<p>There was one SLICE treatment, under prescription numbers 14-088 and 14-089 (12/11/14) in the previous cycle. All fish on site were treated during period 01/04/15 - 01/11/15.</p>		
		<p>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).</p>	<p>Therapeutant information has been submitted.</p>		
		<p>d. Others, please describe</p>			
5.2.2	<p>Indicator: Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [103] in any of the primary salmon producing or importing countries [104]</p> <p>Requirement: None</p> <p>Applicability: All</p>	<p>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 [104].</p>	<p>Marine Harvest Norway maintains a matrix showing therapeutants and chemical and microbial contaminants by importing country and limits in each country, also indicating which substances are banned by the respective countries.</p>	Compliant	
		<p>b. Maintain records of voluntary and/or mandatory chemical residue testing conducted or commissioned by the farm from the prior and current production cycles.</p>	<p>Following a treatment, MHC has samples of treated fish tested for the therapeutant used. In addition, within two months of the expected harvest commencement date, samples from the pen holding the largest fish are tested for drug residues and contaminants.</p>		
		<p>c. Cross-check records of therapeutant use (5.2.1a) against the list of banned therapeutants to verify compliance with requirements.</p>	<p>Aquafarmer and on-site records (prescriptions and Drug Treatment Record) indicate no usage of any banned therapeutant in either the last or current production cycles.</p>		
		<p>d. Others, please describe</p>			

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
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 [96] for definition of veterinarian).	All treatments are traceable to a veterinary prescription.	Compliant	
		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.	The farm maintains copies of all prescriptions and treatment records, and enters the information to Aquafarmer.		
		c. Others, please describe			
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).	Withdrawal periods are noted on prescriptions, and treatment records indicate last date of treatment and date when withholding period ends. In the Aquafarmer system, a treated pen is blocked until the withholding period has passed.	Compliant	
		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.	Withholding periods are specified on the Health Canada website: Tribissen, 80 days; Romet 30, 42 days; Florfenicol, 12 days; SLICE, 60 days.		
		c. Show compliance with all withholding periods by providing treatment records (see 5.2.1a) and harvest dates for the most recent production cycle.	Records indicate that no antibiotics were used in the most recent production cycle. SLICE was used and the last treatment date was 01/11/15. Harvesting commenced 04/27/15 which was 106 days following the last treatment. The withholding period for SLICE is 60 days. Once treatment data is entered to Aquafarmer, the system locks the affected pens for the duration of the withholding period.		
		d. Others, please describe			
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.	The PTI score for the most recent production cycle was 3.2.	Compliant	
		b. Provide the auditor with access to records showing how the farm calculated the PTI score.	MHC has a spreadsheet for the calculation of PTI.		
		c. Submit data on farm level cumulative PTI score to ASC as per Appendix VI for each production cycle.	The cumulative PTI score data as been submitted.		
		d. Others, please describe			

		Compliance Criteria (Use as guidance for audit only)	Audit evidence 1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below .	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
5.2.6	Indicator: For farms with a cumulative PTI ≥ 6 in the most recent production cycle, demonstration that parasiticide load [105] is at least 15% less than of the average of the two previous production cycles Requirement: Yes, within five years of the publication of the SAD standard (i.e. by June 13, 2017) 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.	The indicator is not applicable.	N/A	
		b. Using results from 5.2.5 and the weight of fish treated (kg), calculate parasiticide load in the most recent production cycle [105].	The indicator is not applicable.		
		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.	The indicator is not applicable.		
		d. As applicable, submit data to ASC on parasiticide load for the most recent production cycle and the two previous production cycles (Appendix VI).	The indicator is not applicable.		
		e. Others, please describe			
5.2.7	Indicator: Allowance for prophylactic use of antimicrobial treatments [106] Requirement: None Applicability: All	a. Maintain records for all purchases of antibiotics (invoices, prescriptions) for the current and prior production cycles.	No antibiotics were used at the farm during the current and prior production cycles.	Compliant	
		b. Maintain a detailed log of all medication-related events (see also 5.2.1a and 5.2.3)	No antibiotics were used at the farm during the current and prior production cycles.		
		c. Calculate the total amount (g) and treatments (#) of antibiotics used during the current and prior production cycles (see also 5.2.9).	No antibiotics were used at the farm during the current and prior production cycles.		
		d. Others, please describe			
5.2.8	Indicator: Allowance for use of antibiotics listed as critically important for human medicine by the World Health Organization (WHO [107])	a. Maintain a current version of the WHO list of antimicrobials critically and highly important for human health [107].	The WHO list appears on MHC Sharepoint.	Compliant	
		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.	The farm has not used any antibiotics in the current production cycle.		
		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.	The farm has not used any antibiotics in the current production cycle.		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
	Requirement: None [108] Applicability: All	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. e. Others, please describe	1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below . The farm has not used any antibiotics in the current production cycle.		
5.2.9	Indicator: Number of treatments [109] of antibiotics over 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. b. Calculate the total number of treatments of antibiotics over the most recent production cycle and supply a verifiable statement of this calculation. c. Others, please describe	Antibiotic treatment records are maintained on-site in the form of prescriptions and the form Drug Treatment Record, and treatment data is entered to Aquafarmer. Site usage information and prescriptions correspond with one another, and match the information found in Aquafarmer. No antibiotics were used in the current and immediately prior production cycles. No antibiotics were used over the most recent production cycle.	Compliant	
5.2.10	Indicator: If more than one antibiotic treatment is used in the most recent production cycle, demonstration that the antibiotic load [110] is at least 15% less than that of the average of the two previous production cycles Requirement: Yes [111], within five years of the publication of the SAD standard (i.e. full compliance by June 13, 2017) Applicability: All	a. Use results from 5.2.9b to show whether more than one antibiotic treatment was used in the most recent production cycle. If not, then the requirement of 5.2.10 does not apply. If yes, then proceed to 5.2.10b. b. Calculate antibiotic load (antibiotic load = the sum of the total amount of active ingredient of antibiotic used in kg) for most recent production cycle and for the two previous production cycles. For first audit, calculation must cover one full production cycle immediately prior to the current cycle. c. Provide the auditor with calculations showing that the antibiotic load of the most recent production cycle is at least 15% less than that of the average of the two previous production cycles. d. Submit data on antibiotic load to ASC as per Appendix VI (if applicable) for each production cycle. e. Others, please describe	Not applicable at this time. Not applicable at this time. Not applicable at this time. Not applicable at this time.	Compliant	
	Indicator: Presence of documents demonstrating that the farm has provided buyers [112] of its salmon	a. Prepare a procedure which outlines how the farm provides buyers [112] of its salmon with a list of all therapeutants used in production (see 4.4.3b).	There is a customer database maintained with the dates the letters are sent to the customers.		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
5.2.11	<p>Provide a list of all therapeutants used in production</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>b. Maintain records showing the farm has informed all buyers of its salmon about all therapeutants used in production.</p> <p>c. Others, please describe</p>	<p>Customers are adequately informed of therapeutants in the Suppliers Quality Assurance certificate letter sent at the beginning of every year and signed by the Food Safety Assurance Technician.</p>	Compliant	
Criterion 5.3 Resistance of parasites, viruses and bacteria to medicinal treatments					
5.3.1	<p>Indicator: Bio-assay analysis to determine resistance when two applications of a treatment have not produced the expected effect</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>d. Keep a record of all results arising from 5.3.1c.</p> <p>e. Others, please describe</p>	<p>There has not been two successive treatments with a parasiticide or antimicrobial substance.</p> <p>There has not been two successive treatments with a parasiticide or antimicrobial substance.</p> <p>There has not been two successive treatments with a parasiticide or antimicrobial substance.</p> <p>There has not been two successive treatments with a parasiticide or antimicrobial substance.</p>	Compliant	
5.3.2	<p>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</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>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.</p> <p>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.</p> <p>c. Others, please describe</p>	<p>Although the farm has not had two successive treatments with a medicinal compound, a bioassay was conducted during the last production cycle. Samples were collected 12/10/14 and bioassay was conducted 12/11/14 by CAHS. Results did not indicate resistance.</p> <p>There has not been two successive treatments with a parasiticide or antimicrobial substance.</p>	Compliant	
Criterion 5.4 Biosecurity management [113]					
5.4.1	<p>Indicator: Evidence that all salmon on the site are a single-year class [114]</p> <p>Requirement: 100% [115]</p>	<p>a. Keep records of the start and end dates of periods when the site is fully fallow after harvest.</p> <p>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.</p> <p>-</p>	<p>The site was fallow from 06/08/15 to 05/22/16.</p> <p>Smolts were not stocked at this site. The fish came from MHC sites Upper Retreat and Port Elizabeth.</p> <p>All fish on-site are from the 2016 yearclass.</p>	Compliant	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
	Applicability: All farms except as noted in [115]	d. Others, please describe			
5.4.2	<p>Indicator: Evidence that if the farm suspects an unidentifiable transmissible agent, or if the farm experiences unexplained increased mortality, [116] the farm has:</p> <ol style="list-style-type: none"> Reported the issue to the ABM and to the appropriate regulatory authority Increased monitoring and surveillance [117] on the farm and within the ABM Promptly [118] made findings publicly available <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>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 [116]. The accepted level of significance (for example, $p < 0.05$) should be agreed between farm and CAB.</p> <p>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.</p> <p>c. Proceed to 5.4.2d if, during the most recent production cycle, either:</p> <ul style="list-style-type: none"> results from 5.4.2a showed a statistically significant increase in unexplained mortalities; or the answer to 5.4.2b was 'yes'. <p>Otherwise, Indicator 5.4.2 is not applicable.</p> <p>d. If required, ensure that the farm takes and records the following steps:</p> <ol style="list-style-type: none"> Report the issue to the ABM and to the appropriate regulatory authority; Increase monitoring and surveillance [117] on the farm and within the ABM; and Promptly (within one month) make findings publicly available. <p>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).</p> <p>f. Others, please describe</p>	<p>No mortality event has been a statistically significant increase over background mortalities.</p> <p>The farm has not suspected an unidentified transmissible agent in any mortality event.</p> <p>Not applicable.</p> <p>Not applicable.</p> <p>Not applicable.</p>	Compliant	
5.4.3	<p>Indicator: Evidence of compliance [119] with the OIE Aquatic Animal Health Code [120]</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Maintain a current version of the OIE Aquatic Animal Health Code on site or ensure staff have access to the most current version.</p> <p>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.</p> <p>-</p> <p>d. Others, please describe</p>	<p>MHC provided its document OIE Aquatic Animal Health Code Compliance which is contained in Appendix I of its Fish Health Management Plan.</p> <p>The policies are consistent as the FHMP is reviewed annually. Appendix I will be reviewed as and when there are changes to certification requirements.</p> <p>Policies are implemented and the staff are well informed.</p>	Compliant	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
5.4.4	<p>Indicator: If an OIE-notifiable disease [121] is confirmed on the farm, evidence that:</p> <ol style="list-style-type: none"> 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 [122] 3. the farm and the ABM enhanced monitoring and conducted rigorous testing for the disease 4. the farm promptly [123] made findings publicly available <p>Requirement: Yes</p> <p>Applicability: All</p>	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.	The fish health management plan follows the OIE requirements. There have been no notifiable diseases.	Compliant	
		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 and 5.4.4d do not apply.	No OIE-notifiable disease has been confirmed at the farm during the current and two previous cycles. Up to 3 tests per year showed negative for each of the previous cycles for IHN, VHS and ISA.		
		c. If an OIE-notifiable disease was confirmed on the farm (see 5.4.4b), then retain documentary evidence to show that the farm:	No OIE-notifiable disease has been confirmed at the farm.		
		1) immediately culled the pen(s) in which the disease was detected;			
		2) immediately notified the other farms in the ABM [122]			
		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).	OIE-notifiable disease data has been submitted as zero.				
-	No OIE-notifiable disease has been confirmed at the farm.				
f. Others, please describe					
PRINCIPLE 6: DEVELOP AND OPERATE FARMS IN A SOCIALLY RESPONSIBLE MANNER					
6.1 Freedom of association and collective bargaining [124]					
6.1.1	<p>Indicator: Evidence that workers have access to trade unions (if they exist) and union representative(s) chosen by themselves without managerial interference</p>	a. Workers have the freedom to join any trade union, free of any form of interference from employers or competing organizations set up or backed by the employer. Farms shall prepare documentation to demonstrate to the auditor that domestic regulation fully meets these criteria.	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 can also be accessed 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 recognizes the right of all workers and employees freely to form and join groups for the promotion and defense of their occupational interests, including the right to engage in collective bargaining".	Compliant	
		b. Union representatives (or worker representatives) are chosen by workers without managerial interference. ILO specifically prohibits "acts which are designated to promote the establishment of worker organizations or to support worker organizations under the control or employers or employers' organizations."	see 6.1.1a and code of conduct section 5.3		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence 1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below .	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
	Requirement: Yes Applicability: All	c. Trade union representatives (or worker representatives) have access to their members in the workplace at reasonable times on the premises. d. Be advised that workers and union representatives (if they exist) will be interviewed to confirm the above. e. Others, please describe	see 6.1.1a and code of conduct section 5.3 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 can also be accessed via intranet, which also allows access to human resources Policy & Procedure Manual. Code of Conduct section 5.3. relates to this area. The workers confirmed that that the above information was provided to them.		
6.1.2	Indicator: Evidence that workers are free to form organizations, including unions, to advocate for and protect their rights Requirement: Yes Applicability: All	a. Employment contract explicitly states the worker's right of freedom of association. b. Employer communicates that workers are free to form organizations to advocate for and protect work rights (e.g. farm policies on Freedom of Association; see 6.12.1). c. Be advised that workers will be interviewed to confirm the above. d. Others, please describe	The worker's right of freedom of association is Stated in the contract of employment and in 5.3 of the code of conduct. Employees sign and are tested on Code of Conduct. see 6.1.2a. Code of Conduct section 5.3 relates to this section. 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 can also be accessed via intranet, which also allows access to human resources Policy & Procedure Manual. Code of Conduct section 5.3. relates to this area. The workers confirmed that that the above information was provided to them.	Compliant	
6.1.3	Indicator: Evidence that workers are free and able to bargain collectively for their rights Requirement: Yes Applicability: All	a. Local trade union, or where none exists a reputable civil-society organization, confirms no outstanding cases against the farm site management for violations of employees' freedom of association and collective bargaining rights. b. Employer has explicitly communicated a commitment to ensure the collective bargaining rights of all workers. c. There is documentary evidence that workers are free and able to bargain collectively (e.g. collective bargaining agreements, meeting minutes, or complaint resolutions). d. Others, please describe	No outstanding cases against the farm site management for violations of employees' freedom of association and collective bargaining rights. Stated in code of conduct section 5.3 and confirmed by worker interviews Stated in Marine Harvest Code of Conduct which is signed by the employees.	Compliant	
Criterion 6.2 Child labor					

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
6.2.1	Indicator: Number of incidences of child [125] labor [126] Requirement: None Applicability: All except as noted in [125]	a. In most countries, the law states that minimum age for employment is 15 years. There are two possible exceptions: - in developing countries where the legal minimum age may be set to 14 years (see footnote 125); or - in countries where the legal minimum age is set higher than 15 years, in which case the legal minimum age of the country is followed. If the farm operates in a country where the legal minimum ages is not 15, then the employer shall maintain documentation attesting to this fact.	Ages of all workers is 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 labor, and all forms of forced or compulsory labor." "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."	Compliant	
		b. Minimum age of permanent workers is 15 or older (except in countries as noted above).	Verified through Human Resources Management System		
		c. Employer maintains age records for employees that are sufficient to demonstrate compliance.	Identification is held on file for all farm employees and is signed and verified by senior Management		
		d. Others, please describe			
6.2.2	Indicator: Percentage of young workers [127] that are protected [128] Requirement: 100% Applicability: All	a. Young workers are appropriately identified in company policies & training programs, and job descriptions are available for all young workers at the site.	There is 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 assessment is carried out and displayed within the working areas. All young workers are assessed prior to employment	Compliant	
		b. All young workers (from age 15 to less than 18) are identified and their ages are confirmed with copies of IDs.	No young worker at the facility		
		c. Daily records of working hours (i.e. timesheets) are available for all young workers.	All workers including young workers have the working hours recorded on a time management system		
		d. For young workers, the combined daily transportation time and school time and work time does not exceed 10 hours.	No young worker at the facility		
		e. Young workers are not exposed to hazards [129] and do not perform hazardous work [130]. Work on floating cages in poor weather conditions shall be considered hazardous.	No young workers are employed at this site at the time of the audit		
		f. Be advised that the site will be inspected and young workers will be interviewed to confirm compliance.	No young worker at the facility		
		g. Others, please describe			
Criterion 6.3 Forced, bonded or compulsory labor					
		a. Contracts are clearly stated and understood by employees. Contracts do not lead to workers being indebted (i.e. no 'pay to work' schemes through labor contractors or training credit programs).	All employees are provided with a contracts of employment. Confirmed within employee interviews that employees received a copy of the contract of employment. All contracts have been signed by workers.		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence 1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below .	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
6.3.1	Indicator: Number of incidences of forced, [131] bonded [132] or compulsory labor Requirement: None Applicability: All	b. Employees are free to leave workplace and manage their own time.	Through worker interviews and documentation checks it was confirmed that all working hours are conducted on a voluntary basis.	Compliant	
		c. Employer does not withhold employee's original identity documents.	Employer does not withhold employee's original identity documents. Confirmed through employee interviews		
		d. Employer does not withhold any part of workers' salaries, benefits, property or documents in order to oblige them to continue working for employer.	Employer does not withhold any part of workers' salaries, benefits, property or documents in order to oblige them to continue working for employer. This was confirmed within employee interviews		
		e. Employees are not to be obligated to stay in job to repay debt.	See 6.3.1		
		f. Maintain payroll records and be advised that workers will be interviewed to confirm the above.	No employees are repaying debt. Confirmed in worker interviews		
		g. Others, please describe			
Criterion 6.4 Discrimination [133]					
6.4.1	Indicator: Evidence of comprehensive [134] and proactive anti-discrimination policies, procedures and practices Requirement: Yes Applicability: All	a. Employer has written anti-discrimination policy in place, stating that the company does not engage in or support discrimination in hiring, remuneration, access to training, promotion, termination or retirement based on race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation, age or any other condition that may give rise to discrimination.	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.	Compliant	
		b. Employer has clear and transparent company procedures that outline how to raise, file, and respond to discrimination complaints.	Discrimination complaints are dealt with through the grievance procedures. Grievance procedures are communicated to all workers		
		c. Employer respects the principle of equal pay for equal work and equal access to job opportunities, promotions and raises.	All employees are respected with regards equal treatment.		
		d. All managers and supervisors receive training on diversity and non-discrimination. All personnel receive non-discrimination training. Internal or external training acceptable if proven effective.	All managers have been trained in equality and diversity. This is part of the code of conduct training.		
		e. Others, please describe			
		a. Employer maintains a record of all discrimination complaints. These records do not show evidence for discrimination.	Facility has a process to record of all discrimination complaints. To date there has not been any complaints. There is no evidence of discrimination other than comments made in 6.4.1 c		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
6.4.2	Indicator: Number of incidences of discrimination Requirement: None Applicability: All	b. Be advised that worker testimonies will be used to confirm that the company does not interfere with the rights of personnel to observe tenets or practices, or to meet needs related to race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation or any other condition that may give rise to discrimination.	Workers interviewed stated that the company did not discriminate against them. Workers that were interviewed had not experienced or heard of any issues with regards to discrimination.	Compliant	
		c. Others, please describe			
Criterion 6.5 Work environment health and safety					
6.5.1	Indicator: Percentage of workers trained in health and safety practices, procedures [135] and policies on a yearly basis Requirement: 100% Applicability: All	a. Employer has documented practices, procedures (including emergency response procedures) and policies to protect employees from workplace hazards and to minimize risk of accident or injury. The information shall be available to employees.	The facility has established good procedures and policies to protect employees. No unsafe hazards were noted during the tour.	Compliant	
		b. Employees know and understand emergency response procedures.	Employees have been trained for emergency response procedures. The training has been recorded within the onsite training records and displayed on the employee notice boards.		
		c. Employer conducts health and safety training for all employees on a regular basis (once a year and immediately for all new employees), including training on potential hazards and risk minimization, Occupational Safety and Health (OSH) and effective use of PPE.	Health and safety training is carried by an external company every year. ongoing training is carried out on an online training software management systems. MH try to ensure that the overall training levels are above 80 percent. It is the responsibility of the site managers to ensure that this level is achieved. This site has achieved 96percent		
		d. Others, please describe			
6.5.2	Indicator: Evidence that workers use Personal Protective Equipment (PPE) effectively Requirement: Yes Applicability: All	a. Employer maintains a list of all health and safety hazards (e.g. chemicals).	Full list of MSDS is available with the health and safety standards documentation and stored on all site computers.	Compliant	
		b. Employer provides workers with PPE that is appropriate to known health and safety hazards.	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 understand that PPE should only be used where it is not possible to reduce the risk without the use of PPE		
		c. Employees receive annual training in the proper use of PPE (see 6.5.1c). For workers who participated in the initial training(s) previously an annual refreshment training may suffice, unless new PPE has been put to use.	Employees all receive induction induction training which includes the correct and proper use of PPE. There are modules that are built into the online health & Safety management system that employees have to completed each year. The site manager ensure this training is carried out and recorded.		
		d. Be advised that workers will be interviewed to confirm the above.	Workers confirmed within interview process that PPE was provided and training was provided if required.		
		e. Others, please describe			

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
6.5.3	Indicator: Presence of a health and safety risk assessment and evidence of preventive actions taken Requirement: Yes Applicability: All	a. Employer makes regular assessments of hazards and risks in the workplace. Risk assessments are reviewed and updated at least annually (see also 6.5.1a).	Risk assessments are carried by the site manager every year. All reviews are documented. Changes are made sooner if the process changes or new machinery is implemented	Compliant	
		b. Employees are trained in how to identify and prevent known hazards and risks (see also 6.5.1c).	Risk assessments are used to identify the risk and employees are trained against the risk assessments. Site has trained employees that carry out risk assessments. This training is recorded on the MH internal DATS system.		
		c. Health and safety procedures are adapted based on results from risk assessments (above) and changes are implemented to help prevent accidents.	Health and safety procedures are adapted based on results from risk assessments. Risk assessments are reviewed when changes are made to the processes to avoid potential accidents.		
		d. Others, please describe			
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 Applicability: All	a. Employer records all health- and safety-related accidents.	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.	Compliant	
		b. Employer maintains complete documentation for all occupational health and safety violations and investigations.	Facility has systems to maintain documentation for all occupational health and safety violations and investigations.		
		c. Employer implements corrective action plans in response to any accidents that occur. Plans are documented and they include an analysis of root cause, actions to address root cause, actions to remediate, and actions to prevent future accidents of similar nature.	See 6.5.4 a		
		d. Employees working in departments where accidents have occurred can explain what analysis has been done and what steps were taken or improvements made.	Employees stated within the interview process that accidents were investigated and steps were taken and improvements made if required.		
		e. Others, please describe			
6.5.5	Indicator: Evidence of employer responsibility and/or proof of insurance (accident or injury) for 100% of worker costs in a job-related accident or injury when not covered under national law Requirement: Yes Applicability: All	a. Employer maintains documentation to confirm that all personnel are provided sufficient insurance to cover costs related to occupational accidents or injuries (if not covered under national law). Equal insurance coverage must include temporary, migrant or foreign workers. Written contract of employer responsibility to cover accident costs is acceptable evidence in place of insurance.	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	
		b. Others, please describe			

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
6.5.6	Indicator: Evidence that all diving operations are conducted by divers who are certified Requirement: Yes Applicability: All	a. Employer keeps records of farm diving operations and a list of all personnel involved. In case an external service provider was hired, a statement that provider conformed to all relevant criteria must be made available to the auditor by this provider.	Employer keeps records of farm diving operation. All external divers are given full details on the operations that are required.	Compliant	
		b. Employer maintains evidence of diver certification (e.g. copies of certificates) for each person involved in diving operations. Divers shall be certified through an accredited national or international organization for diver certification.	All diving certification was provided. All divers have the required accreditations. MHC verifies certifications every 60 days.		
		c. Others, please describe			
Criterion 6.6 Wages					
6.6.1	Indicator: The percentage of workers whose basic wage [136] (before overtime and bonuses) is below the minimum wage [137] Requirement: 0 (None) Applicability: All	a. Employer keeps documents to show the legal minimum wage in the country of operation. If there is no legal minimum wage in the country, the employer keeps documents to show the industry-standard minimum wage.	Wages are recorded on an electronic accounting system and verified. All wages paid are in line or above minimum wage requirements	Compliant	
		b. Employer's records (e.g. payroll) confirm that worker's wages for a standard work week (≤ 48 hours) always meet or exceed the legal minimum wage. If there is no legal minimum wage, the employer's records must show how the current wage meets or exceeds industry standard. If wages are based on piece-rate or pay-per-production, the employer's records must show how workers can reasonably attain (within regular working hours) wages that meet or exceed the legal minimum wage.	See 6.6.1 a		
		c. Maintain documentary evidence (e.g. payroll, timesheets, punch cards, production records, and/or utility records) and be advised that workers will be interviewed to confirm the above.	See 6.6.1 a		
		d. Others, please describe			
	Indicator: Evidence that the employer is working toward the pavement of basic needs wage [138]	a. Proof of employer engagement with workers and their representative organizations, and the use of cost of living assessments from credible sources to assess basic needs wages. Includes review of any national basic needs wage recommendations from credible sources such as national universities or government.	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 \$16.42 MHC starting wage is \$17.00		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence 1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below .	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
6.6.2	Requirement: Yes Applicability: All	b. Employer has calculated the basic needs wage for farm workers and has compared it to the basic (i.e. current) wage for their farm workers. c. Employer demonstrates how they have taken steps toward paying a basic needs wage to their workers. d. Others, please describe	See 6.6.2 a See 6.6.2 a	Compliant	
6.6.3	Indicator: Evidence of transparency in wage-setting and rendering [139] Requirement: Yes Applicability: All	a. Wages and benefits are clearly articulated to workers and documented in contracts. b. The method for setting wages is clearly stated and understood by workers. c. Employer renders wages and benefits in a way that is convenient for the worker (e.g. cash, check, or electronic payment methods). Workers do not have to travel to collect benefits nor do they receive promissory notes, coupons or merchandise in lieu of payment. d. Be advised that workers will be interviewed to confirm the above. e. Others, please describe	Wages and benefits are document prior to the point of employment. Wages have also been agreed with the union and are documented the collective bargaining agreement. See 6.6.3 a Workers are paid bi-weekly by electronic bank transfer Workers confirmed within interview process that information was available and electronic transfer payments are made	Compliant	
Criterion 6.7 Contracts (labor) including subcontracting					
6.7.1	Indicator: Percentage of workers who have contracts [141] Requirement: 100% Applicability: All	a. Employer maintains a record of all employment contracts. b. There is no evidence for labor-only contracting relationships or false apprenticeship schemes. c. Be advised that workers will be interviewed to confirm the above. d. Others, please describe	All employees are provided with a contract of employment and a copy of the contract was available on the personnel files. There was no evidence of Labor only contracts or false apprenticeships. It was confirmed within the employee interviews that no labour only contracts are used and no false apprenticeships are used. It was also noted that no apprenticeship placements roles are currently at the site.	Compliant	
6.7.2	Indicator: Evidence of a policy to ensure social compliance of its suppliers and contractors Requirement: Yes Applicability: All	a. Farm has a policy to ensure that all companies contracted to provide supplies or services (e.g. divers, cleaning, maintenance) have socially responsible practices and policies. b. Producing company has criteria for evaluating its suppliers and contractors. The company keeps a list of approved suppliers and contractors. c. Producing company keeps records of communications with suppliers and subcontractors that relate to compliance with 6.7.2.	The Code of Conduct states within clauses 1.2 that Contractors must comply with the Code of Conduct, which has includes all social responsible practices and policies. There is supplier/contract approval process which is used to compile an approved list of suppliers/contractors. Risk, performance are included as part of the process. There are records of communications with contractors.	Compliant	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
		d. Others, please describe			
Criterion 6.8 Conflict resolution					
6.8.1	Indicator: Evidence of worker access to effective, fair and confidential grievance procedures Requirement: Yes Applicability: All	a. Employer has a clear labor conflict resolution policy for the presentation, treatment, and resolution of worker grievances in a confidential manner.	There is a complaint procedure detailed in the HR Policy which explains the reporting procedure including bullying and harassment and confidentiality policy.	Compliant	
		b. Workers are familiar with the company's labor conflict policies and procedures. There is evidence that workers have fair access.	All employees have access to policies through the intranet. This was confirmed through employee interviews.		
		c. Maintain documentary evidence (e.g. complaint or grievance filings, minutes from review meetings) and be advised that workers will be interviewed to confirm the above.	All communication such as Complaints, grievances and discipline is recorded within the employee personnel file. There communications are detailed in writing with the employee personnel files.		
		d. Others, please describe			
6.8.2	Indicator: Percentage of grievances handled that are addressed [142] within a 90-day timeframe Requirement: 100% Applicability: All	a. Employer maintains a record of all grievances, complaints and labor conflicts that are raised.	See 6.8.1c	Compliant	
		b. Employer keeps a record of follow-up (i.e. corrective actions) and timeframe in which grievances are addressed.	The established grievance policy and procedures are well documented. Any grievances that are raised are documented in the employee personnel files and have agreed action plans if required.		
		c. Maintain documentary evidence and be advised that workers will be interviewed to confirm that grievances are addressed within a 90-day timeframe.	None of the workers interviewed employees had any grievances so unable to confirm. The company policy is to respond to each stage of the process within 14 days.		
		d. Others, please describe			
Criterion 6.9 Disciplinary practices					
6.9.1	Indicator: Incidences of excessive or abusive disciplinary actions Requirement: None Applicability: All	a. Employer does not use threatening, humiliating or punishing disciplinary practices that negatively impact a worker's physical and mental health or dignity.	None of the policy are procedures that are used were threatening, humiliating or have any punishing disciplinary practices. The practice of the disciplinary does not impact the workers physical, mentally.	Compliant	
		b. Allegations of corporeal punishment, mental abuse [144], physical coercion, or verbal abuse will be investigated by auditors.	No evidence or allegations of any abuse was noted during the audit.		
		c. Be advised that workers will be interviewed to confirm there is no evidence for excessive or abusive disciplinary actions.	Workers interviews confirmed no issues with excessive or abusive actions.		
		d. Others, please describe			

		Compliance Criteria	Audit evidence	Evaluation	Justification of classification of NC
		(Use as guidance for audit only)	1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below .	(Per indicator, select one category in the drop-down menu)	Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
6.9.2	Indicator: Evidence of a functioning disciplinary action policy whose aim is to improve the worker [143] Requirement: Yes Applicability: All	a. Employer has written policy for disciplinary action which explicitly states that its aim is to improve the worker [143].	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.	Compliant	
		b. Maintain documentary evidence (e.g. worker evaluation reports) and be advised that workers will be interviewed to confirm that the disciplinary action policy is fair and effective.	None of the workers had been involved with a disciplinary procedure but confirmed workers are regularly evaluated and reviewed.		
		c. Others, please describe			
Criterion 6.10 Working hours and overtime					
6.10.1	Indicator: Incidences, violations or abuse of working hours and overtime laws [145] Requirement: None Applicability: All	a. Employer has documentation showing the legal requirements for working hours and overtime in the region where the farm operates. If local legislation allows workers to exceed internationally accepted recommendations (48 regular hours, 12 hours overtime) then requirements of the international standards apply.	Company holds document for Employment Standards Act for BC for working regulations. The working shift pattern is carried out over 2 weeks. The shift patten consists of 8 days on and 6 days off. The averaged hours over the 2 week is 40 hours per week.	Compliant	
		b. Records (e.g. time sheets and payroll) show that farm workers do not exceed the number of working hours allowed under the law.	Working hours are provided by site managers to the payroll and working hours' department. The workers confirm that working hours are correct prior to this. Records on Dayforce system show that workers are not exceeding the working hours that are allowed.		
		c. If an employer requires employees to work shifts at the farm (e.g. 10 days on and six days off), the employer compensates workers with an equivalent time off in the calendar month and there is evidence that employees have agreed to this schedule (e.g. in the hiring contract).	The shift pattern is agreed prior to the commencement of employment. The shift pattern consists of 8 days working and 6 days off. The average hours over the 2 weeks are 40 hours. The contract of employment clearly stated that working hours.		
		d. Be advised that workers will be interviewed to confirm there is no abuse of working hours and overtime laws.	Workers confirmed that the facility did not abuse the working hours regulations and laws.		
		e. Others, please describe			
		a. Payment records (e.g. payslips) show that workers are paid a premium rate for overtime hours.	Workers are paid premium rate for overtime hours they are paid 150% for the first 2 hours and 200% for any hours worked after that.		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
6.10.2	Indicator: Overtime is limited, voluntary [146], paid at a premium rate and restricted to exceptional circumstances Requirement: Yes Applicability: All except as noted in [146]	b. Overtime is limited and occurs in exceptional circumstances as evidenced by farm records (e.g. production records, time sheets, and other records of working hours).	Dayforce System confirmed that overtime is infrequent.	Compliant	
		c. Be advised that workers will be interviewed to confirm that all overtime is voluntary except where there is a collective bargaining agreement which specifically allows for compulsory overtime.	Workers confirmed that overtime is rare and is voluntary.		
		d. Others, please describe			
Criterion 6.11 Education and training					
6.11.1	Indicator: Evidence that the company encourages and sometimes supports education initiatives for all workers (e.g., courses, certificates and degrees) Requirement: Yes Applicability: All	a. Company has written policies related to continuing education of workers. Company provides incentives (e.g. subsidies for tuition or textbooks, time off prior to exams, flexibility in work schedule) that encourage workers to participate in educational initiatives. Note that such offers may be contingent on workers committing to stay with the company for a pre-arranged time.	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.	Compliant	
		b. Employer maintains records of worker participation in educational opportunities as evidenced by course documentation (e.g. list of courses, curricula, certificates, degrees).	All training records are maintained on the DATS system.		
		c. Be advised that workers will be interviewed to confirm that educational initiatives are encouraged and supported by the company.	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.		
		d. Others, please describe			
Criterion 6.12 Corporate policies for social responsibility					
6.12.1	Indicator: Demonstration of company-level [148] policies in line with the standards under 6.1 to 6.11 above Requirement: Yes Applicability: All	a. Company-level policies are in line with all social and labor requirements presented in 6.1 through 6.11.	The Code of Conduct Policy and also the HR Policy are in line with all social and labour requirements	Compliant	
		b. Company-level policies (see 6.12.1a) are approved by the company headquarters in the region where the site applying for certification is located.	Corporate policy is approved by the Senior Management Team in Campbell River		
		c. The scope of corporate policies (see 6.12.1a) covers all company operations relating to salmonid production in the region (i.e. all smolt production facilities, grow-out facilities and processing plants).	The scope of all corporate policies cover all company operations.		
		d. The site that is applying for certification provides auditors with access to all company-level policies and procedures as are needed to verify compliance with 6.12.1a (above).	All documentation was provided and reviewed		

		Compliance Criteria	Audit evidence	Evaluation	Justification of classification of NC
		(Use as guidance for audit only)	1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below .	(Per indicator, select one category in the drop-down menu)	Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
		e. Others, please describe			
PRINCIPLE 7: BE A GOOD NEIGHBOR AND CONSCIENTIOUS CITIZEN					
<i>Criterion 7.1 Community engagement</i>					
7.1.1	Indicator: Evidence of regular and meaningful [149] consultation and engagement with community representatives and organizations Requirement: Yes Applicability: All	a. The farm pro-actively arranges for consultations with the local community at least twice every year (bi-annually).	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 have been many letters sent between Kwiakah First Nation and Marine Harvest. There are outstanding issues and ongoing dialogue between the two parties may require the future reevaluation of this indicator.	Compliant	
		b. Consultations are meaningful. OPTIONAL: the farm may choose to use participatory Social Impact Assessment (pSIA) or an equivalent method for consultations.	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.		
		c. Consultations include participation by representatives from the local community who were asked to contribute to the agenda.	See 7.1.1b		
		d. Consultations include communication about, or discussion of, the potential health risks of therapeutic treatments (see Indicator 7.1.3).	See 7.1.1b		
		e. Maintain records and documentary evidence (e.g. meeting agenda, minutes, report) to demonstrate that consultations comply with the above.	See 7.1.1a		
		f. Be advised that representatives from the local community and organizations may be interviewed to confirm the above.	KWIAKAH First Nation wished to meet the auditors. There are concerns of the farm operations that were discussed. There was no direct non-compliance with the standard. There have been many letters between Kwiakah First Nation and Marine Harvest. There are outstanding issues and ongoing dialogue between the two parties may require the future reevaluation of this indicator.		
		g. Others, please describe			
7.1.2	Indicator: Presence and evidence of an effective [150] policy and mechanism for the presentation, treatment and resolution of complaints by community stakeholders and organizations Requirement: Yes	a. Farm policy provides a mechanism for presentation, treatment and resolution of complaints lodged by stakeholders, community members, and organizations.	MHC have a policy Doc#5/FW905 External Complaint resolution.	Compliant	
		b. The farm follows its policy for handling stakeholder complaints as evidenced by farm documentation (e.g. follow-up communications with stakeholders, reports to stakeholder describing corrective actions).	All external complaints are logged by Director of Public Affairs, Ian Roberts. A log has been created. The Log details who raised the complaint and the nature of the complaint. The complaints are managed and closed off when the matter has been dealt with.		
		c. The farm's mechanism for handling complaints is effective based on resolution of stakeholder complaints (e.g. follow-up correspondence from stakeholders).	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 .		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
	Applicability: All	d. Be advised that representatives from the local community, including complainants where applicable, may be interviewed to confirm the above.	See 7.1.1d		
		e. Others, please describe			
7.1.3	Indicator: Evidence that the farm has posted visible notice [151] at the farm during times of therapeutic treatments and has, as part of consultation with communities under 7.1.1, communicated about potential health risks from treatments Requirement: Yes Applicability: All	a. Farm has a system for posting notifications at the farm during periods of therapeutic treatment. (use of anaesthetic baths is not regarded a therapeutic)	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.	Compliant	
	b. Notices (above) are posted where they will be visible to affected stakeholders (e.g. posted on waterways for fishermen who pass by the farm).	Notices are posted on the system.			
	c. Farm communicates about the potential health risks from treatments during community consultations (see 7.1.1)	This has been communicated in the engagement letter as detailed 7.1.1b			
	d. Be advised that members of the local community may be interviewed to confirm the above.	See 7.1.1d			
	e. Others, please describe				
Criterion 7.2 Respect for indigenous and aboriginal cultures and traditional territories					
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 [152]	a. Documentary evidence establishes that the farm does or does not operate in an indigenous territory (to include farms that operate in proximity to indigenous or aboriginal people [152]). If not then the requirements of 7.2.1 do not apply.	MHC are operating in some indigenous territories and have several agreements (IBA) in place with FN groups. Re Phillips Arm farm and the Kwiakah FN, see 7.1.1a and 7.1.1f. The farm complies with all government requirements for consultation and siting.	Compliant	
	b. Farm management demonstrates an understanding of relevant local and/or national laws and regulations that pertain to consultations with indigenous groups.	The agreements demonstrate that MHC are aware of Local/national laws and regulations.			
	c. As required by law in the jurisdiction: - farm consults with indigenous groups and retains documentary evidence (e.g. meeting minutes, summaries) to show how the process complies with 7.2.1b; OR - farm confirms that government-to-government consultation occurred and obtains documentary evidence.	There is a log sheet that records all meetings/calls and communication.			
	d. Be advised that representatives from indigenous groups may be interviewed to confirm the above.	See 7.1.1d			

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
		e. Others, please describe			
7.2.2	Indicator: Evidence that the farm has undertaken proactive consultation with indigenous communities Requirement: Yes [152] Applicability: All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [152]	a. See results of 7.2.1a (above) to determine whether the requirements of 7.2.2 apply to the farm.	MHC are operating in some indigenous territories and have several agreements (IBA) in place with FN.	Compliant	
		b. Be advised that representatives from indigenous communities may be interviewed to confirm that the farm has undertaken proactive consultations.	See 7.1.1d		
		c. Others, please describe			
7.2.3	Indicator: Evidence of a protocol agreement, or an active process [153] 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 [152]	a. See results of 7.2.1a (above) to determine whether the requirements of 7.2.3 apply to the farm.	MHC are operating in some indigenous territories and have several agreements (IBA) in place with FN. The agreements demonstrate that MHC are aware of Local/national laws and regulations for each FN.	Compliant	
		b. Maintain evidence to show that the farm has either: 1) reached a protocol agreement with the indigenous community and this fact is documented; or 2) continued engagement in an active process [153] to reach a protocol agreement with the indigenous community.	There are agreements in place as detailed in 7.2.1a and continuous engagements as detailed 7.2.1c		
		c. Be advised that representatives from indigenous communities may be interviewed to confirm either 7.2.3b1 or b2 (above) as applicable.	See 7.1.1d		
		d. Others, please describe			
Criterion 7.3 Access to resources					
7.3.1	Indicator: Changes undertaken restricting access to vital community resources [154] without community approval Requirement: None Applicability: All	a. Resources that are vital [155] to the community have been documented and are known by the farm (i.e. through the assessment process required under Indicator 7.3.2).	As detailed in CEAA screening report MHC do not have exclusive use of the location the farms are located in.	Compliant	
		b. The farm seeks and obtains community approval before undertaking changes that restrict access to vital community resources. Approvals are documented.	There is no restriction of access.		
		c. Be advised that representatives from the community may be interviewed to confirm that the farm has not restricted access to vital resources without prior community approval.	See 7.1.1d		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
		d. Others, please describe			
7.3.2	Indicator: Evidence of assessments of company's impact on access to resources Requirement: Yes Applicability: All	a. There is a documented assessment of the farm's impact upon access to resources. Can be completed as part of community consultations under 7.1.1.	The CEAA report for the site includes consultation with FN , local community and government..	Compliant	
		b. Be advised that representatives from the community may be interviewed to generally corroborate the accuracy of conclusions presented in 7.3.2a.	See 7.1.1d		
		c. Others, please describe			
INDICATORS AND STANDARDS FOR SMOLT PRODUCTION					
SECTION 8: STANDARDS FOR SUPPLIERS OF SMOLT					
<i>Standards related to Principle 1</i>					
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).	The smolt supplier was MHC's Dalrymple Creek Hatchery.	Compliant	
		b. Where legal authorisation related to water quality are required, obtain copies of smolt suppliers' permits.	The Dalrymple Creek Hatchery has its : (1) Freshwater/Land-based Aquaculture Licence Under the Fisheries Act, Licence No. AQFW 112571 2015, issued by DFO 06/19/15 and expiring 06/18/24; (2) Provincial Aquaculture Licence Number PR083 issued by the BC Ministry of Forests, Lands and Natural Resource Operations, effective from 07/01/12 to 06/30/17; (3) Permit PE07082 issued 05/03/94 by the BC Ministry of Environment, Lands and Parks specifying effluent volume and load limits and requiring annual reporting of monitoring data.		
		c. Obtain records from smolt suppliers showing monitoring and compliance with discharge laws, regulations, and permit requirements as required.	Monthly effluent monitoring data shows that the Dalrymple Creek Hatchery frequently fails to comply with Ministry of Environment (MOE) requirements for TSS and total phosphorus. MOE letter dated 04/03/14 contains the statement:"The Ministry of Environment has not pressed enforcement regarding excursions to permitted quality limits and is not likely to do so as long as Marine Harvest continues to make progress on installing advanced treatment systems at the hatchery -- or there is evidence of significant adverse impact to the environment attributable to the hatchery." MHC continues to submit required effluent monitoring data, and is in the process of changing the hatchery from a flow-through system to a recirculating system complete with redesigned waste treatment system.		
		-	See 8.1c		
		e. Others, please describe			

		Compliance Criteria (Use as guidance for audit only)	Audit evidence 1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below .	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
8.2	Indicator: Compliance with labor laws and regulations Requirement: Yes Applicability: All Smolt Producers	a. Obtain declarations from smolt suppliers affirming compliance with labor laws and regulations.	All fish on-site originate from within MHC's broodstock and hatchery facilities which operate under the same labor laws and regulations as described in Section 6 of this report.	Compliant	
		b. Keep records of supplier inspections for compliance with national labor laws and codes (only if such inspections are legally required in the country of operation; see 1.1.3a)	All fish on-site originate from within MHC's broodstock and hatchery facilities which operate under the same labor laws and regulations as described in Section 6 of this report.		
		c. Others, please describe			
<i>Standards related to Principle 2</i>					
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	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.	Mainstream Biological Consulting conducted an assessment of the hatchery in February 2014, and the resulting Biodiversity Impact Assessment (November 2014) was presented.	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.	The Biodiversity Impact Assessment determined that there are "no significant concerns" regarding hatchery potential impact on biodiversity due to hatchery operations. Nevertheless, a number contains a number of "recommendations to further lessen the significance of these impacts". All recommendations are being implemented.		
		c. Others, please describe			
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: 5 kg/mt of fish produced over a 12-month period; within three years of publication of the SAI standards, 4 kg/mt of fish	a. Obtain records from smolt suppliers showing amount and type of feeds used for smolt production during the past 12 months.	All feed used is from Skretting feed, and types of feed and quantities are recorded on Aquafarmer.	Minor	The result of the calculation is indicating a negative result and that more Phosphorus in sludge is being removed than is being added by the hatcheries. With the negative result its unclear that the measurement is accurate.
		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).	Skretting declare that the P in feed is 1.6 to 1.7 in Nutra XP and 1.4 in Nutra RC.		
		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.	For the Dalrymple Creek Hatchery, the P in feed was 4.15 tons in 2015.		
		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.	Hatchery biomass was 401.54 tons in 2015.		
		e. Calculate the amount of phosphorus in fish biomass produced (result from 8.4d) using the formula in Appendix VIII-1.	Phosphorus in fish produced at Dalrymple Creek Hatchery was 1.73 Tons.		

	Compliance Criteria (Use as guidance for audit only)	Audit evidence 1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below .	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
the SAD standards, 4 kg/mt of fish produced over a 12-month period Applicability: All Smolt Producers	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.	The phosphorus in sludge removed from the hatchery was 3.09 tons.		
	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.	For the Dalrymple Creek Hatchery, the level of phosphorus discharged to the environment, as calculated by ASC method, was -0.0017 kg/mt of fish produced. As calculated by MHC on the basis of volume of effluent and phosphorus content of the effluent (determined on a monthly basis), phosphorus discharged to the environment was 1.58 kg/mt.		
	h. Others, please describe			
Standards related to Principle 3				
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 [156] of the SAD standards Requirement: Yes [157] Applicability: All Smolt Producers except as noted in [157]	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.	Non-native Atlantic salmon are farmed.	Compliant	
	b. Provide the farm with documentary evidence that the non-native species was widely commercially produced in the area before publication of the SAD Standard. (See definition of area under 3.2.1).	DFO website shows that introductions occurred in 1985 from Scotland.		
	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.	Evidence provided on the DFO website shows egg importations occurring first, from Scotland, in 1985.		
	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.	Evidence provided on the DFO website shows egg importations occurring first, from Scotland, in 1985.		
	e. Retain evidence as described in 8.5a-d necessary to show compliance of each facility supplying smolt to the farm.	Atlantic salmon are farmed, and this species has been farmed in British Columbia since the mid-1980s.		
	f. Others, please describe			

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
8.6	Indicator: Maximum number of escapees [158] in the most recent production cycle Requirement: 300 fish [159] Applicability: All Smolt Producers except as noted in [159]	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.	The Dalrymple Creek Hatchery is a land-based tank system with triple screening on outflows. There have been no escapes.	Compliant	
		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.	There has not been any escape.		
		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 [159]).	Suppliers are owned by MHC.		
		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 [159]. 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.	There has not been any escape.		
		e. Others, please describe			
8.7	Indicator: Accuracy [160] 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.	Vaki automatic counters are used with a reported accuracy of +/- 2%. The smolts are counted three times: at vaccination, when loading transport containers for transfer from the hatchery and by the wellboat when discharging to pens at the farm. There is a Smolt Inventory Control procedure (Document# FW269) for hatcheries.	Compliant	
		b. Review records to verify that accuracy of the smolt supplier's counting technology or counting method is ≥ 98%.	Records are carried on into the marine sites as the company owns the marine sites and the hatchery. The numbers stocked have been reviewed. A Smolt Inventory Control procedure (# FW269) is in place. Wellboat counts are compared with hatchery counts for verification. Regarding 2016YC, the variance in hatchery counts versus boat counts was -0.76%		
		c. Others, please describe			

Standards related to Principle 4

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
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.	The hatchery is part of Marine Harvest Canada. The feed bags, pallets and plastic are all sent back to the feed company. There is a Materials Storage, Handling and Waste Disposal Plan (Document# S/FW963) covering all salt water and fresh water sites, as well as a posted Environmental and Biodiversity Policy signed by the Managing Director and dated May 2016, in which of MHC's commitment to environmental certification programs such as ASC is declared.		
		b. Others, please describe			
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	a. Obtain records from the smolt supplier for energy consumption by source (fuel, electricity) at the supplier's facility throughout each year.	The hatchery reporting is under the same process as that of the marine sites.	Compliant	
		b. Confirm that the smolt supplier calculates total energy consumption in kilojoules (kj) during the last year.	The total energy consumption fro Dalrymple Creek Hatchery for 2015 was 15,582,912,852 kj.		
		c. Obtain records to show the smolt supplier calculated the total weight of fish in metric tons (mt) produced during the last year.	Dalrymple Creek Hatchery production for 2015 was 401.538 MT.		
		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.	Energy consumption per metric tons of production was 38,808,063 kj./mt in 2015.		
		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.	Energy use assessment was conducted in 2015.		
		f. Others, please describe			
8.10	Indicator: Records of greenhouse gas (GHG [161]) emissions [162] at the smolt production facility and evidence of an annual GHG assessment (See Appendix V, subsection 1) Requirement: Yes	a. Obtain records of greenhouse gas emissions from the smolt supplier's facility.	GHG emissions are recorded.	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.	GHG calculations are done and reported to the global Marine Harvest company for inclusion in the annual report.		
		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.	Emission factors have been previously chosen by the head office in Norway and used by all the Marine Harvest companies. The UK government conversion factors are used.		
		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.	The UK government designations on GWP's are used.		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
	Applicability: All Smolt Producers	e. Obtain evidence to show that the smolt supplier has undergone a GHG assessment in compliance with requirements Appendix V-1 at least annually.	Dalrymple Creek Hatchery undergoes annual GHG assessments. GHG emissions for 2015 were 1,302,499 CO ₂ equivalents		
		f. Others, please describe			
<i>Standards related to Principle 5</i>					
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. c. Others, please describe	The Fish Health Management Plan (October 2015) covers both freshwater and marine operations. It covers the requirements of the Finfish Aquaculture Licence and references a comprehensive set of applicable SOPs. The FHMP was signed off by MHC veterinarian. Section 1.1.1 designates the veterinarian's duties and responsibilities, including the responsibility for overseeing matters of fish health management for Marine Harvest Canada.	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 [163] 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. e. Others, please describe	The list of diseases is available in the Fish Health Management Plan. Vaccination is not mandatory but is the common practice of the three Atlantic salmon aquaculture companies operating in British Columbia. The list of diseases of concern is available in MHC's Fish Health Management Plan. All fish received the following vaccines: (1) Renogen for Renibacterium salmoninarum, the causative agent of BKD; (2) Forte Micro for Aeromonas salmonicida and Vibrio spp., causative agents for, respectively, furunculosis and vibriosis; and, (3) APEX-IHN for the infectious haemopoietic necrosis virus. Files on the Aquafarmer system list the vaccines used for the fish at each farm site.	Compliant	
	Indicator: Percentage of smolt groups [164] tested for select diseases of regional concern prior	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.	The diseases for which fish must be tested prior to movement are listed in Appendix 3 of the Freshwater Aquaculture Licence issued by DFO.		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
8.13	to entering the grow-out phase on farm Requirement: 100% Applicability: All Smolt Producers	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). c. Others, please describe	Kennebec River Biosciences in Maine are used as a testing laboratory for all the diseases listed in Appendix 3 of the licence. The laboratory report dated 11/16/15 was viewed.	Compliant	
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. b. Others, please describe	The last treatment of fish at Dalrymple Hatchery occurred in January and February 2010 and was with florfenicol.	Compliant	
8.15	Indicator: Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [165] in any of the primary salmon producing or importing countries [166] 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 [166]. 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. d. Others, please describe	The hatchery is owned by MHC. The same procedures apply to the marine sites and the freshwater sites. MHC's Prohibited Chemical and Therapeutant Purchasing Policy, signed by the Managing Director, refers to the website of the Canadian Food Inspection Agency where the list of banned chemicals is found. The hatchery is owned by MHC. Smolts did not receive any treatment at the Dalrymple Creek Hatchery.	Compliant	
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. c. Others, please describe	Smolts have not received any treatment at the Dalrymple Creek Hatchery. Smolts have not received any treatment over the last production cycle at the Dalrymple Creek Hatchery.	Compliant	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
8.17	Indicator: Allowance for use of antibiotics listed as critically important for human medicine by the WHO [167] Requirement: None [168] 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 [167].	The hatchery is owned by MHC. The WHO list is available on MHC Sharepoint.	Compliant	
		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.	The hatchery is owned by MHC. The WHO list is available on MHC Sharepoint.		
		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.	The hatchery did not use any antibiotic listed as critically important for human medicine.		
		d. Others, please describe			
8.18	Indicator: Evidence of compliance [169] with the OIE Aquatic Animal Health Code [170] Requirement: Yes Applicability: All Smolt Producers	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).	The hatchery is owned by MHC and the OIE Aquatic Animal Health Code is available on MHC Sharepoint.	Compliant	
		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.	The hatchery is owned by MHC and the OIE Aquatic Animal Health Code is available on MHC Sharepoint. The fish health management plan is based on the OIE code.		
		c. Obtain a declaration from the supplier stating their intent to comply with the OIE code and copies of the smolt suppliers policies and procedures that are relevant to demonstrate compliance with the OIE Aquatic Animal Health Code.	The hatchery is owned by Marine Harvest.		
		d. Others, please describe			
Standards related to Principle 6					
8.19	Indicator: Evidence of company-level policies and procedures in line with the labor standards under 6.1 to 6.11 Requirement: Yes Applicability: All Smolt Producers	a. Obtain copies of smolt supplier's company-level policies and procedures and a declaration of compliance with the labor standards under 6.1 to 6.11.	See principle 6	N/A	
		b. Review the documentation and declaration from 8.19a to verify that smolt supplier's policies and procedures are in compliance with the requirements of labor standards under 6.1 to 6.11.	See principle 6		
		c. Others, please describe			
Standards related to Principle 7					
	Indicator: Evidence of regular consultation and engagement with	a. From each smolt supplier obtain documentary evidence of consultations and engagement with the community.	See principle 7		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence 1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below .	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
8.20	community representatives and organizations Requirement: Yes Applicability: All Smolt Producers	b. Review documentation from 8.20a to verify that the smolt supplier's consultations and community engagement complied with requirements.	See principle 7	N/A	
		c. Others, please describe			
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.	See principle 7	N/A	
		b. Others, please describe			
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.	See principle 7	N/A	
		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.	See principle 7		
		c. Others, please describe			
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.	See principle 7	N/A	
		b. Where relevant, obtain documentary evidence that smolt suppliers undertake proactive consultations with indigenous communities.	See principle 7		
		c. Others, please describe			

ADDITIONAL REQUIREMENTS FOR OPEN (NET-PEN) PRODUCTION OF SMOLT

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
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.	The Dalrymple Creek Hatchery is not an open net-pen operation.	N/A	
		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.	The Dalrymple Creek Hatchery is not an open net-pen operation.		
		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.	The Dalrymple Creek Hatchery is not an open net-pen operation.		
		d. Others, please describe			
8.25	Indicator: Allowance for producing or holding smolt in net pens in any water body Requirement: Permitted until five years from publication of the SAD standards (i.e full compliance by June 13, 2017) Applicability: All Smolt Producers Using Open Systems	a. Take steps to ensure that by June 13, 2017 the farm does not source smolt that was produced or held in net pens.	The Dalrymple Creek Hatchery is not an open net-pen operation.	N/A	
		b. Others, please describe			
8.26	Indicator: Evidence that carrying capacity (assimilative capacity) of the freshwater body has been established by a reliable entity [171] within the past five years [172, 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.	The Dalrymple Creek Hatchery is not an open net-pen operation.	N/A	
		b. Identify which entity was responsible for conducting the assessment (8.26a) and obtain evidence for their reliability.	The Dalrymple Creek Hatchery is not an open net-pen operation.		
		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.	The Dalrymple Creek Hatchery is not an open net-pen operation.		
		d. Review information to confirm that the total biomass in the water body is within the limits established in the assessment (8.26a).	The Dalrymple Creek Hatchery is not an open net-pen operation.		
		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.	The Dalrymple Creek Hatchery is not an open net-pen operation.		
		f. Others, please describe			

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
8.27	Indicator: Maximum baseline total phosphorus concentration of the water body (see Appendix VIII-6) Requirement: ≤ 20 µg/l [174] Applicability: All Smolt Producers Using Open Systems	a. Obtain documentary evidence to show that smolt suppliers conducted water quality monitoring in compliance with the requirements of Appendix VIII-6.	The Dalrymple Creek Hatchery is not an open net-pen operation.	N/A	
		b. Obtain from smolt suppliers a map with GPS coordinates showing the sampling locations.	The Dalrymple Creek Hatchery is not an open net-pen operation.		
		c. Obtain from smolt suppliers the TP monitoring results for the past 12 months and calculate the average value at each sampling station.	The Dalrymple Creek Hatchery is not an open net-pen operation.		
		d. Compare results to the baseline TP concentration established below (see 8.29) or determined by a regulatory body.	The Dalrymple Creek Hatchery is not an open net-pen operation.		
		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.	The Dalrymple Creek Hatchery is not an open net-pen operation.		
		f. Others, please describe			
8.28	Indicator: Minimum percent oxygen saturation of water 50 centimeters above bottom sediment (at all oxygen monitoring locations described in Appendix VIII-6) Requirement: ≥ 50% Applicability: All Smolt Producers Using Open Systems	a. Obtain evidence that smolt supplier conducted water quality monitoring in compliance with the requirements (see 8.27a).	The Dalrymple Creek Hatchery is not an open net-pen operation.	N/A	
		b. Obtain from smolt suppliers the DO monitoring results from all monitoring stations for the past 12 months.	The Dalrymple Creek Hatchery is not an open net-pen operation.		
		c. Review results (8.28b) to confirm that no values were below the minimum percent oxygen saturation.	The Dalrymple Creek Hatchery is not an open net-pen operation.		
		d. Others, please describe			
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).	The Dalrymple Creek Hatchery is not an open net-pen operation.	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.	The Dalrymple Creek Hatchery is not an open net-pen operation.		
		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.	The Dalrymple Creek Hatchery is not an open net-pen operation.		
		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.	The Dalrymple Creek Hatchery is not an open net-pen operation.		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
		e. Others, please describe			
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.	The Dalrymple Creek Hatchery is not an open net-pen operation.	N/A	
		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).	The Dalrymple Creek Hatchery is not an open net-pen operation.		
		c. Verify that the average observed TP concentration did not increase by more than 25% from baseline TP concentration.	The Dalrymple Creek Hatchery is not an open net-pen operation.		
		d. Others, please describe			
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.	The Dalrymple Creek Hatchery is not an open net-pen operation.	N/A	
		b. Others, please describe			
ADDITIONAL REQUIREMENTS FOR SEMI-CLOSED AND CLOSED PRODUCTION OF SMOLTS					
8.32	Indicator: Water quality monitoring matrix completed and submitted to ASC (see Appendix VIII-2) Requirement: Yes [177] Applicability: All Smolt Producers Using Semi-Closed or Closed Production Systems	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.	Testing of the water is carried out monthly.	Compliant	
		b. Obtain water quality monitoring matrix from smolt suppliers and review for completeness.	Monthly testing includes TSS, TP, TAN, BOD, chloride, nitrite, nitrate, salinity, pH and DO.		
		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.	Water quality data for Dalrymple Creek Hatchery was submitted.		
		d. Others, please describe			
	Indicator: Minimum oxygen saturation in the outflow (methodology in Appendix VIII-2)	a. Obtain the water quality monitoring matrix from each smolt supplier (see 8.32b).	The hatchery is owned by MHC, Water quality monitoring records are available.		MHC has already implemented measures to increase dissolved
	b. Review the results (8.33a) for percentage dissolved oxygen saturation in the effluent to confirm that no measurements fell below 60% saturation.	Dalrymple Creek Hatchery's water quality monitoring data for 2015 indicated dissolved oxygen levels less than 60% for the months of April to October. The hatchery has raised the height of the discharge pipe and has had higher DO values in recent months.			

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
8.33	Requirement: 60% [178,179] Applicability: All Smolt Producers Using Semi-Closed or Closed Production Systems	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). d. Others, please describe	1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below . See 8.33b	Minor	oxygen in hatchery outflow. Initial results indicate the measures taken may be adequate to maintain dissolved oxygen in effluent at ≥60%.
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. d. Others, please describe	A copy was presented of the report <i>An examination of macrobenthic community structure and health upstream and downstream of effluent discharge from the Dalrymple Creek Hatchery</i> . Sampling was conducted by Mainstream Biological Consulting, and analytical work was performed by Biologica. Surveys were conducted as required in Appendix III-3. The 2015 macro-benthic survey revealed negative impacts on downstream macro-benthic community. As a result, MHC has undertaken surveys twice annually. Surveys took place in February and July of 2016. The February survey found "no detectable effects", whereas there was "some negative impact" found in the July survey. In the latter survey, a control station showed similar results as the negatively-impacted downstream station, thereby leading analysts to speculate that the creek's flow rate is playing a role. MHC will continue the twice-yearly sampling program in order to ensure that downstream communities continue to recover in winter.	Compliant	
8.35	Indicator: Evidence of implementation of biosolids (sludge) Best Management Practices (BMPs) (Appendix VIII-4) Requirement: Yes	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.	Marine Harvest has a Biosolids Best Management practices SOP for all its freshwater units. The latest revision of the SOP was 09/21/15. Process flow plan is in place. Biosolids are separated by drum filters and settling pond, and sludge is removed on a monthly basis. The hatchery is owned by MHC.	Compliant	

	Compliance Criteria (Use as guidance for audit only)	Audit evidence 1. Write down all audit evidence for each compliance criterion (CC). Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text in the 'Audit Evidence' column as appropriate. 3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below .	Evaluation (Per indicator, select one category in the drop-down menu)	Justification of classification of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability
Applicability: All Smolt Producers Using Semi-Closed or Closed Production Systems	d. Obtain records from smolt suppliers showing monitoring of biosolid (sludge) cleaning maintenance, and disposal as described in Appendix VIII-2.	The auditor viewed Invoice No. 15824 dated 08/11/16 for the removal of 13.25 loads of sludge from Dalrymple Creek Hatchery site.		
	e. Others, please describe			

ASC Audit Report - Traceability

	Traceability Factor	Description of risk factor if present	Describe any traceability, segregation, or other systems in place to manage the risk.
10			
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 a slight risk of substitution as three of ten pens at the site hold non-ASC fish. The three pens of non-ASC salmon are clearly identified, and MHC does not move non-ASC fish to cages holding ASC fish.	Fully automated tracking system enables tracking of product, both forward and back, of all fish, including: broodstock and hatchery sources, through to nursery and grow-out sites, harvesting, transportation, processing and distribution. A comprehensive suite of documented procedures supports traceability and product identification and segregation. The processing facility certified to ASC Chain of Custody and the GFSI standard Best Aquaculture Practices. Both standards require effective traceability and input-output reconciliation (mass balance), and these elements are verified during third-party audits.
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.	MHC harvesting, transport and storage activities preclude the risk of substitution. The pen or pens harvested on a given day are identified in advance and on all paperwork associated with the harvest, transport and reception of fish at MHC-owned processing facility. MHC will not harvest certified and non-certified fish at the Phillips Arm site on the same day. Fish from different pens are held in separate holds on wellboats. At processing facility, incoming lots are assigned five-digit lot number which remains with the lot throughout processing, packing and distribution, and by which products can be traced forward as well as back to farm and cage. The processing facility has only one lot of fish in production at a time and completely runs through a lot before another lot enters production.	Fully automated tracking system enables tracking of product, both forward and back, of all fish, including: broodstock and hatchery sources, through to nursery and grow-out sites, harvesting, transportation, processing and distribution. A comprehensive suite of documented procedures supports traceability and product identification and segregation. The processing facility certified to ASC Chain of Custody and the GFSI standard Best Aquaculture Practices. Both standards require effective traceability and input-output reconciliation (mass balance), and these elements are verified during third-party audits.
10.3	The possibility of subcontractors being used to handle, transport, store, or process certified products.	The only contracting involved is the vessel that harvests and transports fish from farm to processing facility. Harvest vessel is contracted exclusively by MHC. All other activities are under direct MHC control.	Fully automated tracking system enables tracking of product, both forward and back, of all fish, including: broodstock and hatchery sources, through to nursery and grow-out sites, harvesting, transportation, processing and distribution. A comprehensive suite of documented procedures supports traceability and product identification and segregation.
10.4	Any other opportunities where certified product could potentially be mixed, substituted, or mislabelled with non-certified product before the point where product enters the chain of custody.	None identified.	Fully automated tracking system enables tracking of product, both forward and back, of all fish, including: broodstock and hatchery sources, through to nursery and grow-out sites, harvesting, transportation, processing and distribution. A comprehensive suite of documented procedures supports traceability and product identification and segregation.

<p>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</p>	<p>Fish are seined and pumped aboard a vessel fully contracted to MHC, and transported to MHC's Port Hardy Processing Plant. All activities are fully controlled by MHC, and fish can be traced with the use of primarily computerised systems from broodstock source to hatchery to farm to processing and distribution.</p>
<p>10.6 <u>Traceability Determination:</u></p>	

<p>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</p>	<p>MHC has in place systems to ensure effective traceability and segregation of products, and can readily verify that products sold as ASC-certified originated from a certified unit of certification. The processing facility certified to ASC Chain of Custody and the GFSI standard Best Aquaculture Practices. Both standards require effective traceability and input-output reconciliation (mass balance), and these elements are verified during third-party audits.</p>
<p>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.</p>	<p>See above.</p>
<p>10.6.3 The point from which chain of custody is required to begin.</p>	<p>Chain of custody begins at MHC's Port Hardy Processing Plant.</p>
<p>10.6.4 Is a separate chain of custody certificate required for the producer?</p>	<p>Yes</p>

ASC Audit Report - Closing

11 Findings

11.1 A summary table that lists all non-conformities and observations

NC reference	NC Status	Clause Reference	Description of NC	Description of actions pending
NC01	Closed	2.1.1, 2.1.2 and 2.1.3	Peak biomass sampling has not yet been carried out and the results cannot be reviewed.	Samples taken Nov 1-2 2016 for pre-peak analysis, and are now with Columbia Science. Results to be available February 2017. Benthic report provided 02/21/17 verifies compliance with ASC criteria for sulfides, Infaunal Trophic Index and highly abundant macrofaunal species.
NC02	Closed	2.2.3c	The water data classification has not been determined. MHC has submitted data to third party analyst and is awaiting report.	Reviewed and accepted 12/22/16. Conrad Powell. Water quality report (Marine Harvest Nutrient Monitoring & Data Analysis April 2017) prepared by Global AquaFoods Development Corp. was provided: temperature, DO, salinity and pH measurements indicate good growing conditions, and ammonia and nitrate concentrations are well within those required to protect marine life according to Nordin et al (2009). (Conrad Powell, 05/26/17)
NC03	Open - verification at first surveillance audit	4.5.2a	There are no records in place logging the disposal of waste such as feed bags and domestic waste.	Certification will work with production department to include enumeration of waste pickup on daily log sheets.
NC04	Open - verification at first surveillance audit	4.6.1e	Incorrect totals were submitted to ASC for the Kilojoules per metric ton produced.	Spreadsheets will be updated with proper information and resubmitted to ASC.
NC05	Open - verification at first surveillance audit	4.6.2e	Incorrect totals were submitted to ASC for the GHG emissions.	Spreadsheets will be updated with proper information and resubmitted to ASC.
NC06	Open - verification at first surveillance audit	8.4g	The level of phosphorus released to the environment for Dalrymple Creek in 2015 was -0.0017 kg/M produced using the ASC required sampling of sludge.	Phosphorus in effluent measured monthly and total hatchery discharge to be calculated for future audits.
NC07	Open - verification at first surveillance audit	8.33b	Dalrymple Creek Hatchery's water quality monitoring data for 2015 indicated dissolved oxygen levels less than 60% for the months of April to October.	New effluent system under development to further increase DO levels in effluent, completion estimated late 2017.

11.2 A copy of the non-conformity report form completed for each non-conformity and observation raised.

11.3 If any approved requests for variations or interpretations have been used, a full copy of the approved variation or interpretation form shall be appended to the report. If used in rating a NC, the ASC reference number (NCF 5) and a justification for its use (NCF 6) shall be completed in the NC report form.

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.

N/A

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).

In the opinion of the auditor the unit of certification can consistently meet the objectives of the Salmon standard.

12.3 In cases where Biodiversity Environmental Impact Assessment (BEIA) or Participatory Social Impact Assessment (PSIA) is available, it shall be added in full to the audit report. If these documents are not in English, then a synopsis in English shall be added to the report as

N/A

13 Decision

13.1 Has a certificate been issued? (yes/no)	Yes
13.2 The Eligibility Date (if applicable)	31st May 2017
13.3 Is a separate coc certificate required for the producer? (yes/no)	Yes
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.	31st May 2017 - 30th May 2020
13.4.2 The scope of the certificate	Phillips Arm farm site, excluding pens PA-0001, PA-0002 and PA-0003
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.	Please note that any complaints or objections to the SAI Global certification decision are to be subject to the SAI Global complaints procedure. The procedure can be reviewed by following the below link. https://www.saiglobal.com/assurance/feedback.htm

14 Surveillance

14.1 Next planned Surveillance	
14.1.1 Planned date	31st May 2018
14.1.2 Planned site	
14.2 Next audit type	
14.2.1 Surveillance 1	x
14.2.2 Surveillance 2	
14.2.3 Re-certification	
14.2.4 Other (specify type)	



KWIAKAH FIRST NATION

P.O. Box 437
Station A
Campbell River, BC
V9W 5B6
Phone : (250) 923-1556
Fax : (250) 923-1581

December 6, 2016

By Email: jean.ragg@saiglobal.com

SAI Global/Global Trust Certification
Quayside Business Park, Mill Street
Dundalk, County Louth, Ireland

Attention: Jean Ragg, Fisheries & Aquaculture Administrator

Re: ASC Full Assessment of Marine Harvest Canada, Phillips Arm

Kwiahah First Nation writes in response to SAI Global's notification to "stakeholders" dated November 7, 2016 that SAI Global will be conducting an audit to assess Marine Harvest Canada's ("Marine Harvest") application for an Aquaculture Stewardship Council ("ASC") certification under the ASC Salmon Standard Version 1.0, June 2013 (the "Salmon Standard") for their operations in Phillips Arm. We understand that SAI Global will consider pre-audit submissions made during the 30-day consultation window triggered by the stakeholder notice. We provide this letter in consideration of the specific conditions precedent to qualifying for a Salmon Standard certification: to demonstrate evidence that Indigenous groups were consulted as required by applicable laws, and proactively engaged by the applicant, including evidence of a protocol agreement with Indigenous groups.

Unfortunately, due to the limited time provided to make pre-audit submissions, and SAI Global's practice of not disclosing a proponent's application, these submissions do not necessarily represent Kwiahah's comprehensive position on Marine Harvest's application. We urge SAI Global to reconsider their position and disclose Marine Harvest's application to promote transparency and to allow stakeholders and rights-holders to participate in the review in a fulsome and unprejudiced manner.

Kwiahah First Nation's Claim to Phillips Arm

It is critical that SAI Global understand that Kwiahah First Nation is not a mere "stakeholder" as that term is commonly understood; Kwiahah asserts, holds and practices Aboriginal rights, including title to Phillips Arm and throughout our traditional territory, as recognized and affirmed by section 35 of the *Constitution Act, 1982*. Kwiahah maintains the right to manage our traditional territory and to control the impacts to our lands, water and resources, out of respect for our ancestors, members and future generations.

The location of Marine Harvest's Phillips Arm operations are at the heart of Kwiakah First Nation's traditional territory. In proximity of the Marine Harvest site, there are two traditional village sites in the area, at Nøts'inuxw on the eastern shores of the Phillips and Kakanuts on the western side in Fanny Bay, in addition to several traditional use sites used for fishing, and the collection of cockles, eel grass, and crabs, among other resources, making it one of the most intensely used and important areas in all of Kwiakah's traditional territory. As well, our small Nation's one successful economic venture is a sustainable bear viewing operation in the Phillips.

Please refer to the maps attached as Appendix 1 from Robert Galois's scholarly treatise, *Kwakwaka'wakw Settlements, 1775-1920*, based on early settler and explorer reports, which while accurate only on a broad scale, demonstrates the long-recognized occupation of the Phillips by Kwiakah (referenced as Kweeha).

The Crown's Duty to Consult and Accommodate Kwiakah

Kwiakah's exceptionally strong strength of claim to Phillips Arm combined with the potential for significant impacts to Kwiakah's Aboriginal rights and title from Marine Harvest's operations impose on the Crown a robust duty to consult and accommodate.¹ The duty to consult and accommodate is grounded in the need to protect Aboriginal rights and title and to preserve the future use of resources claimed by Aboriginal peoples.² The Crown's duty to consult will not be discharged unless the consultation is undertaken in good faith and is meaningful.³ A fundamental component of meaningful consultation is that a First Nation must be provided with all necessary information about the proposed undertaking to allow a comprehensive understanding of the nature of the possible impacts to the First Nation's rights and title.⁴ Depending on the situation, the Crown may need to impose conditions on a proponent's undertaking in order to accommodate a First Nation's rights to avoid irreparable harm or to minimize the effects of infringement.⁵

In the present instance, Kwiakah is specifically concerned about the detrimental environmental impacts introduced by the finfish aquaculture industry to our waters, fisheries and other harvestable marine resources, including impacts from viruses that may be carried by farmed finfish such as infectious salmon anaemia virus and piscine reovirus (PRV), the latter of which is objectively understood to be widespread in aquaculture operations.⁶

¹ *Tsilhqot'in Nation v. B.C.*, [2014] 3 C.N.L.R. 362 at para 79.

² *Carrier Sekani Tribal Council v. B.C. (Utilities Commission)*, 2010 SCC 43 at paras. 33-34.

³ *Haida Nation v. B.C. (Minister of Forests)*, 2004 SCC 73 at para 42.

⁴ *Mikisew Cree First Nation v. Canada (Minister of Canadian Heritage)*, 2005 SCC 69 at para 64.

⁵ *Haida Nation v. B.C. (Minister of Forests)*, 2004 SCC 73 at para 47.

⁶ The Federal Court in *Morton v. Canada (Minister of Fisheries and Oceans)* found sufficient evidentiary support for the position that PRV is the viral precursor to an infectious disease found in farmed salmon known as heart and skeletal muscle inflammation (HSMI), which affects the muscles and heart of salmon and can weaken salmon to the degree that they are

It is our position that Kwiakah has not been meaningfully consulted and accommodated regarding the potential impacts to Kwiakah's Aboriginal rights and title from Marine Harvest's Phillips Arm operation, including with respect to the granting of Marine Harvest's original or replacement tenures upon which Marine Harvest relies as authority for its Phillips Arm operation.

The Crown's duty to Kwiakah will remain unfulfilled until, at a minimum, we are provided with the information necessary to assess potential impacts to our Aboriginal rights and title, including health data from Marine Harvest's farm that will allow a risk assessment in relation to wild stocks, and by extension, the potential for impacts to our Aboriginal rights and title. This information may also help to identify what might be appropriate accommodation of Kwiakah's rights under the circumstances.

To this end, Kwiakah has proposed independent fish health testing at Marine Harvest's Phillips Arm farm; however, to date, neither B.C. nor Canada has imposed this condition, nor has Marine Harvest consented to such a condition or proposed other means by which the necessary information will be shared with Kwiakah.

The Salmon Standard

As referenced above, we provide these submissions in the context of specific criteria under the Salmon Standard that relate to the fulfillment of constitutional legal duties related to consultation, in addition to the applicant's engagement and cooperation with Indigenous groups, including related to risks posed by salmon farms to the health of wild fish populations, which are one of Kwiakah's key concerns regarding Marine Harvest's operations.

Central to Kwiakah's submissions is Criterion 7.2 which mandates "Respect for indigenous and Aboriginal cultures and traditional territories." To comply with the noted criterion, an applicant must provide evidence that Indigenous groups were consulted as required by applicable laws, that the farm has undertaken proactive consultation with Indigenous communities, and evidence of a protocol agreement, or an active process to establish such an agreement with Indigenous communities.⁷

We also note Principle 3 of the Salmon Standard which aims to ensure salmon farms do not harm the health of wild fish populations, specifically Criterion 3.12 of the Salmon Standard which requires "a demonstrated commitment to collaborate with NGOs, academics and governments on areas of mutually agreed research to measure possible impacts on wild

unable to swim up a river and reproduce: *Morton v. Canada (Minister of Fisheries and Oceans)*, [2015] F.C.J. No. 566 at para 35. Mr. Justice Rennie for the Federal Court in *Morton v. Canada (Minister of Fisheries and Oceans)* concluded, based on the application of the precautionary principle, that the evidence suggests that the disease agent PRV may be harmful to the protection and conservation of fish: *Morton v. Canada (Minister of Fisheries and Oceans)*, [2015] F.C.J. No. 566 at paras 45, 57 and 97.

⁷ The Salmon Standard pg. 63.

stocks.”⁸ The noted criterion requires “[a]t a minimum, a farm 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.”

It is Kwiakah’s position that Marine Harvest’s application must fail on the basis that Marine Harvest cannot demonstrate that the conditions underlying Criteria 7.2 and 3.12 have been fulfilled.

Marine Harvest is aware of Kwiakah’s position that Kwiakah was never meaningfully consulted on any aspect of Marine Harvest’s operation in Phillips Arm as discussed above. Until Kwiakah has been meaningfully consulted and appropriate steps have been taken to accommodate our rights to avoid irreparable harm or to minimize the effects of infringement, Criterion 7.2.1 cannot be considered fulfilled.

Marine Harvest has not undertaken proactive consultation with Kwiakah nor has Marine Harvest made good faith efforts to reach a protocol agreement, both of which are conditions to ASC certification under Criteria 7.2.2 and 7.2.3 of the Salmon Standard. From the time we learned of Marine Harvest’s operation in Phillips Arm, despite our significant efforts and repeated requests, Marine Harvest has not disclosed any relevant information to help our Nation understand the farm’s potential impacts on our section 35 rights.

As provided above, to better understand the potential impacts of Marine Harvest’s operations to Kwiakah’s Aboriginal rights and title, Kwiakah proposed an independently prepared and administered fish health testing protocol to confirm the farmed fish pose no risk to wild salmon. In response, Marine Harvest has repeatedly stalled any progress on negotiating such a protocol by imposing unreasonable conditions that raised concerns about transparency and failed to acknowledge that Kwiakah’s concerns about salmon health are rooted in our constitutionally-protected Aboriginal rights and title.

For the same reasons cited to question Marine Harvest’s compliance with Criteria 7.2.2 and 7.2.3, Marine Harvest has thus far shown no commitment to complying with Criterion 3.12, that is, demonstrating a commitment to work with governments (including First Nation governments) to measure possible impacts on wild stocks, including providing farm-level data and granting access to sites.

Meeting with Council

Kwiakah welcomes the opportunity to meet with the SAI Global auditors to discuss the contents of this letter and the audit process in general. We are a very small First Nation and have only limited resources, so we can only meet in Campbell River, B.C. Please contact

⁸ The Salmon Standard pg. 29.

our Band Manager Frank Voelker at (250) 923-1556 to set up a meeting, or if you have any questions about this letter.

Draft Assessment Report

Please advise when you expect to provide the Draft Assessment Report for review to allow sufficient notice for our consultants who will be assisting with the review.

We look forward to further assisting SAI Global with their review of Marine Harvest's application.

Yours sincerely,

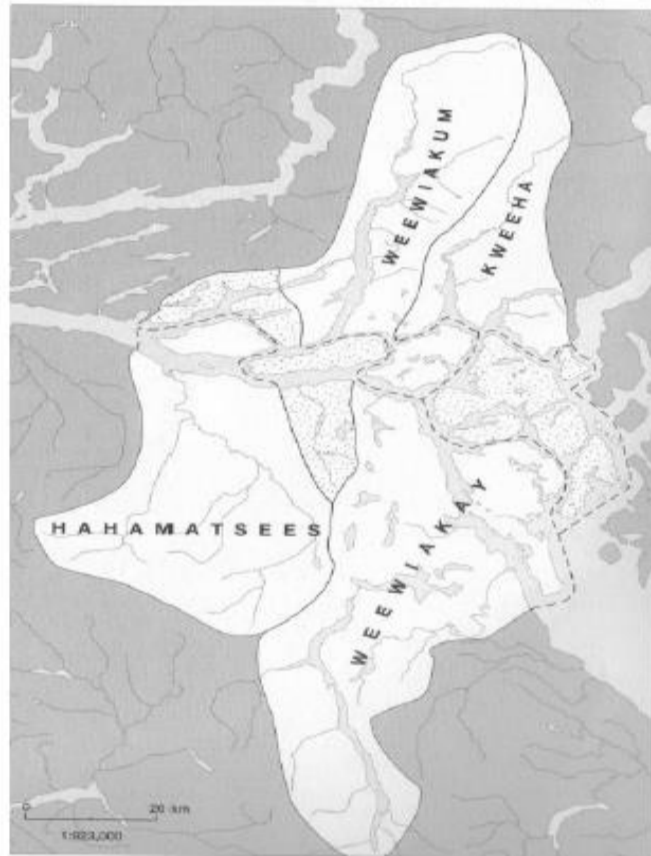
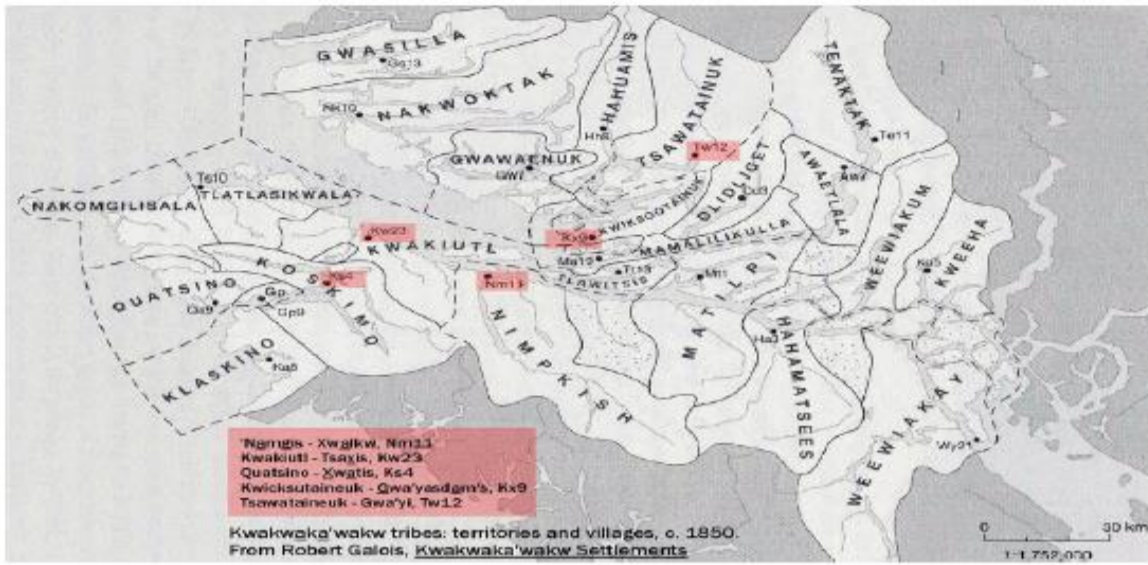


Steven Dick, Chief Councillor
Kwiah First Nation

Encl: Appendix
cc: Holly Vear, Woodward & Company Lawyers LLP

Appendix 1

Kwiah First Nation (Kweeha) Occupation of Phillips Arm at 1850 – Small and Large Scale Maps



Approximate territories of Lekwiltok tribes, c. 1850. Robert Galois, Kwakwaka'wakw Settlements, 1775-1920

Kwiakah First Nation - Phillips Arm

Mr Frank Voelker requested a meeting with the ASC auditors on the 8th of December 2016. This meeting was held at the Comfort Inn to ensure that the Mr Frank Voelker could discuss the concerns of the Kwiakah First Nation in a neutral environment.

Present at the meeting;

Mr Leon Reed - Ethical Auditor

Mr Conrad Powell - Technical Auditor

Mr Frank Voelker - Band Management and Economic Development for the Kwiakah First Nation.

The contact details for Mr Frank Voelker are;

The contact details are;

Phone: (250) 923-1556

Cell: (250) 203-5116

Email: fvoelker@telus.net or frankvoelker@kwiakah.com

Meeting Notes

Mr Frank Voelker was welcomed and introduced to Myself (Leon) and Conrad Powell.

An overview of the ASC standard was given to Mr Frank Voelker explaining the ASC process. It was also explained that we could only audit against the standard and would access if the complaints that the Kwiakah First Nation fell into the scope of the audit.

Auditors then provided the time for Mr Frank Voelker to express the concerns of the Kwiakah First Nation.

There seemed to be two main concerns from the Kwiakah First Nation.

1. That the Farm was operating outside of the licensed area and that an application had been put to the BC Government to correct the problem. Mr Frank Voelker stated that they had cages outside the licenced area.
2. That they wished to sample fish from what they called an independent testing laboratory. (The Independent testing Lab that they wanted to use are not BS Government approved labs)

Point 1: Auditor checked with Marine Harvest, and they confirmed that 2 of the anchoring points were considered to be outside the licensed area, so an application was made to BC Government.

They stated clearly and provided documentation to show that the cages were within the allocated area, but the two anchoring points were just outside.

Marine Harvest moved the two anchoring points inside of the licenced area once they were aware that the anchoring point were outside the area. The relocation of the anchoring points happened in March 2016.

Marine Harvest has applied for a change in the licence not to expand the number of cages only to reposition the anchors for better security of the farm and not to increase the number of cages.

It was considered that Marine Harvest are now operating within the licenced area and no corrective actions were required and no finding could be documented. This was agreed by Conrad Powell as he was the technical auditor

Point 2: There has been a tremendous amount of interaction between the Kwiakah First Nation and Marine Harvest. The Kwiakah First Nation wished to meet with Marine Harvest to discuss the potential of the effects of salmon farming on wild stock. Marine Harvest has agreed at every stage to meet with the Kwiakah First Nation, but there were some conditions that had to be met as the Kwiakah First Nation wished to have Alexandra Morton represent them as a consultant. This was not granted by Marine Harvest as Marine Harvest has an active legal case against Alexandra Morton.

Mr Frank Voelker also stated that they did not recognise the labs that Marine Harvest used for testing and wished to have Marine Harvest use their sampling requirements and to be tested by what they called an independent lab. The auditor (Leon) asked if the labs were approved by the BC Government and Mr Frank Voelker stated that he did not trust BC Government Labs.

The auditors considered that proactive interaction had taken place with the Kwiakah First Nation and that it is not possible to get involved with a legal argument or to raise any concerns as Marine Harvest met the requirements set by ASC.

The auditors also considered that Marine Harvest met all of the requirements with regards to testing by using government approved labs and that the requested to use unapproved labs was not a breach of the ASC standards.

If you require any further information, please do not hesitate to contact me.

Regards

Leon Reed|

Managing Director



KWIAKAH FIRST NATION

P.O. Box 437
Station A
Campbell River, BC
V9W 5B6
Phone : (250) 923-1556
Fax : (250) 923-1581

March 21, 2017

By Email: jean.ragg@saiglobal.com

SAI Global/Global Trust Certification
Quayside Business Park, Mill Street
Dundalk, County Louth, Ireland

Attention: Jean Ragg, Fisheries & Aquaculture Administrator

Re: ASC Draft Assessment Report - Marine Harvest Canada, Phillips Arm

Kwiakah First Nation writes in response to SAI Global's draft assessment of Marine Harvest Canada's ("Marine Harvest") application for an Aquaculture Stewardship Council ("ASC") certification under the ASC Salmon Standard Version 1.0, June 2013 (the "Salmon Standard") for their operations in Phillips Arm provided by email on March 3, 2017 (the "Draft Assessment Report"). This letter summarizes Kwiakah First Nation's objection to the manner in which SAI Global has interpreted and applied certain provisions of the Salmon Standard directed at engagement with indigenous groups and preventing and mitigating negative impacts on indigenous communities and their traditional territories. In addition, we have identified a number of instances where the auditor misrepresented our Band Manager, Frank Voelker in the auditor's notes for the December 8, 2016 meeting.

As explained in our pre-audit letter dated December 6, 2016, Marine Harvest's Phillips Arm operations are located at the heart of Kwiakah First Nation's traditional territory, a territory within which we assert, hold and practice Aboriginal rights, including title, and including the right to manage our territory and to control the impacts to our lands, water and resources (please see the referenced letter for more detail on the significance of this area to Kwiakah).

Criterion 7.2 - "Respect for indigenous and Aboriginal cultures and traditional territories"

SAI Global's Interpretation and Application of Criterion 7.2

Upon our initial review of the Salmon Standard in December 2016, Kwiakah was encouraged to see what appear on their face to be progressive principles informing the criteria applicable to engaging indigenous groups that must be achieved by an applicant. Criterion 7.2, "Respect for indigenous and Aboriginal cultures and traditional territories", requires an applicant to: provide evidence that indigenous groups were consulted as

required by applicable laws, demonstrate that proactive steps have been undertaken to consult with indigenous communities, and provide evidence of a protocol agreement, or an active process to establish such an agreement with indigenous communities.

Unfortunately, the Draft Assessment Report reveals that, at least with respect to engaging with indigenous groups under Criterion 7.2, SAI Global's application of the Salmon Standard is flawed, contradicting an objective reading of the Salmon Standard, and omitting or misrepresenting important facts. Consequently, the noted report risks misleading the public regarding the significance of an ASC certification, and calls into question the integrity of the certification process. From our reading of the Draft Assessment Report, the application of Criterion 7.2 of the Salmon Standard seems to require nothing more than what is required to operate a non-certified farm while giving the impression that a certified farm has demonstrated compliance with a higher set of standards.

The Draft Assessment Report provides that the relevant thresholds to comply with Criterion 7.2 can be met by conduct that falls far short of what would be objectively expected upon reading the noted criterion including: (i) evidence of a protocol agreement negotiated with one or more indigenous communities despite the absence of such an agreement or an active process to establish such an agreement with other indigenous groups, and (ii) evidence that the applicant has communicated with indigenous groups regardless of the nature or content of the communication/correspondence. The Draft Assessment Report fails to reference, much less, consider, Kwiakah's position that Marine Harvest has failed to engage with them in proactive consultation and failed to work in good faith toward a protocol agreement. In fact, the auditor provides that they have no obligation to consider Kwiakah's "legal argument or to raise any concerns as Marine Harvest met the requirements set by ASC."¹

While we understand that SAI Global is not responsible for assessing the merits of Kwiakah's legal claim, it is inappropriate and misleading not to reference Kwiakah's position in the audit evidence when our position goes to the very question of whether Marine Harvest has complied with Criterion 7.2, which is part of the auditor's mandate. As provided below, upon referencing the existence of Kwiakah's claim, the report should clarify that it is not the auditor's practice to assess the veracity of legal claims, which will help to inform the reader of the limited scope of the auditor's assessment.

The Need to Qualify the Auditor's Evidence and Conclusions

If SAI Global maintains its impoverished interpretation of Criterion 7.2 to conclude Marine Harvest complies with the noted criterion, it is critical that the final report provide sufficient context to inform the reader of the auditor's methodology, referencing relevant facts and acknowledging the limitations of the assessment.

¹ Draft Assessment Report, pg. 92.

Certain issues considered in the Draft Assessment Report are quite complex, including whether Marine Harvest consulted as required by relevant laws. The language in the Draft Assessment Report belies the complexity and nuance raised by this question by providing very little context and an unqualified conclusion that the applicant consulted in accordance with relevant laws. Accordingly, we request that the final report provide the following context for any determination under Criterion 7.2:

1. *Explain how the auditor determines an applicant is compliant with the applicable criterion*

We understand that it is SAI Global's position that the existence of a regulatory approval is considered evidence that indigenous groups were consulted as required by local laws. Seeing as this interpretation is not included in the Salmon Standard, and this interpretation is not supported by the section 35 consultation jurisprudence, it is necessary to qualify the auditor's assessment with additional information regarding the applied methodology and its limitations.

2. *Identify the existence of any unresolved claims or other positions related to the applicable criterion*

It is inappropriate to provide unqualified conclusions when it is not warranted by the evidence. The Draft Assessment Report points to the fact that Marine Harvest negotiated several accommodation agreements with First Nations as evidence of Marine Harvest's compliance with Criterion 7.2.3 despite the absence of such an agreement or an active process to establish such an agreement with Kwiakah. While the audit evidence in response to Criterion 7.1.1.a indicates there has been considerable correspondence between Marine Harvest and Kwiakah, the Draft Assessment Report makes no mention of the content of that correspondence which would have revealed that Marine Harvest has failed to take good faith steps toward reaching a protocol agreement with Kwiakah.

In addition, in the interest of transparency, it is necessary for the auditor to explain that it is not the auditor's practice to assess the veracity of a legal or other claim raised in response to an application.

Meeting with Frank Voelker

The Draft Assessment Report provided an inaccurate account of the auditor's meeting with Frank Voelker on December 8, 2016,² of which account may call into question the legitimacy of Kwiakah's position in relation to Marine Harvest's operations in Phillips Arm.

² Draft Assessment Report, pages 91-92.

First, Mr. Voelker did not say that Marine Harvest "had cages outside the licenced area." Mr. Voelker said that he had not seen the applicable surveys for the farm, and consequently, could not confirm whether or not Marine Harvest was compliant in this regard.

Second, in response to the auditor's note suggesting that Marine Harvest's decision not to meet with Kwiakah was justified because Kwiakah insisted on having Alexandra Morton represent them as a consultant, against whom Marine Harvest has filed a legal action, in fact, Kwiakah only insisted our legal counsel attend the meeting. Kwiakah asked that Ms. Morton attend the meeting to present a scientific perspective at the meeting, and not attend as a consultant.

Last, the auditor's notes regarding Mr. Voelker's position on a testing facility is inaccurate. Kwiakah's proposed fish health testing protocol provided that testing be undertaken in a number of different facilities, including a facility of Marine Harvest's choosing.

Conclusion

In order to correct the factual inaccuracies in the Draft Assessment Report, and in the interest of fostering public trust in the ASC certification process, we trust Kwiakah's feedback on the Draft Assessment Report will result in revisions to the auditor's consideration of Criterion 7.2.

Please contact Frank Voelker at (250) 923-1556 if you have any questions about this letter.

Yours sincerely,



Steven Dick, Chief Councillor
Kwiakah First Nation

cc: Holly Vear, Woodward & Company Lawyers LLP



SAI Global
3rd Floor, Block 3
Quayside Business Park
Mill Street
Dundalk
Co.Louth
Ireland.
T + 353 42 932 0912
F + 353 42 938 6864
www.saiglobal.com/assurance

Steven Dick, Chief Councillor
Kwiahah First Nation
P.O. Box 437
Station A
Campbell River,
British Columbia.
V9W 5B6

10th May 2017

Re: ASC Draft Assessment Report - Marine Harvest Canada, Phillips Arm

Dear Mr Steven Dick,

Thank you for the submission letter from Kwiahah First Nation dated March 21 2017 in respect of audit report code ASC040 Marine Harvest Canada's Phillips Arm, British Columbia.

Thank you for the ongoing engagement in the stakeholder process as outlined under the Aquaculture Stewardship Council Standard requirements. I confirm that as part of the transparency requirements your letter of March 21 2017 and this response letter will be included in the final report.

The Aquaculture Stewardship Council Standards are voluntary, it is an applicant's decision to apply for certification under the standard and compliance with the standard is voluntary. There is no legal requirement to attain certification under the Aquaculture Stewardship Council Standards

The audit team are aware of the Crowns duty to consult with Kwiahah and Kwiahah claim in respect of Philips Arm, however the auditor is not in a position, nor is it his role, to assess such claims and indeed it is not the intent of the standard to make a determination in response to legal or other claims to an application of this voluntary standard.

Specifically I refer to the extracted below note under criterion 7.2 which states

Criterion 7.2 Respect for indigenous and aboriginal cultures and traditional territories

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.

In combination with the above intent and standard holder training material we believe the auditor has operated in compliance with the standard requirements. However in respect of 7.2 we will add additional wording to the final report that states communications are ongoing to develop a protocol agreement.

In respect of the meeting with Mr Frank Voelker as required by the standard the auditor prepared summary notes of the discussion points between the Mr. Frank Voelker and the two auditors, this record in our view does not "call into question the legitimacy of Kwiakah's position in relation to Marine Harvest's operations in Phillips Arm".

This record is based on the notes of the auditors and recollection of the discussion that took place.

We note your comment that Mr. Voelker did not state that Marine Harvest "had cages outside the licenced area." The auditors investigated this matter and determined that the applicant was currently in compliance



We note your request that Ms. Morton be recorded as a technical expert and not a consultant.

In respect of testing facilities the standard requires that contracted external third party use national or internationally recognised testing methods; best practice would be that such facilities hold some form of recognition or accreditation. The auditor determined the applicant was in compliance with such testing requirements.

I trust the above clarifies the matters in your submission as stated earlier, I confirm that as part of the transparency requirements your letter of March 21 2017 and this response letter will be included in the final report.

Yours sincerely

A handwritten signature in blue ink, appearing to read "Bill Paterson".

Bill Paterson
General Manager

ATTN: Jean Ragg
Fisheries & Aquaculture Administrator
SAI Global Assurance Services
Jean.ragg@saiglobal.com

23rd March 2017,

Stakeholder Submission RE: Initial Full Assessment Report, Marine Harvest Canada's Phillips Arm farm, by SAI Global Assurances Services (Public comment period 2nd to 23rd March 2017)

Upon review of the draft Aquaculture Stewardship Council (ASC) audit for Marine Harvest Canada's Phillips Arm farm, conducted by SAI Global, the below-noted stakeholders have deep concerns about the robustness of the audit and believe that approving ASC certification of this farm would severely undermine the salmon standard established by the ASC.

We find the draft audit report to be insufficient in evidence to demonstrate the farm successfully met the salmon standard criteria. We submit this is due to SAI Global failing to meet the requirements of the ASC Certification and Accreditation Requirements (CAR).

While SAI Global has recently voiced their dissatisfaction that some of our submission comments are duplicative, we will continue to raise concerns where we respectfully disagree that SAI has successfully resolved them.

Our comments and concerns are provided in detail below. We look forward to hearing how the SAI Global will address these outstanding concerns.

Sincerely,

Kelly Roebuck
Living Oceans Society

John Werring
David Suzuki Foundation

Stan Proboszcz
Watershed Watch Salmon Society

Susanna Fuller
Ecology Action Centre

HEAD OFFICE
Box 320
Sointula, BC V0N 3E0
Tel 250 973 6580

www.livingoceans.org

REGIONAL OFFICE
Suite 2000 – 355 Burrard Street
Vancouver, BC V6C 2G8
Tel 604 696 5044 Fax 604 696 5045

www.livingoceans.org

I. Process Requirements and Audit Timing

a) Exclusion of harvest activities from initial audit

The ASC CAR V1.0 requires that *“The CAB’s initial audit shall include harvesting activities of the principle product to be included for certification.”* (Audit Timing 17.4.2).

There is no justification, as required in the CAR (17.4.6.1/17.4.6.2), provided in the draft audit report for conducting the audit earlier and not witnessing the harvest of the principle product.

Where a justification has been provided in previous ASC audit reports, the rationale has been tied quick ASC market access for the company (example from Monday Rock audit: “to have certified product on the market when they harvest”). However, recent communication received from another Conformity Assessment Body states MHC currently finds no market demand for their ASC products and has taken the decision, at least on one occasion, to not identify ASC certified fish with the logo. Consequently, there appears to be no practical justification for conducting an early audit and not witnessing harvest.

b) Inability to verify the Chain of Custody

17.5.1 of the CAR V1.0 states “The CAB shall determine if the system of tracking, tracing and segregation in the aquaculture operation is sufficient to make sure all aquaculture products identified and sold as certified by the operation originate from the certified unit of certification...”

Without the auditor witnessing the harvest and therefore, the principle product entering the chain of custody, the auditor is unable to verify that the tracking, tracing and segregation is indeed “sufficient”. While the farm may well have a system in place on paper that appears to provide for the necessary elements, the purpose of an on-site audit is to prove that implementation of policies and procedures takes place—that is the essence of the determination of “sufficiency”.

Verifying the farm’s Chain of Custody is particularly important for the Phillips Arm site, given three pens (PA-0001, PA-0002 and PA-0003) are not included in the draft audit for certification. Table C1 of Annex C of the CAR requires the CAB to describe the consideration taken for the “Determination of the start of the CoC”. The draft audit report states: “MHC will not harvest certified and non-certified fish at the Phillips Arm site on the same day” (Page 81). We question how this claim can be made without witnessing the harvest.

c) Insufficient records and evidence

A number of salmon standard indicators are listed in the audit report as “conforming” despite insufficient records or evidence due to the audit taking place before the harvest. CARv1.0 Audit Timing (17.4) states:

17.4.2.3 Audits should be conducted when all control points and sufficient records/evidence are available

The ASC Certification and Accreditation Requirements (CAR) Version 2.0 has the following stated Process Requirements (17):

17.1 Unit of Certification

17.1.2.1 All clients seeking certification shall have available records of performance data covering the periods of time specified in the standard(s) against which the audit(s) is to be conducted; and

17.4 Audit Timing

17.4.5 Audits shall not be conducted until sufficient records/evidence are available for all applicable standard requirements as the minimum.

With the audit taking place before harvest, the records and evidence for the applicable standard requirements are simply not available.

The full assessment audit failed to meet CARv1.0 17.4.2.3/CARv2.0 17.4.5 requirements, as the data and sufficient records/evidence covering the periods of time specified and required in the salmon standard were not yet available. Specifically, the audit took place before sufficient and complete records/evidence were available to assess:

- 2.1.1 Redox potential or sulphide levels
- 2.1.2 Faunal index score
- 2.1.3 Number of macrofaunal taxa
- 3.4.1 Maximum number of escapees in the most recent production cycle
- 3.4.3 Estimated Unexplained loss
- 4.2.1 Fishmeal Forage Fish Dependency Ratio
- 4.2.2 Fish Oil Forage Fish Dependency Ratio
- 5.1.5 Maximum viral disease-related morality
- 5.1.6 Maximum unexplained morality rate
- 5.2.1 On farm documentation... chemicals and therapeutants used...
- 5.2.5 Maximum farm level cumulative parasiticide treatment index (PTI) score
- 5.2.7 Allowance for prophylactic use of antimicrobial treatments
- 5.2.8 Allowance for use of antibiotics listed as critically important...WHO
- 5.2.9 Number of treatments of antibiotics
- 5.4.4 If an OIE-notifiable disease is confirmed...

With the exceptions of 2.1.1; 2.1.2; 2.1.3; the indicators above are listed as “conforming” - despite not having available the complete records and evidence required.

The CAR requires sufficient records and evidence for the initial full assessment audit, requiring a complete production cycle in order to confirm conformance to all applicable salmon standard indicators. An incomplete production cycle equates to incomplete evidence and records.

Insufficient evidence and records remain a concern we have highlighted in other audit reviews. On review, the limited evidence and records that are provided in the audit reports are either based on data from the current production cycle *at the time of the early audit* or the *previous* production cycle. Therefore, the reports fail to provide a full production cycle of data for the most recent cohort of fish. Listing indicators that require a full production cycle of data as 'conforming' - despite approximately four to six months' worth of production cycle data yet to be completed - allows for the potential for non-conforming product to be certified and enter the market with the ASC logo. The Marsh Bay early audit is a prime example of this potential becoming a reality, where an early audit resulted in missing the unfortunate marine mammal deaths which occurred later in the full production cycle (after the audit). The early audit and certification of Marsh Bay allowed for non-conforming product to enter the market place with the ASC logo. As long as early auditing continues, the potential for non-conformance remains. At the very least, non-conformance should be raised for the indicators for which a full production cycle worth of data is needed. The non-conformance should be closed before certification is granted.

Consequently, we find the CAB failed to meet their obligations under the ASC's CAR.

d) Insufficient records and evidence; Early audit and sampling for Major NC 2.1.1, 2.1.2, 2.1.3

The report states peak biomass is due to occur in February 2017. Benthic sampling is required at peak biomass as per the Salmon Standard. A Major Non-conformity was raised on 14th December, 2016 for Indicators 2.1.1; 2.1.2 and 2.1.3 as the early audit made it impossible for peak biomass sampling to have occurred, let alone provide the results for sufficient records and evidence of compliance (as per CARv1.0 17.4.2.3/CARv2.0 17.4.5).

In order to close the Major NC within the three-month period and *before* granting certification, as per the CAR, it appears the CAB has allowed for sampling to occur prematurely at 70 percent peak biomass. The premature sampling was conducted in early November 2016 and the Major NC was 'closed' 21st February 2017. However, the draft audit report fails to provide any sampling results or metrics, as required. Secondly, there is no mention that MHC will also be required to sample the site at peak biomass. This goes against the salmon standard requirements for indicators 2.1.1, 2.1.2 and 2.1.3; as well as contrary to the draft audit for Chancellor Channel which stated, "MHC will be sampling the site in January 2017 and at peak biomass." DFO licensing conditions simply require sulphide sampling at peak biomass (i.e. Indicator 2.1.1); there are no biotic requirements by DFO, therefore the farm would need to again conduct biotic sampling at peak biomass to fulfill the requirements for salmon standard indicators 2.1.2 and 2.1.3.

By this process, the CAB is allowing for the granting of certification without waiting for the salmon standard's required peak biomass sampling and results. By relying solely on the premature 70 percent peak sampling and its results to close out the Major NC and allow for certification, the CAB is creating the potential for non-conforming product to be sold with the logo.

In the circumstance where a Major NC is warranted due to peak biomass biotic results, this fact would not be identified until the surveillance audit, by which time the non-conforming product has already been harvested and entered the market with the ASC logo.

Therefore, by breaching the obligations of CARv1.0 17.4.2.3/CARv2.0 17.4.5 that require sufficient records and evidence to demonstrate compliance, the CAB is allowing the potential for non-conforming product to be certified and go to market as such.

e) Unit of Certification: Intermediary farm

The CARv1.0 *Annex A – The ASC Vocabulary* states the following definition for the term ‘Unit of Certification’:

“The aquaculture operation that is covered by a certificate. It includes the receiving water body and all production operations up to the point where the product enters the chain of custody.”

Additionally, the updated CARv2.0 *Annex A – The ASC Vocabulary* states the following definition for the term ‘Unit of Certification’:

“The operation that is covered by a certificate. It includes all production and processing sites including the receiving water bodies, any harvest sites such as production ponds, and all storage or processing operations (including subcontracted operations) up to the point where the product enters further chain of custody.”

As a production site and a stage of the production operations that occurs before the product enters the chain of custody, intermediary stages meet both CAR ‘unit of certification’ definitions.

The draft ASC audit report notes Upper Retreat and Port Elizabeth as the intermediary farms for Phillips Arm. Therefore, it would be expected that the salmon standard criteria must be applied to this part of the production cycle. For example, see Indicators 2.5.6 and 5.2.5 below.

When applicable salmon standard criteria are not correctly applied to all production sites as per the Unit of Certification CAR definition, non-compliance is likely to be missed or omitted. Therefore, all production operations and sites in the unit of certification should be included to ensure compliance with the ASC salmon standard indicators and integrity of the chain of custody.

II. Salmon Standard Requirements

a) Indicator 2.2.3 For Jurisdictions that have national or regional coastal water targets...

The audit evidence references variance request 198 and seeks to apply the variance to MHC’s Phillips Arm farm. In VR 198, SAI Global state,

“Chile and Canada are amongst the salmon production regions which do not have such a national classification and therefore they are bound by indicator 2.2.4.”

The VR then provides a recommendation for 2.2.4 sampling to occur quarterly, instead of weekly. The ASC approved the VR stating the following interpretation:

“Water quality monitoring is an important aspect of the ASC Salmon Standard. It ensures that farms continue to operate in good quality water. In areas without national or regional coastal water quality targets, farms must conduct weekly water quality measurements at the farm and the reference site. The documents and analysis submitted with the Variance Requests 197 (Multiexport, Chile) and 198 (Cermaq, Canada) provides ample evidence that supports the position that quarterly water quality monitoring, as opposed to weekly monitoring, will not lead to a reduced ability to determine the farm’s impact on water quality.

Future sampling locations should either; 1) Remain consistent with the 50M and reference sampling locations described in Appendix I-5 or; 2) For farm sites using a site-specific AZE, be taken at the edge of the AZE as well as the reference site with duplicates of each sample each quarter. Depths of samples will remain consistent with the description in Appendix I-5.

The Requirement now requires that: the average annual N and P concentrations between samples at 50m station or, in the case of a site-specific AZE the edge of the AZE, should not be significantly higher than those at the reference site.

The sampling minimum should therefore be confined to the reference site and at the edge of the AZE or 50m from the edge of the array where an irregular site specific AZE is used, with duplicates of each sampled each quarter.

Analysis to be confined to NO₃, PO₄ and TN and TP since other forms, eg NH₄, are too labile to be good indicators of longer term effects.

Based on this, ASC approves this VR. It will be required for the CAB/client to develop a water monitoring protocol that is identical to Appendix I-5, with the caveat that monitoring frequency will be on a consistent quarterly basis.

This protocol must be incorporated in the final report.”

This interpretation has not been appropriately applied to Phillips Arm. We detail four departures from the reasoning above and/or the text of the variance request itself, that appear in the draft audit report:

1. In VR 198, SAI Global states that Canada has no national water quality targets, yet in the draft Phillips Arm audit report, SAI Global appears to suggest that the Canadian Council of Ministers of the Environment (CCME) guidelines for water quality might meet the definition of “national or regional water quality targets”. The ASC standard identifies nitrate, phosphorus and chlorophyll A (footnote 16) as the related nutrients for water quality targets. CCME guidelines only measure nitrate. We are accordingly of the view that SAI Global correctly identified the situation in VR198, but failed to apply the same analysis to the Phillips Arm audit.

2. Similarly, while the VR recognizes that Canadian farms “are bound by indicator 2.2.4”, the draft audit report states “N/A” for Indicator 2.2.4.
3. While MHC may be conducting water sampling on a quarterly basis (as is Cermaq), the draft report states water quality verification was against the CCME guidelines, not the salmon standard (Appendix I-5 and Indicator 2.2.4 as per the variance).
4. In approving VR198, ASC required that “...the CAB/client to develop a water monitoring protocol... this protocol must be incorporated in the final report”. No protocol has been incorporated in the audit draft for Phillips Arm.

Therefore, we submit that the variance has not been appropriately applied.

In addition, criterion 2.2.3c states “Identify the most recent classification of water quality for the area in which the farm operates”. The CAB evaluates this criterion as “compliant”, however the audit evidence suggests otherwise: “The water data classification has not been determined. MHC has submitted data to third party analyst and is awaiting report.” Again, without a national water quality target (as per VR198) nor a water data classification, the Phillips Arm farm is unable to comply with indicator 2.2.3. Thus compliance with indicator 2.2.4 is required.

- b) **Indicator 2.5.6 Maximum number of lethal incidents on the farm over the prior two years.**
Requirement: <9 lethal incidents, with no more than two of the incidents being marine mammals.

The draft audit report states no lethal incidents have occurred over the last two-year period. The draft audit report fails to mention:

- 1) The 1,167 Pacific herring (*Clupea pallasii*) reported by MHC to Fisheries and Oceans Canada as “incidental catch” on 8th June 2016¹ during the transfer from Upper Retreat (interim farm) to Phillips Arm (and other MHC sites);
- 2) The 8,300 Pacific herring (*Clupea pallasii*) reported by MHC to Fisheries and Oceans Canada as “incidental catch” in 2015² at Port Elizabeth farm; and
- 3) The 1 Pacific herring (*Clupea pallasii*) reported by MHC to Fisheries and Oceans Canada as “incidental catch” in 2015³ at Phillips Arm farm.

The ASC Salmon Standard Audit Manual states the following instructions:

¹ <http://open.canada.ca/data/en/dataset/0bf04c4e-d2b0-4188-9053-08dc4a7a2b03>

² <http://www.pac.dfo-mpo.gc.ca/od-ds/aquaculture/incidental-accidentel-2011-2015-rpt-pac-dfo-mpo-aquaculture-eng.csv>

³ <http://www.pac.dfo-mpo.gc.ca/od-ds/aquaculture/incidental-accidentel-2011-2015-rpt-pac-dfo-mpo-aquaculture-eng.csv>

"Instruction to Clients and CABs on Indicators 2.5.5, 2.5.6, and 2.5.7 - 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 35]. For the purpose of assisting farms and auditors with understanding how to evaluate compliance with Indicators 2.5.5, 2.5.6, and 2.5.7, 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 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."

The Pacific herring is a non-salmonid. According to Fisheries and Oceans Canada "wild fish are identified as "incidental catch" if they are caught and killed along with farmed fish".⁴ This was accordingly a "lethal incident" within the meaning of Indicator 2.5.6. According to the definition, the farm has now experienced a total number of 9,468 lethal incidents, violating the requirement of <9 as per Indicator 2.5.6. This should disqualify the farm from certification.

c) Indicator 5.2.5 Maximum farm level cumulative parasiticide treatment index (PTI) score...

The PTI score of 3.2 in the draft audit report does not include a SLICE treatment at the Port Elizabeth farm on 16th February, 2016 (see Unit of Certification above). We submit that the PTI score should be reflective of all treatments within the full production cycle, and therefore the current PTI score should be 9.6.

d) Indicator 5.4.1 Evidence that all salmon on the site are a single-year class

Audit evidence for 5.4.1 does not address the three pens (PA-0001, PA-0002 and PA-0003) that originated from Georgie Lake. The salmon standard indicator requires "...no gaps in smolt inputs > 6 months" and that all fish are single-year class. The salmon standard Biosecurity Management criterion explicitly states, "these requirements aim to minimize effect of disease transmission and retransmission". The requirement for all fish "on the site" to be of a single-year class is intended to reduce the risk of disease transmission between farmed and wild fish. The Biosecurity Management criterion becomes pointless if certain pens are 'exempt' from meeting the requirements. To correctly apply the requirements and the intent of the criterion, Indicator 5.4.1 should be applied to the whole

⁴ <http://www.pac.dfo-mpo.gc.ca/aquaculture/reporting-rapports/incidental-accidentel-eng.html>

site, regardless of 'exempted' pens. Therefore, audit evidence needs to demonstrate that the fish originating from Georgie Lake indeed meet indicator 5.4.1 requirements.

e) Indicator 8.1 Compliance with local and national regulations on water use and discharge...

Indicator 8.1 is marked "compliant" despite the fact the Dalrymple Creek hatchery "frequently fails to comply with Ministry of Environment (MOE) requirements for TSS and total phosphorus". Numerous audit reports (including Marsh Bay, Bull Harbour, Duncan Island, Goat Cove, Glacier Falls and Monday Rock) refer to a 2014 letter by MOE deciding not to press enforcement, so long as progress is made by MHC with the installation of advanced treatment systems at the hatchery. However, the non-compliance with the ASC salmon standard indicator 8.1 remains, and is in fact confirmed by the letter, which only defers enforcement of the breach. The draft report evidence states MHC continues to submit monitoring data, as legally required, and no advanced treatment system has been installed.

Firstly, we submit the CAB is inappropriately applying the provincial enforcement thresholds, rather than the ASC standard requirement. Secondly, the intent of the ASC Indicator 8.1 is that companies must demonstrate compliance with water use and discharge regulations, not merely *respond with plans* to remediate identified non-compliance. Therefore, we submit Dalrymple Creek hatchery ought to have a Major Non-conformance raised.

f) Indicator 8.4 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)

A Minor non-conformance was raised for Indicator 8.4 due to a questionable phosphorus result using the required calculation (as per Appendix VIII-1). The corrective action proposed by MHC in the NC report states, "Variance request to be submitted to ASC to calculate phosphorus based on effluent levels, which are monitored more regularly and will result in a more accurate calculation". The NC was 'closed' on 21st December, 2016. However, on review of the audit report and the ASC variance request webpage - no relevant variance request could be found. Therefore, we are unable to identify how the NC was appropriately closed. We also find it inappropriate for the CAB to allow MHC to deviate from the salmon standard sampling requirements (i.e. Appendix VIII-1) in the absence of an approved variance from the ASC.



SAI Global
3rd Floor, Block 3
Quayside Business Park
Millstreet
Dundalk
Co.Louth
Ireland.
T + 353 42 932 0912
F + 353 42 938 6864
www.saiglobal.com/assurance

ATTN: Kelly Roebuck
Living Oceans Society
Box 320
Sointula,
BC
V0N 3E0
Canada

10th May 2017

RE: Initial Full Assessment Report, Marine Harvest Canada's Phillips Arm farm, by SAI Global Assurances Services.

Dear Kelly,

Many thanks for the submission dated 23rd March on behalf of Living Oceans Society, David Suzuki Foundation, Watershed Watch Salmon Society and Ecology Action Centre in relation to the draft assessment report of the Marine Harvest Canada's Phillips Arm farm site to the ASC Salmon Standard. It is an integral part of the ASC process that Stakeholders have an input and we appreciate your comments.

In your submission, you state that you have deep concerns about the robustness of the audit. As a general comment on this, our auditors are trained by ASC to audit the ASC Standard they also have extensive experience in aquaculture and auditing techniques so we can assure you the audit is robust and conducted in compliance to the standard required.

We always welcome constructive stakeholder input, we have addressed the comments in the submission in same sequence as raised below;

1. Process Requirements and Audit Timing

a) Exclusion of harvest activities from initial audit

Under the CAR V2.0 Clause 17.4.6, it is permitted under ASC Salmon Standard to not view the Harvesting in the initial audit, but that justification must be given for not viewing the process. This will be included in the report for final publication, as it was in all previous reports, and will confirm when harvesting will be viewed.

b) Inability to verify the Chain of Custody

The Applicants processing facilities holds certification to a number of third party standards which have traceability and chain of custody as their requirements. These standards require mass balance exercises and this ensures that there is full traceability and chain of custody of all product. The applicant follows a standard operating procedure during harvest activities which has been witnessed previously, this allows the auditor to be sufficiently confident in harvest activity and in verifying the farm's chain of custody.

c) Insufficient records and evidence

The submission is that the following clauses had insufficient records and evidence supplied in the audit report.

Clause	Summary of Requirement	Auditor Justification in Report
2.1.1	Redox Potential Levels or Sulphide Levels	<p>Major Non-Conformance</p> <p>a. The site was peak biomass sampled in 05/20/15 by Mainstream Biological consulting. The report, dated 06/03/15, contains a map of the site with sampling stations identified. The current crop is expected to have peak biomass in February 2017. The site was sampled by MHC at 70% peak in early November 2016 and faunal index scores will be available late January - early February 2017. The work is being done by Columbia Biosciences.</p> <p>b. The bottom is soft.</p> <p>c. Sulphides are measured.</p>

		<p>d. Sediment samples were last collected in May 2015. Peak biomass for current crop is due in February 2017. The sampling stations will be the same and the location is noted on the map in the report. The sampling is carried out at peak biomass as required by DFO as part of licensing requirements.</p> <p>e. Not applicable.</p> <p>f. In the 2015 peak biomass survey, the mean sulphide concentrations at the two 125m stations were 188 uM and 358 uM. A DFO letter dated 06/19/15 indicates: "No further monitoring is required prior to fish entry at this facility." Sampling and testing methodology are specified in the PAR license.</p> <p>g. Not submitted as peak biomass has not been achieved yet. The samples will be submitted once the report and production cycle is complete.</p> <p>Comments: Peak Biomass sampling has not yet taken place and therefore results could not be analyzed or sent to ASC.</p>
2.1.2	Faunal Index Score	<p>Major Non-Conformance</p> <p>a. The site was peak biomass sampled in 05/20/15 by Mainstream Biological consulting. The report, dated 06/03/15, contains a map of the site with sampling stations identified. The current crop is expected to have peak biomass in February 2017. The site was sampled by MHC at 70% peak in early November 2016 and faunal index scores will be available late January/early February 2017.</p> <p>b – i. Awaiting results from the sampling carried out in November. Due in late January/early February.</p> <p>Comments: Peak Biomass sampling has not yet taken place and therefore results could not be analyzed or sent to ASC.</p>
2.1.3	Number of Macrofaunal Taxa	<p>Major Non-Conformance</p> <p>a – e. Awaiting results from the sampling carried out in November. Due in late January/early February.</p> <p>Comments: Peak Biomass sampling has not yet taken place and therefore results could not be analyzed or sent to ASC.</p>
3.4.1	Maximum number of escapees in the most recent production cycle	<p>Compliant</p> <p>a. There have been no escapes from this site. Morts are collected daily and numbers entered to the Aquafarmer database. Final numbers on the site with assessment of unexplained loss is carried out following count at harvest.</p> <p>b. There were no suspected escapes in the most recent production cycle.</p>

		<p>c. Net checks are carried out by divers at least once every 60 days. There are cameras in every cage with excellent resolution and they can pan, tilt and go up and down in the cages for inspection purposes.</p> <p>d. The site has not had an escape of >300 fish.</p> <p>e. Escape monitoring data has been submitted.</p>
3.4.3	Estimated unexplained loss	<p>Compliant</p> <p>a. Records are maintained on the Aquafarmer system</p> <p>b. EUL will be submitted at the end of the cycle</p> <p>c. MHC posts EUL information on the ACS dashboard on its website.</p> <p>d. EUL for the previous cycle has been submitted.</p> <p>e. Counts are within counting error.</p>
4.2.1	Fishmeal Forage Dependency Ratio	<p>Compliant</p> <p>a. The feed company has provided information on the percentage of fishmeal in each formulation, the sources of fishmeal used and the percentage of fishmeal in each formulation derived from whole fish or trimmings. Farm records show the quantities of each formulation used.</p> <p>b. For the previous cycle, the FFDRm was 0.57</p> <p>c. For the previous cycle, the FFDRm was 0.57</p> <p>d. Calculations were done properly.</p> <p>e. FFDRm was submitted.</p>
4.2.2	Fish Oil Forage Dependency Ratio	<p>Compliant</p> <p>a. Inventory of feed used is in the Aquafarmer system.</p> <p>b. By-products are excluded.</p> <p>c. Option 1 is used.</p> <p>d. The FFDRo was 2.14. Calculations were done properly.</p> <p>e. Not applicable</p> <p>f. FFDRo was submitted.</p>
5.1.5	Maximum viral disease related mortality	<p>Compliant</p> <p>a. There were no viral detections of mortalities.</p> <p>b. The total of uncodeable mortalities in the last cycle was 8,996, or 1.73%.</p> <p>c. Mortality data has been submitted.</p>
5.1.6	Maximum unexplained mortality rate	<p>Compliant</p> <p>a. Total mortality in the previous cycle was 3.34%.</p> <p>b. Not applicable</p> <p>c. Data on unexplained mortalities has been submitted.</p>
5.2.1	On farm documentation,	<p>a. The Aquafarmer database system is used to record all therapeutic use. Prescriptions are maintained at the farm as per DFO requirements. There was one SLICE</p>

	chemicals and therapeutants used	treatment this cycle, under prescription numbers 16-111 and 16-112, both dated 11/21/16. All fish on site were treated and the treatment ended 12/11/16. b. There was one SLICE treatment, under prescription numbers 14-088 and 14-089 (12/11/14) in the previous cycle. All fish on site were treated during period 01/04/15 - 01/11/15. c. Therapeutant information has been submitted.
5.2.5	Maximum farm level cumulative parasiticide treatment index (PTI) score	Compliant a. The PTI score for the most recent production cycle was 3.2. b. MHC has a spreadsheet for the calculation of PTI. c. The cumulative PTI score data has been submitted.
5.2.7	Allowance for prophylactic use of antimicrobial treatments	Compliant a – c. No antibiotics were used at the farm during the current and prior production cycles.
5.2.8	Allowance for use of antibiotics listed as critically important	Compliant a. The WHO list appears on MHC Sharepoint. b – d. The farm has not used any antibiotics in the current production cycle.
5.2.9	Number of treatments of antibiotics	Compliant a. Antibiotic treatment records are maintained on-site in the form of prescriptions and the form Drug Treatment Record, and treatment data is entered to Aquafarmer. Site usage information and prescriptions correspond with one another, and match the information found in Aquafarmer. No antibiotics were used in the current and immediately prior production cycles. b. No antibiotics were used over the most recent production cycle.
5.4.4	If an OIE-notifiable disease is confirmed	Compliant a. The fish health management plan follows the OIE requirements. There have been no notifiable diseases. b. No OIE-notifiable disease has been confirmed at the farm during the current and two previous cycles. Up to 3 tests per year showed negative for each of the previous cycles for IHN, VHS and ISA. c. No OIE-notifiable disease has been confirmed at the farm. d. OIE-notifiable disease data has been submitted as zero.

		No OIE-notifiable disease has been confirmed at the farm.
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Under ASC guidance issued to CAB's on 18th January 2017, where a metric is required in the standard, that the Auditor must supply the metric for that clause for that Applicant farm. Therefore as per the above table, as you will see, the Auditor has complied with ASC guidelines and so we are therefore in conformity.

The clauses require parameters and metrics; the auditor provided them as per ASC Guidelines; where they weren't available, the Auditor raised non-conformances. This demonstrates the robustness of the audit.

d) Insufficient records and evidence;

The applicant is undertaking sampling at 70 % peak biomass and again at peak biomass. Results will be included within the report.

e) Unit of Certification: Intermediary farm

The ASC Salmon Standard – version 1.0 June 2012, clearly specified the unit of certification on page 14 as below;

Unit of certification to which the Standard applies

The unit of certification is a farming site, which in practice means a cluster of cages located together in an operational unit. In undergoing assessment for certification, a company that owns multiple grow-out sites will be subject to compliance only at the particular site(s) for which they choose to undergo certification. A farm must comply with all the requirements in the ASC Salmon Standard to be certified, including providing required documentation from their feed and smolt suppliers.

2. Salmon Standard Requirements

a. Indicator 2.2.3 For Jurisdictions that have national or regional coastal water targets...

The Draft audit report references the variance request 198 and additional details, following the review the wording of the clause should have been:

In 2012 the CCME established water quality guidelines for the BC area. In 2014 Dr Stephen Cross from Global Aquafood was contracted to do a literature review of papers water quality in coastal British Columbia, and in particular Queen Charlotte Strait and the Broughton Archipelago region, which he concluded can be considered very good and remain largely unaffected by the fish farming sector. Marine Harvest have been taking water samples from area from May to October gathering data on water quality and sampling N, P, pH and Si. This data has been analysed by Global Aquafood, whose analysis determined that results were well below CCME guidelines.

b) Indicator 2.5.6 Maximum number of lethal incidents on the farm over the prior two years.

The intent of the standard is to reduce the impact of aquaculture farming on predators including marine mammals and birds. 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."

c) Indicator 5.2.5 Maximum farm level cumulative parasiticide treatment index (PTI) score...

The PTI score of 3.2 in the draft audit is correct as per the unit of certification as stated in the ASC Salmon Standard – version 1.0 June 2012, page 14.

d) Indicator 5.4.1 Evidence that all salmon on the site are a single-year class

The auditor verified that all fish in the unit of certification were from one year class all fish were transferred from MHC sites Upper Retreat and Port Elizabeth.

The description of the unit of certification includes the note that PA-0001, -0002 and -0003 are from George Lake and are not included in the unit of certification. The fish were all transferred at the same time, and are the same year class.

e) Indicator 8.1 Compliance with local and national regulations on water use and discharge...

The report clearly states "MHC continues to submit required effluent monitoring data, and is in the process of changing the hatchery from a flow-through system to a recirculating system complete with redesigned waste treatment system."

f) Indicator 8.4 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)



The corrective action plan submitted by the client stated the intent that a variance request to be submitted to ASC, it would appear that this is still in process therefore SAI will record the non-conformance to be open to be validated at surveillance.

We hope that this answers all of your queries, and if you require any additional details, please don't hesitate to contact us.

Yours sincerely

A handwritten signature in blue ink, appearing to read "Bill Paterson".

Bill Paterson
General Manager