

Form 3 - Public Disclosure Form

Public Disclosure Form

Name of CAB	SAI Global
Date of Submission	4th May 2017
CAB Contact Person	
Name of Contact Person	Linda McDonnell
Position in the CAB's-organisation	Program Administrator
Mailing address	3rd Floor, Block 3, Quayside Business Park, Millstreet, Dundalk, Co. Louth
Email address	linda.mcdonnell@saiglobal.com
Phone number	00353 429320912
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 124-1334 Island Hwy Campbell River BC Canada V9W 8C9
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
Wicklow Point	50 47.248 126 41.518	N/A	19th - 30th June 2017	19th - 30th June 2017

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
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
BC Seafood Alliance	Fisheries	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Port McNeill Council	Local Gov	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Regional District of Mt Waddington	Local Gov	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Sayward Town Council	Local Gov	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Da'naxda'xw First Nation	Local Gov	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Gwawaenuk (Gwawa'enuxw) Tribe	Local Gov	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Kwicksutaineuk-ah-kwaw-ah-mish First Nation	Local Gov	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Mamalilikulla First Nation	Local Gov	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Namgis First Nation	Local Gov	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Tlowitsis Nation	Local Gov	Via email	Prior to audit and when the Draft Assessment Report is posted on the ASC website	Via email
Tsawataineuk (Dzawada'enuxw) First Nation	Local Gov	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
Skretting	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

Proposed Timeline

Contract Signed:	Jan-17
Start of audit:	Jun-17
Onsite Audit(s):	19th - 30th June 2017
Determination/Decision:	Sep-17

Audit Team

Title	Name	ASC Registration Reference
Lead Auditor	Conrad Powell (Technical Auditor)	N/A
Social Auditor	Leon Reed (Social Auditor)	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	Conrad Powell
1.5 Names and positions of report authors and reviewers	Conrad Powell - Technical Auditor; Leon Reed - Social Auditor
1.6 Client's Contact person: Name and Title	Ms. Katherine Dolmage - Certification Manager
1.7 Date	19-Jul-17

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	Assessment of compliance to the ASC Salmon Standard regarding production of Atlantic salmon from smolt to harvest at Marine Harvest Canada Wicklow farm
4.2	A brief description of the operations of the unit of certification	The 14.8 ha site is located off the southern shore of Broughton Island in the waters of Fife Sound . There are 12 netpens of dimensions 30m x 30m x 15m. The site has a licensed biomass limit of 3,600 mt.
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	2 major NC's relating to peak biomass sampling and 2 major relating to safety issues.
4.6	The Audit determination	Certification can continue

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	linda.mcdonnell@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>Twelve pens of Atlantic salmon at Wicklow Point farm operating under Aquaculture Finfish Licence No. 115327 2016/2022 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>Best Aquaculture Practices</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 3,600 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>Six</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 covers the marine site from smolt input until harvest at the site. All 12 pens are included in the scope. The fish are all one year class and all the fish came from the client's own hatcheries.</p> <p>Harvest was not witnessed on the farm at time of audit , harvest will be observed during surveillance 1 or 2 depending on the production cycle of the farm. Harvest has been witnessed on other farms operated by the applicant this evidenced a professional harvest activity in line with the standard requirements.</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 Fife Sound. 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.

Lead/Technical Auditor: Conrad Powell Social Auditor: Leon Reed
 Audit dates: 26th - 30th June 2017; Report writing: 1st - 19th July 2017

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 - 06/2017			
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	19-Jun-17	
8.4.2 Onsite audits	June 26-30, 2017	Wicklow Point farm; Marine Harvest Canada offices, Campbell River
8.4.3 Stakeholder interviews and Community meetings		None
8.4.4 Draft report sent to client		
8.4.5 Draft report sent to ASC		
8.5.5 Final report sent to Client and ASC	21-Dec-17	

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 Coordinator); Tina Garlinski-Zonki (HR Manager, MHC); Dean Drobinski (HR Director); Blaine Trembley (Health & Safety Manager, MHC); Dean Pattison (Health & Safety Advisor); Leith Paganoni (First Nation and Community Relations Manager, MHC); Andy Haslam (Site Manager, MHC)

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

Nonconformity Report Form

	CAB	NC Reference	NC01	
	CAB	NC Detected by	Conrad Powell	
	CAB	Date Detected	30th June 2017	
	CAB	Audit Reference	ASC058	
		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.		
		Justification for applying the approved variation or interpretation.		
x	CAB	Status of NC	Open	
	CAB		Closed	x
	CAB	Grade of NC	Major	
	CAB		Minor	x
	CAB		Observation	
	CAB	Deadline for closing the nonconformity		30th September 2017
	CAB	Explanation for deadline for closing the nonconformity	Minor	
	CAB	Requirement Reference		ASC Salmon Standard
		Source Document		Version 1.0 June 2012
	CAB	Clause Number		2.1.1
	CAB	Text of Requirement		
	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		
	Client	Statement of any errors of fact in the nonconformity (include the name of the author and date submitted)	None (Katherine Dolmage 8/10/2017)	
	CAB	Response (include the name of the author and date submitted)		
	Client	Statement of the root cause of the nonconformity (include the name of the author and date submitted)	In order to harvest ASC product, audit must take place prior to site reaching peak biomass (Katherine Dolmage 8/10/2017)	

CAB	Response (include the name of the author and date submitted)	Accepted by Conrad Powell 09/23/17
Client	Statement of the corrective actions proposed and taken (include the name of the author and date submitted)	Peak biomass sampling conducted by MHC July 4-6, 2017 (Katherine Dolmage 8/10/2017)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Accepted by Conrad Powell 09/23/17
Client	Statement of the preventive actions proposed and taken (include the name of the author and date submitted)	Sampling to continue at peak biomass (Katherine Dolmage 8/10/2017)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Benthic Biodiversity Report received 09/26/17 and reviewed. Sulphides are in compliance with ASC requirements. Evidence accepted by Conrad Powell 09/26/17.
Client	Request to extend the implementation period for corrective action(s) until	n/a (Katherine Dolmage 8/10/2017)
	Justification for extension request	
CAB	Extension request approval	Yes/No
	Reason(s) for approval/ disapproval	
	Date on which the nonconformity was closed	09/26/17

Nonconformity Report Form

CAB	NC Reference	NC02	
CAB	NC Detected by	Conrad Powell	
CAB	Date Detected	30th June 2017	
CAB	Audit Reference	ASC058	
	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.		
	Justification for applying the approved variation or interpretation.		
CAB	Status of NC	Open	
CAB		Closed	x
CAB	Grade of NC	Major	x
CAB		Minor	
CAB		Observation	
CAB	Deadline for closing the nonconformity		30th September 2017
CAB	Explanation for deadline for closing the nonconformity		Major
CAB	Requirement Reference		ASC Salmon Standard
		Source Document	Version 1.0 June 2012
CAB		Clause Number	2.1.2
CAB		Text of Requirement	
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		
Client	Statement of any errors of fact in the nonconformity (include the name of the author and date submitted)		None (Katherine Dolmage 8/10/2017)
CAB	Response (include the name of the author and date submitted)		
Client	Statement of the root cause of the nonconformity (include the name of the author and date submitted)		In order to harvest ASC product, audit must take place prior to site reaching peak biomass; as this is a first audit, no historical data was available (Katherine Dolmage 8/10/2017)

CAB	Response (include the name of the author and date submitted)	Accepted by Conrad Powell 09/23/17
Client	Statement of the corrective actions proposed and taken (include the name of the author and date submitted)	Peak biomass sampling conducted by MHC July 4-6, 2017. Analysis underway by Columbia Sciences (Katherine Dolmage 8/10/2017)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Accepted by Conrad Powell 09/23/17
Client	Statement of the preventive actions proposed and taken (include the name of the author and date submitted)	Future assessments will have historical data (Katherine Dolmage 8/10/2017)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Benthic Biodiversity Report received 09/26/17 and reviewed. Shannon Wiener Index scores in compliance with ASC requirements. Evidence accepted by Conrad Powell 09/26/17.
Client	Request to extend the implementation period for corrective action(s) until	n/a (Katherine Dolmage 8/10/2017)
	Justification for extension request	
CAB	Extension request approval	Yes/No
	Reason(s) for approval/ disapproval	
	Date on which the nonconformity was closed	09/26/17

Nonconformity Report Form

CAB	NC Reference	NC03	
CAB	NC Detected by	Conrad Powell	
CAB	Date Detected	30th June 2017	
CAB	Audit Reference	ASC058	
	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.		
	Justification for applying the approved variation or interpretation.		
CAB	Status of NC	Open	
CAB		Closed	x
CAB	Grade of NC	Major	x
CAB		Minor	
CAB		Observation	
CAB	Deadline for closing the nonconformity		30th September 2017
CAB	Explanation for deadline for closing the nonconformity		Major
CAB	Requirement Reference		ASC Salmon Standard Version 1.0 June 2012
		Source Document	
CAB		Clause Number	2.1.3
CAB		Text of Requirement	
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		
Client	Statement of any errors of fact in the nonconformity (include the name of the author and date submitted)		None (Katherine Dolmage 8/10/2017)
CAB	Response (include the name of the author and date submitted)		
Client	Statement of the root cause of the nonconformity (include the name of the author and date submitted)		In order to harvest ASC product, audit must take place prior to site reaching peak biomass; as this is a first audit, no historical data was available (Katherine Dolmage 8/10/2017)

CAB	Response (include the name of the author and date submitted)	Accepted by Conrad Powell 09/23/17
Client	Statement of the corrective actions proposed and taken (include the name of the author and date submitted)	Peak biomass sampling conducted by MHC July 4-6, 2017. Analysis underway by Columbia Sciences (Katherine Dolmage 8/10/2017)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Accepted by Conrad Powell 09/23/17
Client	Statement of the preventive actions proposed and taken (include the name of the author and date submitted)	Future assessments will have historical data (Katherine Dolmage 8/10/2017)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Benthic Biodiversity Report received 09/26/17 and reviewed. Greater than two highly abundant taxa were reported and the farm is in compliance with ASC requirements. Evidence accepted by Conrad Powell 09/26/17.
Client	Request to extend the implementation period for corrective action(s) until	n/a (Katherine Dolmage 8/10/2017)
	Justification for extension request	
CAB	Extension request approval	Yes/No
	Reason(s) for approval/ disapproval	
	Date on which the nonconformity was closed	09/26/17

Nonconformity Report Form

CAB	NC Reference	NC04	
CAB	NC Detected by	Leon Reed	
CAB	Date Detected	30th June 2017	
CAB	Audit Reference	ASC058	
	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.		
	Justification for applying the approved variation or interpretation.		
CAB	Status of NC	Open	
CAB		Closed	X
CAB	Grade of NC	Major	X
CAB		Minor	
CAB		Observation	
CAB	Deadline for closing the nonconformity		30th September 2017
CAB	Explanation for deadline for closing the nonconformity		ASC requirement is 3 months to close out Major non-conformity
CAB	Requirement Reference		ASC Salmon Standard
		Source Document	Version 1.0 June 2012
CAB		Clause Number	6.5.1
CAB		Text of Requirement	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.
CAB	Description of the nonconformity		<ol style="list-style-type: none"> 1. Confined Space ladders are not correctly secured 2. Pallets being used as steps in the silo areas 3. Compressed Air lines do not have Whip-Check hose restraints installed.
CAB	Statement of evidence detected		Safety issues observed during site visit.

Client	Statement of any errors of fact in the nonconformity (include the name of the author and date submitted)	None (Katherine Dolmage 7/24/2017)
CAB	Response (include the name of the author and date submitted)	
Client	Statement of the root cause of the nonconformity (include the name of the author and date submitted)	Ladders not used and issue not identified; pallets used in place of proper step; whip checks used throughout production proven to be ineffective (Katherine Dolmage 7/24/2017)
CAB	Response (include the name of the author and date submitted)	
Client	Statement of the corrective actions proposed and taken (include the name of the author and date submitted)	Ladders to be properly secured, pallets removed, whip checks on all compressed air lines company-wide being replaced (Katherine Dolmage 7/24/2017)
CAB	Evaluation by CAB (include the name of the author and date submitted)	
Client	Statement of the preventive actions proposed and taken (include the name of the author and date submitted)	All ladders to confined spaces to be checked on H&S visits; pallets identified as inappropriate step, proper step in place; whip checks identified by H&S as issue, entire company moving to better whip check for compressed air lines (Katherine Dolmage 7/24/2017)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Leon Reed: Accepted 02/11/2017
Client	Request to extend the implementation period for corrective action(s) until	n/a
	Justification for extension request	
CAB	Extension request approval	Yes/No
	Reason(s) for approval/ disapproval	
	Date on which the nonconformity was closed	02/11/2017

Nonconformity Report Form

CAB	NC Reference	NC05	
CAB	NC Detected by	Leon Reed	
CAB	Date Detected	30th June 2017	
CAB	Audit Reference	ASC058	
	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.		
	Justification for applying the approved variation or interpretation.		
CAB	Status of NC	Open	
CAB		Closed	x
CAB	Grade of NC	Major	x
CAB		Minor	
CAB		Observation	
CAB	Deadline for closing the nonconformity		30th September 2017
CAB	Explanation for deadline for closing the nonconformity		Major
CAB	Requirement Reference		ASC Salmon Standard
		Source Document	Version 1.0 June 2012
CAB		Clause Number	6.5.3
CAB		Text of Requirement	
CAB	Description of the nonconformity		Risk Assessments have not been correctly carried out as workers have not fully understood the process.
CAB	Statement of evidence detected		
Client	Statement of any errors of fact in the nonconformity (include the name of the author and date submitted)		None (Katherine Dolmage 8/10/2017)
CAB	Response (include the name of the author and date submitted)		
Client	Statement of the root cause of the nonconformity (include the name of the author and date submitted)		Inadequate training on risk assessment procedure (Katherine Dolmage 8/10/2017)

CAB	Response (include the name of the author and date submitted)	
Client	Statement of the corrective actions proposed and taken (include the name of the author and date submitted)	Re-training conducted by H&S, updates to risk assessment template to clarify rankings. See updated risk assessment training - separate attachment (Katherine Dolmage 8/10/2017)
CAB	Evaluation by CAB (include the name of the author and date submitted)	
Client	Statement of the preventive actions proposed and taken (include the name of the author and date submitted)	Risk assessments to be reviewed by H&S during site visits and additional training provided as necessary (Katherine Dolmage 8/10/2017)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Leon Reed: Accepted 02/11/2017
Client	Request to extend the implementation period for corrective action(s) until	n/a (Katherine Dolmage 8/10/2017)
	Justification for extension request	
CAB	Extension request approval	Yes/No
	Reason(s) for approval/ disapproval	
	Date on which the nonconformity was closed	02/11/2017

Nonconformity Report Form

CAB	NC Reference	NC06	
CAB	NC Detected by	Conrad Powell	
CAB	Date Detected	30th June 2017	
CAB	Audit Reference	ASC058	
	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.		
	Justification for applying the approved variation or interpretation.		
CAB	Status of NC	Open	
CAB		Closed	x
CAB	Grade of NC	Major	
CAB		Minor	x
CAB		Observation	
CAB	Deadline for closing the nonconformity		30th September 2017
CAB	Explanation for deadline for closing the nonconformity		Minor
CAB	Requirement Reference		ASC Salmon Standard
	Source Document		Version 1.0 June 2012
CAB	Clause Number		4.5.2d
CAB	Text of Requirement		
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		
Client	Statement of any errors of fact in the nonconformity (include the name of the author and date submitted)		None (Katherine Dolmage 8/10/2017)
CAB	Response (include the name of the author and date submitted)		
Client	Statement of the root cause of the nonconformity (include the name of the author and date submitted)		Agreement for waste removal does not include policy for tracking volumes of waste (Katherine Dolmage 8/10/2017)

CAB	Response (include the name of the author and date submitted)	Accepted by Conrad Powell 09/23/17
Client	Statement of the corrective actions proposed and taken (include the name of the author and date submitted)	New agreement in place with waste removal company which will track volume and fees for waste and recycling removal from sites (Katherine Dolmage 8/10/2017)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Accepted by Conrad Powell 09/23/17
Client	Statement of the preventive actions proposed and taken (include the name of the author and date submitted)	New policy will track all waste removal- see attachment (Katherine Dolmage 8/10/2017)
CAB	Evaluation by CAB (include the name of the author and date submitted)	Accepted by Conrad Powell 09/23/17
Client	Request to extend the implementation period for corrective action(s) until Justification for extension request	n/a (Katherine Dolmage 8/10/2017)
CAB	Extension request approval Reason(s) for approval/ disapproval	Yes/No
	Date on which the nonconformity was closed	09/23/17

Nonconformity Report Form

CAB	NC Reference	NC07
CAB	NC Detected by	Conrad Powell
CAB	Date Detected	30th June 2017
CAB	Audit Reference	ASC058

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.

VR 233 was originally submitted on the basis 1. The Salmon Standard is considered inconsistent (for this clause) with other ASC Finfish Standards that do not set this metric; 2. The metric does not represent responsible or best practice in situations where historical performance of the farm is excellent. 3. Good husbandry requires that the welfare of stock is maintained. Clinical disease compromises fish welfare and it is the duty of veterinarians to treat illnesses and support improved health and welfare. 4. *T.maritimum* is ubiquitous in the environment and infection pressure is influenced by environmental variables that are not within the control of the salmon farmer, such as temperature and salinity.

However, after a period of circa 6 months which is outside of ASC stated timeline to respond to a VR, a meeting was held with ASC (conf. call 19th Dec 2017) and a decision taken to re-present the VR as an Interpretation Request. This was based on: Procedural requirements (to allow a certification decision to be taken) and that clause 5.2.10c inadvertently penalises farms that have a history of high conformance to this clause when they are faced with clinical infection events where alternatives to treatment are not available. The minor NC does not contravene the intent of the clause, nor the Principle nor the scope of the ASC Salmon Standard.

Justification for applying the approved variation or interpretation. Therefore, it is not possible for farms to meet this metric consistently. Actually, a good track record causes the non conformity in future production cycles that unfortunately succumb to disease. This pathogen, *T.maritimum* is ubiquitous in the environment and infection pressure is influenced by environmental variables that are not within the control of the salmon farmer, such as temperature and salinity

The VR 233 was originally requested on the basis 1. The Salmon Standard is inconsistent with other ASC Finfish Standards that do not set this metric; 2. The metric does not represent responsible or best practice. 3. Good husbandry requires that the welfare of stock is maintained. Clinical disease compromises fish welfare and it is the duty and legal responsibility of farms to treat illnesses, improve health and welfare. 4. *T.maritimum* is ubiquitous in the environment and infection pressure is influenced by environmental variables that are not within the control of the salmon farmer, such as temperature and salinity.

CAB	Status of NC	Open
CAB		Closed
CAB	Grade of NC	Major
CAB		Minor
CAB		Observation

x	
x	
Minor	

CAB	Deadline for closing the nonconformity	
CAB	Explanation for deadline for closing the nonconformity	

Minor. Deadline delayed due to awaiting response on VR submission.

CAB	Requirement Reference	ASC Salmon Standard Version 1.0 June 2012
CAB	Source Document	2012
CAB	Clause Number	5.2.10c
CAB	Text of Requirement	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.
CAB	Description of the nonconformity	The antibiotic load in the current cycle has increased over the average antibiotic load for the previous two cycles.
CAB	Statement of evidence detected	2012YC: 0 kg 2014YC: 74 kg 2016YC: 137 kg (audited production cycle). Acceptable limit would be 85% of the average of previous 2 cycles: 85% of 37kgs = 31.45kgs.
Client	Statement of any errors of fact in the nonconformity (include the name of the author and date submitted)	None (Katherine Dolmage 8/10/2017)
CAB	Response (include the name of the author and date submitted)	The application of a minor NC is appropriate. Wicklows Point has an excellent track record in managing fish health and can demonstrate in some production cycles that zero antibiotic treatments have occurred. Therefore, track record supports high performance to ASC Principle 5 and the overall intent of the ASC Salmon Standard (Conrad Powell).
Client	Statement of the root cause of the nonconformity (include the name of the author and date submitted)	T. maritimum is ubiquitous in the BC marine environment, when infected, fish welfare demands antibiotics are used (Katherine Dolmage 8/10/2017)
CAB	Response (include the name of the author and date submitted)	Evidence supports the root cause analysis. T. maritimum infection is unpredictable despite high standards of fish health management and welfare maintained at the site. Infection will require treatment in order to protect health and fish welfare. Failure to do so may impact performance to Principles 2 and 3. The root cause is Accepted by Conrad Powell 09/23/17. Supporting evidence: http://www.ca-hs-bc.ca/sites/default/files/Tenacibaculum_maritimum_Workshop_Final_Report.pdf Accepted by Conrad Powell 09/23/17

Client	Statement of the corrective actions proposed and taken (include the name of the author and date submitted)	<p>Variance request submitted to ASC (Katherine Dolmage 8/10/2017) . Then based on ASC/MHC/SAI Global conf. call 19th Dec was withdrawn and re-presented as an Interpretation Request. Wicklows Point has advanced a number of actions that will act in combination to support improved management of T. maritimum infections. These are listed as on-going disease preventative actions below and in the longer-term, including support into vaccine development. However, an immediate corrective action will be to set as a target a maximum use of antibiotic treatment for the site at 85% of the previous 2 production cycles. This in effect sets a maximum permissible usage of antibiotic which may be required in order to effectively</p>
CAB	Evaluation by CAB (include the name of the author and date submitted)	<p>The corrective action represents a practical and effective approach and is Accepted by Conrad Powell 09/23/17 (evidence in VR) and re-presented 12/19/17.</p>
Client	Statement of the preventive actions proposed and taken (include the name of the author and date submitted)	<p>Several measures are proposed that in combination will support the management of clinical outbreaks of this infectious agent. These include; improved epidemiology, improved early detection, improved understanding of the environmental causal factors, research into feed supplements to support natural fish immunity and research underway into vaccine (Katherine Dolmage 8/10/2017).</p>
CAB	Evaluation by CAB (include the name of the author and date submitted)	<p>Accepted by Conrad Powell 09/23/17 (original date and then final review 12/15/17. A workshop held in Campbell River in 2016 involving all salmon farm companies already provided demonstration of active involvement by MHC in the range of management improvement measures underway. A set of development priorities were identified by the industry and BC Center for Aquatic Health Services (CAHS). Subsequent surveillance audits will review the progress of the proposed preventative measures.</p>
Client	Request to extend the implementation period for corrective action(s) until Justification for extension request	<p>n/a (Katherine Dolmage 8/10/2017)</p>
CAB	Extension request approval Reason(s) for approval/ disapproval	<p>Yes/No</p>

**Date on which the
nonconformity was closed**

09/23/17 &
12/20/17 (Latter
post outcome from
ASC/MHC/SAI conf.
call Dec 19 that
resulted in
conversion of VR233
to an IR).

AUDIT MANUAL - ASC Salmon Standard
Created by the Salmon Aquaculture Dialogue

Scope: species belonging to the genus *Salmo* and *Oncorhynchus*

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)
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.	Digital copies of applicable land and water use laws are available.	Compliant
		b. Maintain original (or legalised copies of) lease agreements, land titles, or concession permit on file as applicable.	(1) Finfish Aquaculture Licence AQFF 115327 2016/2022 issued by the Department of Fisheries and Oceans (DFO), expiring 06/30/22; (2) Licence of Occupation No. 109053 issued 05/01/02 by BC Ministry of Agriculture and Lands; (3) Conditional Water Licence No. 117296 for the use of Coppinger Creek, issued 04/19/02 by Land & Water BC Inc.; (4) Navigable Waters Protection Act Permit No. 8200-T-7325.1 issued 12/11/89 by Transport Canada.	
		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 confirm GPS co-ordinates, lice monitoring records, FHMP compliance, benthic surveys and site debris. The most recent DFO visits was 02/01/17 and 04/10/17.	
		d. Obtain permits and maps showing that the farm does not conflict with national preservation areas.	The farm is not located in any national preservation areas.	
		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 Wicklow Point 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 labour laws and regulations Requirement: Yes	a. Maintain copies of national labour 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 labour 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	Evaluation (Per indicator, select one category in the drop-down menu)
	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.	Peak biomass sampling has not yet been carried out and the results cannot be reviewed. However, as part of licencing protocol, a peak biomass survey must be carried out for redox potential, sulphides and other parameters. The Operational Monitoring Report for Wicklow Point (February, 2016) was available.	Minor
		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).	Sampling was done along two transects at stations at edge of cages and 30m and 125m distant.	
		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.	For the last cycle, sulphides at 30m and 125m stations were, respectively: Transect A: 284 µM, 35 µM Transect B: 176 µM, 59 µM The values are the average of three readings at each station.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
		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 report is not yet available. Data will be submitted once the benthic monitoring report is complete.	
		h. Others, please describe		
2.1.2	<p>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</p> <p>Requirement: AZTI Marine Biotic Index (AMBI [5]) score \leq 3.3, or Shannon-Wiener Index score $>$ 3, or Benthic Quality Index (BQI) score \geq 15, or Infaunal Trophic Index (ITI) score \geq 25</p> <p>Applicability: All farms except as noted in [1]</p>	a. Prepare a map showing the AZE (30 m or site specific) and sediment collections stations (see 2.1.1).	Peak biomass sampling has not yet been carried out and the results cannot be reviewed.	Major
		b. Inform the CAB whether the farm chose option #1, #2, #3, or #4 to demonstrate compliance with the requirement.	Peak biomass sampling has not yet been carried out and the results cannot be reviewed.	
		c. Collect sediment samples in accordance with Appendix I-1 (see 2.1.1).	Peak biomass sampling has not yet been carried out and the results cannot be reviewed.	
		d. For option #1, measure, calculate and record AZTI Marine Biotic Index [5] score of sediment samples using the required method.	Peak biomass sampling has not yet been carried out and the results cannot be reviewed.	
		e. For option #2, measure, calculate and record Shannon-Wiener Index score of sediment samples using the required method.	Peak biomass sampling has not yet been carried out and the results cannot be reviewed.	
		f. For option #3, measure, calculate and record Benthic Quality Index (BQI) score of sediment samples using the required method.	Peak biomass sampling has not yet been carried out and the results cannot be reviewed.	
		g. For option #4, measure, calculate and record Infaunal Trophic Index (ITI) score of sediment samples using the required method.	Peak biomass sampling has not yet been carried out and the results cannot be reviewed.	
		h. Retain documentary evidence to show how scores were obtained. If samples were analysed and index calculated by an independent laboratory, obtain copies of results.	Peak biomass sampling has not yet been carried out and the results cannot be reviewed.	
		i. Submit faunal index scores to ASC (Appendix VI) at least once for each production cycle.	Peak biomass sampling has not yet been carried out and the results cannot be reviewed.	
	j. Others, please describe			
1	<p>Indicator: Number of macrofaunal taxa in the sediment within the AZE, following the sampling methodology outlined in Appendix I-1</p>	a. Document appropriate sediment sample collection as for 2.1.1a and 2.1.1c, or exemption as per 2.1.1b.	Peak biomass sampling has not yet been carried out and the results cannot be reviewed.	
		b. For sediment samples taken within the AZE, determine abundance and taxonomic composition of macrofauna using an appropriate testing method.	Peak biomass sampling has not yet been carried out and the results cannot be reviewed.	
		c. Identify all highly abundant taxa [6] and specify which ones (if any) are pollution indicator species.	Peak biomass sampling has not yet been carried out and the results cannot be reviewed.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
2.1.3	<p>Requirement: ≥ 2 highly abundant [6] taxa that are not pollution indicator species</p> <p>Applicability: All farms except as noted in [1]</p>	<p>d. Retain documentary evidence to show how taxa were identified and how counts were obtained. If samples were analysed by an independent lab, obtain copies of results.</p> <p>e. Submit counts of macrofaunal taxa to ASC (Appendix VI) at least once for each production cycle.</p> <p>f. Others, please describe</p>	<p>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.</p> <p>2. Replace explanatory text in the 'Audit Evidence' column as appropriate.</p> <p>3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below.</p> <p>Peak biomass sampling has not yet been carried out and the results cannot be reviewed.</p> <p>Peak biomass sampling has not yet been carried out and the results cannot be reviewed.</p>	Major
2.1.4	<p>Indicator: Definition of a site-specific AZE based on a robust and credible [7] modelling 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>	<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.</p> <p>b. Maintain records to show how the analysis (in 2.1.4a) is robust and credible based on modelling using a multi-parameter approach [7].</p> <p>c. Maintain records to show that modelling results for the site-specific AZE have been verified with > 6 months of monitoring data.</p> <p>d. Others, please describe</p>	<p>Wicklow Point 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.</p> <p>DEPOMOD has been used as per DFO requirements and in place since 2005/035 research document.</p> <p>Verified and accepted following DFO guides.</p>	Compliant
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>	<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.</p> <p>b. Provide a written justification for any missed samples or deviations in sampling time.</p> <p>c. Calculate weekly average percent saturation based on data.</p> <p>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).</p> <p>e. Arrange for auditor to witness DO monitoring and calibration while on site.</p> <p>f. Submit results from monitoring of average weekly DO as per Appendix VI to ASC at least once per year.</p>	<p>Six months of data is in place.</p> <p>No samples have been missed.</p> <p>Weekly average DO percent saturation data was available.</p> <p>Weekly average DO was <70% during first three weeks of 2017. Reference station data showed similar drop.</p> <p>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.</p> <p>Results have been submitted to ASC.</p>	Compliant

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
		g. Others, please describe		
2.2.2	Indicator: Maximum percentage of weekly samples from 2.2.1 that fall under 2 mg/litre 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/litre. The lowest reading was 6.16 mg/litre first week of January 2017.	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 from May to October and determining nitrogen, phosphorus, pH and silica. The data is submitted to a third party analyst, Global AquaFoods Development Corp., 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 is deemed good in Global AquaFoods Development Corp. report April 2017.	
		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, NH ₄ , NO ₃ , 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)
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 last cycle was is 4,179,950 kg O ₂ /l.	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		
<i>Criterion 2.3 Nutrient release from production</i>				
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.	MHC tests from all ASC sites have revealed consistent results of negligible amounts of fines in the feeds it procures from Skretting Canada. As a consequence, it has reached an agreement with Skretting wherein the supplier will conduct fines tests and report results each quarter. The results for Q2 2017 were available and indicated fines no higher than 0.1% in 15 lots tested.	Compliant
		b. If using a sieving machine, calibrate equipment according to manufacturer's recommendations.	Skretting conducts the fines tests.	
		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.	The results for Q2 2017 indicated fines no higher than 0.1% in 15 lots tested.	
		d. Others, please describe		
<i>Criterion 2.4 Interaction with critical or sensitive habitats and species</i>				
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.	The applicant provided copy of the report Wicklow Point (Lane Bay) Commercial Finfish Farm Operation and Habitat Information for the Purpose of Review by the Canadian Environmental Assessment Act (June 2004).	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 document referenced in 2.4.1a does not identify any potential impacts on biodiversity or nearby critical, sensitive or protected habitats.	
		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)
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 for 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. Finfish 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)	
	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, 03/24/17) 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 favours 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)
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>	See 2.5.4a	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>	See 2.5.4a	
		<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>	Per MHC policy, no Lethal actions have been taken.	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>	Per MHC policy, no Lethal actions have been taken.	
		<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>	Logs are in place and can be reviewed on the company's ASC dashboard. Marine mammal mortalities are publicly accessible in the DFO website.	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>	The farm has not had any lethal incidents in the previous two year period.	
		<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>	Information has been submitted.	
		<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)
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 Wicklow Point farm is 8 km distant from the nearest farm which is also operated by MHC.	Compliant
		b. Submit to the CAB a description of how the ABM (3.1.1a) coordinates management of disease and resistance to treatments, including: - coordination of stocking; - fallowing; - therapeutic treatments; and - information sharing.	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 site was fallow for 63 days, from 02/04/16 to 04/07/16.	
		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)
3.1.2	<p>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</p> <p>Requirement: Yes</p> <p>Applicability: All except farms that release no water as noted in [38]</p>	<p>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.</p>	<p>MHC has been involved in numerous collaborations, including. Together with DFO, the NGO group CAAR (Coastal Alliance for Aquaculture Reform) and scientists from University 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 Columbia Salmon Farmers Association (BCSFA) which has its own Marine Environmental Research Program (MERP) which accepts applications for research 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.</p>	Compliant
		<p>b. Provide non-financial support to research activities in 3.1.2a by either:</p> <ul style="list-style-type: none"> - providing researchers with access to farm-level data; - granting researchers direct access to farm sites; or - facilitating research activities in some equivalent way. 	<p>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.</p>	
		<p>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.</p>	<p>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.</p>	
		<p>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.</p>	<p>Research in the BCSFA Marine Environmental Research Program will be published. There is \$1.5 million in the fund.</p>	
		<p>e. Others, please describe</p>		
		<p>a. Keep records to show that a maximum sea lice load has been set for:</p> <ul style="list-style-type: none"> - the entire ABM; and - the individual farm. 	<p>The maximum sea lice load for Wicklow Point is 2,116,230.</p>	

	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)
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 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 the farm.	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	Beginning February 1, 2017, all MHC farms are monitoring sea lice on a weekly basis, including the sensitive period for wild juvenile salmon out-migration, March 1 - June 30. The site was stocked beginning 04/07/16. Weekly sampling took place from third week of April until end of June. Lice counts began once three cages were stocked. Bimonthly counts have continued from July 2016 to February 2017, at which time weekly counts resumed. MHC intends to sample on a weekly basis year-round. 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 sampling for each pen is completed, the anaesthetic tank is examined for detached lice and these are counted and used in the calculation of total lice number and average count per fish. The results appear on the ASC dash board on the company's website. MHC maintains a spreadsheet for each site showing the sampling date and the date lice count data is posted. 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)
3.1.5	<p>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 kilometres of the farm</p> <p>Requirement: Yes</p> <p>Applicability: All farms operating in areas with wild salmonids except farms that release no water as noted in [38]</p>	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 2017 Salmon Outlook</i> report, dated December 2016, 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	<p>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.</p> <p>Requirement: Yes</p> <p>Applicability: All farms operating in areas with wild salmonids except farms that release no water as noted in [38]</p>	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 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 collaborate on wild fish lice counts in the Broughton and Campbell River areas. They use the services of Mainstreram Biological Consulting for sampling, and the BC Centre for Aquatic Health Sciences (CAHS) to enumerate and identify sea lice on wild salmon. The 2016 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. Sampling for 2017 has been completed, but the final report had not been received at time of audit.	
		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 (http://www.marineharvest.ca/planet/salmon_certification/wild-salmonid-lice-monitoring/).	
		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)
3.1.7	<p>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.</p> <p>Requirement: 0.1 mature female lice per farmed fish</p> <p>Applicability: All farms operating in areas with wild salmonids except farms that release no water as noted in [38]</p>	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.	Compliant
		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.	
		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 in the current cycle was 3.20 motile <i>L. salmonis</i> per fish week of November 24, 2016. Treatment was initiated and commenced January 3, 2017. Lice counts had decreased to 0.5 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				
	<p>Indicator: If a non-native species is</p>	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.	
		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	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
	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]	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).	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 .	Compliant
3.2.1		-	Evidence provided for 3.2.1 a and 3.2.1 b.	
		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). b. Inform the CAB if the farm produces a non-native species. If not, then Indicator 3.2.2 does not apply. c. If yes to 3.2.2b, provide evidence of scientific research completed within the past five years that investigates the risk of establishment of the species within the farm's jurisdiction. Alternatively, the farm may request an exemption to 3.2.2c (see below). d. If applicable, submit to the CAB a request for exemption that shows how the farm meets all three conditions specified in instruction box above. e. Submit evidence from 3.2.2c to ASC for review.	The farm produces Atlantic salmon (<i>Salmo salar</i>) which is a non-native species. The farm produces Atlantic salmon (<i>Salmo salar</i>) which is a non-native species. Not applicable Not applicable Not applicable	Compliant
		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. b. Maintain records (e.g. invoices) to show the species name and origin of all fish used by the farm for purposes of sea lice control. c. Collect documentary evidence or first hand accounts as evidence that the species used is not non-native to the region.	The farm does not use fish for sea lice control. The farm does not use fish for sea lice control. The farm does not use fish for sea lice control.	Compliant
		d. Others, please describe		

Criterion 3.3 Introduction of transgenic species

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
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 April 15 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 produce transgenic fish.	
		d. Others, please describe		
Criterion 3.4 Escapes [55]				
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 assessment 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		
		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.	

	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)
3.4.2 Indicator: Accuracy [58] of the counting technology or counting method used for calculating stocking and harvest numbers Requirement: ≥ 98% Applicability: All	b. If counting takes place off site (e.g. pre-smolt vaccination count), obtain and maintain documents from the supplier showing the accuracy of the counting method used (as above). c. During audits, arrange for the auditor to witness calibration of counting machines (if used by the farm). - e. Submit counting technology accuracy to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle). f. Others, please describe	The well boat count, i.e., the count of fish being loaded onto the boat, is used. 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. Counting technology accuracy has been submitted.	Compliant
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 for the last production cycle was 4,920 pieces, or 0.93% of expected harvest number. MHC posts EUL information on the ACS dashboard on its website. Data from Wicklow Pointwill be posted once the farm is certified. EUL for the previous cycle has been submitted. Counts are within counting error.	Compliant
	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.	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, 04/04/16); (2) Site Specific Escape Risk Analysis; (3) Escape and Investigation Report; (4) Net testing and maintenance procedures.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
3.4.4	<p>Indicator: Evidence of escape prevention planning and related employee training, including: net strength testing; appropriate net mesh size; net traceability; system robustness; predator management; record keeping and reporting of risk events (e.g., holes, infrastructure issues, handling errors, reporting and follow up of escape events); and worker training on escape prevention and counting technologies</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>b. If the farm operates an open (net pen) system, ensure the plan (3.4.4a) covers the following areas:</p> <ul style="list-style-type: none"> - 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. 	<p>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.</p> <p>2. Replace explanatory text in the 'Audit Evidence' column as appropriate.</p> <p>3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below.</p> <p>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.</p>	Compliant
		<p>c. If the farm operates a closed system, ensure the plan (3.4.4a) covers the following areas:</p> <ul style="list-style-type: none"> - 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. 	<p>The farm operates an open system.</p>	
		<p>d. Maintain records as specified in the plan.</p>	<p>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.</p>	
		<p>e. Train staff on escape prevention planning as per the farm's plan.</p>	<p>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 06/21/17.</p>	
		<p>-</p>	<p>Interviews indicated appropriate level of knowledge re daily inspections, escape response procedures and use of Containment Kit.</p>	
		<p>g. Others, please describe</p>		
PRINCIPLE 4: USE RESOURCES IN AN ENVIRONMENTALLY EFFICIENT AND RESPONSIBLE MANNER				
<i>Criterion 4.1 Traceability of raw materials in feed</i>				

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
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 Applicability: All	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 (Certificate No. BAP1451, expiring 10/22/17) and Global GAP-certified (Certification No. C834-006-01/2016, expiring 11/26/17).	
		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.	
		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 declaration 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 0.56.	
		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 1.19.	
		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		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
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 Applicability: All	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 2.11. 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.	
		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.	MHC complies with the Interim Solution for Marine Raw Material Requirements in the ASC Standards which came into effect 09/21/16.	
		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.	MHC complies with the Interim Solution for Marine Raw Material Requirements in the ASC Standards which came into effect 09/21/16.	
		e. Others, please describe		
		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.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
4.3.2	<p>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</p> <p>Requirement: All individual scores ≥ 6, and biomass score ≥ 8</p> <p>Applicability: All, until June 13, 2017</p>	b. Confirm that each individual score ≥ 6 and the biomass score is ≥ 8 .	Individual and biomass scores are ≥ 6 , and in compliance with the Interim Solution for Marine Raw Material Requirements in the ASC Standards which came into effect 09/21/16.	Compliant
		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.	
		e. Others, please describe		
4.3.3	<p>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.</p> <p>Requirement: Yes</p> <p>Applicability: All, until June 13, 2017</p>	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	<p>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]</p> <p>Requirement: None [72]</p> <p>Applicability: All except as noted in [72]</p>	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.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
		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 MHC.	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		
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. A Skretting Canada statement to this effect, dated 04/01/14, was available.	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.	MHC Supplier's Quality Assurance Statement dated 01/10/17 and sent to all customers states that the salmon feed includes canola oil and corn gluten that are transgenic.	
		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		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
<i>Criterion 4.5 Non-biological waste from production</i>				
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 + FW Sites (06/22/16) 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 + FW 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.	
		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
		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		
<i>Criterion 4.6 Energy consumption and greenhouse gas emissions on farms [84]</i>				
	Indicator: Presence of an energy use assessment verifying the energy consumption on the farm and	a. Maintain records for energy consumption by source (fuel, electricity) on the farm throughout each production cycle.	All energy sources and consumption are recorded.	
		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 6,447,443,517 kJ.	
		c. Calculate the total weight of fish in metric tons (mt) produced during the last production cycle.	Biomass produced in the last cycle was 3,107 mt.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
4.6.1	<p>representing the whole life cycle at sea, as outlined in Appendix V- 1</p> <p>Requirement: Yes, measured in kilojoule/mt fish/production cycle</p> <p>Applicability: All</p>	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 2,075,465 kJ/mt.	Compliant
		e. Submit results of energy use calculations (4.6.1d) to ASC as per Appendix VI for each production cycle.	Energy use data have been submitted to ASC.	
		f. Ensure that the farm has undergone an energy use assessment that was done in compliance with requirements of Appendix V-1.	The international Marine Harvest has set up an Excel spreadsheet that each country uses to report the energy use.	
		g. Others, please describe		
4.6.2	<p>Indicator: Records of greenhouse gas (GHG [85]) emissions [86] on farm and evidence of an annual GHG assessment, as outlined in Appendix V-1</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	a. Maintain records of greenhouse gas emissions on the farm.	Records are maintained using the DEFRA diagnostic tool database.	Compliant
		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 432,495 kg CO ₂ e. 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 Assessment Sheet.	
		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.	The original GHG calculations and the GWP conversions all originated from UK Department of Environment, Food and Rural Affairs (DEFRA).	
		e. Submit results of GHG calculations (4.6.2d) to ASC as per Appendix VI at least once per year.	GHG dataa have been submitted to ASC.	
		f. Ensure that the farm undergoes a GHG assessment as outlined in Appendix V-1 at least annually.	GHG assessments are done every four months.	
		g. Others, please describe		
4.6.3	<p>Indicator: Documentation of GHG emissions of the feed [87] used during the previous production cycle, as outlined in Appendix V, subsection 2</p> <p>Requirement: Yes, within three years of the publication [88] of the SAD standards (i.e. by June 13, 2015)</p> <p>Applicability: All, after June 13, 2015</p>	a. Obtain from feed supplier(s) a declaration detailing the GHG emissions of the feed (per kg feed).	The only feed supplier is Skretting Canada Inc.	Compliant
		b. Multiply the GHG emissions per unit feed by the total amount of feed from each supplier used in the most recent completed production cycle.	This will be submitted at the end of this production cycle. This is the farm's first audit.	
		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.	Only Skretting is used.	
		d. Submit GHG emissions of feed to ASC as per Appendix VI for each production cycle.	Feed-related GHG emissions will be submitted at the end of the current cycle.	
		e. Others, please describe		

Criterion 4.7 Non-therapeutic chemical inputs [89,90]

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
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.	MHC is not using copper-treated nets.	N/A
		b. Maintain records of antifoulants and other chemical treatments used on nets.	MHC is not using copper-treated nets.	
		c. Declare to the CAB whether copper-based treatments are used on nets.	MHC is not using copper-treated 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.	MHC is not using copper-treated nets.	
		e. Inform ASC whether copper antifoulants are used on farm (yes or no) as per Appendix VI for each production cycle.	MHC is not using copper-treated nets.	
		f. Others, please describe		
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		
	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	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.	
		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.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
4.7.4	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	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.	N/A
		d. Analyse 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		
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 Salmonid Health Management Plan (HMP), dated 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 HMP 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		
	Indicator: Site visits by a designated veterinarian [96] at least four times a year, and by a fish	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.	Fish Health Technicians have made at least one visit per month since the site was stocked in April 2016, and Visitor Log indicates at least quarterly visits by veterinarian.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
5.1.2	health manager [97] at least once a month Requirement: Yes Applicability: All	<p>b. Maintain a current list of personnel who are employed as the farm's designated veterinarian(s) [96] and fish health manager(s) [97].</p> <p>c. Maintain records of the qualifications of persons identified in 5.1.2b.</p> <p>d. Others, please describe</p>	<p>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.</p> <p>2. Replace explanatory text in the 'Audit Evidence' column as appropriate.</p> <p>3. If you see any Compliance Criteria which is not listed below, please describe in the blue cells below.</p> <p>A list of the Fish Health Management Team is in place. There are two veterinarians and two technicians.</p> <p>The two veterinarians are listed as members on the website of the British Columbia College of Veterinarians.</p>	Compliant
5.1.3	Indicator: Percentage of dead fish removed and disposed of in a responsible manner Requirement: 100% [98] Applicability: All	<p>a. Maintain records of mortality removals to show that dead fish are removed regularly and disposed of in a responsible manner.</p> <p>b. Collect documentation to show that disposal methods are in line with practices recommended by fish health managers and/or relevant legal authorities.</p> <p>c. For any exceptional mortality event where dead fish were not collected for post-mortem analysis, keep a written justification.</p> <p>d. Others, please describe</p>	<p>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. Invoices for mortalities pick-up were available.</p> <p>Mortalities are used in compost.</p> <p>There have been no exceptional mortality events.</p>	Compliant
5.1.4	Indicator: Percentage of mortalities that are recorded, classified and receive a post-mortem analysis Requirement: 100% [99] Applicability: All	<p>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).</p> <p>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.</p> <p>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).</p>	<p>A report generated from Aquafarmer shows the numbers of mortalities by classification. About 50 reasons can be made for cause of death, including Predator, Transport Loss, Gill Damage and Treatment Loss. Workers are trained in the classification of mortalities according to the SOP# SW816, Mortality Classification - Marine Sites (10/06/15).</p> <p>Mortalities are removed twice per day, and each one is inspected for a cause of death and recorded into Aquafarmer. Reports from the training database, DATS, show that training for Mortality Counting, Mortality Classification and Mortality Collection and Disposal are up-to-date.</p> <p>Laboratories used when mortality classification is inconclusive or disease is suspected are MHC's internal laboratory, the Centre for Aquatic Health Sciences (CAHS) and the Animal Health Centre (AHC). AHC Report 17-1844, dated 04/18/17 indicated no signs of infectious disease in routine health samples tested for IHN, ISA, SRS, PCR and VHS.</p>	Compliant

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
		d. Using results from 5.1.3a-c, classify each mortality event and keep a record of those classifications.	All mortalities to date have been classified and recorded.	
		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).	All records are maintained.	
		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).	Mortality numbers and post-mortem analysis data have been submitted.	
		g. Others, please describe		
5.1.5	Indicator: Maximum viral disease-related mortality [100] on farm during the most recent production cycle Requirement: ≤ 10% Applicability: All	a. Calculate the total number of mortalities that were diagnosed (see 5.1.4) as being related to viral disease. b. Combine the results from 5.1.5a with the total number of unspecified and unexplained mortalities from the most recent complete production cycle. Divide this by the total number of fish produced in the production cycle (x100) to calculate percent maximum viral disease-related mortality. c. Submit data on total mortality and viral disease-related mortality to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle). d. Others, please describe	There were 14 viral disease-related mortalities in the last cycle for a rate of 0.002%. The total of uncodeable mortalities in the last cycle was 34,096, or 5.377%. The maximum viral disease-related mortalities for the last cycle was 5.38% Mortality data has been submitted.	Compliant
5.1.6	Indicator: Maximum unexplained mortality rate from each of the previous two production cycles, for farms with total mortality > 6% Requirement: ≤ 40% of total mortalities Applicability: All farms with > 6% total mortality in the most recent complete production cycle.	a. Use records in 5.1.4a to calculate the unexplained mortality rate (%) for the most recent full production cycle. If rate was ≤ 6%, then the requirement of 5.1.6 does not apply. If total mortality rate was > 6%, proceed to 5.1.6b. b. Calculate the unexplained mortality rate (%) for each of the two production cycles immediately prior to the current cycle. For first audit, calculation must cover one full production cycle immediately prior to the current cycle. c. Submit data on maximum unexplained mortality to ASC as per Appendix VI for each production cycle. d. Others, please describe	Total mortality in the previous cycle was 16.83%. Unexplained mortality rate for the last cycle was 31.96%. Data on unexplained mortalities has been submitted.	Compliant
	Indicator: A farm-specific	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.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
5.1.7	mortalities reduction program that includes defined annual targets for reductions in mortalities and reductions in unexplained mortalities	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 survival at this site in the last cycle was 83.17%.	Compliant
	Requirement: Yes	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.	
	Applicability: All	d. Others, please describe		
Criterion 5.2 Therapeutic treatments [101]				
5.2.1	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 Requirement: Yes Applicability: All	a. Maintain a detailed record of all chemical and therapeutant use that includes: - name of the veterinarian prescribing treatment; - product name and chemical name; - reason for use (specific disease) - date(s) of treatment; - amount (g) of product used; - dosage; - mt of fish treated; - the WHO classification of antibiotics (also see note under 5.2.8); and - the supplier of the chemical or therapeutant.	The Aquafarmer database system is used to record all therapeutant use. Records identify the prescribing veterinarian, the product and chemical name, reason for use, treatment dates, pens treated, amount of drug and dosage, biomass treated, WHO classification and drug supplier. Prescriptions are maintained at the farm as per DFO requirements.	Compliant
		b. If not already available, assemble records of chemical and therapeutant use to address all points in 5.2.1a for the previous two production cycles. For first audits, available records must cover one full production cycle immediately prior to the current cycle.	There has been one SLICE treatment for sea lice and three florfenicol treatments for mouthrot thus far in the current cycle. In the last cycle, there were two SLICE treatments and two florfenicol treatments for mouthrot.	
		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).	Therapeutant use data have been submitted.	
		d. Others, please describe		
		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].	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. All Marine Harvest operations share the database.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
5.2.2	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] Requirement: None Applicability: All	b. Maintain records of voluntary and/or mandatory chemical residue testing conducted or commissioned by the farm from the prior and current production cycles.	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.	Compliant
		c. Cross-check records of therapeutant use (5.2.1a) against the list of banned therapeutants to verify compliance with requirements.	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.	
		d. Others, please describe		
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).	100% of treatments are under veterinarian's 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.	Original prescriptions are maintained at the farm as per DFO requirements, and digital copies are maintained.	
		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.	In the last cycle, nearly 6 months elapsed between the last day of SLICE treatment and the start of harvest, and about 18 months from the last day of florfenicol treatment and harvest. In both cases, withdrawal times were met.	
		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)
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 current cycle is 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		
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 that 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.	PTI score for the current cycle is 3.2.	Compliant
		b. Using results from 5.2.5 and the weight of fish treated (kg), calculate parasiticide load in the most recent production cycle [105].	PTI score for the current cycle is <6.	
		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.	PTI score for the current cycle is <6.	
		d. As applicable, submit data to ASC on parasiticide load for the most recent production cycle and the two previous production cycles (Appendix VI).	Data on parasiticide load has been submitted for the current and last cycles per ASC requirements for a first audit.	
		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.	Purchase records and coinciding prescriptions are available.	Compliant
		b. Maintain a detailed log of all medication-related events (see also 5.2.1a and 5.2.3)	A log of all medication-related events is available in Aquafarmer, and hard copy log (Drug Treatment Record) are maintained at farm..	
		c. Calculate the total amount (g) and treatments (#) of antibiotics used during the current and prior production cycles (see also 5.2.9).	2012YC: 0 kg used in three treatments 2014YC: 74 kg used in two treatments 2016YC: 137 kg used in three treatments	
		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)
5.2.8	Indicator: Allowance for use of antibiotics listed as critically important for human medicine by the World Health Organization (WHO [107]) Requirement: None [108] Applicability: All	a. Maintain a current version of the WHO list of antimicrobials critically and highly important for human health [107].	The WHO Critically Important Antimicrobials for Human Medicine 5th Revision 2016 is available 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 critically important 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 critically important antibiotics in the current production cycle.	
		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.	The farm has not used any critically important antibiotics in the current production cycle.	
		e. Others, please describe		
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.	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.	Compliant
		b. Calculate the total number of treatments of antibiotics over the most recent production cycle and supply a verifiable statement of this calculation.	For the current cycle, there has been three treatments with florfenicol over the periods: May 16-25, 2016; June 8-17, 2016; July 9-18, 2016.	
		c. Others, please describe		
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	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.	There have been three antibiotic treatments in the current cycle.	Minor
		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.	2012YC: 0 kg 2014YC: 74 kg 2016YC: 137 kg	

	Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
<p>years of the publication of the SAD standard (i.e. full compliance by June 13, 2017)</p> <p>Applicability: All</p>	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.	Current cycle antibiotic load, 137 kg, is 270% higher than the average of the two previous cycles (673.25 kg).	
	d. Submit data on antibiotic load to ASC as per Appendix VI (if applicable) for each production cycle.	Antibiotic load data has been submitted to ASC.	
	e. Others, please describe		
<p>Indicator: Presence of documents demonstrating that the farm has provided buyers [112] of its salmon a list of all therapeutants used in production</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	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.	Compliant
	b. Maintain records showing the farm has informed all buyers of its salmon about all therapeutants used in production.	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.	
	c. Others, please describe		
Criterion 5.3 Resistance of parasites, viruses and bacteria to medicinal treatments			
<p>5.3.1</p> <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>	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.	Although the site has had three florfenicol treatments, there has not been two successive treatments with a parasiticide or antimicrobial substance that has not produced the desired effect. Nevertheless, MHC has conducted bio-assays for SLICE.	Compliant
	b. Whenever the farm uses two successive treatments, keep records showing how the farm evaluates the observed effect of treatment against the expected effect of treatment.	Farm staff and member of Fish Health Team determine that signs of disease in the fish have disappeared, or that lice counts have decreased to acceptable levels.	
	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.	There has not been two successive treatments with a parasiticide or antimicrobial substance that has not produced the desired effect. Nevertheless, MHC has conducted bio-assays for SLICE. The work is performed by CAHS. Sea Lice Bioassay Results reported 11/15/16 indicated no evidence of resistance.	
	d. Keep a record of all results arising from 5.3.1c.	Bioassay reports are available.	
	e. Others, please describe		
<p>Indicator: When bio-assay tests determine resistance is forming, use of an alternative, permitted</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.	Sea lice bioassay indicated no resistance to SLICE (see 5.3.1c).	

		Compliance Criteria	Audit evidence	Evaluation
		(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)
5.3.2	treatment, or an immediate harvest of all fish on the site Requirement: Yes Applicability: All	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. c. Others, please describe	See 5.3.2a	N/A
Criterion 5.4 Biosecurity management [113]				
5.4.1	Indicator: Evidence that all salmon on the site are a single-year class [114] Requirement: 100% [115] Applicability: All farms except as noted in [115]	a. Keep records of the start and end dates of periods when the site is fully fallow after harvest. b. Provide evidence of stocking dates (purchase receipts, delivery records) to show that there were no gaps > 6 months for smolt inputs for the current production cycle. - d. Others, please describe	The site was fallow for 63 days, from 02/04/16 to 04/07/16. Smolts were entered at the farm over the 15 day period 03/22/16 - 04/05/16. All fish on-site are from the 2016 year class.	Compliant
5.4.2	Indicator: Evidence that if the farm suspects an unidentifiable transmissible agent, or if the farm experiences unexplained increased mortality, [116] the farm has: 1. Reported the issue to the ABM and to the appropriate regulatory authority 2. Increased monitoring and surveillance [117] on the farm and within the ABM 3. Promptly [118] made findings publicly available Requirement: Yes	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. b. For mortality events logged in 5.1.4a, record whether the farm did or did not suspect (yes or no) an unidentified transmissible agent. c. Proceed to 5.4.2d if, during the most recent production cycle, either: - results from 5.4.2a showed a statistically significant increase in unexplained mortalities; or - the answer to 5.4.2b was 'yes'. Otherwise, Indicator 5.4.2 is not applicable. d. If required, ensure that the farm takes and records the following steps: 1) Report the issue to the ABM and to the appropriate regulatory authority; 2) Increase monitoring and surveillance [117] on the farm and within the ABM; and 3) Promptly (within one month) make findings publicly available.	No mortality event has been a statistically significant increase over background mortalities. The farm has not suspected an unidentified transmissible agent in any mortality event. Not applicable. Not applicable.	Compliant

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
	Applicability: All	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).	Not applicable.	
		f. Others, please describe		
5.4.3	Indicator: Evidence of compliance [119] with the OIE Aquatic Animal Health Code [120] Requirement: Yes Applicability: All	a. Maintain a current version of the OIE Aquatic Animal Health Code on site or ensure staff have access to the most current version.	MHC provided its document OIE Aquatic Animal Health Code Compliance 19th Edition 2016 which is contained in Appendix I of its Fish Health Management Plan.	Compliant
		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.	The policies are consistent as the FHMP is reviewed annually. Appendix I will be reviewed as and when there are changes to certification requirements.	
		-	Policies are implemented and the staff are well informed.	
		d. Others, please describe		
5.4.4	Indicator: If an OIE-notifiable disease [121] is confirmed on the farm, evidence that: 1. the farm has, at a minimum, immediately culled the pen(s) in which the disease was detected 2. the farm immediately notified the other farms in the ABM [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 Requirement: Yes Applicability: All	a. Ensure that farm policies and procedures in 5.4.3a describe the four actions required under Indicator 5.4.4 in response to an OIE-notifiable disease on the farm.	The fish health management plan follows the OIE requirements.	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.	Fourteen VHS mortalities were identified at the farm in the last cycle.	
		c. If an OIE-notifiable disease was confirmed on the farm (see 5.4.4b), then retain documentary evidence to show that the farm: 1) immediately culled the pen(s) in which the disease was detected; 2) immediately notified the other farms in the ABM [122] 3) enhanced monitoring and conducted rigorous testing for the disease; and 4) promptly (within one month) made findings publicly available.	Fourteen VHS mortalities were encountered at the farm in the last cycle. VHS is regarded as endemic in British Columbia waters, and Variances 89 and 91 are in place. The variances remove the requirement for culling of pens and leave the decision to do so in the hands of the relevant Canadian authorities.	
		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.	
		-		
		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)	
PRINCIPLE 6: DEVELOP AND OPERATE FARMS IN A SOCIALLY RESPONSIBLE MANNER				
<i>6.1 Freedom of association and collective bargaining [124]</i>				
6.1.1	Indicator: Evidence that workers have access to trade unions (if they exist) and union representative(s) chosen by themselves without managerial interference Requirement: Yes Applicability: All	a. Workers have the freedom to join any trade union, free of any form of interference from employers or competing organizations set up or backed by the employer. Farms shall prepare documentation to demonstrate to the auditor that domestic regulation fully meets these criteria. b. Union representatives (or worker representatives) are chosen by workers without managerial interference. ILO specifically prohibits "acts which are designated to promote the establishment of worker organizations or to support worker organizations under the control or employers or employers' organizations." c. Trade union representatives (or worker representatives) have access to their members in the workplace at reasonable times on the premises. d. Be advised that workers and union representatives (if they exist) will be interviewed to confirm the above. e. Others, please describe	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 defence of their occupational interests, including the right to engage in collective bargaining". see 6.1.1a and code of conduct section 5.3 see 6.1.1a and code of conduct section 5.3 Employees confirmed that they have signed the Contract of Employment and felt that their rights are not affected. They also confirmed that they receive a Contract of Employment and a copy of the Employee Handbook.	Compliant
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 to freedom of association is Stated in the contract of employment and within 5.3 of the code of conduct. Employees sign to state that they have been trained and tested on the Code of Conduct. The workers confirmed that the Code of Conduct was provided to them and that they had been trained and tested. The training records show that training happened, and the results are available on the training systems. See 6.1.1a Employees confirmed that they were aware of the company policy on Freedom of Association.	Compliant

		Compliance Criteria	Audit evidence	Evaluation
		(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)
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.	No outstanding cases against the farm site management for violations of employees' freedom of association and collective bargaining rights.	Compliant
		b. Employer has explicitly communicated a commitment to ensure the collective bargaining rights of all workers.	The employer has explicitly communicated a commitment to ensure the collective bargaining rights of all workers as stated in 6.1.1 & 6.1.2. The documentary evidence shows that workers are free and able to bargain collectively. Detailed in the Code of Conduct and training records.	
		c. There is documentary evidence that workers are free and able to bargain collectively (e.g. collective bargaining agreements, meeting minutes, or complaint resolutions).	See 6.1.3b	
		d. Others, please describe		
Criterion 6.2 Child labour				
6.2.1	Indicator: Number of incidences of child [125] labour [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 stored on Human Resources management system. There are no persons employed under the age of 15. Marine Harvest state in section 5.4 of the code of conduct " Marine Harvest is committed to the abolition of child labour, and all forms of forced or compulsory labour." "Marine Harvest considers the minimum age for employment as not lower than the age of completion of compulsory schooling as set by national law, and in any event not lower than 15 years of age." Identification is held on file for all farm employees and is signed and verified by senior Management at the point of employment.	Compliant
		b. Minimum age of permanent workers is 15 or older (except in countries as noted above).	See 6.2.1a	
		c. Employer maintains age records for employees that are sufficient to demonstrate compliance.	See 6.2.1a	
		d. Others, please describe		
	Indicator: Percentage of young workers [127] that are protected	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 a policy stating the rules on employing young workers. The Marine Harvest code of conduct section 5.4 sets out the main rules. Young workers risk assessments are carried out and displayed within the working areas. All young workers assessed before employment commences. All workers including young workers have the working hours recorded on a time management system. No young workers employed at the time of the audit.	
		b. All young workers (from age 15 to less than 18) are identified and their ages are confirmed with copies of IDs.	See 6.2.2a	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
6.2.2	[128] Requirement: 100% Applicability: All	c. Daily records of working hours (i.e. timesheets) are available for all young workers.	See 6.2.2a	Compliant
		d. For young workers, the combined daily transportation time and school time and work time does not exceed 10 hours.	See 6.2.2a	
		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.	See 6.2.2a	
		f. Be advised that the site will be inspected and young workers will be interviewed to confirm compliance.	See 6.2.2a	
		g. Others, please describe		
Criterion 6.3 Forced, bonded or compulsory labour				
6.3.1	Indicator: Number of incidences of forced, [131] bonded [132] or compulsory labour Requirement: None Applicability: All	a. Contracts are clearly stated and understood by employees. Contracts do not lead to workers being indebted (i.e. no 'pay to work' schemes through labour contractors or training credit programs).	All employees are provided with contracts of employment. Workers have signed all contracts of employment. The employer does not withhold employee's original identity documents	Compliant
		b. Employees are free to leave workplace and manage their own time.	Through documentation checks, it confirmed that all working hours are conducted on a voluntary basis.	
		c. Employer does not withhold employee's original identity documents.	The employer does not withhold employee's original identity documents.	
		d. Employer does not withhold any part of workers' salaries, benefits, property or documents in order to oblige them to continue working for employer.	The employer does not withhold any part of workers' salaries, benefits, property or documents to oblige them to continue working for the employer.	
		e. Employees are not to be obligated to stay in job to repay debt.	No employees are repaying debt.	
		f. Maintain payroll records and be advised that workers will be interviewed to confirm the above.	All of the above was confirmed by the employees within the 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	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. Discrimination complaints are dealt with through the grievance procedures. Grievance procedures are communicated to all workers.	Compliant
		b. Employer has clear and transparent company procedures that outline how to raise, file, and respond to discrimination complaints.	See 6.4.1a	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
	Requirement: Yes Applicability: All	c. Employer respects the principle of equal pay for equal work and equal access to job opportunities, promotions and raises. d. All managers and supervisors receive training on diversity and non-discrimination. All personnel receive non-discrimination training. Internal or external training acceptable if proven effective. e. Others, please describe	See 6.4.1a All managers have been trained in equality and diversity.	
6.4.2	Indicator: Number of incidences of discrimination Requirement: None Applicability: All	a. Employer maintains a record of all discrimination complaints. These records do not show evidence for discrimination. b. Be advised that worker testimonies will be used to confirm that the company does not interfere with the rights of personnel to observe tenets or practices, or to meet needs related to race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation or any other condition that may give rise to discrimination. c. Others, please describe	The facility has a procedure in place to document all discrimination complaints. To date, there have not been any complaints. There is no evidence of discrimination. Workers interviewed stated that the company did not discriminate against them. Workers interviewed had not experienced or heard of any issues with regards to discrimination. See 6.4.2a	Compliant
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. b. Employees know and understand emergency response procedures.	The facility has established procedures and policies to protect employees. Employees are trained in emergency response procedures. The training has been recorded within the onsite training systems and displayed on the employee notice boards. Health and safety training is carried by an external company every year. Ongoing training carried out on an online training software management systems. Marine Harvest tries to ensure that the overall training levels are above 75 percent. It is the responsibility of the site managers to ensure that this level is achieved. This site has achieved 95 percent . However there were some problems identified on the site tour. 1. Confined Space ladders are not correctly secured 2. Pallets being used as steps in the silo areas 3. Compressed Air lines do not have Whip- Check hose restraints installed. 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.	Major

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
		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).	A full list of MSDS is available within the health and safety standards documentation and stored on all site computers. The site has carried out risk assessments for all operations and has identified the PPE required for each task. The site uses the risk assessment to understand the risks and eliminate the risks were possible.	Compliant
		b. Employer provides workers with PPE that is appropriate to known health and safety hazards.	All workers are provided with the appropriate PPE and training is carried out where required.	
		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 training which includes the correct and proper use of Personal Protective Equipment. There are modules that are built into the online health & Safety management system that employees have to completed each year. The site manager ensures this training is carried out and recorded.	
		d. Be advised that workers will be interviewed to confirm the above.	Workers confirmed within interview process that Personal Protective Equipment was provided and training was provided if required.	
		e. Others, please describe		
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 have not been correctly carried out as workers have not fully understood the process.	Major
		b. Employees are trained in how to identify and prevent known hazards and risks (see also 6.5.1c).	See 6.5.3	
		c. Health and safety procedures are adapted based on results from risk assessments (above) and changes are implemented to help prevent accidents.	See 6.5.3	
		d. Others, please describe		
	Indicator: Evidence that all health-	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. The facility has systems to maintain documentation for all occupational health and safety violations and investigations.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
6.5.4	and safety-related accidents and violations are recorded and corrective actions are taken when necessary Requirement: Yes Applicability: All	b. Employer maintains complete documentation for all occupational health and safety violations and investigations.	See 6.5.4a	Compliant
		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 6.5.4a	
		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		
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 of 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. Checks of certifications are made by Marine Harvest every 60 days.	
		c. Others, please describe		
Criterion 6.6 Wages				

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
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 pay is in line or above minimum wage requirements. All workers confirmed that wages are paid correctly.	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 6.6.1a	
		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 6.6.1a	
		d. Others, please describe		
6.6.2	Indicator: Evidence that the employer is working toward the payment of basic needs wage [138] Requirement: Yes Applicability: All	a. Proof of employer engagement with workers and their representative organizations, and the use of cost of living assessments from credible sources to assess basic needs wages. Includes review of any national basic needs wage recommendations from credible sources such as national universities or government.	MHC use Hays group to assist with setting pay levels and carry out their 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	Compliant
		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.	See 6.6.2a	
		c. Employer demonstrates how they have taken steps toward paying a basic needs wage to their workers.	See 6.6.2a	
		d. Others, please describe		
		a. Wages and benefits are clearly articulated to workers and documented in contracts.	Wages and benefits are documented before the point of employment and written into the contract of employment. Employees are paid bi weekly by electronic bank transfer.	
		b. The method for setting wages is clearly stated and understood by workers.	See 6.6.3 a	

	Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	
6.6.3	Indicator: Evidence of transparency in wage-setting and rendering [139] Requirement: Yes Applicability: All	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	See 6.6.3 a & b Employees confirmed within interview process that information was available and electronic transfer payments are made directly to their bank accounts.	Compliant
Criterion 6.7 Contracts (labour) 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 labour-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 in the personnel files. There was no evidence of Labour only contracts or false apprenticeships. Employees confirmed that there are no Labour only contracts or false apprenticeships.	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. d. Others, please describe	Where Marine Harvest uses subcontractors, they check that the companies have socially responsible practices and policies. Marine Harvest keeps a list of approved suppliers and contractors. Marine Harvest keeps records of communications with suppliers and subcontractors. See 6.7.2a See 6.7.2a	Compliant
Criterion 6.8 Conflict resolution				
	Indicator: Evidence of worker access to effective, fair and confidential grievance procedures	a. Employer has a clear labour 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. All employees have access to policies through the intranet. This was confirmed through employee interviews. All communication such as Complaints, grievances and discipline is recorded within the employee personnel file. All communications are detailed in writing with the employee personnel files.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
6.8.1	Requirement: Yes Applicability: All	b. Workers are familiar with the company's labour conflict policies and procedures. There is evidence that workers have fair access.	See 6.8.1	Compliant
		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.	See 6.8.1	
		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 labour conflicts that are raised.	The established grievance policy and procedures are well documented. Any grievances that are raised are documented in the employee personnel files and have agreed on action plans if required. None of the workers interviewed had any grievances so unable to confirm. The company policy is to respond to each stage of the process within 14 days. Also, see 6.8.1	Compliant
		b. Employer keeps a record of follow-up (i.e. corrective actions) and timeframe in which grievances are addressed.	See 6.8.2a	
		c. Maintain documentary evidence and be advised that workers will be interviewed to confirm that grievances are addressed within a 90-day timeframe.	see 6.8.2a	
		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 policies or procedures used is threatening, humiliating or has any punishing disciplinary practices.	Compliant
		b. Allegations of corporeal punishment, mental abuse [144], physical coercion, or verbal abuse will be investigated by auditors.	The disciplinary practice does not impact the workers physical or mentally.	
		c. Be advised that workers will be interviewed to confirm there is no evidence for excessive or abusive disciplinary actions.	The workers confirmed there is no excessive or abusive disciplinary actions.	
		d. Others, please describe		
	Indicator: Evidence of a functioning disciplinary action policy whose aim is to improve the worker [143]	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. None of the workers had been involved with a disciplinary procedure but confirmed workers are regularly evaluated and reviewed.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
6.9.2	<p>to improve the worker [145]</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>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.</p> <p>c. Others, please describe</p>	<p>See 6.9.2a</p>	Compliant
Criterion 6.10 Working hours and overtime				
6.10.1	<p>Indicator: Incidences, violations or abuse of working hours and overtime laws [145]</p> <p>Requirement: None</p> <p>Applicability: All</p>	<p>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.</p> <p>b. Records (e.g. time sheets and payroll) show that farm workers do not exceed the number of working hours allowed under the law.</p> <p>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).</p> <p>d. Be advised that workers will be interviewed to confirm there is no abuse of working hours and overtime laws.</p> <p>e. Others, please describe</p>	<p>The company holds document for Employment Standards Act for BC for working regulations. The working shift pattern is carried out over two weeks. The shift pattern consists of 8 days on and 6 days off. The averaged hours over the 2 weeks is 40 hours per week. Working hours are provided by site managers to the payroll and working hours' department. The workers confirm that working hours are correct before this. Records on Dayforce show that workers are not exceeding the working hours that are allowed.</p> <p>Working hours are provided by site managers to the payroll and working hours' department. The workers confirm that working hours are correct before this. Records on Dayforce show that workers are not exceeding the working hours that are allowed.</p> <p>The shift pattern is agreed before the commencement of employment. The contract of employment clearly stated the contracted working hours.</p> <p>Workers confirmed that the facility did not abuse the working hour's regulations and laws.</p>	Compliant
6.10.2	<p>Indicator: Overtime is limited, voluntary [146], paid at a premium rate and restricted to exceptional circumstances</p>	<p>a. Payment records (e.g. payslips) show that workers are paid a premium rate for overtime hours.</p> <p>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).</p>	<p>The employees are paid a premium rate for overtime hours they are paid 150% for the first 2 hours and 200% for any hours worked after that.</p> <p>The Dayforce System confirmed that overtime is infrequent.</p>	Compliant

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
6.10.2	Requirement: Yes Applicability: All except as noted in [146]	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. 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 . The employees confirmed that overtime is rare and is voluntary.	Compliant
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. b. Employer maintains records of worker participation in educational opportunities as evidenced by course documentation (e.g. list of courses, curricula, certificates, degrees). c. Be advised that workers will be interviewed to confirm that educational initiatives are encouraged and supported by the company. d. Others, please describe	The company encourages employees to increase knowledge and participate in training courses and supports the workers in doing this. As stated in HR policy section 9 Employee training and development bad education assistance programs. All training records are maintained on the DATS system. Workers confirmed that they are encouraged to learn and be involved with training courses. Other than compulsory health and safety training workers dictate the speed of additional training.	Compliant
Criterion 6.12 Corporate policies for social responsibility				
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 labour requirements presented in 6.1 through 6.11. b. Company-level policies (see 6.12.1a) are approved by the company headquarters in the region where the site applying for certification is located. c. The scope of corporate policies (see 6.12.1a) covers all company operations relating to salmonid production in the region (i.e. all smolt production facilities, grow-out facilities and processing plants). d. The site that is applying for certification provides auditors with access to all company-level policies and procedures as are needed to verify compliance with 6.12.1a (above). e. Others, please describe	The Code of Conduct Policy and also the HR Policy are in line with all social and labour requirements. The Senior Management Team approves corporate policy in Campbell River. The scope of all corporate policies cover all company operations. All documentation was provided and reviewed.	Compliant

PRINCIPLE 7: BE A GOOD NEIGHBOR AND CONSCIENTIOUS CITIZEN

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
<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 is an agreement in place with the FN in this area. The company recently sent out communication to all the local communities with details on new technology, Therapeutic Treatments, opportunities for future growth and information regarding certification. The community engagement letter states the agenda. Notes are taken during the meeting and follow up emails are sent out to stake holders	Compliant
		b. Consultations are meaningful. OPTIONAL: the farm may choose to use participatory Social Impact Assessment (pSIA) or an equivalent method for consultations.	See 7.1.1 a	
		c. Consultations include participation by representatives from the local community who were asked to contribute to the agenda.	See 7.1.1 a	
		d. Consultations include communication about, or discussion of, the potential health risks of therapeutic treatments (see Indicator 7.1.3).	See 7.1.1 a	
		e. Maintain records and documentary evidence (e.g. meeting agenda, minutes, report) to demonstrate that consultations comply with the above.	See 7.1.1 a	
		f. Be advised that representatives from the local community and organizations may be interviewed to confirm the above.	No representatives made themselves available for the audit	
		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.	Marine Harvest has a policy Doc#5/FW905 External Complaint resolution. External complaints are logged by Public Affairs Director Ian Roberts. A log has been created. The Log details who raised the complaint and the nature of the complaint. The company policy is all complaints are passed to the communications manager and then forwarded to senior management should it be required. The complaints procedure is detailed and sets out the requirements for handling each complaint One representative from the FN attended the Farm tour and all topics discussed. No negative feedback was provided by the representative	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).	See 7.1.2a	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
	Applicability: All	c. The farm's mechanism for handling complaints is effective based on resolution of stakeholder complaints (e.g. follow-up correspondence from stakeholders).	See 7.1.2a	
		d. Be advised that representatives from the local community, including complainants where applicable, may be interviewed to confirm the above.	No representatives made themselves available for the audit	
		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 therapeutant)	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. This has been communicated in the engagement letter as detailed 7.1.1	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 side farm house so that it can be seen by anyone entering the site.	
		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 7.1.1	
		d. Be advised that members of the local community may be interviewed to confirm the above.	No representatives made themselves available for the audit.	
		e. Others, please describe		
Criterion 7.2 Respect for indigenous and aboriginal cultures and traditional territories				
	Indicator: Evidence that indigenous groups were consulted as required by relevant local and/or national	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.	Marine Harvest is operating in some indigenous territories and has several agreements (IBA) in place with FN groups. The agreements demonstrate that Marine Harvest is aware of Local, national laws and regulations for each FN group. There is a spreadsheet detailing agreements with each FN. There is also a log sheet that records all meetings, calls and communication.	
		b. Farm management demonstrates an understanding of relevant local and/or national laws and regulations that pertain to consultations with indigenous groups.	See 7.2.1a	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
7.2.1	laws and regulations Requirement: Yes Applicability: All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [152]	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.	See 7.2.1a	Compliant
		d. Be advised that representatives from indigenous groups may be interviewed to confirm the above.	No representatives made themselves available for the audit	
		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.	Marine Harvest is 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.	No representatives made themselves available for the audit	
		c. Others, please describe	<i>no other.</i>	
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.	Marine Harvest is operating in some indigenous territories and has several agreements (IBA) in place with FN. The agreements demonstrate that Marine Harvest is aware of Local, national laws and regulations for each FN. There are agreements in place as detailed in 7.2.1 and continuous engagements as detailed 7.2.1. Also, there is evidence available of effort by MHC to engage with local area First Nations, as yet no protocol agreement has been reached.	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.	See 7.2.3a	
		c. Be advised that representatives from indigenous communities may be interviewed to confirm either 7.2.3b1 or b2 (above) as applicable.	No representatives made themselves available for the audit	

		Compliance Criteria	Audit evidence	Evaluation
		(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)
		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 Marine Harvest HC does 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.	See 7.3.1a	
		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.	No representatives made themselves available for the audit	
		d. Others, please describe	<i>No other</i>	
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.	No representatives made themselves available for the audit.	
		c. Others, please describe		
INDICATORS AND STANDARDS FOR SMOLT PRODUCTION				
SECTION 8: STANDARDS FOR SUPPLIERS OF SMOLT				
Standards related to Principle 1				
		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 suppliers were MHC's Ocean Falls Hatchery (OFH) and Dalrymple Creek Hatchery (DCH).	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
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	b. Where legal authorisation related to water quality are required, obtain copies of smolt suppliers' permits.	<p>OFH: (1) Freshwater/Land-based Aquaculture Licence Under the Fisheries Act, Licence No. AQFW 112568 2015, issued by DFO and expiring 06/18/24; (2) Provincial Aquaculture Licence Number 5406670 issued by the BC Ministry of Forests, Lands and Natural Resource Operations, expiring 06/30/27; (3) Conditional Water Licence No. 116629 for Link Lake, issued by Land & Water BC 11/18/02; (4) NWPA Permit No 8200-02-8389 issued 01/15/03 by Transport Canada; (5) 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. DCH: (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.</p>	Compliant
		c. Obtain records from smolt suppliers showing monitoring and compliance with discharge laws, regulations, and permit requirements as required.	<p>Monthly effluent monitoring data shows that OFH is in compliance with Ministry of Environment (MOE) requirements. Monthly effluent monitoring data shows that the DCH 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.</p>	
		-	See 8.1c	
		e. Others, please describe		
8.2	Indicator: Compliance with labour laws and regulations Requirement: Yes Applicability: All Smolt Producers	a. Obtain declarations from smolt suppliers affirming compliance with labour laws and regulations.	All fish on-site originate from within MHC's broodstock and hatchery facilities which operate under the same labour laws and regulations as described in Section 6 of this report.	Compliant
		b. Keep records of supplier inspections for compliance with national labour laws and codes (only if such inspections are legally required in the country of operation; see 1.1.3a)	All fish on-site originate from within MHC's broodstock and hatchery facilities which operate under the same labour laws and regulations as described in Section 6 of this report.	
		c. Others, please describe		

Standards related to Principle 2

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
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 assessments of DCH and OFH in February 2014 and March 2014, respectively. The resulting Biodiversity Impact Assessment (November 2014) for each site 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 DCH 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. The OFH Biodiversity Impact Assessment determined that "no significant concerns were identified in the evaluation of potential impacts to biodiversity based on operations at the Ocean Falls Hatchery." The report also determined that that effluent met the criteria of the Land-Based Finfish Waste Control Regulations and that effluent concentrations of ammonia, nitrate and total suspended solids were below the limits of the BC Water Quality Guidelines for the protection of aquatic wildlife.	
		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 SAD standards, 4 kg/mt of fish produced over a 12-month period Applicability: All Smolt Producers	a. Obtain records from smolt suppliers showing amount and type of feeds used for smolt production during the past 12 months.	All feed used at the facilities is from Skretting. Types of feed and quantities are recorded on Aquafarmer. OFH discharges effluent to the ocean (Cousins Inlet) and is exempt under Variance 92. DCH discharges to	Compliant
		b. For all feeds used by the smolt suppliers (result from 8.4a), keep records showing phosphorus content as determined by chemical analysis or based on feed supplier declaration (Appendix VIII-1).	Skretting declare that the P in feed is 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 3.97 tons in 2016.	
		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 326.57 tons in 2016.	
		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 1.40 mt.	
		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 1.93 tons.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
		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 0.0039 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 2.62 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		
		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 hatchery is land-based tank system with triple screening on outflows. There have been no escapes at the facility.	
		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.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
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]	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]).	Smolt suppliers are owned by MHC.	Compliant
		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, 11/10/15) 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 -0.88%.	
		c. Others, please describe		
<i>Standards related to Principle 4</i>				
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, 06/22/16) 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.	Compliant
		b. Others, please describe		

		Compliance Criteria	Audit evidence	Evaluation
		(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)
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.	OFH (2016): 10,052,738,783 kj DCH (2016): 18,728,385,934 kj	
		c. Obtain records to show the smolt supplier calculated the total weight of fish in metric tons (mt) produced during the last year.	OFH (2016): 408.74 mt DCH (2016): 326.57 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.	OFH (2016): 24,594,639 kj/mt DCH (2016): 57,347,184 kj/mt	
		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 assessments are conducted quarterly.	
		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 Applicability: All Smolt Producers	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 Department of Environment, Food and Rural Affairs (DEFRA).	
		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.	DEFRA designations on GWP's are used.	
		e. Obtain evidence to show that the smolt supplier has undergone a GHG assessment in compliance with requirements Appendix V-1 at least annually.	The hatchery undergoes annual GHG assessments. GHG emissions for 2016 were 1,219,951 kg CO ₂ e at OFH and 2,018,685 kg CO ₂ e at DCH.	
		f. Others, please describe		
Standards related to Principle 5				
	Indicator: Evidence of a fish health management plan, approved by the designated veterinarian, for the	a. Obtain a copy of the supplier's fish health management plan for the identification and monitoring of fish disease and parasites.	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.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
8.11	identification and monitoring of fish diseases and parasites Requirement: Yes Applicability: All Smolt Producers	b. Keep documentary evidence to show that the smolt supplier's health plans were approved by the supplier's designated veterinarian.	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
		c. Others, please describe		
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.	The list of diseases is available in the Fish Health Management Plan.	Compliant
		b. Maintain a list of diseases for which effective vaccines exist for the region, developed by the farm veterinarian and supported by scientific evidence.	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.	
		c. Obtain from the smolt supplier(s) a declaration detailing the vaccines the fish received.	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.	
		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.	Files on the Aquafarmer system list the vaccines used for the fish at each farm site.	
		e. Others, please describe		
8.13	Indicator: Percentage of smolt groups [164] tested for select diseases of regional concern prior to entering the grow-out phase on farm Requirement: 100% Applicability: All Smolt Producers	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.	Compliant
		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).	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 M16012905 dated 01/28/16 was viewed.	
		c. Others, please describe		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
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.	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 . There were no treatments at DCH in 2016. Fish at OFH were treated in March 2016 with florfenicol for <i>Yersinia ruckeri</i> . Complete records of the treatment were available.	Compliant
		b. Others, please describe		
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].	The hatcheries are 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.	Compliant
		b. Inform smolt supplier that the treatments on the list cannot be used on fish sold to a farm with ASC certification.	The hatcheries are owned by MHC.	
		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.	Fish at OFH were treated in March 2016 with florfenicol. The antibiotic is not included on the CFIA list of banned chemicals.	
		d. Others, please describe		
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).	Fish at OFH were treated in March 2016 with florfenicol for <i>Yersinia ruckeri</i> .	Compliant
		b. Calculate the total number of treatments of antibiotics from their most recent production cycle.	Fish at OFH were treated once in March 2016 with florfenicol for <i>Yersinia ruckeri</i> .	
		c. Others, please describe		
	Indicator: Allowance for use of antibiotics listed as critically important for human medicine by	a. Provide to smolt supplier(s) a current version of the WHO list of antimicrobials critically and highly important for human health [167].	The hatcheries are owned by MHC. The WHO list is available on MHC Sharepoint.	
		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 hatcheries are owned by MHC. The WHO list is available on MHC Sharepoint.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
8.17	the WHO [167]			Compliant
	Requirement: None [168] Applicability: All Smolt Producers	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 hatcheries are owned by MHC. The WHO list is available on MHC Sharepoint.	
		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 hatcheries are 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 hatcheries are owned by MHC and the OIE Aquatic Animal Health Code is available on MHC Sharepoint.	
		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 hatcheries are owned by MHC.	
		d. Others, please describe		
<i>Standards related to Principle 6</i>				
8.19	Indicator: Evidence of company-level policies and procedures in line with the labour standards under 6.1 to 6.11 Requirement: Yes Applicability: All Smolt Producers	a. Obtain copies of smolt supplier's company-level policies and procedures and a declaration of compliance with the labour standards under 6.1 to 6.11.	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 labour standards under 6.1 to 6.11.	See principle 6	
		c. Others, please describe		
<i>Standards related to Principle 7</i>				
8.20	Indicator: Evidence of regular consultation and engagement with community representatives and organizations Requirement: Yes Applicability: All Smolt Producers	a. From each smolt supplier obtain documentary evidence of consultations and engagement with the community.	See principle 7	Compliant
		b. Review documentation from 8.20a to verify that the smolt supplier's consultations and community engagement complied with requirements.	See principle 7	
		c. Others, please describe		

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
8.21	Indicator: Evidence of a policy for the presentation, treatment and resolution of complaints by community stakeholders and organizations	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	Compliant
	Requirement: Yes			
	Applicability: All Smolt Producers	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	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	Compliant
		Requirement: Yes		
		Applicability: All Smolt Producers		
		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	a. See results of 8.22a (above) to determine whether the requirements of 8.23 apply to the smolt supplier.	See principle 7	Compliant
		Requirement: Yes		
		Applicability: All Smolt Producers		
		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				
	Indicator: Allowance for producing or holding smolt in net pens in water bodies with native salmonids	a. Obtain a declaration from the farm's smolt supplier stating whether the supplier operates in water bodies with native salmonids.	The hatcheries are not open net-pen operations.	
		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 hatcheries are not open net-pen operations.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
8.24	Requirement: None Applicability: All Smolt Producers Using Open Systems	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. 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 . The hatcheries are not open net-pen operations.	N/A
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. b. Others, please describe	The hatcheries are not open net-pen operations. The hatcheries are not open net-pen operations.	N/A
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. b. Identify which entity was responsible for conducting the assessment (8.26a) and obtain evidence for their reliability. c. Review the assessment (8.26a) to confirm that it establishes a carrying capacity for the water body, it is less than five years old, and it meets the minimum requirements presented in Appendix VIII-5. d. Review information to confirm that the total biomass in the water body is within the limits established in the assessment (8.26a). e. If the study in 8.26a is more than two years old and there has been a significant increase in nutrient input to the water body since completion, request evidence that an updated assessment study has been done. f. Others, please describe	The hatcheries are not open net-pen operations. The hatcheries are not open net-pen operations. The hatcheries are not open net-pen operations. The hatcheries are not open net-pen operations. The hatcheries are not open net-pen operations.	N/A
	Indicator: Maximum baseline total	a. Obtain documentary evidence to show that smolt suppliers conducted water quality monitoring in compliance with the requirements of Appendix VIII-6. b. Obtain from smolt suppliers a map with GPS coordinates showing the sampling locations.	The hatcheries are not open net-pen operations. The hatcheries are not open net-pen operations.	

	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)
8.27	<p>Indicator: Maximum allowed phosphorus concentration of the water body (see Appendix VIII-6)</p> <p>Requirement: ≤ 20 µg/l [174]</p> <p>Applicability: All Smolt Producers Using Open Systems</p>	<p>c. Obtain from smolt suppliers the TP monitoring results for the past 12 months and calculate the average value at each sampling station.</p> <p>d. Compare results to the baseline TP concentration established below (see 8.29) or determined by a regulatory body.</p> <p>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.</p> <p>f. Others, please describe</p>	N/A
8.28	<p>Indicator: Minimum percent oxygen saturation of water 50 centimetres above bottom sediment (at all oxygen monitoring locations described in Appendix VIII-6)</p> <p>Requirement: ≥ 50%</p> <p>Applicability: All Smolt Producers Using Open Systems</p>	<p>a. Obtain evidence that smolt supplier conducted water quality monitoring in compliance with the requirements (see 8.27a).</p> <p>b. Obtain from smolt suppliers the DO monitoring results from all monitoring stations for the past 12 months.</p> <p>c. Review results (8.28b) to confirm that no values were below the minimum percent oxygen saturation.</p> <p>d. Others, please describe</p>	N/A
8.29	<p>Indicator: Trophic status classification of water body remains unchanged from baseline (see Appendix VIII-7)</p> <p>Requirement: Yes</p> <p>Applicability: All Smolt Producers Using Open Systems</p>	<p>a. Obtain documentary evidence from the supplier stating the trophic status of water body if previously set by a regulator body (if applicable).</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>e. Others, please describe</p>	N/A
	<p>Indicator: Maximum allowed increase in total phosphorus</p>	<p>a. Determine the baseline value for TP concentration in the water body using results from either 8.29a or 8.29b as applicable.</p>	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
8.30	concentration in lake from baseline (see Appendix VIII-7)	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 hatcheries are not open net-pen operations.	N/A
	Requirement: 25%	c. Verify that the average observed TP concentration did not increase by more than 25% from baseline TP concentration.	The hatcheries are not open net-pen operations.	
	Applicability: All Smolt Producers Using Open Systems	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	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 hatcheries are not open net-pen operations.	N/A
	Requirement: None Applicability: All Smolt Producers Using Open Systems	b. Others, please describe	The hatcheries are not open net-pen operations.	
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 the hatcheries has been submitted.	
		d. Others, please describe		
8.33	Indicator: Minimum oxygen saturation in the outflow (methodology in Appendix VIII-2) Requirement: 60% [178.179]	a. Obtain the water quality monitoring matrix from each smolt supplier (see 8.32b).	The hatcheries are owned by MHC. Water quality monitoring records are available.	Compliant
		b. Review the results (8.33a) for percentage dissolved oxygen saturation in the effluent to confirm that no measurements fell below 60% saturation.	DCH had a reading of 70% Saturation DO week of May 23, 2017.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
	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).	See 8.33b	
		d. Others, please describe		
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.	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 Biological.	N/A
		b. Review supplier documents (8.34a) to confirm that the surveys followed the prescribed methodology (Appendix VIII-3).	Surveys were conducted as required in Appendix III-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.	The 2016 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. Similar results were found in the 2015 macro-benthic survey. MHC will continue the twice-yearly sampling program in order to ensure that downstream communities continue to recover in winter.	
		d. Others, please describe		
	Indicator: Evidence of implementation of biosolids (sludge) Best Management Practices (BMPs) (Appendix VIII-4)	a. Maintain a copy of smolt supplier's biosolids (sludge) management plan and confirm that the plan addresses all requirements in Appendix VIII-2.	Marine Harvest has a Biosolids Best Management practices SOP for all its freshwater units. The latest revision of the SOP was 09/21/15.	
		b. Obtain from smolt suppliers a process flow diagram (detailed in Appendix VIII-2) showing how the farm is dealing with biosolids responsibly.	Process flow plan is in place. Biosolids are separated by drum filters and settling pond, and sludge is removed on a monthly basis.	

		Compliance Criteria (Use as guidance for audit only)	Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)
8.35	Requirement: Yes	c. Obtain a declaration from smolt supplier stating that no biosolids were discharged into natural water bodies in the past 12 months.	The hatchery is owned by MHC.	N/A
	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 no risk of substitution as the entire farm site is within the unit of certification.	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. 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.

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

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.

10.6 Traceability Determination:

<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	Peak biomass sampling has not yet been carried out and the results cannot be reviewed.	
NC02	Closed	2.1.2	Peak biomass sampling has not yet been carried out and the results cannot be reviewed.	
NC03	Closed	2.1.3	Peak biomass sampling has not yet been carried out and the results cannot be reviewed.	
NC04	Closed	6.5.1	1. Confined Space ladders are not correctly secured 2. Pallets being used as steps in the silo areas 3. Compressed Air lines do not have Whip- Check hose restraints installed.	
NC05	Closed	6.5.3	Risk Assessments have not been correctly carried out as workers have not fully	
NC06	Closed	4.5.2d	There are no records in place logging the disposal of waste such as feed bags and domestic waste.	
NC07	Closed	5.2.10c	The antibiotic load in the current cycle has increased over the average antibiotic load for the previous two cycles.	

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.

The audit was comprehensive and well executed.

12.2 A clear statement on whether or not the audited unit of certification has the capability to consistently meet the objectives of the relevant standard(s).

The unit of certification has the capability to consistently meet the objectives of the relevant standard.

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

13 Decision

13.1 Has a certificate been issued? (yes/no)

YES

13.2 The Eligibility Date (if applicable)

20th Dec 2017

13.3 Is a separate coc certifice required for the producer?
(yes/no)

No - For processor only

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.

Marine Harvest Canada - Port Hardy. Issue Date: 20th January 2015 Expiry date: 19th January 2018

13.4.2 The scope of the certificate

Atlantic Salmon (Salmo Salar)

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.

Any objections or complaints in respect of this decision are subject to SAI complaints procedure.
Should a stakeholder wish to register a complaint , please either register the details with ukmarketing@saiglobal.com
Or GTCenquiries@saiglobal.com

14 Surveillance

14.1 Next planned Surveillance

14.1.1 Planned date

14.1.2 Planned site

14.2 Next audit type

14.2.1 Surveillance 1

14.2.2 Surveillance 2

14.2.3 Re-certification

14.2.4 Other (specify type)



Healthy Oceans. Healthy Communities.

ATTN: Linda McDonnell
Programme Administrator
SAI Global Assurance Services
Linda.mcdonnell@saiglobal.com

7th September 2017,

Stakeholder Submission RE: Initial Full Assessment Report, Marine Harvest Canada's Wicklow farm, by SAI Global Assurances Services

Upon review of the draft Aquaculture Stewardship Council (ASC) audit for MHC's Wicklow 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) and the Salmon Standard Audit Manual. Furthermore, the farm is clearly in breach of the antibiotic requirements of the Salmon Standard which should disentitle the farm from certification.

In addition, we believe it would be irresponsible for SAI Global to grant ASC certification given the current occupation and clear vocal opposition of fish farms by the First Nations of the territory in which the Wicklow farm resides. Therefore, the certification would undermine the credibility of the ASC, the salmon standard and SAI Global.

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

I. Process Requirements and Audit Timing

a) Exclusion of harvest activities from initial audit

The draft audit report fails to state whether (or not) harvest activities were witnessed at the initial audit.

The ASC CAR V2.0 requires that *"The CAB's initial audit should include harvesting activities of the principle product to be audited."* (Audit Timing 17.4.2).

17.4.6 If the CAB determines that it is not possible to conduct the initial audit as specified in 17.4.2, the CAB shall:

17.4.6.1 Record this determination in the audit report.

17.4.6.2 Provide a justification for the alternative timing.

There is no record in the draft report that states it was not possible to witness harvest as required by the CAR (17.4.6.1). Likewise, there is no justification, as required in the CAR (17.4.6.2), provided in the draft audit report for conducting the audit earlier and not witnessing the harvest of the principle product.

Responding to our previous submissions regarding this issue, SAI Global has routinely stated:

"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."

Upon review of the reports for final publication, SAI Global did not include the justification or confirm when harvesting will be viewed (Sheep Passage; Phillips Arm; Chancellor Channel; Westside).

Given the CAR requires CABs to record in the audit report: 1) whether the witness of harvest is possible and 2) justification for alternative timing, if applicable; it is reasonable for stakeholders to expect such recording is made available in both the draft and final audit reports.

b) 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. 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. For example, the benthic monitoring indicators set out in Criterion 2 can only be addressed by sampling conducted at the farm's peak biomass (i.e. harvest). Several indicators rely on similar end-of-cycle calculations, such as the Estimated Unexplained Loss (3.4.3); Maximum viral disease-related mortality (5.1.5); Maximum unexplained mortality rate (5.1.6); Maximum farm level cumulative parasiticide treatment index score (5.2.5); Number of treatments of antibiotics (5.2.9) and Fishmeal/Fish Oil Forage Fish Dependency Ratio (4.2.1/4.2.2). Numerous indicators focus on whether an event occurs beyond a stipulated threshold during a stated period up to and including the production cycle under audit, such as Maximum number of lethal incidents (2.5.6); Maximum on-farm lice levels (3.1.7); Maximum number of escapes (3.4.1) and OIE-notifiable disease occurrence (5.4.4).

With the exceptions of 2.1.1; 2.1.2; 2.1.3; the indicators above are listed as "conforming" - despite not having available any of the 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 with 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.

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

II. Salmon Standard Requirements

For the Salmon Standard indicators below, we submit the CAB did not conform to the following CARv2.0 requirement:

17.3 Audit methodology

17.3.1 The ASC audit shall use the ASC Audit Manual as guidance for the standard(s) for which the client is being audited.

Further details to our reasoning are provided below.

a) Indicator 3.1.1 Participation in an Area-Based Management (ABM) scheme...

The draft audit report lists the farm as 'compliant' for indicator 3.1.1 despite noting "there is no ABM". The CAB then exempts the farm from needing to provide evidence for 3.1.1b (description of ABM management of disease and resistance) and 3.1.1c (documentation of ABM compliance to Appendix II-1 components).

Salmon Standard Indicator 3.1.1 is applicable to all farms, except those noted in footnote 38:

Applicability: All except farms that release not water as noted in [38]

Further, the ASC Audit Manual states the following:

Instruction to Clients and CABs on Exemptions to Criterion 3.1 According to footnote [38], farm sites for which there is no release of water that may contain pathogens into the natural (freshwater or marine) environment are exempt from the requirements under Criterion 3.1. More specifically, farms are only eligible for exemption from Criterion 3.1 if it can be shown that either of the following holds: 1) the farm does not release any water to the natural environment; or 2) any effluent released by the farm to the natural environment has been effectively treated to kill pathogens (e.g. UV and/or chemical treatment of water with testing demonstrating efficacy). Auditors shall fully document the rationale for any such exemptions in the audit report.

Footnote 38 does not exempt farms from the same company. Therefore, regardless of whether a sole company or other companies are involved – any farm that releases into the natural environment without treatment is required to demonstrate they participate in an ABM as per the requirements of indicator 3.1.1.

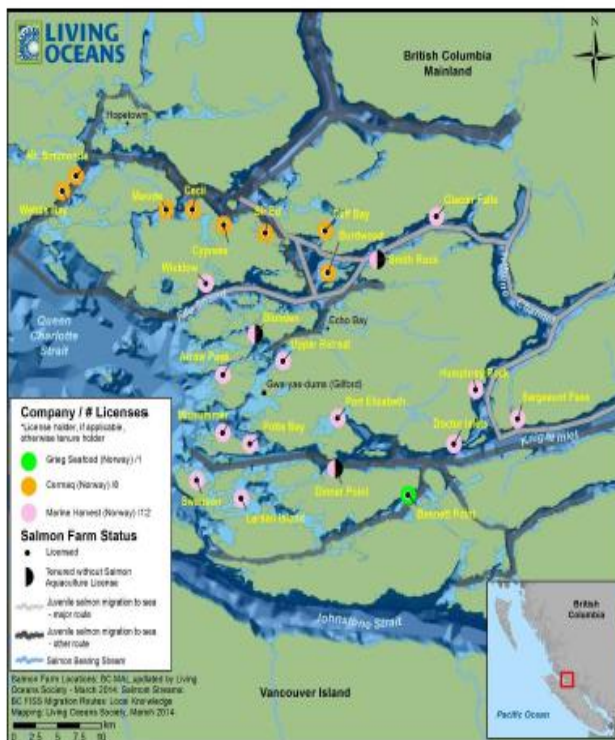
The Salmon Standard's Appendix II-1 Attributes and required components of the ABM provides the following definition of an "area":

II-1. A Definition of "area"

If area-based management is already a regulatory requirement of the farm's jurisdiction, then farms will use this definition of "area" for the purposes of these requirements. In jurisdictions

where ABM is not a regulatory requirement, the area covered under the ABM must reflect a logical geographic scope such as a fjord or a collection of fjords that are ecologically connected. The boundaries of an area should be defined, taking into account the zone in which key cumulative impacts on wild populations may occur, water movement and other relevant aspects of ecosystem structure and function.

As demonstrated in the map below, the Wicklow farm is located within a major juvenile salmon migration route, which overlaps with Cermaq Canada's farms (e.g. Burdwood) and other Marine Harvest farms (e.g. Glacier Falls). Following the salmon standard's definition of an "area", which includes "taking into account the zone in which key cumulative impacts on wild populations may occur", then an appropriate ABM for Wicklow would include all farms within the collection of fjords that are located on the same wild salmon migration route(s). We submit the auditor did not appropriately define the area, nor follow the Audit Manual by appropriately assessing ABM compliance.



Broughton Archipelago salmon farm licenses. Source: LOS

b) Indicator 3.2.2 If a non-native species is being produced, evidence of scientific research...

The auditor notes "the farm produces Atlantic salmon which is a non-native species", yet fails to provide the scientific research on the risk of establishment of the species. Evidence of compliance for 3.2.2C requires:

"C. Confirm that the scientific research included: multi-year monitoring for non-native farmed species; used credible methodologies & analyses; and underwent peer review..."

The CAB inappropriately states this requirement to be "not applicable" with no justification.

c) Indicators 5.2.9 and 8.16 Number of treatments of antibiotics over the most recent production cycle

The Salmon Standard requires:

"≤ 3 treatments of antibiotics over the most recent production cycle"

The Standard clearly calls on the count being from the production cycle – not the farm site and/or hatchery in isolation.

The draft audit report lists the following antibiotic treatment date for the hatchery stage of the most recent production cycle:

Treatment 1 – Florfenicol, March 2016 (Ocean Falls Hatchery)

The following antibiotic treatments are listed for the grow-out stage of the production cycle:

Treatment 2 – Florfenicol, 16-25 May 2016

Treatment 3 – Florfenicol, 8-17 June 2016

Treatment 4 – Florfenicol, 9-18 July 2016

Therefore, the production cycle has experienced four antibiotic treatments which should disqualify the farm from ASC certification.

d) Indicator 5.2.10 If more than one antibiotic treatment is used in the most recent production cycle, demonstration that the antibiotic load is at least 15% less that of the average of the two previous production cycles

The auditor raised a minor non-conformity for indicator 5.2.10, stating "The antibiotic load in the current cycle has increased over the average antibiotic load for the previous two cycles." The non-conformity report (NC07) states the corrective action relies on variance request VR233, with the action proposed: "T.maritimum is ubiquitous in the marine environment and it is necessary for fish welfare to

treat fish...” and the VR’s recommended action stating In order to maintain proper fish health and welfare at MHC sites in British Columbia, antibiotic treatments remain necessary... We ask for a variance to the requirements of 5.2.10 until an effective [sic] vaccination for T. maritimum infection is developed.”¹

Essentially MHC and SAI Global are requesting the farm to be granted an exemption from the Standard’s indicator 5.2.10 and to be held to no absolute antibiotic load. Concerningly, due to the ASC’s allowance for variances to set precedents, if this variance is granted, we can expect CABs to apply this exemption to the benefit of the whole B.C. salmon farming industry. With antibiotic use increasing in the B.C. industry, such a tactic by the auditor is irresponsible, particularly in combination with the incorrect treatment count per production cycle by auditors (as discussed above), and undermines the credibility of the ASC Salmon Standard.

The variance request also states: “Draft standards for sea bass/bream, tropical finfish and flatfish, that all include the requirement for no more than 3 antibiotic treatments, but none include the 15% reduction as required in Salmon Standard V1.0. One of the understood aims of the ASC is aiming for more consistency between standards across core requirements this is an item for consideration.”

In the same vein, we submit the ASC Shrimp Standard has the requirement of zero antibiotic treatments and therefore, another approach “for more consistency between standards” for the ASC Core Standard, equally mean the consideration of adopting a zero antibiotic treatment requirement.

We submit the variance request and the proposed corrective actions are completely inappropriate and the farm’s antibiotic load increase should disqualify the farm from ASC certification.

e) Criterion 7.2 Respect for indigenous and aboriginal cultures and traditional territories (Indicators: 7.2.1; 7.2.2; 7.2.3) & Criterion 7.3 Access to resources (Indicators: 7.3.1; 7.3.2)

MHC’s Wicklow farm is currently being occupied by members of Musgamagw Dzawada’enuwx and the Kwikwasutinuxw Haxwamis². The First Nations clearly state they have no agreement with MHC and are asking for the provincial and federal governments to revoke salmon farming licences in their traditional territories.

The draft audit report fails to acknowledge that the Wicklow farm resides in the Musgamagw Dzawada’enuwx Nation territory. The report also omits the fact that the Musgamagw Dzawada’enuwx have vocally declared their opposition to fish farms in their territory for nearly 30 years.

¹ http://variance-requests.asc-aqua.org/questions/vr233_salmon_v1-0_5-2-10/

² <http://www.cbc.ca/news/canada/british-columbia/b-c-first-nations-occupy-a-second-salmon-farm-as-company-raises-safety-concerns-1.4273628>

Firstly the indicator 7.1.1 states "There is an agreement in place with the FN in this area". This is incorrect. Secondly, Criterion 7.2 selectively states, "has several agreements (IBA) in place with FN groups". While this might be applicable to other regions that MHC operates within, such a statement cannot be readily applied to territory in which the Wicklow farm resides. In addition, the auditor acknowledges that "no protocol agreement has been reached", but fails to provide evidence of compliance to "...or an active process to establish a protocol agreement, with indigenous communities" (7.2.3). Despite this, the draft audit report states 'compliant' for indicator 7.2.3.

Musmagw Dzawada'enuwx Nation position statement can be viewed publicly on their website:
<http://www.mdtc.ca/cleansing-our-waters>

Given the long history of vocal opposition and the current campaigning by Musmagw Dzawada'enuwx, MHC's Wicklow farm clearly does not conform to Criteria 7.2 and 7.3 of the salmon standard.



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24 October 2018

Stakeholder Submission RE: Initial Full Assessment Report, Marine Harvest Canada's Wicklow farm, by
SAI Global Assurances Services

Dear Kelly,

Thank you for your submission of the 10th August 2017 in relation to the draft assessment report of the Marine Harvest Canada's Wicklow farm site to the ASC Salmon Standard. We note this is a joint submission on behalf of Living Oceans Society, David Suzuki Foundation Watershed Watch Salmon Society and Ecology Action Centre. 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 have addressed the comments in the submission in same sequence as raised below;

- I. 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. I can additionally confirm that harvesting has been witnessed on other Marine Harvest farm sites, harvesting is a standard operating procedure across all the Marine Harvest farm sites and the procedure will not vary from farm to farm. Harvest activity has been observed to be in compliance.

Reports for Sheep Passage; Phillips Arm; Chancellor Channel; included statements on harvest activity have been submitted to ASC

b) Insufficient records and evidence

It is standard audit technique whilst seeking evidence of compliance to standard requirements to review records for not only the current production cycle but previous production cycles in this manner a more complete picture of farm activity is obtained.

II. Salmon Standard Requirements

a) Indicator 3.1.1 Participation in an Area-Based Management (ABM) scheme...

All aquaculture sites in BC are regulated through DFO's Pacific Region Marine Finfish Integrated Management of Aquaculture Plan. DFO is working towards developing policy for Area Based Management for all marine finfish operations in BC. Until that happens, stocking permits for fish movement and transfers are in place allowing stocking of each site. Variation requests in respect of this have been approved by ASC.

A comprehensive, Fish Health Management Plan is in place and functioning this is legally-required in compliance with DFO requirements. These documents typically details:

- Isolation Protocols,
- Site Visitation Orders,
- Biosecurity,
- Pathogen and Disease prevention including sea lice management,
- Disease Outbreak Management Protocols,
- Medicine and Chemical Handling protocols,
- Fish Escape Management protocols
- Specific responsibilities and procedures for staff

The purpose of ASC Salmon Standard requirements and Appendix II is to allow for proper management of disease and parasites and resistance to treatments it should be noted that the applicants Fish Health Management Plan, which is required by the Conditions of the Aquaculture Licenses, covers the standards requirements.

b) Indicator 3.2.2 If a non-native species is being produced, evidence of scientific research...

Atlantic salmon has been in production in British Columbia for many decades and is has been studied extensively since that introduction. It is our understanding that wild salmonid monitoring reports include incidences of Atlantic salmon found in surveys in all production areas, at this time we are not aware of these records highlighting presence of Atlantic salmon.

c) Indicators 5.2.9 and 8.16 Number of treatments of antibiotics over the most recent production cycle

The Salmon Standard requires that the unit of certification is the farm unit itself in this case Wicklow farm , the term production cycle is applied to the activities that take place on the Wicklow farm site therefore the farm site is in compliance with the standard requirements.

d) Indicator 5.2.10 If more than one antibiotic treatment is used in the most recent production cycle, demonstration that the antibiotic load is at least 15% less that of the average of the two previous production cycles

We note your comments in respect of VR233 and await ASC decision on this request.

e) Criterion 7.2 Respect for indigenous and aboriginal cultures and traditional territories (Indicators: 7.2.1; 7.2.2; 7.2.3) & Criterion 7.3 Access to resources (Indicators: 7.3.1; 7.3.2)

As required under the Aquaculture Stewardship Council, SAI Global reached out to a number of interested groups and individuals in the region, including First Nations groups, inviting comments and submissions from these various groups and individuals. During the onsite element of the audit the auditor reviewed evidence of the applicant's outreach to all such interested groups and individuals to develop dialogue and positive working relationships. Through this process the auditor determined the farm to be in compliance.

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



Bill Paterson
General Manager