

### **Form 3 - Public Disclosure Form**

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

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

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

*This form should be translated into local languages when appropriate*

#### **PDF 1 Public Disclosure Form**

PDF 1.1 Name of CAB

DNVGL

PDF 1.2 Date of Submission

27/08/2020

PDF 1.3 CAB Contact Person

PDF 1.3.1 Name of Contact Person

Paul Casburn

PDF 1.3.2 Position in the CAB's-organisation

Lead Auditor

PDF 1.3.3 Mailing address

Veritasveien 1, 1363 Høvik, Norway

PDF 1.3.4 Email address	paul.casburn@dnvgl.com
PDF 1.3.5 Phone number	00353 87 1864429
PDF 1.3.6 Other	NA

**PDF 1.4 ASC Name of Client**

PDF 1.4.1 Name of the Client	MOWI Canada West
PDF 1.4.1.a Name of the unit of certification	Sargeaunt Pass
PDF 1.4.2 Name of Contact Person	Renee Hamel
PDF 1.4.3 Position in the client's organisation	Certification Manager
PDF 1.4.4 Mailing address	124-1334 Island Hwy, Campbell River, B, V9W 8C9, Canada
PDF 1.4.5 Email address	<a href="mailto:renee.hamel@mowi.com">renee.hamel@mowi.com</a>
PDF 1.4.6 Phone number	250-850-3276 ex. 7228
PDF 1.4.7 Other	NA

#### PDF 1.5 Unit of Certification

PDF 1.5.1 Single Site

PDF 1.5.2 Multi-site

PDF 1.5.2.a Ownership status

PDF 1.5.3 Group certification

X
Owned

#### PDF 1.6 Sites to be audited

Site Name	GPS Coordinates	List all species per site and indicate if they are in the scope of the standard	Ownership status (owned/ subcontracted)	Date of planned audit and type of audit (Initial, SA1, SA2, recertification, etc.)	Status (new, in production/ following /in harvest)
Sargeaunt Pass	50 40.526 N : 126 11.299	<i>Salmo salar</i>	Owned	October 13th to 16th 2020. SA2	In production

#### PDF 1.7 Species and Standards

Standard	Species (scientific name) produced	Included in scope (Yes/No)	ASC endorsed standard to be used	Version Number
Salmon	<i>Salmo salar</i> (Atlantic Salmon)	Yes	ASC Salmon	1.3

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

Name/organisation	Relevance for this audit	How to involve this stakeholder (in-person/phone interview/input submission)	When stakeholder may be contacted	How this stakeholder will be contacted
David Suzuki Foundation	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Living Oceans Society	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Ducks Unlimited	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Pacific Salmon Foundation	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.

BC Council of Forest Industries	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
BC Seafood Alliance	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Vancouver Island North Tourism	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Sayward Town Council	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Regional District of Mount Waddington Stakeholder		Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Port McNeill	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Strathcona Regional District	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Village of Alert Bay	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
James Walkus Fishing Company	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Skretting	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Noboco	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
BC Centre for Aquatic Health Sciences	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
BC Salmon Farmers Association	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Canadian Aquaculture Industry Association	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.

United Steelworkers Local I-1937	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Da'naxda'xw First Nation	Rightsholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Gwawa'enux Tribe	Rightsholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Mamalilikulla First Nation	Rightsholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Namgis First Nation	Rightsholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Tsawataineuk (Dzawada'enuxw) First Nation	Rightsholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Tlowitsis Nation	Rightsholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Kwicksutaineuk-ah-kwaw-ah-mish First Nation	Rightsholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Wei Wai Kum First Nation	Rightsholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
We Wai Kai First Nation	Rightsholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.

K'omoks First Nation	Rightsholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
BATI Director/First Nations Coordinator	Rightsholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Broughton Aquaculture Transition Initiative	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Marine Coordinator	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.
Central Coast Regional District	Stakeholder	Choice is with the stakeholder. Either in person or written submission.	Before, during and after audit	By e-mail and by notification on the ASC website.

#### PDF 1.9 Proposed Timeline

PDF 1.9.1	Contract Signed:	Jun-19
PDF 1.9.2	Start of audit:	13th October 2020
PDF 1.9.3	Onsite Audit(s):	NA. Remote audit due to Covid 19 restrictions.
PDF 1.9.4	Determination/Decision:	27/11/2020. Still certified

#### PDF 1.10 Audit Team

Column1	Name	ASC Registration Reference
PDF 1.10.1	Lead Auditor	Paul Casburn
PDF 1.10.2	Technical Experts ( <i>specify the activities to be implemented by the expert(s)</i> )	As above
PDF 1.10.3	Social Auditor	Simon Goldby

## ASC Audit Report - Opening

### General Requirements

- C1** Audit reports shall be written in English and in the most common language spoken in the areas where the operation is located.
- C2** Audit reports may contain confidential annexes for commercially sensitive information.
- C2.1** The CAB shall agree the content of any commercially sensitive information with the applicant, which can still be accessible by the ASC and the appointed accreditation body upon request as stipulated in the certification contract.
- C2.2** The public report shall contain a clear overview of the items which are in the confidential annexes.
- C2.3** Except for the annexes that contain commercially sensitive information all audit reports will be public.
- C3** The CAB is solely responsible for the content of all reports, including the content of any confidential annexes.
- C4 Reporting Deadlines for certification and re-certification audit reports (in working day)**
- C4.1** Within thirty (30) days of the completing of the audit the CAB shall submit a draft report in English and the national or most common language spoken in the area where the operation is located.
- C4.2** Within five (5) days the ASC should post the draft report to the ASC website.
- C4.3** The CAB shall allow stakeholders and interested parties to comment on the report for fifteen (15) days.
- C4.4** Within twenty (20) days of the close of comments, the CAB shall submit the final report to the ASC in English and the national or most common language spoken in the area where the operation is located.
- C4.5** Within five (5) days the ASC should post the final report to the ASC website.
- C4.6** Audit reports shall contain accurate and 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	Mowi Canada West
1.2 Report Title [e.g. Public Draft Certification Report/ Final certification report/Surveillance report]	Sargeaunt Pass Surveillance 2
1.3 CAB name	DNV GL
1.4 Name of Lead Auditor	Paul Casburn
1.5 Names and positions of report authors and reviewers	Paul Casburn, Simon Goldby and Kim Andre Karlsen
1.6 Client's Contact person: Name and Title	Renee Hamel, Certification manager.
1.7 Date	20/11/2020



## 2 Table of Contents

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## 3 Glossary

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

GMO = Genetically modified Organism. ISA=Infectious salmonic anemia. PRV=Piscine rhinovirus. BKD = Bacterial Kidney disease. DFO = Department of fisheries and Oceans. BAP = Best Aquaculture practice. PAR = Pacific Aquaculture regulation. DATS = Digital Action Tracking system. HDPE = High density polyethylene.

## 4 Summary

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

4.1	A brief description of the scope of the audit <i>(including activities of the UoC being audited )</i>	The Scope is under the ASC salmon standard V1.3 and CAR V2.2 of the site called Sargeaunt Pass. The Scope includes all farming related activities of the farm site evaluating the Environmental and Social compliance of the farm site to the standard. The related managment systems are also within the Scope of Audit.
4.2	A brief description of the operations of the unit of certification	Farming of Atlantic salmon from smolt to harvest size.
4.3	Type of unit of certification <i>(select only one type of unit of certification in the list)</i>	Single site
4.4	Type of audit <i>(select all the types of audit that apply in the list)</i>	Surveillance 2 audit

4.4.1	Number of sites included in the unit of certification	Subcontracted by	
	Initial audit - 06/2018	Owned by client	client
		1	0
	Surveillance audit 1 - 09/2019	1	0
	Surveillance audit 2 - 10/2020	1	0
	Recertification audit -		
4.5	A summary of the major findings	There were no major findings,	
4.6	The Audit determination	The audit determination was previously taken. This is a surveillance report. There were no issues raised that would cause the certificate to be suspended. Therefore certification can continue.	

## 5 CAB Contact Information

5.1	CAB Name	DNV GL
5.2	CAB Mailing Address	Veritasveien 1, 1363 Høvik, Norway
5.3	Email Address	<a href="mailto:QSL.Certification.ASCfarm@dnvgl.com">QSL.Certification.ASCfarm@dnvgl.com</a>
5.4	Other Contact Information	NA

## 6 Background on the Applicant

6.1	Information on the Public Disclosure Form (Form 3) except 1.2-1.3. All information updated as necessary to reflect the audit as conducted.	Y
6.2	A description of the unit of certification ( <i>for initial audit</i> ) / changes, if any ( <i>for surveillance and recertification audits</i> )	The single production site at Sargeaunt Pass, including operation facilities and associated barges and houses onsite. There have been no changes since the last audit.
6.3	Other certifications currently held by the unit of certification	GAA BAP.
6.4	Other certification(s) obtained by the UoC before this audit	GAA BAP.
6.5	Estimated annual production volumes of the unit of certification of the <u>current</u> year	4020 tons
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 audits</i> )	0 tons
6.7	Production system(s) employed within the unit of certification ( <i>select one or more in the list</i> )	Floating Mariine Pens
6.8	Number of employees working at the unit of certification ( <i>see notes in comment to this cell</i> )	7
6.9	Size, and/or number of ponds, pens (if multi site, per site)	11 x 120m plastic pens with nets 20m deep on the walls.

<b>7 Scope</b>		
<b>7.1</b>	The Standard(s) against which the audit was conducted, including version number	ASC Salmon V1.3
<b>7.2</b>	The species produced at the applicant farm ( <i>in English and Latin names</i> )	Atlantic salmon <i>Salmo salar</i>
<b>7.3</b>	A description of the scope of the audit including a description of whether the unit of certification covers all production or harvest areas (i.e. ponds) managed by the operation or located at the included sites, or whether only a sub-set of these are included in the unit of certification. If only a sub-set of production or harvest areas are included in the unit of certification these shall be clearly named.	The Scope includes all farming related activities of the farm site evaluating the Environmental and Social compliance of the farm site to the standard. The related management systems are also within the Scope of Audit. All the pens harvested are covered by the Scope.
<b>7.4</b>	The names and addresses of any storage, processing, or distribution sites included in the operation (including subcontracted operations) that will potentially be handling certified products, up until the point where product enters further chain of custody.	MOWI Canada West Canada have a processing unit in Port Hardy and this is where all the salmon from this site will be primarily processed, packed and sent to customers for onward distribution to the markets. MOWI Canada West Canada, Port Hardy processing unit, 7200 Coho Rd, Port Hardy, BC V0N 2P0
<b>7.5</b>	Description of the receiving water body(ies).	The site is located in the Sargeaunt Passage part of Tribune Channel of Broughton area of Canada on the Eastern site of Vancouver Island.
<b>8 Audit Plan</b>		
<b>8.1</b>	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.	Paul Casburn, Lead auditor, Simon Goldby, Social auditor Kim-Andre Karlsen, Technical reviewer Audit was finished 2/10/2020 Draft submitted to client 2/10/2020 Draft report was finished 20/11/2020 Technical Review of draft report was finished 29/11/2020

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 -06/2018	1	4.1.1 Minor	Closed prior to the next audit
		2	6.5.1 Major	
		3	6.10.1 Major	
		4	6.10.2 Major	
		5	8.3 Minor	
		6	8.9 Minor	
		7	8.10 Minor	
	Surveillance audit 1 - 09/2019	1	2.3.1 Minor	Closed prior to the next audit
		2	6.5.1 Major	
	Surveillance audit 2 - 10/2020			See summary of findings.
	Recertification audit -			
	Unannounced audit - mm/ yyyy			
	NC close-out audit - mm/ yyyy			
	Scope extention audit mm/ yyyy			

8.3

Audit plan as implemented including:

	Dates	Locations
8.3.1	Sep-20	Auditors offices
8.3.2	October 13th to 16th	Remote audit due to Covid 19
8.3.3		None requested
8.3.4	20/11/2020	
8.3.5		NA as its an SA audit
8.3.6	29/11/2020	

8.4

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

Renee Hamel (Certification Administrator)  
Sam Tomkinson (Certification Administrator)  
Blaine Tremblay (Health & Safety Manager)  
Terra McDonald (Fish health)

The audit was held as a remote audit due to the COVID-19 situation and in accordance with "ASC policy for audits during the Covid-19 outbreak" d.t 18.03.2020.  
Demonstrations of equipment and processes took place, relevant to the scope of the audit, according to the ASC Salmon Standard v1.3 and following guidelines in the ASC Salmon Audit Manual v1.3  
No stakeholder requests or submissions were recieved prior to the audit being published.

8.5

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

Name of stakeholder (if permission given to make name public)		Relevance to be contacted	Date of contact	CAB responded Yes/No	Brief summary of points Raised	Use of comment by CAB	Response sent to stakeholder
None requested							
8.7	E5.1.1.i List of sites removed after the initial audit		NA				
8.7.1	E5.2.2 Reason for the removal of sites from the certificate.		NA				
8.8	E5.4 Map of sites included in the unit of certification has been attached		NA				
8.9	E5.5 Site(s) in following period included in the audit ( <i>only for surveillance</i> )		NA				

Audit report- ASC Salmon standard v.1.3							
Corresponds to Salmon standard v. 1.3							
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							
Indicator		Compliance Criteria (Use as guidance for audit only)		Audit evidence	Evaluation (Per indicator, select one category in the drop-down menu)	Description of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability	Value/ Metric Provide values - if applicable for the respective indicator
				1. Write down all audit evidence. 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. 3. If you see any Compliance Criteria which is not listed below, please describe also in the cells below. A. Review compliance with applicable land and water use laws.			
1.1.1	<b>Indicator:</b> Presence of documents demonstrating compliance with local and national regulations and requirements on land and water use <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Maintain digital or hard copies of applicable land and water use laws.		All applicable laws are available the Mowi quality management system. The system is called Sharepoint, and the sites are required by DFO to have a copy of the PAR licence onsite.	Compliant		
		b. Maintain original (or legalised copies of) lease agreements, land titles, or concession permit on file as applicable.		Facility reference number 1059. Licence number AQFF 115313 2016/2022. Expiry June 20, 2022. There is a licence of occupation that covers the seafloor under the farm that is owned by the crown. The tenures in the Broughton area ran out in June 2018 for this production site. The Provincial government is in an ongoing consultation with the first nations to allow tenures to be re-applied to certain farm sites in the Broughton. There is also an agreement called "The Broughton Way Forward" signed off in December 2018, between Cermaq, MOWI and the first nations in the area. This has resulted in MOWI decommissioned 5 production sites in the Broughton area under the agreement. By 2022 10 sites between MOWI and Cermaq will be de-commissioned.			
		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).		Inspections are not legally required however sites occasionally get visits from different divisions such as Benthic division, compliance divisions and Fish health divisions. Reports are not made available to the sites unless there is non-conformity detected.			
		d. Obtain permits and maps showing that the farm does not conflict with national preservation areas.		Government grants the lease once it is confirmed that national preservation areas are not affected. Maps are in place. <a href="http://www.pac.dfo-mpo.gc.ca/fm-gp/maps/cartes/ca-acsc/index-eng.html">http://www.pac.dfo-mpo.gc.ca/fm-gp/maps/cartes/ca-acsc/index-eng.html</a> .			
1.1.2	<b>Indicator:</b> Presence of documents demonstrating compliance with all tax laws <b>Requirement:</b> Yes <b>Applicability:</b> 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.		The site is located in the Cambell River production area. Cheque number 402770 and dated 3/7/2020 was paid for site taxes.	Compliant		
		b. Maintain copies of tax laws for jurisdiction(s) where company operates.		The tax laws are maintained and reviewed by the companies accountants. Laws are equally available online.			
		c. Register with national or local authorities as an "aquaculture activity".		The licence and Tenure documents detail the site as an Aquaculture facility.			
1.1.3	<b>Indicator:</b> Presence of documents demonstrating compliance with all relevant national and local labor laws and regulations <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Maintain copies of national labor codes and laws applicable to farm (scope is restricted to the farm sites within the unit certification.)		All national labour codes and laws applicable to the farm are available on the Mowi Human Resources management system.	Compliant		
		b. Keep records of farm inspections for compliance with national labor laws and codes (only if such inspections are legally required in the country of operation).		Human Resources management team reviews all codes and regulations and updates as required.			
1.1.4	<b>Indicator:</b> Presence of documents demonstrating compliance with regulations and permits concerning water quality impacts <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Obtain permits for water quality impacts where applicable.		No water impact permits are required.	N/A	No water impact permits are required.	
		b. Compile list of and comply with all discharge laws or regulations.		NA			
		c. Maintain records of monitoring and compliance with discharge laws and regulations as required.		NA			
Criterion 2.1 Benthic biodiversity and benthic effects [1]							
Footnote	[1] Closed production systems that can demonstrate that they collect and responsibly dispose of > 75% of solid nutrients from the production system are exempt from standards under Criterion 2.1. See Appendix VI for requirements on transparency for 2.1.1, 2.1.2 and 2.1.3.						
<b>Instruction to Clients and CABs on Criterion 2.1 - Modification of the Benthic Sampling Methodology</b> For farms located in a jurisdiction where specific benthic sampling locations are required under law, clients may request to modify the benthic sampling methodology prescribed in Appendix I-1 to allow for sampling at different locations and/or changes in the total number of samples. Where modifications are sought, farms shall provide a full justification to the CAB for review. Requests for modification shall be supported by mapping of differences in sampling locations. In any event, the sampling locations must at a minimum include samples from the cage edge and samples taken from inside and outside of a defined AZE.  CABs shall evaluate client requests to modify benthic methodology based on whether there is a risk that such changes would jeopardize the intent and rigor of the ASC Salmon Standard. If the CAB determines that proposed modifications are low risk, the CAB shall ensure that details of the modified benthic sampling methodology are fully described and justified in the audit report.							
2.1.1	<b>Indicator:</b> 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 <b>Requirement:</b> Redox potential > 0 mV or Sulphide ≤ 1,500 µM(A) <b>Applicability:</b> All farms except as noted in [1]	Note: Under indicator 2.1.1, farms can choose to measure redox potential (Option #1) or sulphide concentration (Option #2). Farms do not have to demonstrate that they meet both threshold values.			Compliant		74.5um, 39.2um and 86.3um
		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.		Maps have been prepared by Main stream biological consulting and are included in the benthic report for the last peak biomass which was in July 2018. The report states that Transect A, B and C have less than the 1500 µM(A) required by ASC. Sampling was done along two transects at stations at edge of cages and 30m and 125m distant. Sampling done inside and outside AZE for ASC. ASC has now allowed a VR for Canada to only have to comply with the national requirements on Sulphides. This VR is number 224. The results from 123um, 62.6um and 21.7um for the 3 stations tested.			
		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 a mixture of soft and hard rock bottom.			
		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).		Samples were collected as the Appendix requires.			
		e. For option #1, measure and record redox potential (mV) in sediment samples using an appropriate, nationally or internationally recognized testing method.		NA			
		f. For option #2, measure and record sulphide concentration (µM) using an appropriate, nationally or internationally recognized testing method.		The results from 74.5um, 39.2um and 86.3um for the 3 stations tested.			
		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.		Submitted to ASC.			
Footnote	[2] Farm sites can choose whether to use redox or sulphide. Farms do not have to demonstrate that they meet both.						
Footnote	[3] Allowable Zone of Effect (AZE) is defined under this standard as 30 meters. For farm sites where a site-specific AZE has been defined using a robust and credible modeling system such as the SEPA AUTODEPOMOD and verified through monitoring, the site-specific AZE shall be used.						

2.1.2	<b>Indicator:</b> Faunal index score indicating good [4] to high ecological quality in sediment outside the AZE, following the sampling methodology outlined in Appendix I-1  <b>Requirement:</b> AZTI Marine Biotic Index (AMBI [5]) score ≤ 3.3, or Shannon-Wiener Index score > 3, or Benthic Quality Index (BQI) score ≥ 15, or Infaunal Trophic Index (ITI) score ≥ 25  <b>Applicability:</b> All farms except as noted in [1]		<b>Notes:</b> - Under Indicator 2.1.2, farms can choose one of four measurements to show compliance with the faunal index Requirement: AMBI (Option #1); Shannon-Wiener Index (Option #2); BQI (Option #3); or ITI (Option #4). Farms do not have to demonstrate that they meet all four threshold values. - If a farm is exempt due to hard bottom benthos (see 2.1.1b), then 2.1.2 does not apply and this shall be noted in the audit report.		
		a. Prepare a map showing the AZE (30 m or site specific) and sediment collections stations (see 2.1.1).	Maps have been prepared by Main stream biological consulting and are included in the benthic report for the last peak biomass which was in July 2018. The report states that Transect A, B and C have less than the 1500 uMol/L required by ASC.	N/A	VR 224
		b. Inform the CAB whether the farm chose option #1, #2, #3, or #4 to demonstrate compliance with the requirement.	No longer required due the VR 224.		
		c. Collect sediment samples in accordance with Appendix I-1 (see 2.1.1).	No longer required due the VR 224.		
		d. For option #1, measure, calculate and record AZTI Marine Biotic Index [5] score of sediment samples using the required method.	NA		
		e. For option #2, measure, calculate and record Shannon-Wiener Index score of sediment samples using the required method.	NA		
		f. For option #3, measure, calculate and record Benthic Quality Index (BQI) score of sediment samples using the required method.	NA		
		g. For option #4, measure, calculate and record Infaunal Trophic Index (ITI) score of sediment samples using the required method.	NA		
		h. Retain documentary evidence to show how scores were obtained. If samples were analyzed and index calculated by an independent laboratory, obtain copies of results.	NA		
		i. Submit faunal index scores to ASC (Appendix VI) at least once for each production cycle.	NA		
Footnote	[4] "Good" Ecological Quality Classification: The level of diversity and abundance of invertebrate taxa is slightly outside the range associated with the type-specific conditions. Most of the sensitive taxa of the type-specific communities are present.				
Footnote	[5] <a href="http://www.azti.es/en/amb-azti-marine-biotic-index.html">http://www.azti.es/en/amb-azti-marine-biotic-index.html</a> .				
2.1.3	<b>Indicator:</b> Number of macrofaunal taxa in the sediment within the AZE, following the sampling methodology outlined in Appendix I-1  <b>Requirement:</b> ≥ 2 highly abundant [6] taxa that are not pollution indicator species  <b>Applicability:</b> All farms except as noted in [1]	a. Document appropriate sediment sample collection as for 2.1.1a and 2.1.1c, or exemption as per 2.1.1b.	Maps have been prepared by the internal Environmental assessment biologist and are included in the benthic reports previously covered for the last peak biomass which was in July 2018. Letter from DFO on 27th August 2018 that stated the site could re-stock as the sulphide level at 30m and 125m comply with limits. Fish were re-stocked in January 2019 and are due for harvest by the end of 2020.	N/A	VR 224
		b. For sediment samples taken within the AZE, determine abundance and taxonomic composition of macrofauna using an appropriate testing method.	No longer required due the VR 224.		
		c. Identify all highly abundant taxa [6] and specify which ones (if any) are pollution indicator species.	NA		
		d. Retain documentary evidence to show how taxa were identified and how counts were obtained. If samples were analyzed by an independent lab, obtain copies of results.	NA		
		e. Submit counts of macrofaunal taxa to ASC (Appendix VI) at least once for each production cycle.	NA		
Footnote	[6] Highly abundant: Greater than 100 organisms per square meter (or equally high to reference site(s) if natural abundance is lower than this level).				
2.1.4	<b>Indicator:</b> Definition of a site-specific AZE based on a robust and credible [7] modeling system  <b>Requirement:</b> Yes  <b>Applicability:</b> All farms except as noted in [1]	a. Undertake an analysis to determine the site-specific AZE and depositional pattern.	Mowi uses the DEPOMOD modelling tool to determine the AZE. The model allows parameters can be changed to reflect whats happening. The model is based on average feed use of 758kg/cage/day.	Compliant	
		b. Maintain records to show how the analysis (in 2.1.4a) is robust and credible based on modeling using a multi-parameter approach [7].	DEPOMOD is used as the modelling tool and is favoured by DFO. The model was developed in Scotland in conjunction with SEPA.		
		c. Maintain records to show that modeling results for the site-specific AZE have been verified with > 6 months of monitoring data.	Verification is being done using the sampling results specifically for Sulphides as required in Canada		
Footnote	[7] Robust and credible: The SEPA AUTODEPOMOD modeling system is considered to be an example of a credible and robust system. The model must include a multi-parameter approach. Monitoring must be used to ground-truth the AZE proposed through the model.				
Footnote	<b>Criterion 2.2 Water quality in and near the site of operation [8]</b> <b>Compliance Criteria (Required Client Actions):</b> <b>Auditor Evaluation (Required CAB Actions):</b> [8] See Appendix VI for transparency requirements for 2.2.1, 2.2.2, 2.2.3 and 2.2.5.				
2.2.1	<b>Indicator:</b> Weekly average percent saturation [9] of dissolved oxygen (DO) [10] on farm, calculated following methodology in Appendix I-4  <b>Requirement:</b> ≥ 70% [11]  <b>Applicability:</b> All farms except as noted in [11]	<b>Instruction to Clients for Indicator 2.2.1 - Monitoring Average Weekly Percent Saturation of Dissolved Oxygen</b> Appendix I-4 presents the required methodology that farms must follow for sampling the average weekly percent saturation of dissolved oxygen (DO). Key points of the method are as follows: - measurements may be taken with a handheld oxygen meter or equivalent chemical method; - equipment is calibrated according to manufacturer's recommendations; - measurements are taken at least twice daily: once in the morning (6-9 am) and once in the afternoon (3-6 pm) as appropriate for the location and season; - salinity and temperature must also be measured when DO is sampled; - sampling should be done at 5 meters depth in water conditions that would be experienced by fish (e.g. at the downstream edge of a net pen array); - each week, all DO measurements are used in the calculation of a weekly average percent saturation.  If monitoring deviates from prescribed sampling methodology, the farm shall provide the auditor with a written justification (e.g. when samples are missed due to bad weather). In limited and well-justified situations, farms may request that the CAB approve reduction of DO monitoring frequency to one sample per day.  <u>Exception (see footnote 12)</u> If a farm does not meet the minimum 70 percent weekly average saturation requirement, the farm must demonstrate the consistency of percent saturation with a reference site. The reference site shall be at least 500 meters from the edge of the net pen array, in a location that is understood to follow similar patterns in upwelling to the farm site and is not influenced by nutrient inputs from anthropogenic causes including aquaculture, agricultural runoff or nutrient releases from coastal communities. For any such exceptions, the auditor shall fully document in the audit report how the farm has demonstrated consistency with the reference site.  Note 1: Percent saturation is the amount of oxygen dissolved in the water sample compared to the maximum amount that could be present at the same temperature and salinity.			
		a. Monitor and record on-farm percent saturation of DO at a minimum of twice daily using a calibrated oxygen meter or equivalent method. For first audits, farm records must cover ≥ 6 months.	Both continuous monitoring and twice daily recording is done using in situ oxygen recorders.		
		b. Provide a written justification for any missed samples or deviations in sampling time.	None were missed		
		c. Calculate weekly average percent saturation based on data.	Averages are calculated in and Xl spreadsheet		
		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).	The records for 2020 all show levels over 70%.		
Footnote					



		e. Arrange for auditor to witness DO monitoring and calibration while on site.	There are hand held Oxyguard meter that is used to confirm and calibrate the sensors.			
		f. Submit results from monitoring of average weekly DO as per Appendix VI to ASC at least once per year.	Submitted to ASC.			
Footnote	0					
Footnote	(10) Averaged weekly from two daily measurements (proposed at 6 am and 3 pm).					
Footnote	(11) An exception to this standard shall be made for farms that can demonstrate consistency with a reference site in the same water body.					
2.2.2	<b>Indicator:</b> Maximum percentage of weekly samples from 2.2.1 that fall under 2 mg/L DO <b>Requirement:</b> 5% <b>Applicability:</b> All	a. Calculate the percentage of on-farm samples taken for 2.2.1a that fall under 2 mg/L DO.  b. Submit results from 2.2.2a as per Appendix VI to ASC at least once per year.	There were no weeks under 2mg/L DO  Submitted to ASC.	Compliant	There were no weeks under 2mg/L DO	>2
2.2.3	<b>Indicator:</b> For jurisdictions that have national or regional coastal water quality targets [12], demonstration through third-party analysis that the farm is in an area recently [13] classified as having "good" or "very good" water quality [14] <b>Requirement:</b> Yes [15] <b>Applicability:</b> All farms except as noted in [15]	a. Inform the CAB whether relevant targets and classification systems are applicable in the jurisdiction. If applicable, proceed to "2.2.3.b". If not applicable, take action as required under 2.2.4  b. Compile a summary of relevant national or regional water quality targets and classifications, identifying the third-party responsible for the analysis and classification.  c. Identify the most recent classification of water quality for the area in which the farm operates.	The CAB has been told that up until March 2019 that the production areas had regional coastal water quality targets.  The COME, Canadian council for ministers of the environment set quality guidelines. The parameters covered in the Marine environment are Nitrate, Nitrite and Phosphorus though Phosphorus has no levels set. The report which is a literature review from Dr Stephen Cross and Sherrington on water quality conditions of Coastal British Columbia and Nutrient release from net cage aquaculture in Quatsino sound. Papers reviewed from 1982 to 2005. Water samples for the area are in place until December 2018.  See 2.2.4	Compliant		
Footnote	(12) Related to nutrients (e.g., N, P, chlorophyll A).					
Footnote	(13) Within the two years prior to the audit.					
Footnote	(14) Classifications of "good" and "very good" are used in the EU Water Framework Directive. Equivalent classification from other water quality monitoring systems in other jurisdictions are acceptable.					
Footnote	(15) Closed production systems that can demonstrate the collection and responsible disposal of > 75% of solid nutrients as well as > 50% of dissolved nutrients (through biofiltration, settling and/or other technologies) are exempt from standards 2.2.3 and 2.2.4.					
2.2.4	<b>Indicator:</b> For jurisdictions without national or regional coastal water quality targets, evidence of monitoring of nitrogen and phosphorous [16] levels on farm and at a reference site, following methodology in Appendix I-5 <b>Requirement:</b> Consistency with reference site <b>Applicability:</b> All farms except as noted in [16]	a. Develop, implement, and document a weekly monitoring plan for N, NH4, NO3, total P, and Ortho-P in compliance with Appendix I-5. For first audits, farm records must cover ≥ 6 months.  b. Calibrate all equipment according to the manufacturer's recommendations.  c. Submit data on N and P to ASC as per Appendix VI at least once per year.	The company is about to apply quarterly testing as per the variance allowed number 198. There is a new water quality manager based in Campbell river who is forming a new sampling system based on a site specific sampling program.  Water samples are being sent to the Center for Aquatic Animal Health in Campbell River on a quarterly basis. The BC Center for Aquatic health sciences which is an ISO/IEC 17025:2017 accredited laboratory has provided a report dated September 2020. Results were from the site and the reference station. Total Nitrogen at the reference station was 0.07 Total Nitrogen at the farm site was 0.  The results have been sent to ASC.	Compliant		
Footnote	(16) Farms shall monitor total N, NH4, NO3, total P and Ortho-P in the water column. Results shall be submitted to the ASC database. Methods such as a Hach kit are acceptable.					
2.2.5	<b>Indicator:</b> Demonstration of calculation of biochemical oxygen demand (BOD [17]) of the farm on a production cycle basis <b>Requirement:</b> Yes <b>Applicability:</b> All	<b>Instruction to Clients for Indicator 2.2.5 - Calculating Biochemical Oxygen Demand</b> Biochemical Oxygen Demand (BOD) can be calculated based on cumulative inputs of N and C to the environment over the course of the production cycle. $BOD = ((total\ N\ in\ feed - total\ N\ in\ fish) * 4.57) + ((total\ C\ in\ feed - total\ C\ in\ fish) * 2.67)$ <ul style="list-style-type: none"> <li>A farm may deduct N or C that is captured, filtered or absorbed through approaches such as IMTA or through direct collection of nutrient wasted. In this equation, "fish" refers to harvested fish. In this case, farm must submit breakdown of N &amp; C captured/filtered/absorbed to ASC along with method used to estimate nutrient reduction.</li> <li>Reference for calculation methodology: Boyd C. 2009. Estimating mechanical aeration requirement in shrimp ponds from the oxygen demand of feed. In: Proceedings of the World Aquaculture Society Meeting; Sept 25-29, 2009; VeraCruz, Mexico. And: Global Aquaculture Performance Index BOD calculation methodology available at <a href="http://web.uvic.ca/~gap/explore-gap/bod.html">http://web.uvic.ca/~gap/explore-gap/bod.html</a>.</li> </ul> Note 1: Calculation requires a full production cycle of data and is required beginning with the production cycle first undergoing certification. If it is the first audit for the farm, the client is required to demonstrate to the CAB that data is being collected and an understanding of the calculations. Note 2: Farms may seek an exemption to Indicator 2.2.5 if: the farm collects BOD samples at least once every two weeks, samples are independently analyzed by an accredited laboratory, and the farm can show that BOD monitoring results do not deviate significantly from calculated annual BOD load.				
		a. Collect data throughout the course of the production cycle and calculate BOD according to formula in the instruction box.	For the 2017 year class harvested out in early 2019 the BOD was 8028704 kg.	Compliant		8028704 kg
		b. Submit calculated BOD as per Appendix VI to ASC for each production cycle.	Has been omitted from the original submission but has been submitted previously following end of harvest submissions.			
Footnote	[17] BOD calculated as: ((total N in feed – total N in fish)*4.57) + ((total C in feed – total C in fish)*2.67). A farm may deduct N or C that is captured, filtered or absorbed through approaches such as IMTA or through direct collection of nutrient wasted. In this equation, "fish" refers to harvested fish. Reference for calculation methodology: Boyd C. 2009. Estimating mechanical aeration requirement in shrimp ponds from the oxygen demand of feed. In: Proceedings of the World Aquaculture Society Meeting; Sept 25-29, 2009; VeraCruz, Mexico. And: Global Aquaculture Performance Index BOD calculation methodology available at <a href="http://web.uvic.ca/~gap/explore-gap/bod.html">http://web.uvic.ca/~gap/explore-gap/bod.html</a> .					
2.2.6	<b>Indicator:</b> Appropriate controls are in place that maintain good culture and hygienic conditions on the farm which extends to all chemicals, including veterinary drugs, thereby ensuring that adverse impacts on environmental quality are minimised. <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Document control systems in good culture and hygiene that includes all appropriate elements.  b. Apply the systems ensuring that staff are aware, qualified and trained to properly implement them.  -	Materials storage handling and waste disposal (D S/FW 963 and this covers oils, fuels etc. The company has established a new procedure called Occupational hygiene that includes controlling to hazards such as Chemical exposure.  DATS system for training includes S/FW 963 and Handling Hazardous materials. Staff were reviewed for training in chemical handling and Hazardous waste disposal. Reviewed personal training files on the DATS system.	Compliant		
Criterion 2.3 Nutrient release from production						
Compliance Criteria (Required Client Actions):			Auditor Evaluation (Required CAB Actions):			
2.3.1	<b>Indicator:</b> Percentage of fines [18] in the feed at point of entry to the farm [20] (calculated following methodology in Appendix I-2) <b>Requirement:</b> < 1% by weight of the feed <b>Applicability:</b> All farms except as noted in [19]	Note: The methodology given in Appendix I-2 is used to determine the fines (dust and small fragments) in finished product of fish feed which has a diameter of 3 mm or more.  a. Determine and document a schedule and location for quarterly testing of feed. If testing prior to delivery to farm site, document rationale behind not testing on site.  b. If using a sieving machine, calibrate equipment according to manufacturer's recommendations.  c. Conduct test according to detailed methodology in Appendix I-2 and record results for the pooled sample for each quarter. For first audits, farms must have test results from the last 3 months.	Variance number 246 in place to allow for the feed company to carry out the samples. Results are in place from the feed company which is Skerretting. In quarter 2 of 2020, 3 types of feed are were sampled. Premium 1000, Premium 2000 and Premium 3500 with 5 lots in each. The results showed the average fines across the 15 samples was 0.04% with 0.1% being the highest.  No sieving machines are used.  Variance number 246 in place to allow for the feed company to carry out the samples. Results are in place from the feed company which is Skerretting. In quarter 2 of 2020, 3 types of feed are were sampled. Premium 1000, Premium 2000 and Premium 3500 with 5 lots in each. The results showed the average fines across the 15 samples was 0.04% with 0.1% being the highest.	Compliant	VR 246	<0.01%
Footnote	[18] Fines: Dust and fragments in the feed. Particles that separate from feed with a diameter of 5 mm or less when sieved through a 1 mm sieve, or particles that separate from feed with a diameter greater than 5 mm when sieved through a 2.36 mm sieve. To be measured at farm gate (e.g., from feed bags after they are delivered to farm).					

Footnote:	[19] To be measured every quarter or every three months. Samples that are measured shall be chosen randomly. Feed may be sampled immediately prior to delivery to farm for sites with no feed storage where it is not possible to sample on farm. Closed production systems that can demonstrate the collection and responsible disposal of > 75% of solid nutrients and > 50% of dissolved nutrients (through biofiltration, settling and/or other technologies) are exempt.
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Criterion 2.4 Interaction with critical or sensitive habitats and species						
Compliance Criteria (Required Client Actions):			Auditor Evaluation (Required CAB Actions):			
2.4.1	<p><b>Indicator:</b> 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</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>Note: If a farm has previously undertaken an independent assessment of biodiversity impact (e.g. as part of the regulatory permitting process), the farm may use such documents as evidence to demonstrate compliance with Indicator 2.4.1 as long as all components in Appendix I-3 are explicitly covered.</p> <p>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.</p> <p>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.</p> <p>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.</p>	<p>The company has a wildlife interaction plan ID SW965 that is a BAP requirement for its certification it includes all red listed species. The plan was put in place several years ago, but the current update is dated February 9th, 2018. Risks include fish mortalities as an attractant, and the control measures include routine mort retrieval, appropriate mort disposal and containment and mortalities stored away from the main production area. Mortality records are in place on the farm site. All records are added to the company's database, and records for disposal are documented. The site has a CEAA (Canadian environmental assessment act) from when the site was established.</p> <p>Risks include fish mortalities as an attractant, and the control measures include routine mort retrieval, appropriate mort disposal and containment and mortalities stored away from the main production area.</p> <p>Mortality records are in place on the farm site. All records are added to the company's database, and records for disposal are documented.</p>	Compliant		
2.4.2	<p><b>Indicator:</b> Allowance for the farm to be sited in a protected area [20] or High Conservation Value Areas [21] (HCVAs)</p> <p><b>Requirement:</b> None [22]</p> <p><b>Applicability:</b> All farms except as noted in [22]</p>	<p><b>Instruction to Clients for Indicator 2.4.2 - Exceptions to Requirements that Farms are not sited within Protected Areas or HCVAs</b> The following exceptions shall be made for Indicator 2.4.2:</p> <p>Exception #1: For protected areas classified by the International Union for the Conservation of Nature (IUCN) as Category V or VI (these are areas preserved primarily for their landscapes or for sustainable resource management).</p> <p>Exception #2: For HCVAs if the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the HCVA designation. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the core reason an area has been identified as a HCVA.</p> <p>Exception #3: For farms located in a protected area if it was designated as such after the farm was already in operation and provided the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the protected area and it is in compliance with any relevant conditions or regulations placed on the farm as a result of the formation/designation of the protected area. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the core reason an area has been protected.</p> <p><b>Definitions</b> <u>Protected area:</u> "A clearly defined geographical space, recognized, dedicated and managed through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values." <u>High Conservation Value Areas (HCVAs):</u> Natural habitats where conservation values are considered to be of outstanding significance or critical importance. HCVA are designated through a multi-stakeholder approach that provides a systematic basis for identifying critical conservation values—both social and environmental—and for planning ecosystem management in order to ensure that these high conservation values are maintained or enhanced</p>	<p>a. Provide Geographical Information System (GIS) files according to ASC guidelines (see note above) showing the boundaries of the farm relative to nearby protected areas or High Conservation Value Areas (HCVAs) as defined above (see also 1.1.1a)</p> <p>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.</p> <p>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.</p> <p>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.</p>	<p>The company has provided the GIS information the ASC as required and its now posted on the ASC website. Marine Plan Partnership for the North Pacific Coast (MaPP) map provided confirms that the farm is not located in a protected area but in a Special Management Zone, SMZ, where off-bottom finfish aquaculture is conditionally allowed.</p> <p>The site is not in a protected area or HCVA.</p> <p>The site is not in a protected area or HCVA.</p> <p>The site is not in a protected area or HCVA.</p>	Compliant	
Footnote:	[20] Protected area: "A clearly defined geographical space, recognized, dedicated and managed through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values." Source: Dudley, N. (Editor) (2008). Guidelines for Applying Protected Area Management Categories, Gland, Switzerland: IUCN. x + 86pp.					
Footnote:	[21] High Conservation Value Areas (HCVA): Natural habitats where conservation values are considered to be of outstanding significance or critical importance. HCVA are designated through a multi-stakeholder approach that provides a systematic basis for identifying critical conservation values—both social and environmental—and for planning ecosystem management in order to ensure that these high conservation values are maintained or enhanced ( <a href="http://www.hcwnetwork.org/">http://www.hcwnetwork.org/</a> ).					
Footnote:	[22] The following exceptions shall be made for Standard 2.4.2:					
• For protected areas classified by the International Union for the Conservation of Nature (IUCN) as Category V or VI (these are areas preserved primarily for their landscapes or for sustainable resource management).						
• For HCVAs if the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the HCVA designation. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the core reason an area has been identified as a HCVA.						
• For farms located in a protected area if it was designated as such after the farm was already in operation and provided the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the protected area and it is in compliance with any relevant conditions or regulations placed on the farm as a result of the formation/designation of the protected area. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the core reason an area has been protected.						
Criterion 2.5 Interaction with wildlife, including predators [23]						
Compliance Criteria (Required Client Actions):			Auditor Evaluation (Required CAB Actions):			
Footnote:	[23] See Appendix VI for transparency requirements for 2.5.2, 2.5.5 and 2.5.6.					
2.5.1	<p><b>Indicator:</b> Number of days in the production cycle when acoustic deterrent devices (ADDs) or acoustic harassment devices (AHDs) were used</p> <p><b>Requirement:</b> 0</p> <p><b>Applicability:</b> All</p>	<p>a. Compile documentary evidence to show that no ADDs or AHDs have been used by the farm.</p> <p>-</p>	<p>No ADD's on site. Not allowed in the Pacific area.</p>	Compliant		0
2.5.2	<p><b>Indicator:</b> Number of mortalities [25] of endangered or red-listed [26] marine mammals or birds on the farm</p> <p><b>Requirement:</b> 0 (zero)</p> <p><b>Applicability:</b> 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>There are no predator control devices, only top nets to keep birds out.</p> <p>There have been no incidences of Red-listed animal or bird mortalities. Since the last audit there have been two cormorants and one Kingfisher death.</p> <p>Records are posted on the Dashboard for ASC reporting. Under Section 10 of the Finfish Aquaculture Licence, marine mammal mortalities must be reported to DFO.</p> <p>MOWI has a Wildlife Interaction Plan (SOP# SW965) 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>	Compliant		0
Footnote:	[25] Mortalities: Includes animals intentionally killed through lethal action as well as accidental deaths through entanglement or other means.					
Footnote:	[26] Species listed as endangered or critically endangered by the IUCN or on a national endangered species list.					

2.5.3	<b>Indicator:</b> Evidence that the following steps were taken prior to lethal action [27] against a predator: 1. All other avenues were pursued prior to using lethal action 2. Approval was given from a senior manager above the farm manager 3. Explicit permission was granted to take lethal action against the specific animal from the relevant regulatory authority <b>Requirement:</b> Yes [28] <b>Applicability:</b> All except cases where human safety is endangered as noted in [28]	a. Provide a list of all lethal actions that the farm took against predators during the previous 12-month period. Note: "lethal action" is an action taken to deliberately kill an animal, including marine mammals and birds.	No lethal actions in the past year. There were no reports on the DFO website of lethal measures having taken place.	Compliant		
		b. For each lethal action identified in 2.5.4a, keep record of the following: 1) a rationale showing how the farm pursued all other reasonable avenues prior to using lethal action; 2) approval from a senior manager above the farm manager of the lethal action; 3) where applicable, explicit permission was granted by the relevant regulatory authority to take lethal action against the animal.	None taken.			
		c. Provide documentary evidence that steps 1-3 above (in 2.5.4b) were taken prior to killing the animal. If human safety was endangered and urgent action necessary, provide documentary evidence as outlined in [28].	NA			
Footnote	[27] Lethal action: Action taken to deliberately kill an animal, including marine mammals and birds.					
Footnote	[28] Exception to these conditions may be made for a rare situation where human safety is endangered. Should this be required, post-incident approval from a senior manager should be made and relevant authorities must be informed.					
<b>Instruction to Clients and CABs on Indicators 2.5.4, 2.5.5, and 2.5.6 - Clarification about the ASC Definition of "Lethal Incident"</b> The ASC Salmon Standard has defined "lethal incident" to include all lethal actions as well as entanglements or other accidental mortalities of non-salmonids [footnote 29]. For the purpose of assisting farms and auditors with understanding how to evaluate compliance with indicators 2.5.4, 2.5.5, and 2.5.6, ASC has clarified this definition further:  Total number of lethal incidents = sum of all non-salmonid deaths arising from all lethal actions taken by the farm during a given time period  There should be a 1:1 relationship between the number of animal deaths and the number of lethal incidents reported by the farm. For example, if a farm has taken one (1) lethal action in past last two years and that single lethal action resulted in killing three (3) birds, it is considered three (3) lethal incidents within a two year period.  The term "non-salmonid" was intended to cover any predatory animals which are likely to try to feed upon farmed salmon. In practice these animals will usually be seals or birds.						
2.5.4	<b>Indicator:</b> Evidence that information about any lethal incidents [30] on the farm has been made easily publicly available [29] <b>Requirement:</b> Yes <b>Applicability:</b> All	a. For all lethal actions (see 2.5.3), keep records showing that the farm made the information available within 30 days of occurrence.	The lethal incidents are reported on the ASC dashboard on the movi.ca website. This was checked and verified as being the same and is 4 birds since January 2019.	Compliant		
		a. For all lethal actions (see 2.5.3), keep records showing that the farm made the information available within 30 days of occurrence.	Information relating to incidents is posted on the ASC dashboard if there are any incidents to report as soon as they are received. DFO website also showed no incidents on mammals.			
		b. Ensure that information about all lethal actions listed in 2.5.4a are made easily publicly available (e.g. on a website).	All incidents are publicly available.			
Footnote	[29] Posting results on a public website is an example of "easily publicly available." Shall be made available within 30 days of the incident and see Appendix VI for transparency requirements.					
2.5.5	<b>Indicator:</b> Maximum number of lethal incidents [30] on the farm over the prior two years <b>Requirement:</b> < 9 lethal incidents [31], with no more than two of the incidents being marine mammals <b>Applicability:</b> All	a. Maintain log of lethal incidents (see 2.5.3a) for a minimum of two years. For first audit, > 6 months of data are required.	Log in place. There have been 4 lethal incidents in 2019. There were 2 cormorants, 1 kingfisher and 1 crow. 2 x Phalacrocorax pelagicus, 1 x Corvus brachyrhynchos and 1 x Megascops asio	Compliant		4 birds
		b. Calculate the total number of lethal incidents and the number of incidents involving marine mammals during the previous two year period.	No mammal incidents and nothing on the DFO website.			
		c. Send ASC the farm's data for all lethal incidents [30] of any species other than the salmon being farmed (e.g. lethal incidents involving predators such as birds or marine mammals). Data must be sent to ASC on an ongoing basis (i.e. at least once per year and for each production cycle).	Has been submitted.			
Footnote	[30] Lethal incident: Includes all lethal actions as well as entanglements or other accidental mortalities of non-salmonids.					
Footnote	[31] Standard 2.5.6 applicable to incidents related to non-endangered and non-red-listed species. This standard complements, and does not contradict, 2.5.3.					
2.5.6	<b>Indicator:</b> 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 <b>Requirement:</b> Yes <b>Applicability:</b> 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.	This document is called the Animal incident de-brief document held in sharepoint. Document last updated August 8th 2019. The form includes an investigation into the incident and corrective action.	Compliant		
		b. Provide documentary evidence that the farm implements those steps identified in 2.5.6a to reduce the risk of future lethal incidents.	Staff are aware of the reporting, and corrective actions process and emails are sent to other sites to make sure that all are aware of the corrective actions.			
<b>PRINCIPLE 3: PROTECT THE HEALTH AND GENETIC INTEGRITY OF WILD POPULATIONS</b> <i>Criterion 3.1: Introduced or amplified parasites and pathogens [24, 32]</i>						
		<b>Compliance Criteria (Required Client Actions):</b>	<b>Auditor Evaluation (Required CAB Actions):</b>			
Footnote	[32] Farm sites for which there is no release of water that may contain pathogens into the natural (freshwater or marine) environment are exempt from the standards under Criterion 3.1.					
Footnote	[33] See Appendix VI for transparency requirements for 3.1.1, 3.1.3, 3.1.4, 3.1.6 and 3.1.7.					
<b>Instruction to Clients and CABs on Exemptions to Criterion 3.1</b> According to footnote [32], farm sites for which there is no release of water that may contain pathogens into the natural (freshwater or marine) environment are exempt from the requirements under Criterion 3.1. More specifically, farms are only eligible for exemption from Criterion 3.1 if it can be shown that either of the following holds: 1) the farm does not release any water to the natural environment; or 2) any effluent released by the farm to the natural environment has been effectively treated to kill pathogens (e.g. UV and/or chemical treatment of water with testing demonstrating efficacy). Auditors shall fully document the rationale for any such exemptions in the audit report.						
3.1.1	<b>Indicator:</b> 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. <b>Requirement:</b> Yes <b>Applicability:</b> All except farms that release no water as noted in [32]	a. Keep record of farm's participation in an ABM scheme.	There are other farm and companies in the Broughton production area. Other companies such as CERMAQ and Grieg are also farming in the area. None of the sites are very near to each other. The ASC VR 146 Exception to Area Based Management is applied. DFO are currently going towards ABM for salmon farming in the area but to date full guidelines are not in place.	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.	DFO has management zones in BC. There are fish health surveillance zones in BC. These fish health zones only require notification for moving fish. <a href="http://www.dfo-mpo.gc.ca/aquaculture/bc-ch/maps-cartes-eng.html">http://www.dfo-mpo.gc.ca/aquaculture/bc-ch/maps-cartes-eng.html</a>			
		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.	The site is managed as per the ABM requirements. The nearby sites are all owned by the same company and co-ordination is in place as a result.			
		d. Submit dates of fallowing period(s) as per Appendix VI to ASC at least once per year.	Fallow period for the site will be from 08/10/2018 to 10/01/2019 and is just fallow again now following harvest. This site takes in smolts directly from a hatchery. Previous fallow dates have been submitted to ASC.			

3.1.2	<p><b>Indicator:</b> A demonstrated commitment [34] to collaborate with NGOs, academics and governments on areas of mutually agreed research to measure possible impacts on wild stocks</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All except farms that release no water as noted in [32]</p>	<p>Note: Indicator 3.1.2 requires that farms demonstrate a commitment to collaborate with NGOs, academics and governments on areas of mutually agreed research to measure possible impacts on wild stocks. If the farm does not receive any requests to collaborate on such research projects, the farm may demonstrate compliance by showing evidence of commitment through other proactive means such as published policy statements or directed outreach to relevant organizations.</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>Research is mainly focused through the BC salmon farmers. One member of Mowi sits on the science advisory council. All research is listed on the <a href="https://bcsalmonfarmers.ca/research-development/">https://bcsalmonfarmers.ca/research-development/</a>. Four principal areas of research are listed that include 'Understanding the interactions between salmon farms and the environment and investigating potential impacts while developing mitigations as appropriate'.</p>	Compliant				
		<p>b. Provide non-financial support to research activities in 3.1.2a by either:</p> <ul style="list-style-type: none"><li>- providing researchers with access to farm-level data;</li><li>- granting researchers direct access to farm sites; or</li><li>- facilitating research activities in some equivalent way.</li></ul>	<p>DFO and academics site on the science advisory council of the BC salmon farmers association. Both funding and non-funding support are given. Depending on the project information is provided from the farm sites to the council. There was a tag monitoring device was located in Okisdi (Sonora Island). Cleaner fish is also being researched by the Vancouver Aquarium and the Centre for Aquatic Health.</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 BCSCFA 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 records are maintained. Reports on sustainability on the BC salmon farmers website. Reports into researching lice on wild smolts annually are available online as well.</p>					
Footnote	[34] Commitment: At a minimum, a farm and/or its operating company must demonstrate this commitment through providing farm-level data to researchers, granting researchers access to sites, or other similar non-financial support for research activities.							
3.1.3	<p><b>Indicator:</b> 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</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All except farms that release no water as noted in [32]</p>	<p>a. Keep records to show that a maximum sea lice load has been set for:</p> <ul style="list-style-type: none"><li>- the entire ABM; and</li><li>- the individual farm.</li></ul>	<p>The load for the farm is set as 4,548,323 lice for the stocking of 1,516,108 fish. The lice load for the entire area is 12,900,727 for motile leps of 3 per fish as per the DFO requirement. This is for 4 Mowi sites.</p>	Compliant				
		<p>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).</p>	<p>The sea lice load is reviewed annually.</p>					
		<p>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.</p>	<p>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).</p>					
		<p>d. Submit the maximum sea lice load for the ABM to ASC as per Appendix VI at least once per year.</p>	<p>Has been submitted.</p>					
3.1.4	<p><b>Indicator:</b> Frequent [35] on-farm testing for sea lice, with test results made easily publicly available [36] within seven days of testing</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All except farms that release no water as noted in [32]</p>	<p>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).</p>	<p>There is an SOP called SW 822 called sea lice monitoring in marine sites last updated July 2020. This SOP follows the DFO requirements on lice counting and sampling. Details found at <a href="https://www.pac.dfo-mpo.gc.ca/aquaculture/licence-permis/docs/licence-cond-permis-mar/index-eng.html#6">https://www.pac.dfo-mpo.gc.ca/aquaculture/licence-permis/docs/licence-cond-permis-mar/index-eng.html#6</a>. Counting includes a reference cage and 2 other pens where 20 fish each are sampled monthly. If the threshold is exceeded (3 motiles) then the counts are bi-weekly. During sensitive periods all cages are counted. All Lice levels are reported to DFO. DFO also carry out their own site visits to count lice levels.</p>	Compliant				
		<p>b. Maintain records of results of on-farm testing for sea lice. If farm deviates from schedule due to weather [35] maintain documentation of event and rationale.</p>	<p>Information sampling counts are logged on the Mowi dashboard. The company also maintains a spreadsheet. DFO is given the counts monthly and if there is a lice level exceedance then they will have been notified. DFO also publish the Lice data from the farms. <a href="https://www.pac.dfo-mpo.gc.ca/aquaculture/reporting-rapports/lice-ab-pou/index-eng.html">https://www.pac.dfo-mpo.gc.ca/aquaculture/reporting-rapports/lice-ab-pou/index-eng.html</a></p>					
		<p>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, follow 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.</p>	<p>There is an SOP called SW 822 called sea lice monitoring in marine sites last updated July 2020. There is a training module for the staff that includes a power point on sea lice identification and a sign off training by the fish health department that the staff are competent in identification.</p>					
		<p>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.</p>	<p>The certification administrator submits the counts to the Dashboard on <a href="https://mowicanadawest.ca">mowicanadawest.ca</a>, and the information is kept on court days and posting dates. The DFO requirement for reporting Lice is monthly on a fish health zone level and site level. <a href="https://www.pac.dfo-mpo.gc.ca/aquaculture/reporting-rapports/lice-ab-pou/index-eng.html">https://www.pac.dfo-mpo.gc.ca/aquaculture/reporting-rapports/lice-ab-pou/index-eng.html</a></p>					
		<p>e. Keep records of when and where test results were made public.</p>	<p>Records are maintained.</p>					
		<p>f. Submit test results to ASC (Appendix VI) at least once per year.</p>	<p>Has been submitted to ASC.</p>					
Footnote	[35] Testing must be weekly during and immediately prior to sensitive periods for wild salmonids, such as outmigration of wild juvenile salmon. Testing must be at least monthly during the rest of the year, unless water temperature is so cold that it would jeopardize farmed fish health to test for lice (below 4 degrees C). Within closed production systems, alternative methods for monitoring sea lice, such as video monitoring, may be used.							
Footnote	[36] Posting results on a public website is an example of "easily publicly available."							
3.1.5	<p><b>Indicator:</b> In areas with wild salmonids [37], evidence of data [38] and the farm's understanding of that data, around salmonid migration routes, migration timing and stock productivity in major waterways within 50 kilometers of the farm</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms operating in areas with wild salmonids except farms that release no water as noted in [32]</p>	<p><b>Instruction to Clients for Indicator 3.1.5 - Evidence for Wild Salmonid Health and Migration</b></p> <p>In writing this indicator, the SAG Steering Committee concluded that relevant data sets on wild salmonid health and migration are publicly available in the vast majority of, if not all, jurisdictions with wild salmonids. The information is likely to come from government sources or from research institutions. Therefore farms are not responsible for conducting this research themselves. However farms must demonstrate that they are aware of this basic information in their region, as such information is needed to make management decisions related to minimizing potential impact on those wild stocks.</p> <p>This indicator requires collection and understanding of general data for the major watersheds within approximately 50 km of the farm. A farm does not need to demonstrate that there is data for every small river or tributary or subpopulation. Information should relate to the wild fish stock level, which implies that the population is more or less isolated from other stocks of the same species and hence self-sustaining. A "conservation unit" under the Canadian Wild Salmon Policy is an example of an appropriate fish stock-level definition. However, it must be recognized that each jurisdiction may have slight differences in how a wild salmonid stock is defined in the region.</p> <p>For purposes of these standards, "areas with wild salmonids" are defined as areas within 75 kilometers of a wild salmonid migration route or habitat. This definition is expected to encompass all, or nearly all, of salmon-growing areas in the northern hemisphere [39]. Potentially affected species in these areas are salmonids (i.e. including all trout species). Where a species is not natural to a region (e.g. Atlantic or Pacific Salmon in Chile) the areas are not considered as "areas with wild salmonids" even if salmon have escaped from farms and established themselves as a reproducing species in "the wild".</p> <p>Farms do not need to conduct research on migration routes, timing and the health of wild stocks under this standard if general information is already available. Farms must demonstrate an understanding of this information at the general level for salmonid populations in their region, as such information is needed to make management decisions related to minimizing potential impact on those stocks. Such "evidence" would consist of, for example, peer review studies, publicly available government monitoring and reporting.</p>						
		<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.</p>	<p>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. kisutch</i>); pink (<i>O. gorbusha</i>); and, chum (<i>O. keta</i>). The sixth species is the rainbow trout or steelhead (<i>O. mykiss</i>).</p>	Compliant				
		<p>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.</p>	<p>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. There is an annual Salmon Outlook report for wild fish published annually. Information is provided for individual river systems and for each of the five species of Pacific salmon.</p>					
		<p>c. From data in 3.1.5a, identify any sensitive periods for wild salmonids (e.g. periods of outmigration of juveniles) within 50 km of the farm.</p>	<p>The sensitive period for this area is listed as March 1st to June 30th.</p>					
		<p>-</p>						
Footnote	[37] For purposes of these standards, "areas with wild salmonids" are defined as areas within 75 kilometers of a wild salmonid migration route or habitat. This definition is expected to encompass all, or nearly all, of salmon-growing areas in the northern hemisphere.							

Footnote	[38] Farms do not need to conduct research on migration routes, timing and the health of wild stocks under this standard if general information is already available. Farms must demonstrate an understanding of this information at the general level for salmonid populations in their region, as such information is needed to make management decisions related to minimizing potential impact on those stocks.
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3.1.6	<b>Indicator:</b> In areas of wild salmonids, monitoring of sea lice levels on wild out-migrating salmon juveniles or on coastal sea trout or Arctic char, with results made publicly available. See requirements in Appendix III-1. <b>Requirement:</b> Yes <b>Applicability:</b> All farms operating in areas with wild salmonids except farms that release no water as noted in [32]	a. Inform the CAB if the farm operates in an area of wild salmonids. If not, then indicator 3.1.6 does not apply.	The company has informed the CAB that they operate in a wild Salmonid area	Compliant		
		b. Keep records to show the farm participates in monitoring of sea lice on wild salmonids.	Sampling is carried out by Mainstream Biological Consulting for sampling, and the BC Centre for Aquatic Health Sciences (CAHS) to enumerate and identify sea lice on wild salmon. First nations assist in the sampling work. Wild Juvenile Salmonid Monitoring Program 2020, Broughton Archipelago, BC. Report Date: July 6, 2020. Sampling was conducted during three separate sampling events in March, April and May of 2020, selected to roughly coincide with the estimated peak outmigration period of juvenile salmonids. A total of 45 sites were selected for sampling in 2020. Attempts were made to sample at all 45 sites during the first sampling event completed on March 30, 31 and April 4. 40/45 sites were sampled and completed on March 30, 31 and April 4. 40/45 sites were sampled and completed on March 30, 31 and April 4. 40/45 sites were sampled and completed on March 30, 31 and April 4.			
		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.	Report viewed during the audit. It states "Procedures used by Mainstream Biological Consulting during 2020 sampling were adapted from procedures for beach seining, fish collection and field data recording utilized by the Department of Fisheries and Oceans (DFO)."			
		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 posted on the Dashboard within the companies website at www.mowicanadawest.ca			
		e. Submit to ASC the results from monitoring of sea lice levels on wild salmonids as per Appendix VI.	Has been submitted.			
3.1.7	<b>Indicator:</b> In areas of wild salmonids, maximum on-farm lice levels during sensitive periods for wild fish [39]. See detailed requirements in Appendix II, subsection 2. <b>Requirement:</b> 0.1 mature female lice per farmed fish <b>Applicability:</b> All farms operating in areas with wild salmonids except farms that release no water as noted in [32]	a. Inform the CAB if the farm operates in an area of wild salmonids. If not, then indicator 3.1.7 does not apply.	Wild salmonids are in the areas.	Compliant		VR 141
		b. Establish the sensitive periods [39] of wild salmonids in the area where the farm operates. Sensitive periods for migrating salmonids is during juvenile outmigration and approximately one month before.	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.	Sensitive periods are set as March 1st to June 30th under pacific regulation 7.3. There is a variance request in place number 141 for Canada which allows up to 3 motiles. Numbers were looked at and they were well below the trigger level. Lice levels for the 2020 sensitive period range from 0.05 to 0.33 min to max.			
		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 other than following DFO licence regulations.			
Footnote [39] Sensitive periods for migrating salmonids is during juvenile outmigration and approximately one month before.						
Criterion 3.2 Introduction of non-native species						
3.2.1	<b>Indicator:</b> If a non-native species is being produced, demonstration that the species was widely commercially produced in the area by the date of publication of the ASC Salmon standard <b>Requirement:</b> Yes [40] <b>Applicability:</b> All farms except as noted in [40]	<b>Compliance Criteria (Required Client Actions):</b> Note: For the purposes of indicator 3.2.1, "area" is defined as a contiguous body of water with the bio-chemical and temperature profile required to support the farmed species' life and reproduction (e.g. the Northern Atlantic Coast of the U.S. and Canada). Appendix II-1A elaborates further on this definition: "The boundaries of an area should be defined, taking into account the zone in which key cumulative impacts on wild populations may occur, water movement and other relevant aspects of ecosystem structure and function." The intent is that the area relates to the spatial extent that is likely to be put at risk from the non-native salmon. Areas will only rarely coincide with the boundaries of countries.		<b>Auditor Evaluation (Required CAB Actions):</b>		
		a. Inform the CAB if the farm produces a non-native species. If not, then indicator 3.2.1 does not apply.	Atlantic salmon are non Native to the area.	Compliant		
		b. Provide documentary evidence that the non-native species was widely commercially produced in the area before June 13, 2012.	According to the Fisheries and Oceans Canada website, Atlantic salmon were first farmed in British Columbia in the 1980's. There are reports of Atlantic Salmon being introduced for angling purposes back as early as 1874 to California and 1905 to British Columbia. The DFO website shows that the first importation of salmon eggs for farming came from Scotland in 1985 when 130,000 eggs were imported. All egg imports are logged on the website as public reporting on Aquaculture.			
		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.	Evidence provided.			
		d. If the farm cannot provide evidence for 3.2.1b or 3.2.1c, provide documented evidence that the production system is closed to the natural environment and for each of the following: 1) non-native species are separated from wild fish by effective physical barriers that are in place and well maintained; 2) barriers ensure there are no escapes of reared fish specimens that might survive and subsequently reproduce [40]; and 3) barriers ensure there are no escapes of biological material [40] that might survive and subsequently reproduce (e.g. UV or other effective treatment of any effluent water exiting the system to the natural environment).	Evidence provided.			
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Footnote [40] Exceptions shall be made for production systems that use 100 percent sterile fish or systems that demonstrate separation from the wild by effective physical barriers that are in place and well-maintained to ensure no escapes of reared specimens or biological material that might survive and subsequently reproduce.						
3.2.2	<b>Indicator:</b> If a non-native species is being produced, evidence of scientific research [41] completed within the past five years that investigates the risk of establishment of the species within the farm's jurisdiction and these results submitted to ASC for review [42] <b>Requirement:</b> Yes <b>Applicability:</b> All [43]	<b>Instruction to Clients for Indicator 3.2.2 - Exceptions to Allow Production of Non-Native Species</b> Farms have had five years to demonstrate compliance with this standard from the time of publication of the ASC Salmon Standard (i.e. full compliance by June 13, 2017). Farms are exempt from this standard if they are in a jurisdiction where the non-native species became established prior to farming activities in the area and the following three conditions are met: eradication would be impossible or have detrimental environmental effects; the introduction took place prior to 1993 (when the Convention on Biological Diversity (CBD) was ratified); the species is fully self-sustaining.  Note: For the purposes of Indicator 3.2.2, "jurisdiction" is defined the same as "area" in 3.2.1.				
		a. Inform the ASC of the species in production (Appendix VI).	Salmo salar are produced.	Compliant		
		b. Inform the CAB if the farm produces a non-native species. If not, then indicator 3.2.2 does not apply.	CAB have been informed.			
		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).	Canadian Technical Report of Fisheries and Aquatic Sciences 3061 dated from 2015 reporting on catches and sightings in BC of Atlantic salmon based on fieldwork conducted in 2011 and 2012 indicated none found. Declarations in place from Mainstream Biological and DFO stating that no Atlantic salmon have been caught in the annual Beach seine surveys. DFO also conduct trawl surveys and no Atlantic salmon have been caught. The number of stations sampled is 103 that are sampled twice per year, and this is only for the salmon farms for the five production areas where Mow is located.			
		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.	Exemption is not needed.			
		e. Submit evidence from 3.2.2c to ASC for review.	Evidence has been submitted.			
Footnote [41] The research must at a minimum include multi-year monitoring for non-native farmed species, use credible methodologies and analysis, and undergo peer review.						
Footnote [42] If the review demonstrates there is increased risk, the ASC will consider prohibiting the certification of farming of non-native salmon in that jurisdiction under this standard. In the event that the risk tools demonstrate "high" risks, the SAD expects that the ASC will prohibit the certification of farming of non-native salmon in that jurisdiction. The ASC intends to bring this evidence into future revision of the standard and those results taken forward into the revision process.						
Footnote [43] Farms are exempt from this standard if they are in a jurisdiction where the non-native species became established prior to farming activities in the area and the following three conditions are met: eradication would be impossible or have detrimental environmental effects; the introduction took place prior to 1993 (when the Convention on Biological Diversity (CBD) was ratified); the species is fully self-sustaining.						

3.2.3	<b>Indicator:</b> Use of non-native species for sea lice control for on-farm management purposes  <b>Requirement:</b> None  <b>Applicability:</b> All	a. Inform the CAB if the farm uses fish (e.g. cleaner fish or wrasse) for the control of sea lice.	None used.	N/A	None used.		
		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.	None used.				
		c. Collect documentary evidence or first hand accounts as evidence that the species used is not non-native to the region.	None used.				
Criterion 3.3 Introduction of transgenic species							
3.3.1	<b>Indicator:</b> Use of transgenic [44] salmon by the farm  <b>Requirement:</b> None  <b>Applicability:</b> All	a. Prepare a declaration stating that the farm does not use transgenic salmon.	Mowi ASA declaration states: "Mowi does not produce, farm or sell transgenic salmon." Dated January 2nd 2020 and found in the Quality assurance letter to customers..	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 Mowi are from Mowi broodstock and hatcheries and can be traced to origin.				
		c. Ensure purchase documents confirm that the culture stock is not transgenic.	Mowi produce their own fish from their own hatcheries. None are transgenic.				
Footnote [44] Transgenic: Containing genes altered by insertion of DNA from an unrelated organism. Taking genes from one species and inserting them into another species to get that trait expressed in the offspring (reference USDA).							
Criterion 3.4 Escapes [47]							
Footnote	<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>				
[45] See Appendix VI for transparency requirements for 3.4.1, 3.4.2 and 3.4.3.							
3.4.1	<b>Indicator:</b> Maximum number of escapes [46] in the most recent production cycle  <b>Requirement:</b> 300 [47]  <b>Applicability:</b> All farms except as noted in [47]	a. Maintain monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapes.	There have been no reported escapes in this most recent production cycle.	Compliant		0	
		b. Aggregate cumulative escapes in the most recent production cycle.	None.				
		c. Maintain the monitoring records described in 3.4.1a for at least 10 years beginning with the production cycle for which farm is first applying for certification (necessary for farms to be eligible to apply for the exception noted in [47]).	DFO publishes escape reports <a href="https://open.canada.ca/data/en/dataset/691d9994-4911-433d-b3b6-00349ba9f24e">https://open.canada.ca/data/en/dataset/691d9994-4911-433d-b3b6-00349ba9f24e</a>				
		d. If an escape episode occurs (i.e. an incident where > 300 fish escaped), the farm may request a rare exception to the Standard [47]. Requests must provide a full account of the episode and must document how the farm could not have predicted the events that caused the escape episode.	There have been none.				
		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).	Has been submitted.				
Footnote [46] Farms shall report all escapes; the total aggregate number of escapes per production cycle must be less than 300 fish. Data on date of escape episode(s), number of fish escaped and cause of escape episode shall be reported as outlined in Appendix VI.							
Footnote [47] A rare exception to this standard may be made for an escape event that is clearly documented as being outside the farm's control. Only one such exceptional episode is allowed in a 10-year period for the purposes of this standard. The 10-year period starts at the beginning of the production cycle for which the farm is applying for certification. The farmer must demonstrate that there was no reasonable way to predict the events that caused the episode. See auditing guidance for additional details.							
3.4.2	<b>Indicator:</b> Accuracy [48] of the counting technology or counting method used for calculating stocking and harvest numbers  <b>Requirement:</b> ≥ 98%  <b>Applicability:</b> All	a. Maintain records of accuracy of the counting technology used by the farm at times of stocking and harvest. Records include copies of spec sheets for counting machines and common estimates of error for hand-counts.	The counters used are VAKI and Aquascan counters. Protocols on calibration are used from the VAKI manual and followed by relevant staff. VAKI manuals can be accessed online at <a href="http://www.vaki.com">www.vaki.com</a> . Spec sheet from VAKI was stating an accuracy of over 99%. The Aquascan states accuracy between 98% and 100%.	Compliant		>98%	
		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).	Records are kept of counting accuracy on a freshwater production spreadsheet. There is a new SOP reference FW269 called Smolt Inventory control. This provides guidelines as to which count to use. The smolt suppliers are all Mowi owned. Both off-site and onsite counting takes place. There are various counts such as Hatchery book count, Hatchery dispatch count and smolt input count as well as vaccination counts.				
		c. During audits, arrange for the auditor to witness calibration of counting machines (if used by the farm).	Witnessed calibration not done due to the audit being remote and no counting taking place on the sites during the audit. Counting machines are only used at input and harvest and all under contractor and not site control.				
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		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).	Has been submitted.				
Footnote [48] Accuracy shall be determined by the spec sheet for counting machines and through common estimates of error for any hand-counts.							
3.4.3	<b>Indicator:</b> Estimated unexplained loss [49] of farmed salmon is made publicly available  <b>Requirement:</b> Yes  <b>Applicability:</b> All	<b>Instruction to Clients for Indicator 3.4.3 - Calculation of Estimated Unexplained Loss</b> The Estimated Unexplained Loss (EUL) of fish is calculated at the end of each production cycle as follows:  EUL = (stocking count) - (harvest count) - (mortalities) - (recorded escapes)  Units for input variables are number of fish (i.e. counts) per production cycle. Where possible, farms should use the pre-smolt vaccination count as the stocking count. This formula is adapted from footnote 59 of the ASC Salmon Standard.					
		a. Maintain detailed records for mortalities, stocking count, harvest count, and escapes (as per 3.4.1).	Mortalities are recorded along with stocking counts, harvest and escapes in the Aquafarmer system.		Minor	The EUL number submitted to ASC for the 2017 year class, in the transparency, is not the same as posted on the Mowi Dashboard. Finding closed PC 20/11/2020	2019YC was -0.82% or - 6474 fish
		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.	From the Mowi Canada ASC dashboard online: 'Inventory difference at Sargeaunt Pass for the 2019YC was -0.82% (-6474 pieces). This is within the counting error of ±2%.'				
		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.	Posted to the site on Sept 28, 2020.				
		d. Submit estimated unexplained loss to ASC as per Appendix VI for each production cycle.	The EUL number submitted to ASC for the 2017 year class, in the transparency, is not the same as posted on the Mowi Dashboard.				
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Footnote	[49] Calculated at the end of the production cycle as: Unexplained loss = Stocking count – harvest count – mortalities – other known escapes. Where possible, use of the pre-smolt vaccination count as the stocking count is preferred.
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3.4.4	<b>Indicator:</b> 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  <b>Requirement:</b> Yes  <b>Applicability:</b> All	a. Prepare an Escape Prevention Plan and submit it to the CAB before the first audit. This plan may be part of a more comprehensive farm planning document as long as it addresses all required elements of Indicator 3.4.4.	As part of the PAR licence (Pacific aquaculture regulation), there is an escape prevention plan SW 951. There is also a fish containment plan for SW 962 dated April 2020. There is an Escape response flowchart located on the sites. There is also a Escape response - Marine sites SW954 dated July 2019. These documents are located on the notice board located in each site office. There are flow charts of what to do and who to notify.	Compliant		
		b. If the farm operates an open (net pen) system, ensure the plan (3.4.4a) covers the following areas: - net strength testing; - appropriate net mesh size; - net traceability; - system robustness; - predator management; - record keeping; - reporting risk events (e.g. holes, infrastructure issues, handling errors); - planning of staff training to cover all of the above areas; and - planning of staff training on escape prevention and counting technologies.	There is regular training for onsite staff in relation to implementing the escape prevention plan including annual DATS training online. DATS records were reviewed. The site has an escape prevention box with netting, needles, weights, ropes etc. and once per year, there is a mock fish escape drill each year as part of the quarterly drills. Last fish escape response drill carried out July 2019. There is specific site escape risk analysis detailing the history of escapes in the area. Escape prevention kits were inspected on the site through footage provided. Cameras that pan and tilt are in each cage with excellent resolutions monitor the behaviour of the fish. The diver checks the cages every 60 days on every site and updates the net log as to what was found. The last fish escape response drill was carried out in June 30th 2020. The Health and safety program section 13.4.1 requires escape response drills to be carried out annually.			
		c. If the farm operates a closed system, ensure the plan (3.4.4a) covers the following areas: - system robustness; - predator management; - record keeping; - reporting risk events (e.g. holes, infrastructure issues, handling errors); - planning of staff training to cover all of the above areas; and - planning of staff training on escape prevention and counting technologies.	Its an open system			
		d. Maintain records as specified in the plan.	Net records are in place. Diver inspection records in place. Escape drill records are in place.			
		e. Train staff on escape prevention planning as per the farm's plan.	Training records in place on DATS and these records were reviewed. Staff must update their allocated training annually.			
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PRINCIPLE 4: USE RESOURCES IN AN ENVIRONMENTALLY EFFICIENT AND RESPONSIBLE MANNER						
Criterion 4.1 Traceability of raw materials in feed						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
<b>Instruction to Clients for Indicators 4.1.1 through 4.4.2 - Sourcing of Responsibly Produced Salmon Feeds</b> Farms must show that all feeds used by the farm are produced in compliance with the requirements of Indicators 4.1.1 through 4.4.4. To do so, farms must obtain documentary evidence that the feed producers (see note 1) are audited at regular intervals by an independent auditing firm or a conformity assessment body against a recognized standard which substantially incorporate requirements for traceability. Acceptable certification schemes include GlobalGAP or other schemes that have been acknowledged by the ASC (see 4.1.1c below). Results from these audits shall demonstrate that feed producers have robust information systems and information handling processes to allow the feed producers to be able to bring forward accurate information about their production and supply chains. Declarations from the feed producer that are provided to the farm to demonstrate compliance with these indicators must be supported by the audits. Farms must also show that all of their feed producers are duly informed of the requirements of the ASC Salmon Standard relating to sourcing of responsibly produced salmon feed (see 4.1.1b below).  In addition to the above, farms must also show that their feed suppliers comply with the more detailed requirements for traceability and ingredient sourcing that are specified under indicators 4.1.1 through 4.4.2. The ASC Salmon Standard allows farms to use one of two different methods to demonstrate compliance of feed producers:  Method #1: Farms may choose to source feed from feed producers who used only those ingredients allowed under the ASC Salmon Standards during the production of a given batch of feed. For example, the farm may request its feed supplier to produce a batch of feed according to farm specifications. Audits of the feed producer will independently verify that manufacturing processes are in compliance with ASC requirements.  Method #2: Farms may choose to source feed from feed producers who demonstrate compliance using a "mass-balance" method. In this method, feed producers show that the balance of all ingredients (both amount and type) used during a given feed production period meets ASC requirements. However, mixing of ingredients into the general silos and production lines is allowed during manufacturing. Audits of the feed producer will independently verify that manufacturing processes are in compliance with ASC requirements. The mass balance method can be applied, for example, to integrated feed production companies that handle all steps of feed manufacturing (purchasing of raw materials, processing to finished feed, and sales) under the management of a single legal entity.  Note 1: The term "feed producer" is used here to identify the organization that produces the fish feed (i.e. it is the "feed manufacturer"). In most cases, the organization supplying feed to a farm (i.e. the feed supplier) will be the same organization that produced the feed, but there may be instances where feed suppliers are not directly responsible for feed production. Regardless of whether the farm sources feeds directly from a feed producer or indirectly through an intermediary organization, it remains the farm's obligation to show evidence that all feeds used are in compliance with requirements.						
4.1.1	<b>Indicator:</b> Evidence of traceability, demonstrated by the feed producer, of feed ingredients that make up more than 1% of the feed [50].  <b>Requirement:</b> Yes  <b>Applicability:</b> All	a. Maintain detailed records of all feed suppliers and purchases including contact information and purchase and delivery records.	All skretting feed is used on the site. The location of the production unit is in Richmond BC.	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 company has been made aware of the 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.	Skretting Canada has GAA BAP certification that includes a traceability element. Valid until 22nd October 2020. BAP certification code M10017 and Control Union is the issuing body.			
		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 Mass balance is chosen.			
		e. Obtain declaration from feed supplier(s) stating that the company can assure traceability of all feed ingredients that make up more than 1% of the feed to a level of detail required by the ASC Salmon Standard [50].	Quality assurance and Nutrace internal standard declared traceability for Skretting and external certifications such as BAP, for ingredient that make up more than 1% of the feed.			
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Footnote: [50] Traceability shall be at a level of detail that permits the feed producer to demonstrate compliance with the standards in this document (i.e., marine raw ingredients must be traced back to the fishery, say to the region grown, etc.). Feed manufacturers will need to supply the farm with third-party documentation of the ingredients covered under this standard.						
Criterion 4.2 Use of wild fish for feed [51]						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
Footnote: [51] See Appendix VI for transparency requirements for 4.2.1 and 4.2.2.						
4.2.1	<b>Indicator:</b> Fishmeal Forage Fish Dependency Ratio (FFDRm) for grow-out (calculated using formulas in Appendix IV-1)  <b>Requirement:</b> < 1.2  <b>Applicability:</b> All	<b>Instruction to Clients for Indicator 4.2.1 - Calculation of FFDRm</b> Farms must calculate the Fishmeal Forage Fish Dependency Ratio (FFDRm) according to formula presented in Appendix IV-1 using data from the most recent complete production cycle. Farms must also show that they have maintained sufficient information in order to make an accurate calculation of FFDRm as outlined below. For first audits, farms may be exempted from compliance with Indicator 4.2.1 for the most recent complete production cycle (i.e. if the FFDRm of the most recent crop was > 1.2) if the farm can satisfactorily demonstrate to the auditor that: - the client understands how to accurately calculate FFDRm; - the client maintains all information needed to accurately calculate FFDRm (i.e. all feed specs for > 6 months) for the current production cycle; and - the client can show how feed used for the current production cycle will ensure that the farm will meet requirements at harvest (i.e. FFDRm < 1.2).		Compliant		0.2
		a. Maintain a detailed inventory of the feed used including: - Quantities used of each formulation (kg); - Percentage of fishmeal in each formulation used; - Source (fishery) of fishmeal in each formulation used; - Percentage of fishmeal in each formulation derived from trimmings; and - Supporting documentation and signed declaration from feed supplier.	Percentage of fishmeal used, and oil is on the feed bags label. Daily quantities used are maintained on the day sheets and in the Aquafarmer system.			
		b. For FFDRm calculation, exclude fishmeal derived from rendering of seafood by-products (e.g. the "trimmings" from a human consumption fishery.	Trimmings have been excluded			
		c. Calculate eFCR using formula in Appendix IV-1 (use this calculation also in 4.2.2 option #1).	eFCRs are maintained for all year classes of fish and generated using the Aquafarmer system			

d. Calculate FFDRm using formulas in Appendix IV-1.	The FFDRM was 0.2 for the last production cycle called the 2017 yearclass.
e. Submit FFDRm to ASC as per Appendix VI for each production cycle.	The information has been submitted to ASC.

4.2.2	<b>Indicator:</b> Fish Oil Forage Fish Dependency Ratio (FFDRo) for grow-out (calculated using formulas in Appendix IV-1), or, Maximum amount of EPA and DHA from direct marine sources [52] (calculated according to Appendix IV-2) <b>Requirement:</b> FFDRo < 2.52 or (EPA + DHA) < 30 g/kg feed <b>Applicability:</b> All	a. Maintain a detailed inventory of the feed used as specified in 4.2.1a.	Inventory is maintained in the Aquafarmer for all the Skretting feed used.	Compliant		1.64		
		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.	Trimmings have been 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.	FFDRo is 1.64 for the previous yearclass.					
		e. For option #2, calculate amount of EPA + DHA using formulas in Appendix IV-2.	NA					
		f. Submit FFDRo or EPA & DHA to ASC as per Appendix VI for each production cycle.	Has been submitted.					
		<b>Footnote</b> [52] Calculation excludes DHA and EPA derived from fisheries by-products and trimmings. Trimmings are defined as by-products when fish are processed for human consumption or if whole fish is rejected for use of human consumption because the quality at the time of landing does not meet official regulations with regard to fish suitable for human consumption. Fishmeal and fish oil that are produced from trimmings can be excluded from the calculation as long as the origin of the trimmings is not any species that are classified as critically endangered, endangered or vulnerable in the IUCN Red List of Threatened Species ( <a href="http://www.iucnredlist.org">http://www.iucnredlist.org</a> ).						
<i>Criterion 4.3 Source of marine raw materials</i>								
4.3.1	<b>Indicator:</b> Timeframe for all fishmeal and fish oil used in feed to come from fisheries [53] certified under a scheme that is an ISAL member [54] and has guidelines that specifically promote responsible environmental management of small pelagic fisheries <b>Requirement:</b> Not required <b>Applicability:</b> N/A	NA	NA					
		<b>Footnote</b> [53] This standard and standard 4.3.2 applies to fishmeal and oil from forage fisheries, pelagic fisheries, or fisheries where the catch is directly reduced (including krill) and not to by-products or trimmings used in feed.						
<b>Footnote</b> [54] Meets ISAL guidelines as demonstrated through full membership in the ISAL Alliance, or equivalent as determined by the Technical Advisory Group of the ASC.								
4.3.2	<b>Indicator:</b> Prior to achieving 4.3.1, the FishSource score [55] for the fishery(ies) from which all marine raw material in feed is derived <b>Requirement:</b> All individual scores ≥ 6, and biomass score ≥ 6 <b>Applicability:</b> All	<b>Instruction to Clients for Indicator 4.3.2 - FishSource Score of Fish Used in Feed</b> To determine FishSource scores of the fish species used as feed ingredients, do the following: - go to <a href="http://www.fishsource.org/">http://www.fishsource.org/</a> ; - type the species into the search function box and choose the accurate fishery - confirm that the search identifies the correct fishery then scroll down or click on the link from the menu on the left reads "Scores"  For first audits, farms must have scoring records that cover all feeds purchased during the previous 6-month period.  Note: Indicator 4.3.2 applies to fishmeal and oil from forage fisheries, pelagic fisheries, or fisheries where the catch is directly reduced (including krill) and not to by-products or trimmings used in feed.						
		a. Record FishSource score for each species from which fishmeal or fish oil was derived and used as a feed ingredient (all species listed in 4.2.1a).	Database from the feed supplier listing all feed ingredients shows all fish used and their fish scores is kept by Skretting.	Compliant		>6		
		b. Confirm that each individual score ≥ 6 and the biomass score is ≥ 6.	Under the mass balance guidance there is more fish with scores above the score level than not. King Mackerel - Gulf of Mexico 8.2 and 8.7 Blue Whiting - NE Atlantic 10 and 6.4 Gulf Menhaden - Gulf of Mexico 10 and 9.5					
		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 scores were available. Skretting has not undertaken any third party FishSource score evaluations.					
		-						
<b>Footnote</b> [55] Or equivalent score using the same methodology. See Appendix IV-3 for explanation of FishSource scoring.								
4.3.3	<b>Indicator:</b> 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. <b>Requirement:</b> Yes <b>Applicability:</b> All	<b>Instruction to Clients for Indicator 4.3.3 - Third-Party Verification of Traceability</b> Indicator 4.3.3 requires that farms show that their feed producers can demonstrate chain of custody and traceability as verified through third-party audits. Farms may submit reports from audits of feed producers (see 4.1.1c) as evidence that traceability systems are in compliance. Alternatively, farms may show that their feed producers comply with traceability requirements of indicator 4.3.3 by submitting evidence that suppliers, and the batches of fishmeal and oil, are certified to the International Fishmeal and Fish Oil Organization's Global Standard for Responsible Supply or to the Marine Stewardship Council Chain of Custody Standard.  For the first audit, a minimum of 6 months of data on feed is required and evidence shall relate to species used in said dataset.						
		a. Obtain from the feed supplier documentary evidence that the origin of all fishmeal and fish oil used in the feed is traceable via a third party verified chain of custody or traceability program.	The feed company has BAP certification on feed that covers traceability. Valid until 22nd October 2020. See 4.1.1	Compliant				
		b. Ensure evidence covers all the species used (as consistent with 4.3.2a, 4.2.1a, and 4.2.2a).	The BAP standard cover all the species and sources used.					
		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.	Database from the feed supplier listing all historic and current feed ingredients and shows all fish used and their origin.					
		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.	Species listed are not broken down into whole fish fishery source and trimmings fishery sources. Skretting (Nutreco), under their sustainable procurement policy for Marine products version states under section 7 criteria that the supplier needs to provide documentation that the meal and oil are IFPO RS or MSC certified. Under section 7.2 of the Skretting (Nutreco) criteria for Marine raw materials, it mentions Endangered or critically endangered but not vulnerable. Skretting has further provided a table showing that no vulnerable species are registered in their list of supplied raw material.					

4.3.4	<p><b>Indicator:</b> Feed containing fishmeal and/or fish oil originating from by-products [56] or trimmings from IUU [57] catch or from fish species that are categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species [58], whole fish and fish meal from the same species and family as the species being farmed</p> <p><b>Requirement:</b> None [59]</p> <p><b>Applicability:</b> All except as noted in [59]</p>	<p>c. Obtain from the feed supplier declaration that the meal or oil did not originate from a species categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species [58] and explaining how they are able to demonstrate this (i.e. through other certification scheme or through their independent audit).</p>	<p>Skretting has a signed declaration that there are no IUU species used. Under Nutreco supplier code of conduct. This is also a BAP requirement that the feed company is certified to. List of species from trimmings is in place. Eg. King mackerel from Gulf of Mexico. Skretting Supplier Code of Conduct which suppliers of fish oil and meal are required to sign. From that COC 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 by-product, unless for fisheries from a discrete sub-population assessed to be responsibly managed.</p> <p>• IUU fishing activity: Fishery material shall not be from illegal, unreported and unregulated (IUU) fishing activity. In addition the BAP standard also has a similar requirement which is met.</p>	Compliant		
		<p>d. If meal or oil originated from a species listed as "vulnerable" by IUCN, obtain documentary evidence to support the exception as outlined in [59].</p>	<p>No exception needed.</p>			
4.3.5	<p><b>Indicator:</b> Presence and evidence of a responsible sourcing policy for the feed manufacturer for marine ingredients that includes a commitment to continuous improvement of source fisheries</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Request a link to a public policy from the feed manufacturer stating the company's support of efforts to shift feed manufacturers purchases of fishmeal and fish oil to fisheries certified under a scheme that is an ISEAL member and has guidelines that specifically promote responsible environmental management of small pelagic fisheries and committing to continuous improvement of source fisheries.</p> <p>b. Prepare a letter stating the farm's intent to source feed containing fishmeal and fish oil originating from fisheries certified under the type of certification scheme noted in indicator 4.3.1.</p> <p>c. Compile a list of the origin of all fish products used as feed ingredients in all feed.</p>	<p>Nutreco has a supplier code of conduct that is online that includes no IUU and declares responsible sourcing and commitment to the environment. Mowi has a policy on sustainable Salmon feed. It states no IUU and sources must come from MSC or IFO RS schemes or the fish source scores being greater than 6. It's dated April 2019.</p> <p>From Mowi policy on sustainable salmon feed: dated April 2019: Marine raw materials processed from whole fish shall be sourced from suppliers who adhere to responsible fishery management practices. This entails sourcing fishmeal and oil from fisheries that are certified as sustainable according to the Marine Stewardship Council (MSC) standard and/or the IFO RS scheme and/or achieve Fish Source scores ≥6 in all categories and ≥6 in the biomass category</p> <p>The species listed by the feed manufacturer includes Gulf Menhaden (Gulf of Mexico), Blue Whiting (NE Atlantic) and South American Pilchard (Gulf of California).</p>	Compliant		
Footnote	[56] Trimmings are defined as by-products when fish are processed for human consumption or if whole fish is rejected for use of human consumption because the quality at the time of landing does not meet official regulations with regard to fish suitable for human consumption.					
Footnote	[57] IUU: Illegal, Unregulated and Unreported.					
Footnote	[58] The International Union for the Conservation of Nature reference can be found at <a href="http://www.iucnredlist.org/">http://www.iucnredlist.org/</a> .					
Footnote	[59] For species listed as "vulnerable" by IUCN, an exception is made if a regional population of the species has been assessed to be not vulnerable in a National Red List process that is managed explicitly in the same science-based way as IUCN. In cases where a National Red List doesn't exist or isn't managed in accordance with IUCN guidelines, an exception is allowed when an assessment is conducted using IUCN's methodology and demonstrates that the population is not vulnerable.					
Criterion 4.4 Source of non-marine raw materials in feed						
4.4.1	<p><b>Indicator:</b> Presence and evidence of a responsible sourcing policy for the feed manufacturer for feed ingredients that comply with recognized crop moratoriums [60] and local laws [61]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Compile and maintain a list of all feed suppliers with contact information. (See also 4.1.1a)</p> <p>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.</p> <p>c. Confirm that third party audits of feed suppliers (4.1.1c) show evidence that supplier's responsible sourcing policies are implemented.</p>	<p><b>Auditor Evaluation (Required CAB Actions):</b></p> <p>The Client uses only Skretting feed.</p> <p>Skretting is part of the Nutreco group, and a vendor policy is in place where all suppliers must sign applicable declarations guaranteeing source.</p> <p>Responsible sourcing policy has to be signed by the suppliers as part of their contract with Skretting.</p>	Compliant		
Footnote	[60] Moratorium: A period of time in which there is a suspension of a specific activity until future events warrant a removal of the suspension or issues regarding the activity have been resolved. In this context, moratoriums may refer to suspension of the growth of defined agricultural crops in defined geographical regions.					
Footnote	[61] Specifically, the policy shall include that vegetable ingredients, or products derived from vegetable ingredients, must not come from areas of the Amazon Biome that were deforested after July 24, 2006, as geographically defined by the Brazilian Soy Moratorium. Should the Brazilian Soy Moratorium be lifted, this specific requirement shall be reconsidered.					
4.4.2	<p><b>Indicator:</b> Percentage of soya or soya-derived ingredients in the feed that are certified by the Roundtable for Responsible Soy (RTRS) or equivalent [62]</p> <p><b>Requirement:</b> 100%</p> <p><b>Applicability:</b> All</p>	<p>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.</p> <p>b. Prepare a letter stating the farm's intent to source feed containing soya certified under the RTRS (or equivalent)</p> <p>c. Notify feed suppliers of the farm's intent (4.4.2b).</p> <p>d. Obtain and maintain declaration from feed supplier(s) detailing the origin of soya in the feed.</p> <p>e. Provide evidence that soya used in feed is certified by the Roundtable for Responsible Soy (RTRS) or equivalent [62]</p>	<p>Mowi policy on sustainable salmon feed dated September 2020. Details include for Soy: "Certified under ProTerra, the Roundtable for Responsible Soy (RTRS) or equivalent. The company has now stopped using Soya in the feed that is being used.</p> <p>The company has now stopped using Soya in the feed that is being used.</p> <p>Email ws sent to the feed company by the certification manager.</p> <p>NA</p> <p>The feed company has submitted in its sourcing policy that the feed uses RTRS Soy in its feed. Skretting have purchased 500 credits from RTRS dated 12/8/2020. Certificate RTRS-CTP-B002382. However, the company has now stopped using Soya in the feed that is being used.</p>	Compliant		
Footnote	[62] Any alternate certification scheme would have to be approved as equivalent by the Technical Advisory Group of the ASC.					
4.4.3	<p><b>Indicator:</b> Evidence of disclosure to the buyer [63] of the salmon of inclusion of transgenic [64] plant raw material, or raw materials derived from transgenic plants, in the feed</p> <p><b>Requirement:</b> Yes, for each individual raw material containing &gt; 1% transgenic content [65]</p> <p><b>Applicability:</b> All</p>	<p>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.</p> <p>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 &gt; 6 months.</p> <p>c. Inform ASC whether feed contains transgenic ingredients (yes or no) as per Appendix VI for each production cycle.</p>	<p>The feed company has informed Mowi that the inclusion of Soya in ASC salmon feed supplied was 2.42%. Soya, Canola, Camelina oil and Corn Gluten can be considered as GMO as &lt;1% contain transgenic material.</p> <p>There is a supplier quality assurance letter, sent to customers, that is used to declare that there may be transgenic plant material used in the feed in the form of Soya, Canola, Camelina oil and Corn Gluten (&gt;1%).</p> <p>ASC have been informed.</p>	Compliant		
Footnote	[63] The company or entity to which the farm or the producing company is directly selling its product. This standard requires disclosure by the feed company to the farm and by the farm to the buyer of their salmon.					
Footnote	[64] Transgenic: Containing genes altered by insertion of DNA from an unrelated organism. Taking genes from one species and inserting them into another species to get that trait expressed in the offspring.					
Footnote	[65] See Appendix VI for transparency requirement for 4.4.3.					
Criterion 4.5 Non-biological waste from production						
4.5.1	<p><b>Indicator:</b> Presence and evidence of a functioning policy for proper and responsible [66] treatment of non-biological waste from production (e.g., disposal and recycling)</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>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.</p> <p>b. Prepare a declaration that the farm does not dump non-biological waste into the ocean.</p> <p>c. Provide a description of the most common production waste materials and how the farm ensures these waste materials are properly disposed of.</p> <p>d. Provide a description of the types of waste materials that are recycled by the farm.</p>	<p><b>Auditor Evaluation (Required CAB Actions):</b></p> <p>Materials storage and waste disposal plan SPW 963 dated July 2020. The declaration is in the plan, and it refers to the ASC standard. Each site has separation of waste for recycling purposes, and this includes domestic and industrial waste.</p> <p>Declaration in place previously.</p> <p>Plastics, Ropes, Wood are the most common waste materials. Also oils, used hazmat pads and household waste.</p> <p>Nets, plastics, oils and ropes are all recycled. The company has an SOP on recycling and each staff member does annual DATS training on recycling.</p>	Compliant		

Footnote [66] Proper and responsible disposal will vary based on facilities available in the region and remoteness of farm sites. Disposal of non-biological waste shall be done in a manner consistent with best practice in the area. Dumping of non-biological waste into the ocean does not represent "proper and responsible" disposal.						
4.5.2	<b>Indicator:</b> Evidence that non-biological waste (including net pens) from grow-out site is either disposed of properly or recycled  <b>Requirement:</b> Yes  <b>Applicability:</b> 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)	Non-biologic waste includes ropes, plastics, oils and batteries. Full description in the Materials storage and waste disposal plan SPW 963 dated July 2020.	Compliant		
		b. Provide a description of the types of waste materials that are recycled by the farm. (See also 4.5.1d)	Disposal forms are used by the site managers when equipment is being de-commissioned, and there is a column for describing what happens to the item, i.e. either sold, recycled or donated. Equipment is also donated to enhancement facilities. On the company website there is an email address for applying for old equipment sales.			
		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 or infractions.			
		d. Maintain records of disposal of waste materials including old nets and cage equipment.	There was no evidence of waste build up on the site. Waste such as pallets, feed bags and plastic is returned to shore via the feed delivery boat. The delivery docket supplied with the feed itemises the removal quantities of wooden pallets, plastic liners and feed bag. During the Covid situation there was no reduction of transporting of waste materials away from the site.			

Criterion 4.6 Energy consumption and greenhouse gas emissions on farms [67]							
Footnote		Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):			
		[67] See Appendix VI for transparency requirements for 4.6.1, 4.6.2 and 4.6.3.					
		<b>Instruction to Clients for Indicator 4.6.1 - Energy Use Assessment</b> Indicator 4.6.1 requires that farms must have an assessment to verify energy consumption. The scope of this requirement is restricted to operational energy use for the farm site(s) that is applying for certification. Boundaries for operational energy use should correspond to the sources of Scope 1 and Scope 2 emissions (see Appendix V-1). Energy use corresponding to Scope 3 emissions (i.e. the energy used to fabricate materials that are purchased by the farm) is not required. However the SAD Steering Committee encourages companies to integrate energy use assessments across the board in the company.  For the purposes of calculating energy consumption, the duration of the production cycle is the entire life cycle "at sea" - it does not include freshwater smolt production stages. Farms that have integrated smolt rearing should break out the grow-out stage portion of energy consumption if possible. Quantities of energy (fuel and electricity) are converted to kilojoules. Verification is done by internal or external assessment following either the GHG Protocol Corporate Standard or ISO 14064-1 (see Appendix V-1 for more details).					
4.6.1	<b>Indicator:</b> Presence of an energy use assessment verifying the energy consumption on the farm and representing the whole life cycle at sea, as outlined in Appendix V-1 <b>Requirement:</b> Yes, measured in kilojoule/t fish produced/production cycle <b>Applicability:</b> All	a. Maintain records for energy consumption by source (fuel, electricity) on the farm throughout each production cycle.	There is a GHG Energy assessment excel sheet used. Items recorded include petrol, Diesel and gas (propane).	Compliant		2,574,134 kJ/Mt produced.	
		b. Calculate the farm's total energy consumption in kilojoules (kJ) during the last production cycle.	The total energy used for the end of the last production cycle was 12,307,589,241 kJ				
		c. Calculate the total weight of fish in metric tons (t) produced during the last production cycle.	Weight of fish produced was 4728.26 Mt.				
		d. Using results from 4.6.1b and 4.6.1c, calculate energy consumption on the farm as required, reported as kilojoule/mt fish/production cycle.	For the 2017 year class the consumption was 2,574,134 kJ/mt produced. The 2019 year class results have not yet been finalized.				
		e. Submit results of energy use calculations (4.6.1d) to ASC as per Appendix VI for each production cycle.	Have been submitted.				
		f. Ensure that the farm has undergone an energy use assessment that was done in compliance with requirements of Appendix V-1.	The assessment is being done under the annual Mowi reporting requirements.				
		<b>Instruction to Clients for Indicator 4.6.2 - Annual GHG Assessment</b> Indicator 4.6.2 requires that farms must have an annual Greenhouse Gas (GHG) assessment. Detailed instructions are presented in Appendix V-1 and references therein. The scope of this requirement is restricted to operational boundaries for the farm site(s) that is applying for certification. However the SAD Steering Committee encourages companies to integrate GHG accounting practices across the board in the company. Verification may be done by internal or external assessment following either the GHG Protocol Corporate Standard or ISO 14064-1 (see Appendix V-1 for more details).  Note: For the purposes of this standard, GHGs are defined as the six gases listed in the Kyoto Protocol: carbon dioxide (CO <sub>2</sub> ); methane (CH <sub>4</sub> ); nitrous oxide (N <sub>2</sub> O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF <sub>6</sub> ).					
4.6.2	<b>Indicator:</b> Records of greenhouse gas (GHG [68]) emissions [69] on farm and evidence of an annual GHG assessment, as outlined in Appendix V-1 <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Maintain records of greenhouse gas emissions on the farm.	Records are maintained.	Compliant		833,622 kg CO <sub>2</sub> equivalents.	
		b. At least annually, calculate all scope 1 and scope 2 GHG emissions in compliance with Appendix V-1.	For the 2017 yearclass the GHG emissions were 833,622 kg CO <sub>2</sub> equivalents.				
		c. For GHG calculations, select the emission factors which are best suited to the farm's operation. Document the source of those emissions factors.	Emission factors have been selected and approved for the annual stock exchange reporting requirements.				
		d. For GHG calculations involving conversion of non-CO <sub>2</sub> gases to CO <sub>2</sub> equivalents, specify the Global Warming Potential (GWP) used and its source.	Records are maintained using the DEFRA diagnostic tool database. The original GHG calculations and the GWP conversions all originated from DEFRA in the UK where Scotland has been using these calculations for longer than Canada				
		e. Submit results of GHG calculations (4.6.2d) to ASC as per Appendix VI at least once per year.	Has been submitted.				
		f. Ensure that the farm undergoes a GHG assessment as outlined in Appendix V-1 at least annually.	It is done annually as part of the annual report.				
Footnote		[68] For the purposes of this standard, GHGs are defined as the six gases listed in the Kyoto Protocol: carbon dioxide (CO <sub>2</sub> ); methane (CH <sub>4</sub> ); nitrous oxide (N <sub>2</sub> O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF <sub>6</sub> ).					
Footnote		[69] GHG emissions must be recorded using recognized methods, standards and records as outlined in Appendix V.					
		<b>Instruction to Clients for Indicator 4.6.3 - GHG Emissions of Feed</b> Indicator 4.6.3 requires that farms document the greenhouse gas emissions (GHG) associated with any feeds used during salmon production. Farms will need to obtain this information from their feed supplier(s) and thereafter maintain a continuous record of Feed GHG emissions throughout all production cycles. This requirement applies across the entire previous production cycle. Therefore farms should inform their feed supplier(s) and: -the farm provides its feed suppliers with detailed information about the requirements including a copy of the methodology outlined in Appendix V, subsection 2; -the farm explain what analyses must be done by feed suppliers; and -the farm explains to feed suppliers what documentary evidence will be required by the farm to demonstrate compliance.  Note1: Farms may calculate GHG emissions of feed using the average raw material composition used to produce the salmon (by weight) rather than using feed composition on a lot-by-lot basis.  Note2: Feed supplier's calculations must include Scope 1, Scope 2, and Scope 3 GHG emissions as specified in Appendix V, subsection 2.					
4.6.3	<b>Indicator:</b> Documentation of GHG emissions of the feed [70] used during the previous production cycle, as outlined in Appendix V, subsection 2 <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Obtain from feed supplier(s) a declaration detailing the GHG emissions of the feed (per kg feed).	The requirement was communicated to the feed company Skretting. The company has only supplied the scope one emissions as is 2.15 kg CO <sub>2</sub> e/kg for 2019.	Compliant		20,036,863 kg CO <sub>2</sub> equivalents.	
		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.	For the 2017 yearclass the GHG emissions were 20,036,863 kg CO <sub>2</sub> equivalents.				
		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.	There is only Skretting feed used.				
		d. Submit GHG emissions of feed to ASC as per Appendix VI for each production cycle.	Has been submitted to ASC.				
Footnote		[70] GHG emissions from feed can be given based on the average raw material composition used to produce the salmon (by weight) and not as documentation linked to each single product used during the production cycle. Feed manufacturer is responsible for calculating GHG emissions per unit feed. Farm site then shall use that information to calculate GHG emissions for the volume of feed they used in the prior production cycle.					
Criterion 4.7 Non-therapeutic chemical inputs [71, 72]							
Footnote		Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):			
Footnote		[71] Closed production systems that do not use nets and do not use antifoulants shall be considered exempt from standards under Criterion 4.7.					
		[72] See Appendix VI for transparency requirements for 4.7.1, 4.7.3 and 4.7.4.					
4.7.1	<b>Indicator:</b> For farms that use copper-treated nets [73], evidence that nets are not cleaned [74] or treated in situ in the marine environment <b>Requirement:</b> Yes	a. Prepare a farm procedure for net cleaning and treatment that describes techniques, technologies, use of off-site facilities, and record keeping.	No copper nets.	N/A	No copper nets.		
		b. Maintain records of antifoulants and other chemical treatments used on nets.	NA				
		c. Declare to the CAB whether copper-based treatments are used on nets.	NA				

	<p><b>Applicability:</b> All farms except as noted in [71]</p>	<p>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.</p> <p>e. Inform ASC whether copper antifoulants are used on farm (yes or no) as per Appendix VI for each production cycle.</p>	<p>NA</p> <p>Have been informed.</p>			
Footnote	[73] Under the SAD, "copper-treated net" is defined as a net that has been treated with any copper-containing substance (such as a copper-based antifoulant) during the previous 18 months, or has not undergone thorough cleaning at a land-based facility since the last treatment. Farms that use nets that have, at some point prior in their lifespan, been treated with copper may still consider nets as untreated so long as sufficient time and cleaning has elapsed as in this definition. This will allow farms to move away from use of copper without immediately having to purchase all new nets.					
Footnote	[74] Light cleaning of nets is allowed. Intent of the standard is that, for example, the high-pressure underwater washers could not be used on copper treated nets under this standard because of the risk of copper flaking off during this type of heavy or more thorough cleaning.					
4.7.2	<p><b>Indicator:</b> For any farm that cleans nets at on-land sites, evidence that net-cleaning sites have effluent treatment [75]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms except as noted in [71]</p>	<p>a. Declare to the CAB whether nets are cleaned on-land.</p> <p>b. If nets are cleaned on-land, obtain documentary evidence from each net-cleaning facility that effluent treatment is in place.</p> <p>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.</p>	<p>In situ net cleaning is carried out on the site using a RONG.</p> <p>NA</p> <p>NA</p>	N/A	In situ net cleaning is carried out on the site using a RONG.	
Footnote	[75] Treatment must have appropriate technologies in place to capture copper if the farm uses copper-treated nets.					
4.7.3	<p><b>Indicator:</b> 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</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms except as noted in [71]</p>	<p>Note: If the benthos throughout and immediately outside the full AZE is hard bottom, provide evidence to the CAB and request an exemption from indicator 4.7.3 (see 2.1.1c).</p> <p>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.</p> <p>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.</p> <p>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.</p>	<p>No copper nets.</p> <p>NA</p> <p>NA</p>	N/A	No copper nets.	
4.7.4	<p><b>Indicator:</b> Evidence that copper levels [76] are &lt; 34 mg Cu/kg dry sediment weight, or, in instances where the Cu in the sediment exceeds 34 mg Cu/kg dry sediment weight, demonstration that the Cu concentration falls within the range of background concentrations as measured at three reference sites in the water body</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms except as noted in [71] and excluding those farms shown to be exempt from indicator 4.7.3</p>	<p>a. Inform the CAB whether:</p> <p>1) farm is exempt from indicator 4.7.4 (as per 4.7.3a), or</p> <p>2) Farm has conducted testing of copper levels in sediment.</p> <p>b. Provide evidence from measurements taken in 4.7.3b that copper levels are &lt; 34 mg Cu/kg dry sediment weight.</p> <p>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).</p> <p>d. Analyze results from 4.7.4c to show the background copper concentrations as measured at three reference sites in the water body.</p> <p>e. Submit data on copper levels in sediments to ASC as per Appendix VI for each production cycle.</p>	<p>No copper nets.</p> <p>NA</p> <p>NA</p> <p>NA</p> <p>NA</p>	N/A	No copper nets.	
Footnote	[76] According to testing required under 4.7.3. The standards related to testing of copper are only applicable to farms that use copper-based nets or copper-treated nets.					
4.7.5	<p><b>Indicator:</b> 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</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms except as noted in [71]</p>	<p>a. Identify all biocides used by the farm in net antifouling.</p> <p>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.</p>	<p>No biocides used.</p> <p>NA</p>	N/A	No biocides used.	
PRINCIPLES: MANAGE DISEASE AND PARASITES IN AN ENVIRONMENTALLY RESPONSIBLE MANNER						
		Criterion 5.1 Survival and health of farmed fish [77]				
Footnote		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
		[77] See Appendix VI for transparency requirements for 5.1.4, 5.1.5 and 5.1.6.				
5.1.1	<p><b>Indicator:</b> Evidence of a fish health management plan for the identification and monitoring of fish diseases, parasites and environmental conditions relevant for good fish health, including implementing corrective action when required</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>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.</p> <p>b. Ensure that the farm's current fish health management plan was reviewed and approved by the farm's designated veterinarian [78].</p>	<p>There is a regional health plan that is re-viewed annually. The plan is submitted to the DFO for part of the licence requirements. The Salmonid Health Management Plan (SHMP), covers both freshwater and marine operations. It covers the requirements of the Finnish Aquaculture Licence and references a comprehensive set of applicable SOPs. There are specific site health plans that are started at the beginning of the cycle and are live until the fish are harvested. This plan includes goals and records all visits and activities of the health staff including results of tests.</p> <p>It's a condition of licence (point 4.1)to submit a fish health plan annually. This was done and the reviewed fish health plan was submitted to DFO at the end of 2019. The 2019 version was approved by the head of the fish health team within MOWI. A new Veterinarian is now in place within the company but the current Fish health management plan has not been approved by her.</p>	Minor	The current Fish health management plan has not been approved by the current company Veterinarian. Finding closed PC 20/11/2020	
5.1.2	<p><b>Indicator:</b> Site visits by a designated veterinarian [78] at least four times a year, and by a fish health manager [79] at least once a month</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Maintain records of visits by the designated veterinarian [78] and fish health managers [82]. If schedule cannot be met, a risk assessment must be provided.</p> <p>b. Maintain a current list of personnel who are employed as the farm's designated veterinarian(s) [78] and fish health manager(s) [79].</p> <p>c. Maintain records of the qualifications of persons identified in 5.1.2b.</p>	<p>The health unit maintains a record of all health visits on a database. This records site records, comments, the number of fish examined and tests done. There are sampling of fish done every month to 2 months depending on fish size and if there are any issues pending. External lab results are linked to the results. Due to low staff numbers, the size of the area to be covered and also the recent Covid situation, fish health visits have been reduced. The company has supplied a risk assessment dated September 2019, that covers areas such as Mort classification and lice counts. Staff are well trained and experienced and can interact directly with health staff using phone and Skype if needed. There have been 7 health visits to Wicklow point since April 2020.</p> <p>The fish health Manager and the Fish Vet are both full time employees of Mowi Canada West. The Veterinarian is registered with BC as an approved Vet.</p> <p>The qualifications are kept in the HR department within the company.</p>	Compliant		
Footnote	[78] A designated veterinarian is the professional responsible for health management on the farm who has the legal authority to diagnose disease and prescribe medication. In some countries such as Norway, a fish health biologist or other professional has equivalent professional qualifications and is equivalent to a veterinarian for purposes of these standards. This definition applies to all references to a veterinarian throughout the standards document.					
Footnote	[79] A fish health manager is someone with professional expertise in managing fish health, who may work for a farming company or for a veterinarian, but who does not necessarily have the authority to prescribe medicine.					
5.1.3	<p><b>Indicator:</b> Percentage of dead fish removed and disposed of in a responsible manner</p> <p><b>Requirement:</b> 100% [80]</p> <p><b>Applicability:</b> All</p>	<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>All dead fish are removed daily from each cage. They're all assessed as to their cause of death and recorded into a day mort sheet and transferred into the Aquafarmer. The Veterinarian examines the reports daily to ensure that all issues are monitored. Assigning the cause of death for some issues is not permitted by the Vet unless there is a diagnosis first.</p> <p>There are Mortality Collection and disposal procedure for Marine sites SW 124. This procedure cover classification, records and disease outbreak. Mortality records were reviewed on site during the visit. Mortalities are placed into totes and put onto a tote barge adjacent to the farm. The farm updates the information database on the number of totes full of mort's and this triggers a pickup from the site if the mort totes are full. Following removal, to the land site, the mortalities are transported to a company called Seasol / Foenix Forest technology and is used for a composted product called Seasol</p> <p>All fish are collected for post mortem regardless of number.</p>	Compliant		





		Note: Farms are required to maintain mortality records from the current and two previous production cycles. For first audit, records for the current and prior production cycle are required. It is recommended that farms maintain a compiled set of records to demonstrate compliance with 5.1.3 - 5.1.6.			
5.1.4	<b>Indicator:</b> Percentage of mortalities that are recorded, classified and receive a post-mortem analysis <b>Requirement:</b> 100% [81] <b>Applicability:</b> All	a. Maintain detailed records for all mortalities and post-mortem analyses including: - date of mortality and date of post-mortem analysis; - total number of mortalities and number receiving post-mortem analysis; - name of the person or lab conducting the post-mortem analysis; - qualifications of the individual (e.g. veterinarian [78], fish health manager [79]); - cause of mortality (specify disease or pathogen) where known; and - classification as 'unexplained' when cause of mortality is unknown (see 5.1.6).	The mortality records on the farm were reviewed along with the protocols for assigning the cause of mortality. Daily mort checks are carried out using uplifts on the site. All the staff have been trained in assigning reasons for mortality, from the Veterinarian and fish health team. No unusual classification can be assigned unless a diagnosis is made first and confirmed by a lab. The vet confirmed that she does this onsite training with the staff.	Compliant	100%
		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.	Unknown reasons for mortality or assigning disease not previously diagnosed must be referred to the fish health team for diagnosis. Mort sheets have all required information to allow assignment of mortality reasons and only following confirmation of diagnosis.		
		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).	The offsite lab used is only when unknown mortalities need to be assessed. The lab is situated in Campbell River. Third party labs can also be used such as Centre for Aquatic Health Sciences in Campbell River. The company has its own small lab, used for analysis and sample preparations, located in the main offices in Campbell river.		
		d. Using results from 5.1.3a-c, classify each mortality event and keep a record of those classifications.	There are Mortality Collection and disposal procedure for Marine sites SW 124. This procedure cover classification, records and disease outbreak.		
		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 of mortalities from previous generations and their reports are kept within the companies management system.		
		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).	Has been submitted.		
Footnote [81] If on-site diagnosis is inconclusive, this standard requires off-site laboratory diagnosis. A qualified professional must conduct all diagnosis. One hundred percent of mortality events shall receive a post-mortem analysis, not necessarily every fish. A statistically relevant number of fish from the mortality event shall be analyzed.					
5.1.5	<b>Indicator:</b> Maximum viral disease-related mortality [82] on farm during the most recent production cycle <b>Requirement:</b> ≤ 10% <b>Applicability:</b> All	a. Calculate the total number of mortalities that were diagnosed (see 5.1.4) as being related to viral disease.	For the most recent yearclass the viral related mortality was 0. The current yearclass has a viral mortality of 0.	Compliant	1.43% or 22763 fish.
		b. Combine the results from 5.1.5a with the total number of unspecified and unexplained mortalities from the most recent complete production cycle. Divide this by the total number of fish produced in the production cycle (x100) to calculate percent maximum viral disease-related mortality.	The total number unexplained and viral (0) for the previous generation was 23853 fish or 1.50%. Total mortality was 113,585 The total number of unexplained and viral (0) in the current cycle is 1.43% or 22763 fish.		
		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).	The information has been submitted to ASC.		
Footnote [82] Viral disease-related mortality count shall include unspecified and unexplained mortality as it could be related to viral disease.					
5.1.6	<b>Indicator:</b> Maximum unexplained mortality rate from each of the previous two production cycles, for farms with total mortality > 6% <b>Requirement:</b> ≤ 40% of total mortalities <b>Applicability:</b> 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.	The unexplained mortality rate for the last full production cycle was 67790 fish or 9.39%	Compliant	21.00%
		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.	Unexplained mortality for the previous 2 generations was 2017/80,940 @ 1.99% 2019/23,853 @ 1.50%. Total mortality was 113,585. Maximum total unexplained mortality for the previous 2019 generation, as a percentage of the total mortality was 21%, less than the 40% threshold, therefore the criteria is compliant.		
		c. Submit data on maximum unexplained mortality to ASC as per Appendix VI for each production cycle.	Has been submitted.		
5.1.7	<b>Indicator:</b> A farm-specific mortalities reduction program that includes defined annual targets for reductions in mortalities and reductions in unexplained mortalities <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Use records in 5.1.4a to assemble a time-series dataset on farm-specific mortalities rates and unexplained mortality rates.	The company uses a spreadsheet to recorded monthly mortalities in both percentage terms for count and Biomass. Done on an overall company basis and based on historical information and how each site has produced in the past. Updated regularly in real time. This is done company wide and per site.	Compliant	
		b. Use the data in 5.1.7a and advice from the veterinarian and/or fish health manager to develop a mortalities-reduction program that defines annual targets for reductions in total mortality and unexplained mortality.	There is a company wide reduction plan and targets set for the production. The current target set for 2020 is for <5% mortality over a company average. Mort causes include Mechanical, poor performers and mouth mycobacteria. It depends on the area and the issues locally such as high plankton. The sites have plankton monitoring and Oxygen monitoring. The site also has predator exclusion nets both above and below the water. The site also has the ability to diffuse air into the pens if the oxygens get very low.		
		c. Ensure that farm management communicates with the veterinarian, fish health manager, and staff about annual targets and planned actions to meet targets.	The Veterinarian confirmed that reports and targets are discussed at end of generation management meetings. This can set out the plan for future plans and strategies on the site.		
Criterion 5.2 Therapeutic Treatments [83]					
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):		
Footnote [83] See Appendix VI for transparency requirements for 5.2.1, 5.2.5, 5.2.6 and 5.2.10.					
Instruction to Clients and CABs for Criterion 5.2 - Records Related to Therapeutic Treatments					
Indicator 5.2.1 requires that farms maintain detailed record of all chemical and therapeutant use. Those records maintained for compliance with 5.2.1, if all consolidated into a single place, can be used to demonstrate performance against subsequent indicators (5.2.1 through 5.2.10) under Criterion 5.2.					
5.2.1	<b>Indicator:</b> On-farm documentation that includes, at a minimum, detailed information on all chemicals [84] and therapeutants used during the most recent production cycle, the amounts used (including grams per ton of fish produced), the dates used, which group of fish were treated and against which diseases, proof of proper dosing, and all disease and pathogens detected on the site <b>Requirement:</b> Yes <b>Applicability:</b> 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; - 1 of fish treated; - the WHO classification of antibiotics (also see note under 5.2.8); and - the supplier of the chemical or therapeutant.	All prescriptions are in place and maintained by the company vet. This is a licence requirement. Reviewed prescription 20-TM005. Dated 10th January 2020. All pens. Fish N = 899,650. Av weight 2.5kg. Biomass 2,249,125kg. Reason = Lice treatment. RX = SLICE 0.2%. Total 10kg SLICE per ton of feed or 0.12mg Emmeemectin/kg of fish. Withdrawal period 60 days after treatment.	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.	All records on treatments are maintained in the companies data base including the treatments of previous production cycles and the company retains these prescriptions for 7 years.		
		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).	Has been submitted to ASC including the previous treatments.		
Footnote [84] Chemicals used for the treatment of fish.					
Indicator: Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [85] in any of the primary salmon producing and importing countries listed in [86]		a. Prepare a list of therapeutants, including antibiotics and chemicals, that are proactively banned for use in food fish for the primary salmon producing and importing countries listed in [86]  Mowi International has an extensive list of countries and their allowable and unallowable contaminants, drugs and microbiology and statutory limits for fish for all these growing areas. This database is updated when a country changes its limits by anybody in the Mowi organisation that has the current information. Every possible worldwide therapeutant is listed. Mowi Canada also have a medicine positive list showing drugs allowable however in the case of Trifrisen even though it's allowed Mowi no longer uses it for the US market. Even though there is a positive list, it does not mean that the treatments are used.			

5.2.2	<p>SEMINAR PRODUCING AN IMPORTING SALMONS (90%)</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All</p>	<p>b. Maintain records of voluntary and/or mandatory chemical residue testing conducted or commissioned by the farm from the prior and current production cycles.</p>	<p>Following the use and a therapeutant, the Aquafarmer system locks in place the withdrawal time. Time is documented on the prescriptions. Maxxim in Vancouver carries out residue testing for each site prior to harvest. They are accredited to Standards Council of Canada no. 117. Testing is mandatory from CFIA.</p>	Compliant		
Footnote	[B5] "Banned" means proactively prohibited by a government entity because of concerns around the substance. A substance banned in any of the primary salmon-producing or importing countries, as defined here, cannot be used in any salmon farm certified under the SAD, regardless of country of production or destination of the product. The SAD recommends that ASC maintain a list of a banned therapeutants.					
Footnote	[B6] For purposes of this standard, those countries are Norway, the UK, Canada, Chile, the United States, Japan and France.					
5.2.3	<p><b>Indicator:</b> Percentage of medication events that are prescribed by a veterinarian</p> <p><b>Requirement:</b> 100%</p> <p><b>Applicability:</b> All</p>	<p>a. Obtain prescription for all therapeutant use in advance of application from the farm veterinarian (or equivalent, see [78] for definition of veterinarian).</p> <p>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.</p>	<p>The farm has the original prescription located in the drug record file on site as required by its DFO operating licence. All the prescriptions for the current year class were reviewed during the site visit. All were in order. The site has had two antibiotic (Florfenicol) and one SLICE treatment prescribed for the previous completed year class. Also MS222 is prescribed by the Vet for anesthetising fish.</p> <p>All prescriptions are in place and maintained by the company vet. This is a licence requirement. Reviewed prescription 20-TM005. Dated 10th January 2020. All pens. Fish N = 899,650. Av weight 2.5kg. Biomass 2,249,125kg. Reason = Lice treatment. RX = SLICE 0.2%. Total 10kg SLICE per ton of feed or 0.12mg Emmelectin/kg of fish. Withdrawal period 60 days after treatment.</p>	Compliant		100%
5.2.4	<p><b>Indicator:</b> Compliance with all withholding periods after treatments</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Incorporate withholding periods into the farm's fish health management plan (see 5.1.1a).</p> <p>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.</p> <p>c. Show compliance with all withholding periods by providing treatment records (see 5.2.1a) and harvest dates for the most recent production cycle.</p>	<p>Fish health plan section 2.11.1 Treatment records states that MOWI Canada West does not harvest fish until they have cleared withdrawal period described by the Veterinarian.</p> <p>The medicine positive list has withdrawal periods. Emmelectin benzocate tested pre-harvest and has a withdrawal period of 60 days.</p> <p>Reviewed prescription 20-TM005. Withdrawal period 60 days after treatment with SLICE.</p>	Compliant		
5.2.5	<p><b>Indicator:</b> The farm shall publicly report (via Appendix VI) the:</p> <ol style="list-style-type: none"> <li>1. Weighted Number of Medicinal Treatments (see Appendix VII) for each production cycle</li> <li>2. The parasiticide load for each agent over the production cycle</li> <li>3. The benthic parasiticide residue levels</li> </ol> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>No guidance available yet. - Guidance below from Audit Manual v.1.3</p> <p>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.</p> <p>b. Provide the auditor with access to records showing how the farm calculated the WMNT score.</p> <p>c. Submit data on farm level WMNT score to ASC as per Appendix VI for each production cycle.</p>	<ol style="list-style-type: none"> <li>1. The company made the submission on Weighted number of medicinal treatments via the Appendix VI to ASC, by email.</li> <li>2. The Parasiticide load for the current cycle will be submitted post harvest as the production cycle is not yet complete but its currently 1.</li> <li>3. Benthic parasiticide residue levels are not applicable yet but its noted that the company has moved towards freshwater baths and mechanical removal of lice.</li> </ol>	Compliant		
5.2.6	<p><b>Indicator:</b> The Weighted Number of Medicinal Treatments shall be at or below the country Entry Level (see Appendix VII)</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>No guidance available yet. - Guidance below from Audit Manual v.1.3</p> <p>a. Review WMNT scores from 5.2.5a to determine if the score is at or below the Country Entry Level (see Appendix VII)</p> <p>b. As applicable, submit data to ASC on WMNT score for the most recent production cycle (Appendix VI).</p>	<p>This site has an entry level of 1. This has been submitted to ASC.</p>	Compliant		
5.2.7	<p><b>Indicator:</b> The farm shall reduce the Weighted Number of Medicinal Treatments, after achieving indicator 5.2.6, with 25% per 2 years until the WMNT is at or below the Global Level (see Appendix VII).</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>No guidance available yet. - Guidance below from Audit Manual v.1.3</p> <p>a. Every 2 years after achieving 5.2.6, check the WMNT score calculated 2 years before as above (5.2.5a). Calculate the percent difference in WMNT score between current cycle and cycle of 2 years before.</p> <p>b. As applicable, submit data to ASC on WMNT score for the most recent production cycle and the two previous production cycles (Appendix VI).</p>	<p>This indicator does not apply in Canada as QA number 97 states that as entry level in Canada is below the Global level the indicator does not apply.</p>	N/A	This indicator does not apply in Canada as QA number 97 states that as entry level in Canada is below the Global level the indicator does not apply.	
5.2.8	<p><b>Indicator:</b> The farm shall implement Integrated Pest Management (IPM) according to the guidance in Appendix VII.</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Implement Integrated Pest Management (IPM) into farm management plans (see Appendix VII).</p> <p>b. Review and update IPM on a production cycle basis to reflect the effectiveness of applied methods and to determine next approaches.</p>	<p>Mowi IPM in place signed and dated December 2019. <a href="https://corpsite.azureedge.net/corpsite/wp-content/uploads/sites/7/2019/12/MOW-IPM-2019.pdf">https://corpsite.azureedge.net/corpsite/wp-content/uploads/sites/7/2019/12/MOW-IPM-2019.pdf</a></p>	Compliant		
5.2.9	<p><b>Indicator:</b> The farm shall public present (e.g. via company website) the IPM-measures that the company applies which need to be approved by a authorized veterinarian.</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>No guidance available yet. - Guidance below from Audit Manual v.1.3</p> <p>a. Ensure the latest version of the IPM is public on the company website</p> <p>b. Ensure the IPM is signed-off by an authorized veterinarian.</p>	<p>The IPM was reviewed as being in place on the companies website and dated 30/12/19. The IPM has been signed off by the Vet..</p>	Compliant		
5.2.10	<p><b>Indicator:</b> The farm shall monitor parasiticide residue levels annually in the benthic sediment directly outside the AZE.</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>No guidance available yet. - Guidance below from Audit Manual v.1.3</p> <p>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.</p> <p>b. If benthos throughout the full AZE is hard bottom, provide evidence to the CAB and request an exemption from 5.2.10</p> <p>c. 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.</p> <p>d. Retain documentary evidence to show how scores were obtained. If samples were analysed an independent laboratory, obtain copies of results.</p>	<p>ASC has determined that this indicator under QA 111 is not applicable.</p>	N/A	ASC has determined that this indicator under QA 111 is not applicable.	
5.2.11	<p><b>Indicator:</b> Allowance for prophylactic use of antimicrobial treatments [88]</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All</p>	<p>a. Maintain records for all purchases of antibiotics (invoices, prescriptions) for the current and prior production cycles.</p> <p>b. Maintain a detailed log of all medication-related events (see also 5.2.1a and 5.2.3)</p> <p>c. Calculate the total amount (g) and treatments (#) of antibiotics used during the current and prior production cycles (see also 5.2.9).</p>	<p>Records have been reviewed. Treatments logs are maintained on the farm site. This is a legal requirement. Drug use is reported to DFO each quarter. There has been one treatment but it was prescribed by the company Vet.</p>	Compliant		
5.2.12	<p><b>Indicator:</b> Allowance for use of antibiotics listed as critically important for human medicine by the World Health Organization (WHO) [89]</p> <p><b>Requirement:</b> None [90]</p> <p><b>Applicability:</b> All</p>	<p>a. Maintain a current version of the WHO list of antimicrobials critically and highly important for human health [89].</p> <p>b. If the farm has not used any antibiotics listed as critically important (5.2.8a) in the current production cycle, inform the CAB and proceed to schedule the audit.</p> <p>c. If the farm has 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.</p> <p>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.</p>	<p>The company has a medicines positive list that is maintained by the food safety manager. On the CFIA website there is a list of banned substances by country and worldwide. No antibiotics used were critically important within the company. There have been one treatment of antibiotics on this site for this production cycle.</p>	Compliant		
5.2.13	<p><b>Indicator:</b> Number of treatments [91] of antibiotics over the most recent production cycle</p> <p><b>Requirement:</b> ≤ 3</p> <p><b>Applicability:</b> All</p>	<p>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.</p> <p>b. Calculate the total number of treatments of antibiotics over the most recent production cycle and supply a verifiable statement of this calculation.</p>	<p>There has been one treatments of antibiotics (Florfenicol for mouth Rot) on this site for this production cycle which is the 2019 year class.</p>	Compliant		1

5.2.14	<p><b>Indicator:</b> If more than one antibiotic treatment is used in the most recent production cycle, demonstration that the antibiotic load is at least 15% less than the average of the two previous production cycles</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Use results from 5.2.13b to show whether more than one antibiotic treatment was used in the most recent production cycle. If not, then the requirement of 5.2.14 does not apply. If yes, then proceed to 5.2.14b.</p> <p>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.</p> <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.</p> <p>d. Submit data on antibiotic load to ASC as per Appendix VI (if applicable) for each production cycle.</p>	There have been one treatment of antibiotics on this site for this production cycle.	N/A	Only one treatment of antibiotics.	
5.2.15	<p><b>Indicator:</b> Presence of documents demonstrating that the farm has provided buyers of its salmon a list of all therapeutants used in production</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Prepare a procedure which outlines how the farm provides buyers [94] of its salmon with a list of all therapeutants used in production (see 4.4.3b).</p> <p>b. Maintain records showing the farm has informed all buyers of its salmon about all therapeutants used in production.</p>	Once per year in January MOWI supply their customers with a 'Suppliers Quality Assurance Certificate'. It mentions potential treatments and refers the reader to web links with the Canadian Food inspection agency for regulatory status. It lists the possible supply plants. On the bottom of the Suppliers QA certificate, there is a statement from the Food Safety assurance technician to contact her if there are any questions. Her number and extension are included.	Compliant		

Criterion 5.3 Resistance of parasites, viruses and bacteria to medicinal treatments							
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):				
5.3.1	<b>Indicator:</b> Bio-assay analysis to determine resistance when two applications of a treatment have not produced the expected effect  <b>Requirement:</b> Yes  <b>Applicability:</b> All	<b>Instruction to Clients for Indicator 5.3.1 - Identifying the "Expected Effect" of Medicinal Treatment</b> Indicator 5.3.1 requires that farms identify treatments that have not produced the expected effect. The SAD Steering Committee recognizes that the "expected effect" will vary with health condition and type of medicinal treatment. Therefore farms and auditors will need to review the pre- and post-treatment condition of fish in order to understand and evaluate the impact of treatment.  <b>Example: sea lice treatment with emamectin benzoate</b> The SAD SC recommends that a typical baseline for effectiveness of emamectin benzoate is a minimum of 90 percent reduction in abundance of lice on the farmed fish. To determine whether treatment has produced the expected effect, farm and auditor must review pre- and post-treatment lice counts. If the calculated percent reduction in lice is < 90% then the treatment did not produce the expected effect and a bio-assay should be performed to determine whether sea lice have developed resistance.  Note: If field-based bio-assays for determining resistance are ineffective or unavailable, the farm shall have samples analyzed by an independent laboratory to determine resistance formation. The auditor shall record in the audit report why field-based bio-assays were deemed ineffective and shall include results from the laboratory analyses of resistance formation.					
		a. In addition to recording all therapeutic treatments (5.2.1a), keep a record of all cases where the farm uses two successive medicinal treatments.	There has not been two successive medicinal treatments. There have been treatments with freshwater and physical removal with a Hydrolizer.	N/A	There has not been two successive treatments.		
		b. Whenever the farm uses two successive treatments, keep records showing how the farm evaluates the observed effect of treatment against the expected effect of treatment.	NA				
		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.	While this is not applicable the company uses bioassays prior to medicinal treatments in order to judge the effective dosage required. If the dosage is ineffective then the treatment is not carried out.				
		d. Keep a record of all results arising from 5.3.1c.	NA				
5.3.2	<b>Indicator:</b> When bio-assay tests determine resistance is forming, use of an alternative, permitted treatment, or an immediate harvest of all fish on the site  <b>Requirement:</b> Yes  <b>Applicability:</b> All	a. Review results of bio-assay tests (5.3.1d) for evidence that resistance has formed. If yes, proceed to 5.3.2b. If no, then Indicator 5.3.2 is not applicable.	Bio assays are carried out pre-treatment that determines what dosage the lice are sensitive to. The bioassays are carried out by the centre for aquatic health sciences in Campbell river. If resistance is found then treatments are not used and alternative removal is used. The company is switching to freshwater bath treatments for 6 hours and the company now also has a hydrolizer.	Compliant			
		b. When bio-assay tests show evidence that resistance has formed, keep records showing that the farm took one of two actions:	No resistance was determined.				
5.3.3	<b>Indicator:</b> Specific rotation, providing that the farm has >1 effective medicinal treatment product available, every third treatment must belong to a different family of drugs.  <b>Requirement:</b> Yes  <b>Applicability:</b> All	a. Determine how many effective medicinal treatment products the farm uses. b. If farm uses >1 effective medicinal treatment product, ensure every third treatment belongs to a different family of drugs.	There have been one antibiotic treatment for Mouth Rot using Florfenicol and one treatment of Slic for Lice. There are only 2 possible antibiotic treatment allowed in British Columbia and that is Florfenicol or Oxytetracycline. Florfenicol is always used as it is the most effective and requires low levels of active ingredient.	Compliant			
Criterion 5.4 Biosecurity management [95]							
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):				
Footnote: [95] See Appendix VI for transparency requirements for 5.4.2 and 5.4.4.							
5.4.1	<b>Indicator:</b> Evidence that all salmon on the site are a single-year class [96]  <b>Requirement:</b> 100% [97]  <b>Applicability:</b> All farms except as noted in [97]	a. Keep records of the start and end dates of periods when the site is fully fallow after harvest.	Records confirm that the fish are single year class. Fish movement records show the fish came from Larsen Island in May to July 2020 with an average weight of between 750g to 1200g. All fish were the same year class. Fallow dates were from 30th December 2019 to 13th May 2020.	Compliant			
		b. Provide evidence of stocking dates (purchase receipts, delivery records) to show that there were no gaps > 6 months for smolt inputs for the current production cycle.	The fish were supplied by Mowi internal hatcheries Ocean Falls and Dalrymple. All fish were stocked from May to July of 2020.				
		-					
		-					
Footnote: [96] Gaps of up to six months between inputs of smolts derived from the same stripping are acceptable as long as there remains a period of time when the site is fully fallow after harvest.							
Footnote: [97] Exception is allowed for: 1) farm sites that have closed, contained production units where there is complete separation of water between units and no sharing of filtration systems or other systems that could spread disease, or, 2) farm sites that have ≥95% water recirculation, a pre-entry disease screening protocol, dedicated quarantine capability and biosecurity measures for waste to ensure there is no discharge of live biological material to the natural environment (e.g. UV or other effective treatment of effluent).							
5.4.2	<b>Indicator:</b> Evidence that if the farm suspects an unidentified transmissible agent, or if the farm experiences unexplained increased mortality, [98] the farm has: 1. Reported the issue to the ABM and to the appropriate regulatory authority 2. Increased monitoring and surveillance [99] on the farm and within the ABM 3. Promptly [100] made findings publicly available  <b>Requirement:</b> Yes  <b>Applicability:</b> All	a. For mortality events logged in 5.1.4a, show evidence that the farm promptly evaluated each to determine whether it was a statistically significant increase over background mortality rate on a monthly basis [98]. The accepted level of significance (for example, $p < 0.05$ ) should be agreed between farm and CAB.	The site does not suspect any unidentified transmissible agents. There have been no unexplained mortality events. There is a red and green system in place that assess the mortality trends.	Compliant			
		b. For mortality events logged in 5.1.4a, record whether the farm did or did not suspect (yes or no) an unidentified transmissible agent.	There were no large or unusual mortality events, and all mortality is diagnosed. Nothing was suspected as being unidentified.				
		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.	There were no large or unusual mortality events, and all mortality is diagnosed both onsite and using approved labs to confirm diagnosis.				
		d. If required, ensure that the farm takes and records the following steps: 1) Report the issue to the ABM and to the appropriate regulatory authority; 2) Increase monitoring and surveillance [99] on the farm and within the ABM; and 3) Promptly (within one month) make findings publicly available.	DFO must be informed if 4000kg of mort's or 2% of the inventory in 24 hours or 10000kg or more or 5% of total fish in 5 days of mortalities occur. This reporting has not been necessary for the current or previous production cycle.				
		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).	There was none.				
Footnote: [98] Increased mortality: A statistically significant increase over background rate on a monthly basis.							
Footnote: [99] Primary aim of monitoring and surveillance is to investigate whether a new or adapted disease is present in the area.							
Footnote: [100] Within one month.							

		<p style="text-align: center;"><b>Instruction to Clients for Indicator 5.4.3 - Compliance with the OIE Aquatic Animal Health Code</b></p> <p>Indicator 5.4.3 requires that farms show evidence of compliance with the OIE Aquatic Animal Health Code (see <a href="http://www.oie.int/index.php?id=171">http://www.oie.int/index.php?id=171</a>). Compliance is defined as farm practices consistent with the intentions of the Code. For purposes of the ASC Salmon Standard, this means that the farm must have written procedures stating how the farm will initiate an aggressive response to detection of an exotic OIE-notifiable disease on the farm ("exotic" = not previously found in the area or had been fully eradicated (area declared free of the pathogen)). An aggressive response will involve, at a minimum, the following actions:</p> <ul style="list-style-type: none"><li>- depopulation of the infected site;</li><li>- implementation of quarantine zones (see note below in accordance with guidelines from OIE for the specific pathogen; and</li><li>- additional actions as required under Indicator 5.4.4.</li></ul> <p>To demonstrate compliance with Indicator 5.4.3, clients have the option to describe how farm practices are consistent with the intentions of the OIE Aquatic Animal Health Code by developing relevant policies and procedures and integrating them into the farm's fish health management plan.</p> <p>Note: The Steering Committee recognizes that establishment of quarantine zones will likely incorporate mandatory depopulation of sites close to the infected site and affect some, though not necessarily all, of the ABM.</p>				
5.4.3	<b>Indicator:</b> Evidence of compliance [101] with the OIE Aquatic Animal Health Code [102] <b>Requirement:</b> Yes <b>Applicability:</b> 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.	Current version of the code is online and the relevant staff have knowledge where to find it. Auditor was supplied a link within the site submissions.	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.	During interview the Vet stated that the policies around fish health are based on the OIE health code and that DFO also follow and develop licencing around the OIE Code.			
		-	The staff are trained in animal welfare and the fish health plan.			
Footnote	[101] Compliance is defined as farm practices consistent with the intentions of the Code, to be further outlined in auditing guidance. For purposes of this standard, this includes an aggressive response to detection of an exotic OIE-notifiable disease on the farm, which includes depopulating the infected site and implementation of quarantine zones in accordance with guidelines from OIE for the specific pathogen. Quarantine zones will likely incorporate mandatory depopulation of sites close to the infected site and affect some, though not necessarily all, of the ABM. Exotic signifies not previously found in the area or had been fully eradicated (area declared free of the pathogen).					
Footnote	[102] OIE 2011. Aquatic Animal Health Code. <a href="http://www.oie.int/index.php?id=171">http://www.oie.int/index.php?id=171</a> .					
5.4.4	<b>Indicator:</b> If an OIE-notifiable disease [103] is confirmed on the farm, evidence that: 1. the farm, at a minimum, immediately culled the pen(s) in which the disease was detected 2. the farm immediately notified the other farms in the ABM [104] 3. the farm and the ABM enhanced monitoring and conducted rigorous testing for the disease 4. the farm promptly [105] made findings publicly available <b>Requirement:</b> Yes <b>Applicability:</b> 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.	Notifiable diseases are immediately conveyed to the DFO and the CRA who take control and determine the action. There is a legal onus on the fish health team to do this. Notifiable diseases in this area are IHN, IPN, VHS, ISA, OMV, Whirling disease and Coldwater Vibriosis.	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.	There has been none in the current or previous production cycles.			
		c. If an OIE-notifiable disease was confirmed on the farm (see 5.4.4b), then retain documentary evidence to show that the farm: 1) immediately culled the pen(s) in which the disease was detected; 2) immediately notified the other farms in the ABM [104] 3) enhanced monitoring and conducted rigorous testing for the disease; and 4) promptly (within one month) made findings publicly available.	There is a variance in place and granted by ASC as VHS is endemic in the area and DFO have not required to cull the fish. This was allowed for other sites in BC, and the variance number was 89 and 91.			
		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).	NA as there has been none.			
		-	There have been no notifiable diseases according to the mortality records.			
Footnote	[103] At the time of publication of the final draft standards, OIE-notifiable diseases relevant to salmon aquaculture were: Epizootic haematopoietic necrosis, Infectious haematopoietic necrosis (IHN), Infectious salmon anemia (ISA), Viral hemorrhagic septicemia (VHS) and Gyrodactylus (Gyrodactylus salaris).					
Footnote	[104] This is in addition to any notifications to regulatory bodies required under law and the OIE Aquatic Animal Health Code.					
Footnote	[105] Within one month.					
Social requirements in the standards shall be audited by an individual who is a lead auditor in conformity with SAAS Procedure 200 section 3.1.						
PRINCIPLE 6: DEVELOP AND OPERATE FARMS IN A SOCIALLY RESPONSIBLE MANNER						
6.1 Freedom of association and collective bargaining [106]						
		Compliance Criteria				
Footnote	[106] Bargain collectively: A voluntary negotiation between employers and organizations of workers in order to establish the terms and conditions of employment by means of collective (written) agreements.					
6.1.1	<b>Indicator:</b> Evidence that workers have access to trade unions (if they exist) and union representative(s) chosen by themselves without managerial interference <b>Requirement:</b> Yes <b>Applicability:</b> 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 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 of 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.	No Trade Unions exist; however, the Code of Conduct, which is provided to all employees and they are tested to show they have understood the Code of Conduct. The Code of Conduct is accessible via the intranet, which also allows access to human resources Policy & Procedure Manual. Code of Conduct section 5.3. Relates to this area and states "Mowi recognises the right of all workers and employees freely to form and join groups for the promotion and defence of their occupational interests, including the right to engage in collective bargaining".  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	<b>Indicator:</b> Evidence that workers are free to form organizations, including unions, to advocate for and protect their rights <b>Requirement:</b> Yes <b>Applicability:</b> 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.  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.	The worker's Contracts of Employment explicitly states the worker's right of freedom of association. Mowi also confirms this within the Code of Conduct section 5.3. The workers confirmed that the Code of Conduct is provided to them and that they are trained and tested. The training records show that training happened, and the results are available on the DATS training systems.	Compliant		
6.1.3	<b>Indicator:</b> Evidence that workers are free and able to bargain collectively for their rights <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Local trade union, or where none exists a reputable civil-society organization, confirms no outstanding cases against the farm site management for violations of employees' freedom of association and collective bargaining rights.  b. Employer has explicitly communicated a commitment to ensure the collective bargaining rights of all workers.  c. There is documentary evidence that workers are free and able to bargain collectively (e.g. collective bargaining agreements, meeting minutes, or complaint resolutions).	There are no outstanding cases against the farm site management for violations of employees' freedom of association and collective bargaining rights.  The employer has explicitly communicated a commitment to ensure the collective bargaining rights of all workers, as stated in 6.1.1 & 6.1.2 and within 5.3 of the Mowi Code of Conduct.  The documentary evidence shows that workers are free and able to bargain collectively and detailed in the Code of Conduct and training records.	Compliant		
Criterion 6.2 Child labor						
		Compliance Criteria				
6.2.1	<b>Indicator:</b> Number of incidences of child [107] labor [108] <b>Requirement:</b> None <b>Applicability:</b> All except as noted in [107]	a. In most countries, the law states that minimum age for employment is 15 years. There are two possible exceptions: - in developing countries where the legal minimum age may be set to 14 years (see footnote 108); or - in countries where the legal minimum age is set higher than 15 years, in which case the legal minimum age of the country is followed. If the farm operates in a country where the legal minimum age is not 15, then the employer shall maintain documentation attesting to this fact.  b. Minimum age of permanent workers is 15 or older (except in countries as noted above).	The ages of all workers stored on Human Resources management system. There are no persons employed under the age of 15. Mowi state in section 5.4 of the Code of Conduct " Mowi is committed to the abolition of child labour, and all forms of forced or compulsory labour. Mowi 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		

		c. Employer maintains age records for employees that are sufficient to demonstrate compliance.				
Footnote	[107] Child: Any person under 15 years of age. A higher age would apply if the minimum age law of an area stipulates a higher age for work or mandatory schooling. Minimum age may be 14 if the country allows it under the developing country exceptions in ILO convention 138.					
Footnote	[108] Child Labor: Any work by a child younger than the age specified in the definition of a child.					

6.2.2	<b>Indicator:</b> Percentage of young workers [109] that are protected [110] <b>Requirement:</b> 100% <b>Applicability:</b> All	a. Young workers are appropriately identified in company policies & training programs, and job descriptions are available for all young workers at the site.	There is a policy stating the rules on employing young workers. The Mowi Code of Conduct, section 5.4, sets out the primary controls. Young workers risk assessments are carried out and displayed in 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 were employed at the time of the audit.	Compliant		100%
		b. All young workers (from age 15 to less than 18) are identified and their ages are confirmed with copies of IDs.				
		c. Daily records of working hours (i.e. timesheets) are available for all young workers.				
		d. For young workers, the combined daily transportation time and school time and work time does not exceed 10 hours.				
		e. Young workers are not exposed to hazards [111] and do not perform hazardous work [112]. Work on floating cages in poor weather conditions shall be considered hazardous.				
		f. Be advised that the site will be inspected and young workers will be interviewed to confirm compliance.				
Footnote	[109] Young Worker: Any worker between the age of a child, as defined above, and under the age of 18.					
Footnote	[110] Protected: Workers between 15 and 18 years of age will not be exposed to hazardous health and safety conditions; working hours shall not interfere with their education and the combined daily transportation time and school time, and work time shall not exceed 10 hours.					
Footnote	[111] Hazard: The inherent potential to cause injury or damage to a person's health (e.g., unequipped to handle heavy machinery safely, and unprotected exposure to harmful chemicals).					
Footnote	[112] Hazardous work: Work that, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of workers (e.g., heavy lifting disproportionate to a person's body size, operating heavy machinery, exposure to toxic chemicals).					
Criterion 6.3 Forced, bonded or compulsory labor						
6.3.1	<b>Indicator:</b> Number of incidences of forced, [113] bonded [114] or compulsory labor <b>Requirement:</b> None <b>Applicability:</b> All	a. Contracts are clearly stated and understood by employees. Contracts do not lead to workers being indebted (i.e. no 'pay to work' schemes through labor contractors or training credit programs).	All employees are provided with contracts of employment. Workers have signed all contracts of employment. The employer does not withhold the employee's original identity documents. Through documentation checks, it confirmed that all working hours are conducted voluntarily. The employer does not withhold the employee's original identity documents. The employer does not withhold any part of workers' salaries, benefits, property or documents to obligate them to continue working for the employer. No employees are repaying debt. The employees confirmed all of the above within the interviews.	Compliant		
		b. Employees are free to leave workplace and manage their own time.				
		c. Employer does not withhold employee's original identity documents.				
		d. Employer does not withhold any part of workers' salaries, benefits, property or documents in order to obligate them to continue working for employer.				
		e. Employees are not to be obligated to stay in job to repay debt.				
		f. Maintain payroll records and be advised that workers will be interviewed to confirm the above.				
Footnote	[113] Forced (Compulsory) labor: All work or service that is extracted from any person under the menace of any penalty for which a person has not offered himself/herself voluntarily or for which such work or service is demanded as a repayment of debt. "Penalty" can imply monetary sanctions, physical punishment, or the loss of rights and privileges or restriction of movement (e.g., withholding of identity documents).					
Footnote	[114] Bonded labor: When a person is forced by the employer or creditor to work to repay a financial debt to the crediting agency.					
Criterion 6.4 Discrimination [115]						
Footnote	[115] Discrimination: Any distinction, exclusion or preference that has the effect of nullifying or impairing equality of opportunity or treatment. Not every distinction, exclusion or preference constitutes discrimination. For instance, a merit- or performance-based pay increase or bonus is not by itself discriminatory. Positive discrimination in favor of people from certain underrepresented groups may be legal in some countries.					
6.4.1	<b>Indicator:</b> Evidence of comprehensive [116] and proactive anti-discrimination policies, procedures and practices <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Employer has written anti-discrimination policy in place, stating that the company does not engage in or support discrimination in hiring, remuneration, access to training, promotion, termination or retirement based on race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation, age or any other condition that may give rise to discrimination.	Stated in Mowi Code of Conduct section 5.2 & 6.1, that Mowi does not accept any form of discrimination.  The anti-discrimination policy that is in place indicates that the company does not engage in or support discrimination in hiring, remuneration, access to training, promotion, termination or retirement based on race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation, age or any other condition that may give rise to discrimination.  Discrimination complaints are dealt with through the grievance procedures. Grievance procedures are communicated to all workers. All employees are respected with regards to equal treatment. All managers have been trained in equality and diversity, and evidence of the training is recorded on DATS. (Training Management System)	Compliant		
		b. Employer has clear and transparent company procedures that outline how to raise, file, and respond to discrimination complaints.				
		c. Employer respects the principle of equal pay for equal work and equal access to job opportunities, promotions and raises.				
		d. All managers and supervisors receive training on diversity and non-discrimination. All personnel receive non-discrimination training. Internal or external training acceptable if proven effective.				
Footnote	[116] Employers shall have written anti-discrimination policies stating that the company does not engage in or support discrimination in hiring, remuneration, access to training, promotion, termination or retirement based on race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation, age or any other condition that may give rise to discrimination.					
6.4.2	<b>Indicator:</b> Number of incidences of discrimination <b>Requirement:</b> None <b>Applicability:</b> All	a. Employer maintains a record of all discrimination complaints. These records do not show evidence for discrimination.	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.	Compliant		
		b. Be advised that worker testimonies will be used to confirm that the company does not interfere with the rights of personnel to observe tenets or practices, or to meet needs related to race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation or any other condition that may give rise to discrimination.				
Criterion 6.5 Work environment health and safety						
6.5.1	<b>Indicator:</b> Percentage of workers trained in health and safety practices, procedures [117] and policies on a yearly basis <b>Requirement:</b> 100% <b>Applicability:</b> 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.	Mowi has established procedures and policies to protect employees. These are communicated within the human resources policy and the Mowi Code of Conduct section 4.1. Employees are trained in emergency response procedures. The training has been recorded in the on-site training systems (DATS) and displayed on the employee notice boards. Ongoing training carried out on online training software management systems. Mowi tries 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. The MOWI Code of Conduct Section 4.1 sets out the Health & Safety rules  All sites shall establish annual safety targets with action plans (what, who, when) • All sites shall have high standards of housekeeping • All managers shall carry out safety walks (Walk – Observe – Communicate) • All employees shall participate in safety meetings on a regular basis • The use of personal protective equipment and life jackets shall be specified for employees, contractors and visitors • A risk assessment concerning safety shall be made for all jobs, equipment, and potentially hazardous materials, with an annual review made of those, considered most critical • A work permit system shall be in place, to include lock-out tag-out procedures and to safeguard work in confined spaces • An approval system for contractors shall be in place • All accidents and near-misses shall be reported and investigated, to include root-cause analysis, and with the subsequent implementation of corrective actions within the planned time • An emergency response plan shall be in place and tested at least once every year • All Business Units shall have a safety committee, to include site managers and other members, to reflect a safety focus throughout the organisation • A programme for systematic and regular safety training shall be in place However, some of the basic health & safety training, for both the sites employees and the operations teams, has not been renewed or completed.	Compliant		100%
		b. Employees know and understand emergency response procedures.				
		c. Employer conducts health and safety training for all employees on a regular basis (once a year and immediately for all new employees), including training on potential hazards and risk minimization, Occupational Safety and Health (OSH) and effective use of PPE.				
		Footnote				
6.5.2	<b>Indicator:</b> Evidence that workers use Personal Protective Equipment (PPE) effectively <b>Requirement:</b> Yes <b>Applicability:</b> 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 where possible.  The site understands that Personal Protective Equipment (PPE) should only be used where it is not possible to reduce the risk without the use of Personal Protective Equipment. Employees all receive induction training which includes the correct and proper use of Personal Protective Equipment. Some modules are built into the online health & Safety management system that employees have to complete each year. The site manager ensures that this training is carried out and recorded.  <i>Management system which meets ISO 9001 in relation</i>	Compliant		
		b. Employer provides workers with PPE that is appropriate to known health and safety hazards.				
		c. Employees receive annual training in the proper use of PPE (see 6.5.1c). For workers who participated in the initial training(s) previously an annual refreshment training may suffice, unless new PPE has been put to use.				



		d. Be advised that workers will be interviewed to confirm the above.	REMARKS & WORKER SIGHTING P.P.E. BY PUBLIC.			
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6.5.3	<b>Indicator:</b> Presence of a health and safety risk assessment and evidence of preventive actions taken <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Employer makes regular assessments of hazards and risks in the workplace. Risk assessments are reviewed and updated at least annually (see also 6.5.1a).	Risk assessments are carried by the site manager every year. All reviews are documented. Changes are made sooner if the process changes or new machinery is implemented. Risk assessments are used to identify the risk and employees are trained against the risk assessments. The site has trained employees that carry out risk assessments. This training is recorded on the MOWI internal DATS system. Health and safety procedures are adapted based on results from risk assessments. Risk assessments are reviewed when changes are made to the processes to avoid potential accidents.	Compliant		
		b. Employees are trained in how to identify and prevent known hazards and risks (see also 6.5.1c).				
		c. Health and safety procedures are adapted based on results from risk assessments (above) and changes are implemented to help prevent accidents.				
6.5.4	<b>Indicator:</b> Evidence that all health- and safety-related accidents and violations are recorded and corrective actions are taken when necessary <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Employer records all health- and safety-related accidents.	Facility records all health & safety-related accidents. The Health & Safety Manager investigates accidents. The Health & Safety Manager investigation looks and the Root Cause and implements a corrective action plan and review of the working procedures. Accidents are investigated, and steps were taken, and improvements made if required.	Compliant		
		b. Employer maintains complete documentation for all occupational health and safety violations and investigations.				
		c. Employer implements corrective action plans in response to any accidents that occur. Plans are documented and they include an analysis of root cause, actions to address root cause, actions to remediate, and actions to prevent future accidents of similar nature.				
		d. Employees working in departments where accidents have occurred can explain what analysis has been done and what steps were taken or improvements made.				
6.5.5	<b>Indicator:</b> 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 <b>Requirement:</b> Yes <b>Applicability:</b> 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		
6.5.6	<b>Indicator:</b> Evidence that all diving operations are conducted by divers who are certified <b>Requirement:</b> Yes <b>Applicability:</b> All	Note: If the farm outsources its diving operations to an independent company, the farm shall ensure that auditors have access to specified information sufficient to demonstrate compliance with Indicator 6.5.6. It is the farm's responsibility to obtain copies of relevant documentation (e.g. certificates) from the dive company.		Compliant		
		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.	The employer keeps records of farm diving operation. All external divers are given full details of the activities that are required. Divers have the required accreditations. Checks of certifications are made by Mowi every 60 days.			
		b. Employer maintains evidence of diver certification (e.g. copies of certificates) for each person involved in diving operations. Divers shall be certified through an accredited national or international organization for diver certification.				
Criterion 6.6 Wages						
6.6.1	<b>Indicator:</b> The percentage of workers whose basic wage [118] (before overtime and bonuses) is below the minimum wage [119] <b>Requirement:</b> 0 (None) <b>Applicability:</b> 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 in 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		0
		b. Employer's records (e.g. payroll) confirm that worker's wages for a standard work week (≤ 48 hours) always meet or exceed the legal minimum wage. If there is no legal minimum wage, the employer's records must show how the current wage meets or exceeds industry standard. If wages are based on piece-rate or pay-per-production, the employer's records must show how workers can reasonably attain (within regular working hours) wages that meet or exceed the legal minimum wage.				
		c. Maintain documentary evidence (e.g. payroll, timesheets, punch cards, production records, and/or utility records) and be advised that workers will be interviewed to confirm the above.				
		Footnote				
[118] Basic wage: The wages paid for a standard working week (no more than 48 hours).						
[119] If there is no legal minimum wage in a country, basic wages must meet the industry-standard minimum wage.						
6.6.2	<b>Indicator:</b> Evidence that the employer is working toward the payment of basic needs wage [120] <b>Requirement:</b> Yes <b>Applicability:</b> 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.	Mowi use Hays group to assist with setting pay levels and carry out here own reviews to ensure that levels are correct. There are details of living wages for BC available which states the living wage is \$12.65 MOWI starting wage is \$20.00.	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.				
		c. Employer demonstrates how they have taken steps toward paying a basic needs wage to their workers.				
Footnote						
[120] Basic needs wage: A wage that covers the basic needs of an individual or family, including housing, food and transport. This concept differs from a minimum wage, which is set by law and may or may not cover the basic needs of workers.						
6.6.3	<b>Indicator:</b> Evidence of transparency in wage-setting and rendering [121] <b>Requirement:</b> Yes <b>Applicability:</b> All	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. Employees are paid bi-weekly by electronic bank transfer, and the workers clearly understand this. Employees confirmed within the interview process that information was available, and electronic transfer payments are made directly to their bank accounts.	Compliant		
		b. The method for setting wages is clearly stated and understood by workers.				
		c. Employer renders wages and benefits in a way that is convenient for the worker (e.g. cash, check, or electronic payment methods). Workers do not have to travel to collect benefits nor do they receive promissory notes, coupons or merchandise in lieu of payment.				
		d. Be advised that workers will be interviewed to confirm the above.				
Footnote						
[121] Payments shall be rendered to workers in a convenient manner.						
Criterion 6.7 Contracts (labor) including subcontracting						
6.7.1	<b>Indicator:</b> Percentage of workers who have contracts [122] <b>Requirement:</b> 100% <b>Applicability:</b> All	a. Employer maintains a record of all employment contracts.	All employees are provided with a contract of employment, and a copy of the contract was available in the personnel files. There was no evidence of Labor only contracts or false apprenticeships. Employees confirmed that there are no Labor, only contracts or false apprenticeships.	Compliant		100%
		b. There is no evidence for labor-only contracting relationships or false apprenticeship schemes.				
		c. Be advised that workers will be interviewed to confirm the above.				
Footnote						
[122] Labor-only contracting relationships or false apprenticeship schemes are not acceptable. This includes revolving/consecutive labor contracts to deny benefit accrual or equitable remuneration. False Apprenticeship Scheme: The practice of hiring workers under apprenticeship terms without stipulating terms of the apprenticeship or wages under contract. It is a "false" apprenticeship if its purpose is to underpay people, avoid legal obligations or employ underage workers. Labor-only contracting arrangement: The practice of hiring workers without establishing a formal employment relationship for the purpose of avoiding payment of regular wages or the provision of legally required benefits, such as health and safety protections.						
6.7.2	<b>Indicator:</b> Evidence of a policy to ensure social compliance of its suppliers and contractors <b>Requirement:</b> Yes <b>Applicability:</b> 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.	Where Mowi uses subcontractors, they check that the companies have socially responsible practices and policies. MOWI keeps a list of approved suppliers and contractors. MOWI keeps records of communications with suppliers and subcontractors.	Compliant		
		b. Producing company has criteria for evaluating its suppliers and contractors. The company keeps a list of approved suppliers and contractors.				
		c. Producing company keeps records of communications with suppliers and subcontractors that relate to compliance with 6.7.2.				
Criterion 6.8 Conflict resolution						
6.8.1	<b>Indicator:</b> Evidence of worker access to effective, fair and confidential grievance procedures <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Employer has a clear labor conflict resolution policy for the presentation, treatment, and resolution of worker grievances in a confidential manner.	There is a complaint procedure detailed in the HR Policy, which explains the reporting procedure, including bullying and harassment and confidentiality policy. 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 in the employee personnel file. All communications are detailed in writing with the employee personnel files.	Compliant		
		b. Workers are familiar with the company's labor conflict policies and procedures. There is evidence that workers have fair access.				
		c. Maintain documentary evidence (e.g. complaint or grievance filings, minutes from review meetings) and be advised that workers will be interviewed to confirm the above				
	<b>Indicator:</b> Percentage of grievances handled that are addressed [123] within a 90-day timeframe	a. Employer maintains a record of all grievances, complaints and labor conflicts that are raised.	The established grievance policy and procedures are well documented.			

6.8.2	Requirement: 100%	b. Employer keeps a record of follow-up (i.e. corrective actions) and timeframe in which grievances are addressed.	Any grievances that are raised are recorded in the employee personnel files and have agreed on action plans if required. Through workers interviewed, it was noted that grievances had been made and the grievances were handled following the MOWI grievance procedures. The company policy is to respond to each stage of the process within 14 days. Also, see 6.8.1	Compliant		
	Applicability: All	c. Maintain documentary evidence and be advised that workers will be interviewed to confirm that grievances are addressed within a 90-day timeframe.				
Footnote	[123] Addressed: Acknowledged and received, moving through the company's process for grievances, corrective action taken when necessary.					

Criterion 6.9 Disciplinary practices					
		Compliance criteria			
6.9.1	<b>Indicator:</b> Incidences of excessive or abusive disciplinary actions	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. The practice of the disciplinary does not impact the workers physical or mentally. There were no excessive or abusive disciplinary actions.	Compliant	
	<b>Requirement:</b> None	b. Allegations of corporeal punishment, mental abuse [124], physical coercion, or verbal abuse will be investigated by auditors.			
	<b>Applicability:</b> All	c. Be advised that workers will be interviewed to confirm there is no evidence for excessive or abusive disciplinary actions.			
Footnote	[124] Mental Abuse: Characterized by the intentional use of power, including verbal abuse, isolation, sexual or racial harassment, intimidation or threat of physical force.				
6.9.2	<b>Indicator:</b> Evidence of a functioning disciplinary action policy whose aim is to improve the worker [125]	a. Employer has written policy for disciplinary action which explicitly states that its aim is to improve the worker [125].	The company has written policy disciplinary action that "explicitly" states to improve the worker. The company has a performance management policy, so this should be noted alongside the disciplinary procedure. None of the workers had been involved in a disciplinary procedure the workers confirmed this.	Compliant	
	<b>Requirement:</b> Yes	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.			
	<b>Applicability:</b> All				
Footnote	[125] If disciplinary action is required, progressive verbal and written warnings shall be engaged. The aim shall always be to improve the worker; dismissal shall be the last resort. Policies for bonuses, incentives, access to training and promotions are clearly stated and understood, and not used arbitrarily. Fines or basic wage deductions shall not be acceptable disciplinary practices.				
Criterion 6.10 Working hours and overtime					
		Compliance criteria			
6.10.1	<b>Indicator:</b> Incidences, violations or abuse of working hours and overtime laws [126] <b>Requirement:</b> None <b>Applicability:</b> All	Note: Working hours, night work and rest periods for workers in agriculture should be in accordance with national laws and regulations or collective agreements (e.g. The Safety and Health in Agriculture Convention, 2001). Additional information can be found on the website of the International Labour Organization (www.ilo.org).		Compliant	
		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.	The company holds a document for the 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 six days off. The averaged hours over the two weeks is 40 hours per week.		
		b. Records (e.g. time sheets and payroll) show that farm workers do not exceed the number of working hours allowed under the law.	During the last few months Mowi have adjusted the shift pattern 2 weeks on and 2 weeks off. This was due to the COVID 19. The shift pattern has now returned to normal.		
		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).	Working hours are provided by site managers to the payroll and working hours' department. The workers confirmed that working hours are correct before this. Records on the attendance system show that workers are not exceeding the working hours that are allowed.		
		d. Be advised that workers will be interviewed to confirm there is no abuse of working hours and overtime laws.	The shift pattern is agreed before the commencement of employment. The contract of employment clearly stated the contracted working hours. Workers confirmed that the facility did not abuse the working hour's regulations and laws.		
Footnote	[126] In cases where local legislation on working hours and overtime exceed internationally accepted recommendations (48 regular hours, 12 hours overtime), the international standards will apply.				
6.10.2	<b>Indicator:</b> Overtime is limited, voluntary [127], paid at a premium rate [128] and restricted to exceptional circumstances <b>Requirement:</b> Yes <b>Applicability:</b> All except as noted in [130]	a. Payment records (e.g. paylips) show that workers are paid a premium rate for overtime hours.	The employees are paid a premium rate for overtime hours; they are paid 150% for the first 2 hours and 200% for any hours worked after that. The time and attendance system confirmed that overtime is infrequent. The employees confirmed that overtime is rare and is voluntary.	Compliant	
		b. Overtime is limited and occurs in exceptional circumstances as evidenced by farm records (e.g. production records, time sheets, and other records of working hours).			
		c. Be advised that workers will be interviewed to confirm that all overtime is voluntary except where there is a collective bargaining agreement which specifically allows for compulsory overtime.			
Footnote	[127] Compulsory overtime is permitted if previously agreed to under a collective bargaining agreement.				
Footnote	[128] Premium rate: A rate of pay higher than the regular work week rate. Must comply with national laws/regulations and/or industry standards.				
Criterion 6.11 Education and training					
6.11.1	<b>Indicator:</b> Evidence that the company regularly performs training of staff in fish husbandry, general farm and fish escape management and health and safety procedures <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Company has written policies related to continuing education of workers. Company provides incentives (e.g. subsidies for tuition or textbooks, time off prior to exams, flexibility in work schedule) that encourage workers to participate in educational initiatives. Note that such offers may be contingent on workers committing to stay with the company for a pre-arranged time.	The company encourages employees to increase knowledge and participate in training courses and supports the workers in doing this. As stated in HR policy section 9 Employee training and development and 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	
		b. Employer maintains records of worker participation in educational opportunities as evidenced by course documentation (e.g. list of courses, curricula, certificates, degrees).			
		c. Be advised that workers will be interviewed to confirm that educational initiatives are encouraged and supported by the company.			
Criterion 6.12 Corporate policies for social responsibility					
		Compliance criteria			
6.12.1	<b>Indicator:</b> Demonstration of company-level [129] policies in line with the standards under 6.1 to 6.11 above <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Company-level policies are in line with all social and labor requirements presented in 6.1 through 6.11.	The Code of Conduct Policy and the HR Policy are in line with all social and labour requirements. The Senior Management Team approves corporate policy at Campbell River. The scope of all corporate policies covers all company operations. All requested documentation was provided and reviewed.	Compliant	
		b. Company-level policies (see 6.12.1a) are approved by the company headquarters in the region where the site applying for certification is located.			
		c. The scope of corporate policies (see 6.12.1a) covers all company operations relating to salmonid production in the region (i.e. all smolt production facilities, grow-out facilities and processing plants).			
		d. The site that is applying for certification provides auditors with access to all company-level policies and procedures as are needed to verify compliance with 6.12.1a (above).			
Footnote	[129] Applies to the headquarters of the company in a region or country where the site applying for certification is located. The policy shall relate to all of the company's operations in the region or country, including grow-out, smolt production and processing facilities.				
Social requirements in the standards shall be audited by an individual who is a lead auditor in conformity with SAAS Procedure 200 section 3.1.					
PRINCIPLE 7: BE A GOOD NEIGHBOR AND CONSCIENTIOUS CITIZEN					
Criterion 7.1 Community engagement					
		Compliance Criteria			
7.1.1	<b>Indicator:</b> Evidence of regular and meaningful [130] consultation and engagement with community representatives and organizations <b>Requirement:</b> Yes <b>Applicability:</b> 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 that is sent to the mayor of each community. It covers the direction of the company and initiatives that are being developed. The company recently sent out a 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 stakeholders and rightsholders. No representatives made themselves available for the audit	Compliant	
		b. Consultations are meaningful. OPTIONAL: the farm may choose to use participatory Social Impact Assessment (pSIA) or an equivalent method for consultations.			
		c. Consultations include participation by representatives from the local community who were asked to contribute to the agenda.			
		d. Consultations include communication about, or discussion of, the potential health risks of therapeutic treatments (see Indicator 7.1.3).			
		e. Maintain records and documentary evidence (e.g. meeting agenda, minutes, report) to demonstrate that consultations comply with the above.			
		f. Be advised that representatives from the local community and organizations may be interviewed to confirm the above.			
Footnote	[130] Regular and meaningful: Meetings shall be held at least bi-annually with elected representatives of affected communities. The agenda for the meetings should in part be set by the community representatives. Participatory Social Impact Assessment methods may be one option to consider here.				
7.1.2	<b>Indicator:</b> Presence and evidence of an effective [131] policy and mechanism for the presentation, treatment and resolution of complaints by community stakeholders and organizations <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Farm policy provides a mechanism for presentation, treatment and resolution of complaints lodged by stakeholders, community members, and organizations.	Mowi has a policy Doc#5/FW905 External Complaint resolution. A log has been created. The Log details who raised the complaint and the nature of the complaint. The company policy is all complaints are passed to the communications manager and then forwarded to senior management should it be required. The complaints procedure is detailed and sets out the requirements for handling each complaint. No complaints relevant to this site on review of the complaint log. No representatives made themselves available for the audit.	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).			
		c. The farm's mechanism for handling complaints is effective based on resolution of stakeholder complaints (e.g. follow-up correspondence from stakeholders).			
		d. Be advised that representatives from the local community, including complainants where applicable, may be interviewed to confirm the above.			
Footnote	[131] Effective: In order to demonstrate that the mechanism is effective, evidence of resolutions of complaints can be given.				

7.1.3	<b>Indicator:</b> Evidence that the farm has posted visible notice [132] at the farm during times of therapeutic treatments and has, as part of consultation with communities under 7.1.1, communicated about potential health risks from treatments <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Farm has a system for posting notifications at the farm during periods of therapeutic treatment. (use of anaesthetic baths is not regarded a therapeutic) b. Notices (above) are posted where they will be visible to affected stakeholders (e.g. posted on waterways for fishermen who pass by the farm). c. Farm communicates about the potential health risks from treatments during community consultations (see 7.1.1) d. Be advised that members of the local community may be interviewed to confirm the above.	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. Notices are posted on the side of the MOWI house so that anyone entering the site can see it. No representatives made themselves available for the audit.	Compliant		
Footnote	[132] Signage shall be visible to mariners and, for example, to fishermen passing by the farm. Criterion 7.2 Respect for indigenous and aboriginal cultures and traditional territories					
Compliance Criteria						
Instruction to Clients and CABs on Criterion 7.2 - Traditional Territories of Indigenous Groups The ASC Salmon Standard requires that farms must be respectful of the traditional territories of indigenous groups. The indicators listed under Criterion 7.2 were designed to fulfill this purpose in a manner consistent with the United Nations Declaration on the Rights of Indigenous Peoples. In many locales, the territorial boundaries of indigenous groups have a defined legal status according to local or national law. In such cases, it is straightforward to know whether a farm is operating in close proximity to indigenous people. However, when boundaries of indigenous territories are undefined or unknown, there is no simple way to establish whether the farm is operating in close proximity to indigenous groups. Here ASC provides the following guidance. The intent behind the ASC Salmon Standard is that the farm will identify all neighboring groups who are potentially negatively impacted by the farm's activities. The actual physical distance between the farm and an indigenous group is less important than understanding whether the farm is having a detrimental impact upon its neighbors. Effective community consultations are one of the best ways to identify such impacts to neighbor groups. Through a transparent process of consultation, indigenous groups who are put under "stress" by the farm will identify themselves and voice their concerns about the nature of the farm's impacts. Continued consultations between farm and neighbors should create a forum where any key issue can be discussed and resolved.						
7.2.1	<b>Indicator:</b> Evidence that indigenous groups were consulted as required by relevant local and/or national laws and regulations <b>Requirement:</b> Yes <b>Applicability:</b> All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [133]	a. Documentary evidence establishes that the farm does or does not operate in an indigenous territory (to include farms that operate in proximity to indigenous or aboriginal people [133]). If not then the requirements of 7.2.1 do not apply. b. Farm management demonstrates an understanding of relevant local and/or national laws and regulations that pertain to consultations with indigenous groups. c. As required by law in the jurisdiction: - farm consults with indigenous groups and retains documentary evidence (e.g. meeting minutes, summaries) to show how the process complies with 7.2.1b; OR - farm confirms that government-to-government consultation occurred and obtains documentary evidence. d. Be advised that representatives from indigenous groups may be interviewed to confirm the above	Mowi is operating in some indigenous territories and has several agreements (IBA) in place with rightsholders. Mowi holds 55 licensed ocean salmon farms in B.C. with about 30 operating at any one time, while others lay fallow. Mowi Canada has a track record of collaboration with rightsholders – with some agreements dating back 20 years. The company operates within the traditional territories of 24 rightsholders and has formal agreements with 15 of these rightsholders and eight rightsholders -owned businesses. Approximately 20 per cent of the MOWI Canada workforce is of First Nations heritage.	Compliant		
7.2.2	<b>Indicator:</b> Evidence that the farm has undertaken proactive consultation with indigenous communities <b>Requirement:</b> Yes [133] <b>Applicability:</b> All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [133]	a. See results of 7.2.1a (above) to determine whether the requirements of 7.2.2 apply to the farm. b. Be advised that representatives from indigenous communities may be interviewed to confirm that the farm has undertaken proactive consultations.	Meeting held with chief and council for K'omox April 10th, 2019 Tentative meeting for September 2020 Meeting held with chief and council for Homalco July 27th, 2020 Mowi have worked closely on a large donation with the nation for infrastructure to their Orford Hatchery, project just completed in July Follow up meetings tentatively scheduled for September 2020	Compliant		
Footnote	[133] All standards related to indigenous rights only apply where relevant, based on proximity of indigenous territories.					
7.2.3	<b>Indicator:</b> Evidence of a protocol agreement, or an active process [134] to establish a protocol agreement, with indigenous communities <b>Requirement:</b> Yes <b>Applicability:</b> All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [133]	a. See results of 7.2.1a (above) to determine whether the requirements of 7.2.3 apply to the farm. b. Maintain evidence to show that the farm has either: 1) reached a protocol agreement with the indigenous community and this fact is documented; or 2) continued engagement in an active process [134] to reach a protocol agreement with the indigenous community. c. Be advised that representatives from indigenous communities may be interviewed to confirm either 7.2.3b1 or b2 (above) as applicable.	The agreements demonstrate that MOWI is aware of Local, national laws and regulations for each rightsholder. There are agreements in place: •K'omox - Agreement signed : January 1, 2016, no expiry unless operations cease •Homalco - Agreement signed : March 20th, 2015, expires March 20th, 2045 No representatives made themselves available for the audit.	Compliant		
Footnote	[134] To demonstrate an active process, a farm must show ongoing efforts to communicate with indigenous communities, an understanding of key community concerns and responsiveness to key community concerns through adaptive farm management and other actions.					
Criterion 7.3 Access to resources						
7.3.1	<b>Indicator:</b> Changes undertaken restricting access to vital community resources [135] without community approval <b>Requirement:</b> None <b>Applicability:</b> All	a. Resources that are vital [135] to the community have been documented and are known by the farm (i.e. through the assessment process required under Indicator 7.3.2). b. The farm seeks and obtains community approval before undertaking changes that restrict access to vital community resources. Approvals are documented. c. Be advised that representatives from the community may be interviewed to confirm that the farm has not restricted access to vital resources without prior community approval.	Mowi have a Tenure in place and an agreement with the rightsholders within the area and as documented in 7.2.1. The agreement includes and ensures that Mowi does not restrict access to vital community resources No representatives made themselves available for the audit	Compliant		
Footnote	[135] Vital community resources can include freshwater, land or other natural resources that communities rely on for their livelihood. If a farm site were to block, for example, a community's sole access point to a needed freshwater resource, this would be unacceptable under the Dialogue standard.					
7.3.2	<b>Indicator:</b> Evidence of assessments of company's impact on access to resources <b>Requirement:</b> Yes <b>Applicability:</b> All	a. There is a documented assessment of the farm's impact upon access to resources. Can be completed as part of community consultations under 7.1.1. b. Be advised that representatives from the community may be interviewed to generally corroborate the accuracy of conclusions presented in 7.3.2a.	The CEAA report for the site includes consultation with rightsholders, local community and government. No representatives made themselves available for the audit.	Compliant		
INDICATORS AND STANDARDS FOR SMOLT PRODUCTION A farm seeking certification must have documentation from all of its smolt suppliers to demonstrate compliance with the following standards. The requirements are, in general, a subset of the standards in Principles 1 through 7, focusing on the impacts that are most relevant for smolt facilities. In addition, specific standards are applied to open systems (net pens), and to closed and semi-closed systems (recirculation and flow-through). [136]						
Footnote	[136] The SAD SC proposes this approach to addressing environmental and social performance during the smolt phase of production. In the medium term, the SC anticipates a system to audit smolt production facilities on site. In the meantime, farms will need to work with their smolt suppliers to generate the necessary documentation to demonstrate compliance with the standards. The documentation will be reviewed as part of the audit at the grow-out facility.					
SECTION B: STANDARDS FOR SUPPLIERS OF SMOLT						
Standards related to Principle 1						
Compliance Criteria (Required Client Actions):						
Auditor Evaluation (Required CAB Actions):						
8.1	<b>Indicator:</b> Compliance with local and national regulations on water use and discharge, specifically providing permits related to water quality <b>Requirement:</b> Yes <b>Applicability:</b> All Smolt Producers	a. Identify all of the farm's smolt suppliers. For each supplier, identify the type of smolt production system used (e.g. open, semi or closed systems) and submit this information to ASC (Appendix VI). b. Where legal authorisation related to water quality are required, obtain copies of smolt suppliers' permits. c. Obtain records from smolt suppliers showing monitoring and compliance with discharge laws, regulations, and permit requirements as required. -	The hatcheries involved for this site is Big tree Creek, Ocean Falls and Dalrymple . Ocean falls is a flow through farm discharging to the sea. The other two are re-circulation hatcheries. The hatcheries are all owned by Mowi.  The Aquaculture Licence numbers are AQPW 112572 2015 valid until June 18th 2024. Facility reference number 79. for Big Tree Creek. For Ocean falls facility number 1680, the Licence number is AQPW 112568 2015 Valid until Jun 18th 2024. For Dalrymple hatchery facility reference number 47 the Licence number is AQPW 112571 and valid until June 18th 2024.  Big tree Creek has been converted to re-circulation and are not compliant to the old flow through discharge licences. The site has just completed modernisation. All other hatcheries are starting updating their equipment to modernize treatments and effluents.  The licences are monitored by DFO for compliance.	Compliant		

8.2	<b>Indicator:</b> Compliance with labor laws and regulations	<b>a.</b> Obtain declarations from smolt suppliers affirming compliance with labor laws and regulations.	See principle 6 as the hatchery are owned by Mowi.	Compliant		
	<b>Requirement:</b> Yes <b>Applicability:</b> All Smolt Producers	<b>b.</b> Keep records of supplier inspections for compliance with national labor laws and codes (only if such inspections are legally required in the country of operations see 1.1.3a)	There has been no required inspections of the facility.			

Standards related to Principle 2						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
8.3	<b>Indicator:</b> 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 <b>Requirement:</b> Yes <b>Applicability:</b> All Smolt Producers	Note: If the smolt facility has previously undertaken an independent assessment of biodiversity impact (e.g. as part of the regulatory permitting process), the farm may obtain and use such documents as evidence to demonstrate compliance with indicator 8.3 as long as all components are covered.				
		a. Obtain from the smolt supplier(s) a documented assessment of the smolt site's potential impact on biodiversity and nearby ecosystems. The assessment must address all components outlined in Appendix I-3.	Biodiversity impact assessment for the hatcheries was drawn up in November 2014. There are a series of recommendations at the end of the report mainly to do with the effluent discharge and its effect. Dalrymple Hatchery: There is an addendum dated December 2018 and carried out by Mainstream biological consulting. The report covers upgrades to the hatchery and re-assesses the impacts covered in 2014.	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 hatcheries are owned by MOWI and they have confirmed implementing the assessment on potential impacts.			
8.4	<b>Indicator:</b> 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) <b>Requirement:</b> 4 kg/t of fish produced over a 12-month period <b>Applicability:</b> All Smolt Producers	<b>Instruction to Clients for Indicator 8.4 - Calculating Total Phosphorus Released per Ton of Fish Produced</b> Farms must confirm that each of their smolt suppliers complies with the requirement of indicator 8.4. This specifies the maximum amount of phosphorus that a smolt production facility can release into the environment per metric ton (mt) of fish produced over a 12-month period. The requirement is set at 4 kg/mt. The calculation of total phosphorus released is made using a "mass balance" approach. Detailed instructions and formulas are given in Appendix VII-1.  If applicable, farms may take account of any physical removals of phosphorus in the form of sludge provided there is evidence to show: - the smolt supplier has records showing the total quantity of sludge removed from site over the relevant time period; - the supplier determined phosphorus concentration (% P) in removed sludge by sampling and analyzing representative batches; and - the sludge was properly disposed off site and in accordance with the farm's biosolid management plan.				
		a. Obtain records from smolt suppliers showing amount and type of feeds used for smolt production during the past 12 months.	All Skretting feed has been used.	Compliant		For Big tree Creek for 2019 there was 2.98kg of phosphorus per ton of production. For Ocean falls is NA as the site discharges to the sea. For Dalrymple for 2019 there was 0.88kg of phosphorus per ton of production.
		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).	The Skretting feed is declared as 1.5 to 1.7% depending on the feed type.			
		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 Big tree Creek for 2019 there was 750.772 tons of feed For Ocean fall for 2019 there was 275.166 tons of feed. For Dalrymple for 2019 there was 519.847 tons feed.			
		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.	For Big tree Creek for 2019 there was 701.75 tons production. For Ocean fall for 2019 there was 303.091 tons of production. For Dalrymple for 2019 there was 595.826 tons of production.			
		e. Calculate the amount of phosphorus in fish biomass produced (result from 8.4d) using the formula in Appendix VIII-1.	There is a new Variance in place number 231 that allows Phosphorus to be calculated in the effluent water rather than the sludge. There is also a VR for Ocean falls number 92 as they are discharging to the marine environment. All the numbers were reviewed and results are below.			
		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.	For Big tree Creek for 2019 there was 2090.45kg of phosphorus in the effluent. For Ocean fall for 2018 is NA as they discharge to the sea. For Dalrymple for 2019 there was 523.28kg of phosphorus in the effluent.			
		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 Big tree Creek for 2019 there was 2.98kg of phosphorus per ton of production. For Ocean falls is NA as the site discharges to the sea. For Dalrymple for 2019 there was 0.88kg of phosphorus per ton of production.			
Standards related to Principle 3						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
8.5	<b>Indicator:</b> If a non-native species is being produced, the species shall have been widely commercially produced in the area prior to the publication of the ASC Salmon Standard <b>Requirement:</b> Yes [137] <b>Applicability:</b> All Smolt Producers except as noted in [137]	a. Obtain written evidence showing whether the smolt supplier produces a non-native species or not. If not, then Indicator 8.5 does not apply.	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 ASC Salmon Standard. (See definition of area under 3.2.1.)	The DFO website shows that introductions occurred in 1985 from Scotland. Evidence provided in the form of the information on the DFO website showing egg importations. www.dfo-mpo.gc.ca			
		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.	NA			
		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.	NA			
		e. Retain evidence as described in 8.5a-d necessary to show compliance of each facility supplying smolt to the farm.	NA			
Footnote	[137] Exceptions shall be made for production systems that use 100 percent sterile fish or systems that demonstrate separation from the wild by effective physical barriers that are in place and well-maintained to ensure no escapes of reared specimens or biological material that might survive and subsequently reproduce.					
8.6	<b>Indicator:</b> Maximum number of escapes [138] in the most recent production cycle <b>Requirement:</b> 300 fish [139] <b>Applicability:</b> All Smolt Producers except as noted in [139]	a. Obtain documentary evidence to show that smolt suppliers maintained monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapes.	There are no escapes reported. Two of the hatcheries are re-circulation.	Compliant		0
		b. Using smolt supplier records from 8.6a, determine the total number of fish that escaped. Verify that there were fewer than 300 escapes from the smolt production facility in the most recent production cycle.	The system on two of the hatcheries are a full re-circulation with grids and screens in place. All monitoring records are submitted to DFO who keep them indefinitely and are available on their website. The hatchery has to comply with reporting conditions with the PAR licence the same as the marine sites. There is a requirement of 3 screens to be in place on each of the hatcheries. All the hatcheries are BAP certified annually where escapes are also taken into account.			
		c. Inform smolt suppliers in writing that monitoring records described in 8.6a must be maintained for at least 10 years beginning with the production cycle for which the farm is first applying for certification (necessary for farms to be eligible to apply for the exception noted in [139]).	The hatcheries are all owned by Mowi.			
		d. If an escape episode occurs at the smolt production facility (i.e. an incident where > 300 fish escaped), the farm may request a rare exception to the Standard [139]. Requests must provide a full account of the episode and must document how the smolt producer could not have predicted the events that caused the escape episode.	NA			
Footnote	[138] Farms shall report all escapes; the total aggregated number of escapes per production cycle must be less than 300 fish.					
Footnote	[139] A rare exception to this standard may be made for an escape event that is clearly documented as being outside of the farm's control. Only one such exceptional episode is allowed in a 10-year period for the purposes of this standard. The 10-year period starts at the beginning of the production cycle for which the farm is applying for certification. The farmer must demonstrate that there was no reasonable way to predict the events that caused the episode. Extreme weather (e.g., 100-year storms) or accidents caused by farms located near high-traffic waterways are not intended to be covered under this exception.					
8.7	<b>Indicator:</b> Accuracy [140] of the counting technology or counting method used for calculating the number of fish <b>Requirement:</b> >98%	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, loading for transfer and then by the well boat into the pens. There is a new Smolt inventory control SOP for hatchery sites Document FW269.	Compliant		>98%

	Applicability: All Smolt Producers	B. Review records to verify that accuracy of the smolt supplier's counting technology or counting method is ≥ 98%.	EUL for the recent completed harvest show good accuracy for all the sites in production.			
Footnote	[140] Accuracy shall be determined by the spec sheet for counting machines and through common estimates of error for any hand counts.					



Standards related to Principle 4							
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):				
8.8	<b>Indicator:</b> Evidence of a functioning policy for proper and responsible treatment of non-biological waste from production (e.g., disposal and recycling) <b>Requirement:</b> Yes <b>Applicability:</b> 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 hatcheries are part of Mowi Canada. The feed bags, pallets and plastic are all sent back to the feed company. There is a waste management plan in place for MOWI. The policy also covers the sea. S/PW963. There is a declaration on Environmental and biodiversity policy and signed by the Managing director of MOWI stating that there is a commitment to environmental certification programs such as ASC.	Compliant			
8.9	<b>Indicator:</b> 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) <b>Requirement:</b> Yes, measured in kilojoule/mt fish/production cycle <b>Applicability:</b> All Smolt Producers	Note: see instructions for indicator 4.6.1.			Compliant	Big Tree Creek 46,535,024 kJ/m production Ocean Falls 10,397,698 kJ/mt production Dairymple 45,226,562 kJ/mt production	
		a. Obtain records from the smolt supplier for energy consumption by source (fuel, electricity) at the supplier's facility throughout each year.	Records are in place showing electricity and fuel consumption.				
		b. Confirm that the smolt supplier calculates total energy consumption in kilojoules (kJ) during the last year.	These calculations are in place. Bigtree Creek 32,655,953,162 kJ Ocean falls 3,151,448,570 kJ Dairymple 26,947,161,531 kJ				
		c. Obtain records to show the smolt supplier calculated the total weight of fish in metric tons (mt) produced during the last year.	Big Tree Creek 701 tons Ocean Falls 303.09 tons Dairymple 595.83 tons				
		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.	Big Tree Creek 46,535,024 kJ/mt production Ocean Falls 10,397,698 kJ/mt production Dairymple 45,226,562 kJ/mt production				
		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.	Declaration and evidence provided.				
8.10	<b>Indicator:</b> Records of greenhouse gas (GHG [141]) emissions [142] at the smolt production facility and evidence of an annual GHG assessment (See Appendix V, subsection 1) <b>Requirement:</b> Yes <b>Applicability:</b> All Smolt Producers	Note: see instructions for indicator 4.6.2.			Compliant	Big Tree Creek 5,943,704 kg/CO2eq Ocean Falls 1,416,087 kg/CO2eq Dairymple 5,004,790 kg/CO2eq	
		a. Obtain records of greenhouse gas emissions from the smolt supplier's facility.	Records derived from 8.9 and provided to auditor.				
		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.	They are calculated as per the requirement annually.				
		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.	Same emission factors as used by the Marine farms from 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.	Warning potential is also from DEFRA.				
		e. Obtain evidence to show that the smolt supplier has undergone a GHG assessment in compliance with requirements Appendix V-1 at least annually.	Big Tree Creek 5,943,704 kg/CO2eq Ocean Falls 1,416,087 kg/CO2eq Dairymple 5,004,790 kg/CO2eq				
Footnote	[141] For the purposes of this standard, GHGs are defined as the six gases listed in the Kyoto Protocol: carbon dioxide (CO <sub>2</sub> ); methane (CH <sub>4</sub> ); nitrous oxide (N <sub>2</sub> O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF <sub>6</sub> ).						
Footnote	[142] GHG emissions must be recorded using recognized methods, standards and records as outlined in Appendix V.						
Standards related to Principle 5							
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):				
8.11	<b>Indicator:</b> Evidence of a fish health management plan, approved by the designated veterinarian, for the identification and monitoring of fish diseases and parasites <b>Requirement:</b> Yes <b>Applicability:</b> All Smolt Producers	a. Obtain a copy of the supplier's fish health management plan for the identification and monitoring of fish disease and parasites.	The fish health management plan is the same as the FHMP used on the seawater sites for MOWI. The veterinarian Diane Morrison covers all the MOWI operations.	Compliant			
		b. Keep documentary evidence to show that the smolt supplier's health plans were approved by the supplier's designated veterinarian.	The internal veterinarian covers all the MOWI operations.				
8.12	<b>Indicator:</b> Percentage of fish that are vaccinated for selected diseases that are known to present a significant risk in the region and for which an effective vaccine exists [143] <b>Requirement:</b> 100% <b>Applicability:</b> 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.	Vaccinating for viruses is not compulsory in Canada, but the three companies in the BC area have agreed to vaccinate as part of the regional management plan. The fish health plan has a detailed list of all diseases in the area.	Compliant		100%	
		b. Maintain a list of diseases for which effective vaccines exist for the region, developed by the farm veterinarian and supported by scientific evidence.	All smolts at this hatchery were vaccinated against IHN, Furunculosis, BKD and Vibrio.				
		c. Obtain from the smolt supplier(s) a declaration detailing the vaccines the fish received.	All fish are vaccinated with Alphaject 5-3, Renogen, Emergen dip and Apex IHN. Vaccines trials can also be carried out.				
		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.	The product CV lists the fish vaccinations. All vaccines are approved by DFO.				
Footnote	[143] The farm's designated veterinarian is responsible for undertaking and providing written documentation of the analysis of the diseases that pose a risk in the region and the vaccines that are effective. The veterinarian shall determine which vaccinations to use and demonstrate to the auditor that this decision is consistent with the analysis.						
8.13	<b>Indicator:</b> Percentage of smolt groups [144] tested for select diseases of regional concern prior to entering the grow-out phase on farm <b>Requirement:</b> 100% <b>Applicability:</b> All Smolt Producers	<b>Instruction to Clients for Indicator 8.13- Testing of Smolt for Select Diseases</b>  The farm is responsible for developing and maintaining a list of diseases of regional concern for which each smolt group should be tested. The list of diseases shall include diseases that originate in freshwater and are proven or suspected to occur in seawater (and for which seawater fish-to-fish transmission is a concern).  The designated veterinarian <u>to the smolt supplier</u> is required to evaluate, based on scientific criteria and publicly available information, which diseases should be tested for. This analysis shall include an evaluation of whether clinical disease or a pathogen carrier state in fresh water is deemed to have a negative impact on the grow-out phase, thereby disqualifying a smolt group from being transferred. The analysis must be available to the CAB upon request.  Note: A "smolt group" is defined as a population that shares disease risk, including environment, husbandry, and host factors that might contribute to sharing disease agents for each group.			Compliant		100%
		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.	Prior to transfer, smolts are tested for diseases such as VHS, BKD, IPN, ISA and bacterial diseases.				
		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).	The hatchery is owned by Mowi so no declaration is needed.				
Footnote	[144] A smolt group is any population that shares disease risk, including environment, husbandry and host factors that might contribute to sharing disease agents for each group. Only diseases that are proven, or suspected, as occurring in seawater (and for which seawater fish-to-fish transmission is a concern) but originating in freshwater should be on the list of diseases tested. The designated veterinarian to the smolt farm is required to evaluate, based on scientific criteria and publicly available information, which diseases should be tested for. This analysis shall include an evaluation of whether clinical disease or a pathogen carrier state in fresh water is deemed to have a negative impact on the grow-out phase, thereby disqualifying a smolt group from being transferred. A written analysis must be available to the certifier on demand.						

8.14	<p><b>Indicator:</b> 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</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>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:</p> <ul style="list-style-type: none"><li>- name of the veterinarian prescribing treatment;</li><li>- product name and chemical name;</li><li>- reason for use (specific disease)</li><li>- date(s) of treatment;</li><li>- amount (g) of product used;</li><li>- dosage;</li><li>- mt of fish treated;</li><li>- the WHO classification of antibiotics (also see note under 5.2.8); and</li><li>- the supplier of the chemical or therapeutant.</li></ul>	<p>No antibiotics have been used in 2019 in any hatchery. Incoming water is disinfected with Ozone. All other chemical or therapeutant use is recorded on AquaFarmer for example MS222 used for anesthetizing fish. Formalin used to treat Fungus.</p>	Compliant		
8.15	<p><b>Indicator:</b> Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [145] in any of the primary salmon producing or importing countries [146]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Provide to the smolt supplier the list (see 5.2.2a) of therapeutants, including antibiotics and chemicals, that are proactively banned for use in food fish for the primary salmon producing and importing countries listed in [146].</p> <p>b. Inform smolt supplier that the treatments on the list cannot be used on fish sold to a farm with ASC certification.</p> <p>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.</p>	<p>Mowi ASA has an extensive list of countries and their allowable and unallowable contaminants, drugs and microbiology and statutory limits for fish for all these growing areas. This database is updated when a country changes its limits by anybody in the Mowi organisation that has the current information. Every possible worldwide therapeutant is listed. Mowi Canada also have a medicine positive list showing drugs allowable however in the case of Trifloris even though its allowed MOWI no longer uses it for the US market. Even though there is a positive list, it does not mean that the treatments are used. The list is maintained by the food safety officer within the fish health group.</p> <p>The hatchery is owned by Mowi so they are aware of ASC requirements.</p> <p>None were used.</p>	Compliant		
Footnote	[145] "Banned" means proactively prohibited by a government entity because of concerns around the substance.					
Footnote	[146] For purposes of this standard, those countries are Norway, the UK, Canada, Chile, the United States, Japan and France.					
8.16	<p><b>Indicator:</b> Number of treatments of antibiotics over the most recent production cycle</p> <p><b>Requirement:</b> ≤ 3</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Obtain from the smolt supplier records of all treatments of antibiotics (see 8.14a).</p> <p>b. Calculate the total number of treatments of antibiotics from their most recent production cycle.</p>	<p>There have been none.</p> <p>None.</p>	Compliant		0
8.17	<p><b>Indicator:</b> Allowance for use of antibiotics listed as critically important for human medicine by the WHO [147]</p> <p><b>Requirement:</b> None [148]</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Provide to smolt supplier(s) a current version of the WHO list of antimicrobials critically and highly important for human health [147].</p> <p>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.</p> <p>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.</p>	<p>None used.</p> <p>None</p> <p>None</p>	Compliant		
Footnote	[147] The 3rd edition of the WHO list of critically and highly important antimicrobials was released in 2009 and is available at: <a href="http://www.who.int/foodborne_disease/resistance/CIA_3.pdf">http://www.who.int/foodborne_disease/resistance/CIA_3.pdf</a> .					
Footnote	[148] If the antibiotic treatment is applied to only a portion of the pens on a farm site, fish from pens that did not receive treatment are still eligible for certification.					
8.18	<p><b>Indicator:</b> Evidence of compliance [149] with the OIE Aquatic Animal Health Code [150]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>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).</p> <p>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.</p> <p>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.</p>	<p>A copy of the OIE code is available to all staff through the 'SharePoint'. The appendix 1 in the Fish Health plan includes a link for OIE and refers to the Code.</p> <p>The hatchery is owned by Mowi so they are aware of ASC requirements.</p> <p>Mowi comply with the OIE codes as described earlier in the report.</p>	Compliant		
Footnote	[149] Compliance is defined as farm practices consistent with the intentions of the Code, to be further outlined in auditing guidance. For purposes of this standard, this includes an aggressive response to detection of an exotic OIE-notifiable disease on the farm, which includes depopulating the infected site and implementation of quarantine zones in accordance with guidelines from OIE for the specific pathogen. Exotic signifies not previously found in the area or had been fully eradicated (area declared free of the pathogen).					
Footnote	[150] OIE 2011. Aquatic Animal Health Code. <a href="http://www.oie.int/index.php?id=171">http://www.oie.int/index.php?id=171</a> .					
Standards related to Principle 6						
8.19	<p><b>Indicator:</b> Evidence of company-level policies and procedures in line with the labor standards under 6.1 to 6.11</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Obtain copies of smolt supplier's company-level policies and procedures and a declaration of compliance with the labor standards under 6.1 to 6.11.</p> <p>b. Review the documentation and declaration from 8.19a to verify that smolt supplier's policies and procedures are in compliance with the requirements of labor standards under 6.1 to 6.11.</p>	<p>The same policies apply as detailed in Principle 6 as it is the same company.</p> <p>See principle 6 as the hatchery are owned by Mowi.</p>	Compliant		
Standards related to Principle 7						
8.20	<p><b>Indicator:</b> Evidence of regular consultation and engagement with community representatives and organizations</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>Farms must comply with Indicator 7.1.1 which requires that farms engage in regular consultation and engagement with community representatives and organizations. Under indicator 8.20, farms must show how each of their smolt suppliers complies with an equivalent requirement. Farms are obligated to maintain evidence that is sufficient to show their suppliers remain in full compliance. Evidence shall be documentary (e.g. meeting agenda, minutes, report) and will substantiate the following:</p> <ul style="list-style-type: none"><li>- the smolt supplier engaged in "regular" consultations with the local community at least twice every year (bi-annually);</li><li>- the supplier's consultations were effective (e.g. using participatory Social Impact Assessment (pSIA) or similar methods); and</li><li>- the supplier's consultations included participation by elected representatives from the local community who were asked to contribute to the agenda.</li></ul> <p>a. From each smolt supplier obtain documentary evidence of consultations and engagement with the community.</p> <p>b. Review documentation from 8.20a to verify that the smolt supplier's consultations and community engagement complied with requirements.</p>	<p>Meetings dated July 24th 2019 with the Sayward council (Big Tree and Dalrymple). The meeting included the Mayor and full council dated November 5th 2019. There was also an ASC invite letter to the City of Campbell river Council on the same date. There was a meeting on January 15th 2020. There was a letter sent out to CORD The Central Coast regional district dated 24th July 2019 and received no replies. Letter was an update on activities and included an invite to meet.</p> <p>Documents show the questions are recorded and follows ups are done if required when no immediate answers are available. Community consultation document dated Jan 14th 2020.</p>	Compliant		
8.21	<p><b>Indicator:</b> Evidence of a policy for the presentation, treatment and resolution of complaints by community stakeholders and organizations</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Obtain a copy of the smolt supplier's policy for presentation, treatment and resolution of complaints by community stakeholders and organizations.</p>	<p>Mowi own the facility See P7</p>	Compliant		
	<p><b>Indicator:</b> Where relevant, evidence that indigenous groups were consulted as required by relevant local and/or national laws and regulations</p>	<p>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.</p>	<p>Mowi own the facility See P7. The company has an indigenous relations department and where MOWI activities occur then all bands are consulted. MOWI have provided the bands contacts as part of the stakeholder contact information for these audits.</p>			

8.22	<b>Requirement:</b> Yes <b>Applicability:</b> 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.	Mowi own the facility See P7	Compliant		
8.23	<b>Indicator:</b> Where relevant, evidence that the farm has undertaken proactive consultation with indigenous communities <b>Requirement:</b> Yes <b>Applicability:</b> All Smolt Producers	a. See results of 8.22a (above) to determine whether the requirements of 8.23 apply to the smolt supplier. b. Where relevant, obtain documentary evidence that smolt suppliers undertake proactive consultations with indigenous communities.	Mowi own the facility See P7. The company has an indigenous relations department and where MOWI activities occur then all bands are consulted. MOWI have provided the bands contacts as part of the stakeholder contact information for these audits. Mowi own the facility See P7	Compliant		
<b>ADDITIONAL REQUIREMENTS FOR OPEN (NET-PEN) PRODUCTION OF SMOLT</b> In addition to the requirements above, if the smolt is produced in an open system, evidence shall be provided that the following are met:						
8.25	<b>Indicator:</b> Allowance for stocking smolts produced in cage-culture <b>Requirement:</b> Permitted only if supplying farms are 1) operated in a region where indigenous salmonids are present of the same species being cultivated and 2) the farm is certified to the ASC Freshwater trout Standard <b>Applicability:</b> open (net-pen) production of smolt	No guidance available yet	Land based site.	N/A	Land based site.	
8.26	<b>Indicator:</b> Water quality monitoring matrix completed and submitted to ASC (see Appendix VIII-2) <b>Requirement:</b> Yes <b>Applicability:</b> open (net-pen) production of smolt	No guidance available yet	Land based site.	N/A	Land based site.	
<b>ADDITIONAL REQUIREMENTS FOR SEMI-CLOSED AND CLOSED PRODUCTION OF SMOLTS</b> Additionally, if the smolt is produced in a closed or semi-closed system (flow through or recirculation) that discharges into freshwater, evidence shall be provided that the following are met [157]:						
8.27	<b>Indicator:</b> Minimum oxygen saturation in the outflow (methodology in Appendix VIII-2) <b>Requirement:</b> 60% [156, 157] <b>Applicability:</b> All Smolt Producers Using Semi-Closed or Closed Production Systems	a. Obtain the water quality monitoring matrix from each smolt supplier (see 8.32b). b. Review the results (8.33a) for percentage dissolved oxygen saturation in the effluent to confirm that no measurements fell below 60% saturation. c. If a single DO reading (as reported in 8.33a) fell below 60%, obtain evidence that the smolt supplier performed daily continuous monitoring with an electronic probe and recorder for a least a week demonstrating a minimum 60% saturation at all times (Appendix VIII-2).	Matrix in place and supplied to ASC as part of Transparency. All the hatcheries are above 60% for Oxygen at outflow for 2019. Lowest at Bigtree creek was 77%. The readings were above 60%.	Compliant		>60%
Footnote	[156] A single oxygen reading below 60 percent would require daily continuous monitoring with an electronic probe and recorder for at least a week demonstrating a minimum 60 percent saturation at all times.					
Footnote	[157] See Appendix VI for transparency requirements for 8.33.					
8.28	<b>Indicator:</b> 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) <b>Requirement:</b> Yes <b>Applicability:</b> All Smolt Producers Using Semi-Closed or Closed Production Systems	a. Obtain documentation from smolt supplier(s) showing the results of macro-invertebrate surveys. b. Review supplier documents (8.34a) to confirm that the surveys followed the prescribed methodology (Appendix VIII-3). c. Review supplier documents (8.34a) to confirm the survey results show that benthic health is similar to or better than upstream of the supplier's discharge.	For Big Tree report dated December 2018 is based on samples taken by Mainstream biological and was analysed and written up by Biologica based in Victoria and is due a new report in 2020 as its been doing so well in previous reports. For Dalrymple report dated July 2019 is based on samples taken by Mainstream biological and was analysed and written up by Biologica based in Victoria. The hatchery was rebuilding and re-structured in 2019 and the facility now has primary treatment in place and is looking at secondary treatment. Mainstream Biological follow the Appendix as specified to them by Mowi. For the Dalrymple hatchery, the Macro invertebrate report states that water quality is fair downstream compared to good or very good upstream of the hatchery.	Compliant		
8.29	<b>Indicator:</b> Evidence of implementation of biosolids (sludge) Best Management Practices (BMPs) (Appendix VIII-4) <b>Requirement:</b> Yes <b>Applicability:</b> All Smolt Producers Using Semi-Closed or Closed Production Systems	a. Maintain a copy of smolt supplier's biosolids (sludge) management plan and confirm that the plan addresses all requirements in Appendix VIII-2. b. Obtain from smolt suppliers a process flow diagram (detailed in Appendix VIII-2) showing how the farm is dealing with biosolids responsibly. c. Obtain a declaration from smolt supplier stating that no biosolids were discharged into natural water bodies in the past 12 months. d. Obtain records from smolt suppliers showing monitoring of biosolid (sludge) cleaning maintenance, and disposal as described in Appendix VIII-2.	Bio-sludge management plan in place as part of the ASC requirements. Last revised February 2020. Big tree creek has 6 collection tanks that can hold 2500 litre each. Removal frequency is 1-2 times per year. Dalrymple has 2 linked tanks with a capacity of 28,000 litres each and emptied as production requires. Flow diagrams for the hatcheries were provided. Mowi confirm that sludge is removed. Hatcheries remove sludge to Renewable resources. Invoice number 825 dated March 6th 2019.	Compliant		

NC reference	Indicator	Grade of NC	Description of NC	Evidence	Date of detection	Status	Related VR (P)	Root cause (by client)	Corrective / preventive actions proposed by UoC and accepted by CAB	Deadline for NC close-out	Evaluation by CAB (including evidence)	Actual date of close-out	Date request for delay received	Justification for delay	Next deadline	Request evaluation by CAB	Date request approved
1	3.4.3	Minor	The EUL number submitted to ASC for the 2017 year class, in the transparency, is not the same as posted on the Mowi Dashboard.	Mortalities are recorded along with stocking counts, harvest and escapes in the Aquafarmer system.	16/10/2020	Closed	NA	Human error/typo	Re-sent to ASC	16/1/2021 or by approved plan	Evidence supplied showing transparency sent to ASC on the 19/10/2020. Finding closed PC 20/11/2020	20.11.20	NA	NA	NA	NA	NA
2	5.1.1	Minor	The current Fish health management plan has not been approved by the current company Veterinarian.	It's a condition of licence (point 4.1) to submit a fish health plan annually. This was done and the reviewed fish health plan was submitted to DFO at the end of 2019. The 2019 version was approved by the head of the fish health team within MOWI. A new Veterinarian is now in place within the company but the current Fish health management plan has not been approved by her.	16/10/2020	Closed	NA	current vet not on staff during annual update	FHMP updated and approved by current vet	16/1/2021 or by approved plan	Email from current company Veterinarian accepting current FHMP. Finding closed PC 20/11/2020	20.11.20	NA	NA	NA	NA	NA