



# Aquaculture Stewardship Council Audit Report for Farms Salmon

## Lerøy Aurora AS

Date:	8. - 10. oct. 2013	By:	BUREAU VERITAS Certification - Denmark - oldenborggade 2, 7000 Fredericia
CLIENT :	Lerøy Aurora		ASSESSORS TEAM : Sølvi Skare, ASC Lead Auditor, Irene Watten, ASC Auditor, Stine Josefson, LA SA 8000
MAIN CONTACT (Audited person):	Gudrun Gunnarsdottir		
REPORT REFERENCE :	ASC	REPORT WRITING DATE :	09.10.2013 - 11.12.2013
LEAD ASSESSOR :	Sølvi Skare	REPORT REVIEWING DATE :	
ASSESSMENT / MISSION	INITIAL		X
	SURVEILLANCE		
	COMPLEMENTARY /SUPPLEMENTARY		

### 1. Summary:

The audit report shows the results from the first ASC Salmon Standard audit of Lerøy Aurora, on Årøya seafarm in Lyngenfjorden. The audit was performed in three days. The first audit day was performed onsite on the seafarm with interviews of all the employees. It was focused on social responsibility, review of documentation, processes and handling of equipment. The interviews of the employees were performed on the vessel belonging to the seafarm, one by one. We wanted to be sure that the employees could talk with us without being disturbed. Day two and three of the audit was performed in the head office for Lerøy Aurora in Tromsø, since it was much easier to get the necessary documentation and competence there. The results of the audit are 13 major non-conformities and 26 minor non-conformities. They are documented and described in the non-conformity report

### 2. Background on the Applicant Farm:

Årøya seafarm, licence number 10735 is an ongrowing farm for Atlantic Salmon from smolt and until the salmon is ready for slaughtering. The farm is located in Lyngenfjorden in Lyngen Community in Troms County. See [www.Fiskeridirektoratet.no/akvakulturregisteret](http://www.Fiskeridirektoratet.no/akvakulturregisteret) .

### 3. Scope:

STANDARD	ASC Salmon Standard Version 1.0 - June 2012
Activity & scope of the audit:	Activities at Årøya seafarm location is farming of salmon from smolt to harvest in circular cages in sea. Control of the fish as well as feeding, is managed from a station, close to the cages. The plant has a land base containing office and storage, where employees are changing clothes before entering the station. The location has a MTB (Maximal Allowed Biomass) of 3600 tons salmon.
Species :	Atlantic Salmon (Salmo Salar)
Description of receiving water body :	The site is placed in Lyngenfjorden, as the one seafarm is this fjord. The nearest other seafarm also belongs to Lerøy Aurora and is placed in Kåfjorden. there are naturally wild salmon pieces in an area 75 km, like Reisavassdraget and Målselvvassdraget in Troms County.

**4. Audit Plan:**

Desk reviews and other activities undertaken before or after any site visits.

Documentation review in oct 2013

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

Sites of the Company concerned by the ASC. <b>For each site show:</b>	Name of site :	Årøya
	Adress :	Strandveien 106, 9006 Tromsø, Norway
	Contact :	Gudrun Gunnarsdottir
	Names and affiliations of individuals consulted or otherwise involved in the audit (representatives of the client, employees, contractors, stakeholders and any observers that participated in the audit):	Renate Larsen: CEO Lerøy Aurora, Gudrun Gunnarsdottir: Quality Coordinator, Hugo Nilsen: Resp. Production, Hans Otto Larsen: Site manager, Rune Berglund: Operator, Olav Skille: Operator deputy, Steinar Westgaard: Operator, Håvard Hårstad: Fish health Manager, Erik Monsen: Responsible Fiskehelth, Roy Tore Rikhardsen: Production Manager.
	Date & Duration of the visit :	The audit on the site Årøya: 08.10.2013, Audit and document review in the head office of Lerøy Aurora: 09.10.2013, Audit and document review of smolt supplier: 10.10.2013

**Previous Audits (if applicable):**

No ASC audit is performed in this site or in any other sites belonging to Lerøy Aurora.

**5. Findings**

	PREVIOUS ASSESSMENTS REVIEW			CURRENT ASSESSMENT CONCLUSION		
	Number	NON-CONFORMANCES REFERENCES	Open/closed	Number	NON-CONFORMANCES REFERENCES	Open /closed
Observations	NA	NA	NA	-		
Minor NC	NA	NA	NA	26		closed
Major NC	NA	NA	NA	13		closed
Summary of Conditions :						

**6. Evaluation Results:**

Lerøy Aurora has a robust and well implemented quality system, which cover the whole organization from smolt to finished slaughtered fish. The company is certified for GlobalGAP in the whole chain of custody. The audit was performed at Årøya farm and Lerøy Aurora head office in Tromsø. Laksefjord smolt farm was not visit during audit. Lerøy Aurora is a company showing enthusiasm towards their employees, concerning health, environment and safety, social requirements and Norwegian laws. There was not during audit, found non-conformities regarding industrial accidents. The farm is managed with actual documentations and employees are well trained in internal procedures. There is a high level in the whole company to achieve knowledge and continuous education of employees. During interview of employees was found that the work with ASC standard was met with a favorable reception. The actual pre-audit data was available before audit, as well as all documents and quality system was available for auditors.

**7. Non-conformity Report(s)***Please see non-conformity reports attached*

**8. Determination of the start of the CoC**

It will be necessary with COC certification from the point where the direct control of the fish is changed. This happens when the fish is moved from the wellboat and are pumped into the waiting cages. The fish will at that time be covered by the COC - ASC Salmon Standard for the slaughterhouse. The fish is held in the waiting cages for 1 - 2 days. Then it will be pumped into the slaughterhouse sedated and bled before it is graded and further processed or directly packed. These operations are performed in the slaughterhouse belonging to Lerøy Aurora on Skjervøy.

**Determination of the eligibility of aquaculture products to enter further Chains of Custody and the points at which they can enter**

Evaluation of the system of tracking, tracing and segregation in the aquaculture operation is sufficient to make sure all aquaculture products identified and sold as certified by the operation originate from the unit of certification certified

Item	Risk Level			comments of the auditor and evidences
	Low risk	Medium risk	high risk	
1. The tracking, tracing and segregation systems in use	x			Lerøy Aurora is certified for Globalgap
2. The opportunity of substitution of certified with non-certified product prior to and at harvesting	x			Low risk for substitution
3. The possibility of introducing product from outside the unit of certification		x		Slaughtering of salmon who comes from some of the externally smolt producers
4. The robustness of the applicant or certificate holders' management system	x			Robust management system
5. Any transshipment activities taking place	x			The wellboat is subcontracted - hired for only L.Aurora
6. Any subcontracted post-harvest handling or processing	x			There are slaughtered fish from only one waiting cage at a time

Advice of the auditor	YES	NO	JUSTIFICATION
the systems are sufficient, aquaculture products from the operation may enter into further certified chains of custody and be eligible to carry the ASC label.	X		
<i>Describe points of change of ownership after which chain of custody certification is needed</i>	From the point where the fish is landed into the waiting cage belonging to the slaughterhouse there is a change. That makes it necessary with a COC certification for the slaughterhouse belonging to Lerøy Aurora		

**Confidential data for commercially sensitive information**

*This report do not contain confidential annexes for commercially sensitive information.  
Bureau Veritas had been agree the content of commercially sensitive information with the applicant.*

**Signature - Approval**

Signature of the client	
Signature of the auditor	

**CERTIFICATION DECISION**

Certification status of the applicant:	BUREAU VERITAS CERTIFICATION determines that all the requirements of the standard are sufficiently met and has certified LEROY AURORA SITE OF AROYA. A certificate has been issued for the scope specified in the section "scope" above in the report . Any outstanding non-conformities and their status are listed in the section "Findings" above in the report
Date of issuing of Certificate:	Date of issuing will be the date where BVC will obtain the accreditation for ASC salmon standard
Date of expiring:	Date of issuing will be three years from the date where BVC will obtain the accreditation for ASC salmon standard
Scope of the certificate:	Aquaculture operations for salmon
List of all outstanding non-conformities:	All major and minor non-conformities raised on 08 october 2013 were closed by 08 Januar 2014



## A.S.C. NON-CONFORMITY REPORT

13 26

Non Conformity No.	CLAUSE	DESCRIPTION OF THE NON CONFORMITY:	ROOT CAUSE	CORRECTIVE ACTION REPORT	ACCEPTED	Major	Minor
1	2.1.1 E	Results to verify that redox potential of sediments complies with the requirement at each sampling station outside the AZE are not finished at audit	The analyse requisition for the environmental test was sent too late to be finished at audit	Results from environmental test were finished 9. December 2013. The results from Redox potential were lower than ASC requirement. The test contractor is asked to compare results from redox and sulphide test at next testing. The fish will be slaughtered from Årøya in May and site moved according to application to different bottom and stream condition. This clause is already treated in ASC certification connection, but an approval for certification based on not fulfilled requirements, will not necessarily be the result at next surveillance audit	08/01/2014	1	
2	2.1.1 G	Results are not submitted to ASC	The results were not finished to be sent to ASC at audit	Results are submitted to ASC 18. December 2013	08/01/2014		1
3	2.1.2 E	Results to verify that Shannon Wiener score of sediments is > 3 at each sampling station outside the AZE is not finished at audit	The analyse requisition for the environmental test was sent too late to be finished at audit	Results from environmental test were finished 9. December 2013. The results from Shannon Wiener were lower than ASC requirement for 75 % of samples. The test contractor is asked to compare results from the other possible methods at next testing. The fish will be slaughtered from Årøya in May and site moved according to application to different bottom and stream condition. This clause is already treated in ASC certification connection, but an approval for certification based on not fulfilled requirements, will not necessarily be the result at next surveillance audit	08/01/2014	1	
4	2.1.2 H	Documentary evidence to show how scores were obtained, was not finished at audit	The analyse requisition for the environmental test was sent too late to be finished at audit	Results Shannon-Wiener test was finished 9. December 2013, description of method documented, in accordance with ASC requirement	08/01/2014	1	
5	2.1.2 I	Results are not submitted to ASC	The results were not finished to be sent to ASC at audit	Results are submitted to ASC 18. December 2013	08/01/2014		1

6	2.1.3 B	Sediment samples taken within the AZE, for determination of abundance and taxonomic composition of macro fauna was not finished at audit	The analyse requisition for the environmental test was sent too late to be finished at audi	Results for determination of abundance and taxonomic composition of macro fauna was finished 9. December 2013, description of method documented, in accordance with ASC requirement	08/01/2014	1	
8	2.1.3 D	Documentary evidence to show how taxa were identified and how counts were obtained was not finished at audit	The analyse requisition for the environmental test was sent too late to be finished at audit	Results of how taxa were identified and how counts were obtained, was finished 9. December 2013, description of method documented, in accordance with ASC requirement	08/01/2014	1	
9	2.1.3 E	Results are not submitted to ASC	The results were not finished to be sent to ASC at audit	Results are submitted to ASC 18. December 2013	08/01/2014		1
7	2.1.3.C	Analyse of highly abundant taxa an pollution indicator species was not finished at audit	The analyse requisition for the environmental test was sent too late to be finished at audit	The results from highly abundant taxa and pollution indication species was finished 13. December 2013, results from all samples was classified to fulfill requirement from ASC	08/01/2014	1	
10	2.4.2 B	There is not a declaration from the farm stating that the farm is not sited in a protected area or HCVA	Statement was not ready at audit	Statement has been forwarded CB	08/01/2014		1
11	2.5.1 A	A written statement affirming that the farm's management is committed to eliminate all usage of acoustic deterrent devices (ADDs) or acoustic harassment devices (AHDs) by June 13, 2015 is not present	Statement was not ready at audit	Statement has been forwarded CB	08/01/2014		1
13	4.1.1 C	For the feed producer used by the farm, it is not confirmed that an audit of the producer was recently done by an audit firm or CAB against an ASC-acknowledged certification scheme, there is a copy of the most recent audit report for each feed producer.	The client has not understood the requirement to be an audit rapport, but a certificate	Parts of audit rapport from feed supplier has been forwarded to CB	08/01/2014	1	
14	4.1.1 F	There are no audit results (rapports) at site	The client has not understood the requirement to be an audit rapport, but a certificate	Parts of audit rapport from feed supplier has been forwarded to CB	08/01/2014	1	
15	4.3.1 A	There is not a policy from client to support responsible feed sourcing	Statement was not ready at audit	Policy form client to support responsible feed sourcing has been forwarded to CB	08/01/2014	1	
16	4.3.1 B	There is not a letter of intent to source feed containing fishmeal and fish oil originating from fisheries certified under the type of certification scheme noted in 4.3.1a	Statement was not ready at audit	Intent to responsible feed sourcing has been documented from contracts with feed companies	08/01/2014	1	
17	4.3.2 B	Fish source score for deliveries to Årøya seafarm, is recorded, for Sandeel and Sprat one or more score <6, no recording of biomass score for pilchard, Mexico, Sandeel and Sprat	Fish source score has not been focused at deliveries before ASC plan, results in small deviations from actual feed deliveries	Fish source score for all feed to be used at Årøya Farm, will be in accordance to ASC requirements, plan has been forwarded to CB	08/01/2014		1

18	4.3.3 A	There is not a rapport from third party traceability program to show compliance with 4.3.2	The client has not understood the requirement to be an audit rapport, but a certificate	Traceability tests from feed suppliers has been forwarded, shows compliance with 4.3.2	08/01/2014		1
19	4.3.3 B	There is a list of species used, but not a demonstration of third party chain-of-custody in place for the species used	The client has not understood the requirement to be an audit rapport, but a certificate	Traceability for species used, demonstration from third party has been forwarded CB	08/01/2014		1
20	4.4.1 B	There is not a sourcing policy in place from feed producer	Statement was not ready at audit	Sourcing policy from feed producers has been forwarded to CB	08/01/2014	1	
21	4.4.1 C	There is not a third party audit of feed suppliers showing evidence that supplier's responsible sourcing policies are implemented.	Statement was not ready at audit	Third party audit of feed suppliers including responsible sourcing policies, has been forwarded to CB	08/01/2014		1
22	4.4.2 A	There is not a policy from client to support responsible sourcing of soya	Statement was not ready at audit	Policy form client to support responsible sourcing of soya has been forwarded to CB	08/01/2014	1	
23	4.4.2 B	There is not a letter of intent to source feed containing soya certified under the RTRS (or equivalent)	Statement was not ready at audit	Intent to source feed containing soya certified under the RTRS has been documented from contracts with feed companies	08/01/2014	1	
24	4.4.2 C	Feed suppliers are not notified of the farm's intent (4.4.2b)	Statement was not ready at audit	Feed suppliers are notified on the farms intent	08/01/2014		1
25	4.6.2 A	Records of greenhouse gas emissions on the farm has not been done for methane (CH4); nitrous oxide (N2O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF6).	The calculations from CO2 was not ready at audit	The gas emissions from the greenhouse gasses, has been calculated as CO2 equivalents and forwarded to CB	08/01/2014		1
26	4.6.2 B	The calculation of CO2 have been done from July 2012 to date of audit - but not for other GHG	The calculations from CO2 was not ready at audit	The gas emissions from the greenhouse gasses, has been calculated as CO2 equivalents and forwarded to CB	08/01/2014		1
27	4.6.2 C	Farm has maintained records for CO2 emission, based on use of diesel, oil and gas - but not for other GHG	The calculations from CO2 was not ready at audit	The gas emissions from the greenhouse gasses, has been calculated as CO2 equivalents and forwarded to CB	08/01/2014		1
28	4.6.2 D	Farm has maintained records for CO2 emission, based on use of diesel, oil and gas - but not for other GHG	The calculations from CO2 was not ready at audit	The gas emissions from the greenhouse gasses, has been calculated as CO2 equivalents and forwarded to CB	08/01/2014		1
29	4.6.2 F	GHG assesments has been shown for CO2 annually, but not for other GHG	The calculations from CO2 was not ready at audit	The gas emissions from the greenhouse gasses, has been calculated as CO2 equivalents and forwarded to CB	08/01/2014		1
30	4.7.3 B	Sediment sampled for copper analyze as described, has been sent for analyse, results are not finished	The analyse requisition for the environmental test was sent too late to be finished at audit	Analyses from copper analyses were finished 9. December 2013, all results fulfilled requirements	08/01/2014		1
31	4.7.3 C	Records of testing methods, equipment, and laboratories used to test copper level in sediments are not finished	The analyse requisition for the environmental test was sent too late to be finished at audit	Records from copper testing has been forwarded to CB	08/01/2014		1

32	4.7.4 B	Analyses of copper are not finished at audit	The analyse requisition for the environmental test was sent too late to be finished at audit	Records from copper testing fulfill requirements	08/01/2014		1
33	4.7.4 C	Analyses of copper are not finished at audit	The analyse requisition for the environmental test was sent too late to be finished at audit	Records from copper testing do not exceed 34 mg Cu/kg dry sediment weight	08/01/2014		1
34	4.7.4 D	Analyses of copper are not finished at audit	The analyse requisition for the environmental test was sent too late to be finished at audit	Records from copper testing do not exceed 34 mg Cu/kg dry sediment weight	08/01/2014		1
35	4.7.4 E	Analyses of copper are not submitted to ASC	The results were not finished to be sent to ASC at audit	Results are submitted to ASC 18. December 2013	08/01/2014		1
36	5.2.1 C	No data regarding therapeutant info is submitted to ASC	The data were not finished to be sent to ASC at audit	Results are submitted to ASC 24. October 2013	08/01/2014		1
37	6.5.2 B	Workers are provided with PPE, gas mask where filter is out of date	The focus for PPE was not sufficient	Procedure for use of PPE has been trained with employees and filter changed	08/01/2014		1
38	6.5.3	The employers assessments of hazards and risks in the workplace, do not include fire extinguisher seen with expire due date and truck with expire due date for service	The focus for hazard risk at workplace, was not sufficient	Procedure for use of fire extinguisher has been trained with employees, service done, document forwarded to CB	08/01/2014		1
39	8.3.2 C	No supplier water quality monitoring matrix was sent to ASC	The data was finished, but not sent before audit	Results are submitted to ASC 24. October 2013	08/01/2014		1
40	8.4.6	No calculations of phosphorus from Laksefjord smoltfarm.	The client has not calculated the phosphorus from smoltfarm	Calculation of phosphorous has been forwarded to CB, result fulfill requirement from ASC	08/01/2014		1



AUDIT MANUAL - ASC Salmon Standard Created by the Salmon Aquaculture Dialogue Audit Manual Version 1.0, April 2013				361	13	26	137
Scope: species belonging to the genus <i>Salmo</i> and <i>Oncorhynchus</i>							
<p><b>Preamble:</b> In order to determine the level of compliance against the ASC Salmon Standard it is essential to use information of completed crop cycle(s), or on a specific point in time in the crop (e.g. stocking) for several requirements. For this reason, for first audits, it is necessary for farms to present full data on at least one or more completed crop cycle(s) per site at the time of the assessment.</p> <p>Therefore, at the time of the first audit:                      • farmer must be able to show full records (e.g. feed-use, mortality rate, etc.) of at least 1 completed crop cycle per site (i.e. from stocking to harvest) and the relevant information for all the crops stocked after having stocked that crop                      • certifier must use these records of each site to calculate the level of compliance of the relevant indicators</p> <p>Applicable to all relevant requirements in this Audit Manual:  <b>Client:</b> At first audit: data of at least 1 full crop cycle per site must be made available to certifier.  <b>Auditor:</b> At first audit: data of at least 1 full crop cycle per site must be used to determine compliance.</p> <p>All criteria issues must be checked, for all the audited sites</p>				<b>CONFIRMITY</b>		<b>COMMENTS -RATIONALE</b>	
<b>PRINCIPLE 1: COMPLY WITH ALL APPLICABLE NATIONAL LAWS AND LOCAL REGULATIONS</b>				<b>C</b>	<b>Major NC</b>	<b>Minor NC</b>	<b>NA</b>
<i>Criterion 1.1 Compliance with all applicable local and national legal requirements and regulations</i>							
		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>			
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.	A. Review compliance with applicable land and water use laws.	1			F.dir. dt 28.2.2012, Arøya. Licence 10735, Mattilsynet, discharge permit 3600 tons, MTB, dt.08.10. 2013
		b. Maintain original (or legalised copies of) lease agreements, land titles, or concession permit on file as applicable.	B. Confirm client holds original (or legalised copies of) lease agreements or land titles.	1			Confirm original agreements.
		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).	C. Review inspection records for compliance with national and local laws and regulations (as applicable).	1			Doc. Records from F.dir., and Mattilsynets inspections on the site
		d. Obtain permits and maps showing that the farm does not conflict with national preservation areas.	D. Verify facility does not conflict with national preservation areas and has required operational permits if sited in such an area (see 2.4.2).	1			F. Dir map service and GPS documented. No conflict with preservation areas
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.	A. Verify client has records of tax payments to appropriate authorities. Do not disclose client tax information which is confidential. An independently audited company annual report may be used to confirm tax status.	1			Statement from Kemneren, paid taxis 16.9.2013, Skatteetaten: 17.09.2013.
		b. Maintain copies of tax laws for jurisdiction(s) where company operates.	B. Confirm client has a basic knowledge of tax requirements for farm.	1			See above
		c. Register with national or local authorities as an "aquaculture activity".	C. Verify client is registered with local or national authorities.	1			Brønnøysundregisteret: Statement licence for L.Aurora:05.08.2013
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.)	A. Confirm client has specified documentation.	1			Arbeidsmiljøloven: Lovdata: Lov 2005-06-17 nr. 62
		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).	B. Review inspection records for compliance with national labor laws and codes (as applicable).	1			Inspection reports: Mattilsynet19.10.2012, F.dir: 23.06.2011
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.	A. Verify that client obtains permits as applicable.	1			EU Vanddirektiv (2000/60/EF) Mattilsynet, Discharge permit 600 tons
		b. Compile list of and comply with all discharge laws or regulations.	B. Review evidence of compliance with discharge laws or regulations.	1			As doc. Above
		c. Maintain records of monitoring and compliance with discharge laws and regulations as required.	C. Verify that records show compliance with discharge laws and regulations.	1			Records from F.dir., and Mattilsynets inspections on the site and internally registrations from production.
<b>PRINCIPLE 2: CONSERVE NATURAL HABITAT, LOCAL BIODIVERSITY AND ECOSYSTEM FUNCTION</b>							
<i>Criterion 2.1 Benthic biodiversity and benthic effects [1]</i>							
		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>			
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.							
<p><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.</p>							
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 millivolts (mV) or Sulphide ≤ 1,500 microMoles / l  <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.					
		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.	A. Review map to verify appropriate siting of sampling stations (Appendix I-1) and evidence (if applicable) to justify use of a site specific AZE.	1			A map showing sampling stations according to Appendix I-1
		b. If benthos throughout the full AZE is hard bottom, provide evidence to the CAB and request an exemption from 2.1.1c-f 2.1.2 and 2.1.3.	B. Review evidence of benthic type and confirm whether to proceed to 2.1.1c.	1			The benthos throughout the whole AZE is not hard bottom
		c. Inform the CAB whether the farm chose option #1 or option #2 to demonstrate compliance with the requirements of the Standard.	C. Record which option the client chose.	1			The farm choose option #1, analyze of redox potential
		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).	D. Review documentary evidence (notes, GPS coordinates) showing sampling time, stations, and frequency. Cross-check against farm maps and harvest records.	1			Samples from the 11 stations has been sampled 21.9.2013, and sent for analyze to FiskeLIV AS
		e. For option #1, measure and record redox potential (mV) in sediment samples using an appropriate, nationally or internationally recognized testing method.	E. Review results to verify that redox potential of sediments complies with the requirement at each sampling station outside the AZE. Confirm that the testing method used by the farm is appropriate.		1		Results are not finished
		f. For option #2, measure and record sulphide concentration (µM) using an appropriate, nationally or internationally recognized testing method.	F. Review results to verify that sulphide concentration in sediments complies with the Standard at each sampling station outside the AZE. Confirm that the testing method used by the farm is appropriate.			1	
Footnote [2] Farm sites can choose whether to use redox or sulphide. Farms do not have to demonstrate that they meet both.							Results are not sent to ASC
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.							
Notes -							
- Under Indicator 2.1.2, farms can choose one of four measurements to show compliance with the faunal index Requirement: AMBI (Option #1), Shannon-Wiener Index (Option #2), BQI (Option #3), or ITI (Option #4). Farms do not have to demonstrate that they meet all four threshold values.							

2.1.2	<p><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</p> <p><b>Requirement:</b> AZTI Marine Biotic Index (AMBI) [5] score <math>\leq 3.3</math>, or Shannon-Wiener index score <math>&gt; 3</math>, or Benthic Quality Index (BQI) score <math>\geq 15</math>, or Infaunal Trophic Index (ITI) score <math>\geq 25</math></p> <p><b>Applicability:</b> All farms except as noted in [1]</p>	a. Prepare a map showing the AZE (30 m or site specific) and sediment collections stations (see 2.1.1).	A. Review map to verify appropriate siting of sampling stations (see 2.1.1).	1		A map showing sampling stations according to Appendix I-1	
		b. Inform the CAB whether the farm chose option #1, #2, #3, or #4 to demonstrate compliance with the requirement.	B. Record which option the client chose for scoring faunal index.	1		The farm chose option #2, Shannon-Wiener Index score	
		c. Collect sediment samples in accordance with Appendix I-1 (see 2.1.1).	C. Confirm sample collection followed Appendix I-1 (see 2.1.1).	1		Samples from the 11 stations has been sampled 21.9.2103, and sent for analyze	
		d. For option #1, measure, calculate and record AZTI Marine Biotic Index [5] score of sediment samples using the required method.	D. Review results (as applicable) to verify that AMBI score of sediments is $\leq 3.3$ at each sampling station outside the AZE.		1		
		e. For option #2, measure, calculate and record Shannon-Wiener index score of sediment samples using the required method.	E. Review results (as applicable) to verify that Shannon Wiener score of sediments is $> 3$ at each sampling station outside the AZE.	1		Results are not ready	
		f. For option #3, measure, calculate and record Benthic Quality Index (BQI) score of sediment samples using the required method.	F. Review results (as applicable) to verify that BQI score of sediments is $\geq 15$ at each sampling station outside the AZE.		1		
		g. For option #4, measure, calculate and record Infaunal Trophic Index (ITI) score of sediment samples using the required method.	G. Review results (as applicable) to verify that ITI score of sediments is $\geq 25$ at each sampling station outside the AZE.		1		
		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.	H. Confirm that an approved method was used or that a qualified independent laboratory performed the sampling and calculation of faunal index.	1		Results are not ready	
		i. Submit faunal index scores to ASC (Appendix VI) at least once for each production cycle.	I. Confirm that client submitted faunal index scores to ASC (Appendix VI).		1	Results are not sent to ASC	
		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/ambi-azti-marine-biotic-index.html">http://www.azti.es/en/ambi-azti-marine-biotic-index.html</a> .						
2.1.3	<p><b>Indicator:</b> Number of macrofaunal taxa in the sediment within the AZE, following the sampling methodology outlined in Appendix I-1</p> <p><b>Requirement:</b> <math>\geq 2</math> highly abundant [6] taxa that are not pollution indicator species</p> <p><b>Applicability:</b> All farms except as noted in [1]</p>	a. Document appropriate sediment sample collection as for 2.1.1a and 2.1.1c, or exemption as per 2.1.1b.	A. Confirm appropriate sediment sample collection as for 2.1.1a and 2.1.1c or exemption as per 2.1.1b.	1		Sediment sample collection as for 2.1.1a and 2.1.1c	
		b. For sediment samples taken within the AZE, determine abundance and taxonomic composition of macrofauna using an appropriate testing method.	B. Confirm that an appropriate method was used or that a suitably qualified independent laboratory performed the analysis.	1		Results are not ready	
		c. Identify all highly abundant taxa [6] and specify which ones (if any) are pollution indicator species.	C. Confirm that all samples from within the AZE have $\geq 2$ highly abundant [6] taxa (exclusive of pollution indicator species).	1		Results are not ready	
		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.	D. Confirm that a suitable method was used or that a suitability qualified independent laboratory performed the scoring of faunal index.	1		Results are not ready	
		e. Submit counts of macrofaunal taxa to ASC (Appendix VI) at least once for each production cycle.	E. Confirm that client has submitted scores to ASC (Appendix VI).		1	Results are not sent to ASC	
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	<p><b>Indicator:</b> Definition of a site-specific AZE based on a robust and credible [7] modeling system</p> <p><b>Requirement:</b> Yes, within three years of the publication [8] of the SAD standard (i.e. full compliance by June 13, 2015)</p> <p><b>Applicability:</b> All farms except as noted in [1]</p>	a. Undertake an analysis to determine the site-specific AZE and depositional pattern before 3 years have passed since publication of the Standard on June 13, 2012.	A. Review documentation to confirm that the farm has undertaken an analysis before the required date.		1		
		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].	B. Confirm that the farm used a robust and credible modeling system to define the site-specific AZE.		1		
		c. Maintain records to show that modeling results for the site-specific AZE have been verified with $> 6$ months of monitoring data.	C. Confirm that farms have validated the general applicability of the site-specific AZE using monitoring data (i.e. "ground truthing").		1		
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	[8] Publication: Refers to the date when the final standards and accompanying guidelines are completed and made publicly available. This definition of publication applies throughout this document.						
<b>Criterion 2.2 Water quality in and near the site of operation [12]</b>							
		<b>Compliance Criteria (Required Client Actions):</b>	<b>Auditor Evaluation (Required CAB Actions):</b>				
Footnote	[12] See Appendix VI for transparency requirements for 2.2.1, 2.2.2, 2.2.3 and 2.2.5.						
2.2.1	<p><b>Indicator:</b> Weekly average percent saturation [13] of dissolved oxygen (DO) [14] on farm, calculated following methodology in Appendix I-4</p> <p><b>Requirement:</b> <math>\geq 70\%</math> [15]</p> <p><b>Applicability:</b> All farms except as noted in [15]</p>	<p><b>Instruction to Clients for Indicator 2.2.1 - Monitoring Average Weekly Percent Saturation of Dissolved Oxygen</b></p> <p>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:</p> <ul style="list-style-type: none"> <li>-measurements may be taken with a handheld oxygen meter or equivalent chemical method;</li> <li>-equipment is calibrated according to manufacturer's recommendations;</li> <li>-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;</li> <li>-salinity and temperature must also be measured when DO is sampled;</li> <li>-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);</li> <li>-each week, all DO measurements are used in the calculation of a weekly average percent saturation.</li> </ul> <p>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.</p>					
		a. Monitor and record on-farm percent saturation of DO at a minimum of twice daily using a calibrated oxygen meter or equivalent method. For first audits, farm records must cover $\geq 6$ months.	A. Do not schedule audit until client provides a minimum of 6 months of DO data.	1		Results from registering of DO in period from 23.7.2012 until this day	
		b. Provide a written justification for any missed samples or deviations in sampling time.	B. Review records for completeness and conformity with methodology in Appendix I-4.	1		Results are complete	
		c. Calculate weekly average percent saturation based on data.	C. Review calculation and confirm all weekly averages $\geq 70\%$ .	1		Weekly averages $> 70\%$ seen as 110 %, 103 %, 91 %, lowest result 7.92 (82.2 %) 31.8.2012	
		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).	D. As needed, review DO data from reference site and document in the audit report (see instruction).	1		No weekly results $< 70\%$	
		e. Arrange for auditor to witness DO monitoring and calibration while on site.	E. Witness DO monitoring and verify calibration while on site. On-site values should fall within range of farm data for DO. If an out of range measurement is observed, raise a nonconformity.	1		Monitoring with measuring tube placed in cage, cleaning and changing of sensor cap regular, seen for 3.8.2013	
		f. Submit results from monitoring of average weekly DO as per Appendix VI to ASC at least once per year.	F. Confirm that client has submitted DO results to ASC (Appendix VI).	1			
Footnote	[13] Percent saturation: Percent saturation is the amount of oxygen dissolved in the water sample compared to the maximum amount that could be present at the same temperature and salinity.						
Footnote	[14] Averaged weekly from two daily measurements (proposed at 6 am and 3 pm).						
Footnote	[15] 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	<p><b>Indicator:</b> Maximum percentage of weekly samples from 2.2.1 that fall under 2 mg/liter DO</p> <p><b>Requirement:</b> 5%</p> <p><b>Applicability:</b> All</p>	a. Calculate the percentage of on-farm samples taken for 2.2.1a that fall under 2 mg/l DO.	A. Review the farm's calculation and confirm that $\leq 5\%$ of weekly samples fall under 2 mg/l DO.	1		No measuring samples fall under 2 mg/l DO	
		b. Submit results from 2.2.2a as per Appendix VI to ASC at least once per year.	B. Confirm that client has submitted results to ASC (Appendix VI).		1		
2.2.3	<p><b>Indicator:</b> For jurisdictions that have national or regional coastal water quality targets [16], demonstration through third-party analysis that the farm is in an area recently [17] classified as having "good" or "very good" water quality [18]</p> <p><b>Requirement:</b> Yes [19]</p> <p><b>Applicability:</b> All farms except as noted in [19]</p>	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	A. Record whether indicator is applicable.	1		Water framework directive has been implemented in Norway, the quality target is that all water occurrence have good water quality before 2015	
		b. Compile a summary of relevant national or regional water quality targets and classifications, identifying the third-party responsible for the analysis and classification.	B. Confirm that there has been a recent third-party analysis (within two years prior to the audit) to classify areas according to national or regional water quality targets.	1		Havforskningsinstituttet (institute of marine research) have classifying Næringsstae N and P, chlorofyl and oxygen for estimation of condition of water	
		c. Identify the most recent classification of water quality for the area in which the farm operates.	C. Confirm that the analysis and classification shows the farm is located in an area where the water quality complies with the requirement.	1		The quality classifying for area has been evaluated 66 % as presumed good, 13 % good and 7 % very good from www.vann-net.no	
Footnote	[16] Related to nutrients (e.g., N, P, chlorophyll A).						
Footnote	[17] Within the two years prior to the audit.						
Footnote	[18] 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	[19] 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	<p><b>Indicator:</b> For jurisdictions without national or regional coastal water quality targets, evidence of weekly monitoring of nitrogen and phosphorous [20] levels on farm and at a reference site, following methodology in Appendix I-5</p> <p><b>Requirement:</b> Yes</p>	<p>a. Develop, implement, and document a weekly monitoring plan for N, NH<sub>4</sub>, NO<sub>3</sub>, total P, and ortho-P in compliance with Appendix I-5, testing a minimum of once weekly in both locations. For first audits, farm records must cover ≥ 6 months.</p> <p>b. Calibrate all equipment according to the manufacturer's recommendations.</p> <p>c. Submit data on N and P to ASC as per Appendix VI at least once per year.</p>	<p>A. Review the farm's monitoring plan and verify that the farm has collected monitoring data for N and P following the methodology in Appendix I-5.</p> <p>B. Verify that client calibrates equipment as needed.</p> <p>C. Confirm that client has submitted N and P data to ASC (Appendix VI).</p>					1	
Footnote	<p>[20] Farms shall monitor total N, NH<sub>4</sub>, NO<sub>3</sub>, 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.</p>								
2.2.5	<p><b>Indicator:</b> Demonstration of calculation of biochemical oxygen demand (BOD [21]) of the farm on a production cycle basis</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p><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.  <math>BOD = ((total\ N\ in\ feed - total\ N\ in\ fish) * 4.57) + ((total\ C\ in\ feed - total\ C\ in\ fish) * 2.67)</math></p> <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/~gapi/explore-gapi/bod.html">http://web.uvic.ca/~gapi/explore-gapi/bod.html</a>.</li> </ul> <p>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.</p> <p>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.</p>	<p>A. Review calculation, cross-check data used with feed and harvest records.</p> <p>B. Confirm that client has submitted calculated BOD to ASC (Appendix VI).</p>	1				1	Calculation of BOD has been cross checked, N is calculated from protein in feed (38 %) and fish (35 %) using factor 6,25 for calculation for N, C is calculated from 45 and 12 % C in feed and fish respectively
Footnote	<p>[21] BOD calculated as: <math>((total\ N\ in\ feed - total\ N\ in\ fish) * 4.57) + ((total\ C\ in\ feed - total\ C\ in\ fish) * 2.67)</math>. 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/~gapi/explore-gapi/bod.html">http://web.uvic.ca/~gapi/explore-gapi/bod.html</a>.</p>								
<p><b>Criterion 2.3 Nutrient release from production</b></p>									
		<p><b>Compliance Criteria (Required Client Actions):</b></p>			<p><b>Auditor Evaluation (Required CAB Actions):</b></p>				
2.3.1	<p>Date of issuing will be the date where BVC will obtain the accreditation for ASC salmon standard</p>	<p>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.</p> <p>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.</p> <p>b. If using a sieving machine, calibrate equipment according to manufacturer's recommendations.</p> <p>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.</p>	<p>A. Review timing and location of testing. If testing off-site, verify rationale and ensure consistent with [23].</p> <p>B. Verify that client has appropriate testing technology on site and that, if applicable, it is calibrated as required.</p> <p>C. Review testing results and confirm that the pooled sample for each quarter has a percent fines of &lt;1%.</p>	1	1			1	Feed are tested at every receiving of feed, results from 6 mm 12.2.2013 0,21 %, no result more than 1 % dust. Sieve calibrated 18.3.2011 regarding visual and size Apparatus with Retsch sieve, has been calibrated 18.3.2011 regarding visual and size Testing results from feed to Årøya from July 2012 - October 2013, every month, no results more than 1 % dust
Footnote	<p>[22] 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).</p>								
Footnote	<p>[23] 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 &gt; 75% of solid nutrients and &gt; 50% of dissolved nutrients (through biofiltration, settling and/or other technologies) are exempt.</p>								
<p><b>Criterion 2.4 Interaction with critical or sensitive habitats and species</b></p>									
		<p><b>Compliance Criteria (Required Client Actions):</b></p>			<p><b>Auditor Evaluation (Required CAB Actions):</b></p>				
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>A. Review the assessment to confirm that it complies with all components outlined in Appendix I-3.</p> <p>B. Verify the farm has a plan to address all potential impacts identified in the assessment.</p> <p>C. Verify that the farm implements the plan(s).</p>	1	1			1	There is a MOMB analyse from Årøya, state 1. Risk assessment from Havforskningsinstituttet for impact of habitats and species There is environmental assessment from Havforskningsinstituttet for impact from lice and lice treatment. No species listed on IUCN list There are no special plan for area Årøya
2.4.2	<p><b>Indicator:</b> Allowance for the farm to be sited in a protected area [24] or High Conservation Value Areas [25] (HCVAs)</p> <p><b>Requirement:</b> None [26]</p> <p><b>Applicability:</b> All farms except as noted in [26]</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:                  Exception #1: For protected areas classified by the International Union for the Conservation of Nature (IUCN) as Category V or VI (these are areas preserved primarily for their landscapes or for sustainable resource management).                  Exception #2: For HCVAs if the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the HCVAs 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 HCVAs.                  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>  <b>Protected area:</b> "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."  <b>High Conservation Value Areas (HCVAs):</b> Natural habitats where conservation values are considered to be of outstanding significance or critical importance. HCVAs 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 a map showing the location of the farm relative to nearby protected areas or High Conservation Value Areas (HCVAs) as defined above (see also 1.1.1a).</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 is <u>sited</u> in a protected area or HCVAs, 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 HCVAs 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>A. Review map and cross-check against independent information sources (e.g. 1.1.1d) to determine if the farm is sited in a protected area or HCVAs.</p> <p>B. Obtain a copy of the farm's declaration stating that the farm is not sited in a protected area or HCVAs (as applicable).</p> <p>C. Review the applicability of the exception requested by the farm together with the supporting evidence to determine if the farm is eligible. If yes, Indicator 2.4.2 is not applicable.</p> <p>D. Review evidence to determine whether the farm is allowed to be sited in a protected area or HCVAs and hence eligible for ASC certification.</p>	1			1	1	A map was shown, Årøya is not in a protected area or HCVAs There is not a declaration from farm
Footnote	<p>[24] 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.</p>								

Footnote	[25] 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.hcvnetwork.org/">http://www.hcvnetwork.org/</a> ).					
Footnote	[26] The following exceptions shall be made to standard 2.4.2: A. For protected areas classified by the International Union for the Conservation of Nature (IUCN) as Category I or II, there are no special provisions for their location or for sustainable resource management.					
Footnote	Criterion 2.5 Interaction with wildlife, including predators [27]					
		<b>Compliance Criteria (Required Client Actions):</b>			<b>Auditor Evaluation (Required CAB Actions):</b>	
Footnote	[27] 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, within three years of the date of publication [28] of the SAD standard (i.e. full compliance by June 13, 2015)</p> <p><b>Applicability:</b> All</p>	<p>a. Prepare a written statement affirming that the farm's management is committed to eliminate all usage of acoustic deterrent devices (ADDs) or acoustic harassment devices (AHDs) by June 13, 2015.</p> <p>b. Compile documentary evidence to show that no ADDs or AHDs were used by the farm after June 13, 2015 (applicable only after the specified date).</p>	<p>A. Confirm that farm management has prepared a written statement of commitment.</p> <p>B. Review documentary evidence (e.g. predator management policies, records of predator incidents) and cross-check against interviews with farm staff and local community members (applicable only after the date specified in 2.5.1a).</p> <p>C. During the on-site audit, inspect the farm to confirm that no ADDs or AHDs are present at the facilities (applicable only after June 13, 2015).</p>	1	1	There is not a declaration from farm
Footnote	[28] Publication: Refers to the date when the final standards and accompanying guidelines are completed and made publicly available. This definition of publication applies throughout this document.					
2.5.2	<p><b>Indicator:</b> Prior to the achievement of 2.5.1, if ADDs or AHDs are used, maximum percentage of days [29] in the production cycle that the devices are operational</p> <p><b>Requirement:</b> ≤ 40%</p> <p><b>Applicability:</b> All, until June 13, 2015</p>	<p><b>Instruction to Clients for Indicator 2.5.2 - Percentage of Days that ADDs or AHDs were used</b> Farms must calculate the percentage of days in the production cycle that ADDs or AHDs were operated using data from the most recent complete production cycle. For first audits, farms may be exempted from compliance with Indicator 2.5.2 for the most recent complete production cycle if the farm can satisfactorily demonstrate to the auditor that: -the client understands how to accurately calculate percentage of days the devices were operational; -the client maintains all information needed to accurately calculate the percentage of operational days based on &gt; 6 months of data for the current production cycle; and -the client can show how plans for the current production cycle will ensure that the farm will meet requirements at harvest (i.e. devices in operation &lt;40% of days).</p> <p>Indicator 2.5.2 is applicable until June 13, 2015, after which the use of ADDs and AHDs is not allowed under the standard.</p> <p>a. Maintain a log for the use of any ADDs or AHDs on farm that includes recording the number of days (24-hour cycles) during which the devices were used.</p>	<p>A. Review log and cross-check with records of predator incidents.</p> <p>B. Verify calculations and cross-check against records for the duration of the production cycle.</p> <p>C. Confirm devices were operational ≤ 40% of the days of the production cycle.</p> <p>D. Confirm that client has submitted data on ADDs/AHDs to ASC (Appendix VI).</p>	1	1	No use of ADD or AHD
Footnote	[29] Day: 24-hour cycle.					
2.5.3	<p><b>Indicator:</b> Number of mortalities [30] of endangered or red-listed [31] 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>A. Review list.</p> <p>B. Review farm records of predator incidents and cross-check against relevant records (e.g. escapes).</p> <p>C. Review records for completeness. Cross-check mortality records against interviews with farm staff and community representatives.</p> <p>D. Review list for consistency with 2.4.1</p> <p>E. Compare results from (a) through (d) above to confirm that there were no mortalities of endangered or red-listed marine mammals or birds on farm.</p>	1	1	For bird protection, there is a net covering cages There has been no predator incidences, from list at farm, and no red listed animals No mortality of animals or birds No IUCN animal in area No mortalities of these animal on farm
Footnote	[30] Mortalities: Includes animals intentionally killed through lethal action as well as accidental deaths through entanglement or other means.					
Footnote	[31] Species listed as endangered or critically endangered by the IUCN or on a national endangered species list.					
2.5.4	<p><b>Indicator:</b> Evidence that the following steps were taken prior to lethal action [32] 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</p> <p><b>Requirement:</b> Yes [33]</p> <p><b>Applicability:</b> All except cases where human safety is endangered as noted in [33]</p>	<p>a. Provide a list of all lethal actions that the farm took against predators during the previous 12-month period. Note: "lethal action" is an action taken to deliberately kill an animal, including marine mammals and birds.</p> <p>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.</p> <p>c. Provide documentary evidence that steps 1-3 above (in 2.5.4b) were taken prior to killing the animal. If human safety was endangered and urgent action necessary, provide documentary evidence as outlined in [33].</p>	<p>A. Review list of lethal actions taken by the farm and cross-check against 2.5.3b.</p> <p>B. Review documentation to confirm that the farm shows evidence of compliance with requirements in steps 1-3.</p> <p>C. Review documentary evidence to verify actions, permissions, and approvals were taken prior to taking lethal action. If client requests exemption due to human safety, review evidence to verify [33].</p>	1	1	No lethal actions at farm Documentation of possible lethal action at document II.1.2.15 in quality system Actions will be documented
Footnote	[32] Lethal action: Action taken to deliberately kill an animal, including marine mammals and birds.					
Footnote	[33] 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.					
Footnote	<b>Instruction to Clients and CABs on Indicators 2.5.3, 2.5.4, and 2.5.7 - 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 351. For the purpose of assisting farms and auditors with understanding how to evaluate compliance with Indicators 2.5.3, 2.5.4, and 2.5.7, ASC has clarified:					
2.5.5	<p><b>Indicator:</b> Evidence that information about any lethal incidents [35] on the farm has been made easily publicly available [34]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. For all lethal actions (see 2.5.4), keep records showing that the farm made the information available within 30 days of occurrence.</p> <p>b. Ensure that information about all lethal actions listed in 2.5.5a are made easily publicly available (e.g. on a website).</p>	<p>A. Check farm records for publicizing lethal actions against the actions listed in 2.5.4a to confirm that the farm made information available within 30 days.</p> <p>A. Check farm records for publicizing lethal actions against the actions listed in 2.5.4a to confirm that the farm made information available within 30 days.</p> <p>B. Verify that required information is easily publicly available.</p>	1	1	There has not been lethal actions, and will be published at website There has not been lethal actions, and will be published at website There has not been lethal actions, and will be published at website <a href="http://www.leroyseafood.com/investor/berekraft/matvaresikke/rhet/serifisering/">http://www.leroyseafood.com/investor/berekraft/matvaresikke/rhet/serifisering/</a>
Footnote	[34] 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.					
2.5.6	<p><b>Indicator:</b> Maximum number of lethal incidents [35] on the farm over the prior two years</p> <p><b>Requirement:</b> &lt; 9 lethal incidents (REI) with no more than two</p>	<p>a. Maintain log of lethal incidents (see 2.5.4a) for a minimum of two years. For first audit, &gt; 6 months of data are required.</p> <p>b. Calculate the total number of lethal incidents and the number of incidents involving marine mammals during the previous two year period.</p>	<p>A. Review log.</p> <p>B. Verify that over the previous two years there were &lt; 9 lethal incidents in total and that 2 of those incidents were marine mammal deaths.</p>	1	1	List for records of lethal actions, no lethal incidents last 6 months List for records of lethal actions, no lethal incidents last 6 months

	<p><b>Requirement:</b> 2.5.6 Lethal incidents (38), with the exception of the incidents being marine mammals</p> <p><b>Applicability:</b> All</p>	<p>c. Send ASC the farm's data for all lethal incidents [35] of any species other than the salmon being farmed (e.g. lethal incidents involving predators such as birds or marine mammals). Data must be sent to ASC on an ongoing basis (i.e. at least once per year and for each production cycle).</p>	<p>C. Confirm that data on all lethal incidents has been submitted to ASC (Appendix VI).</p>	1		
Footnote	[35] Lethal incident: includes all lethal actions as well as entanglements or other accidental mortalities of non-salmonids.					
Footnote	[36] 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.					
2.5.7	<p><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</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>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.</p> <p>b. Provide documentary evidence that the farm implements those steps identified in 2.5.7a to reduce the risk of future lethal incidents.</p>	<p>A. Review farm records to confirm that all the farm performs an appropriate risk assessment following all lethal incidents (see list 2.5.4a).</p> <p>B. Verify that the farm implements steps to reduce risk of lethal incidents.</p>	1		There has not been lethal incidents
				1		There has not been lethal incidents
<b>PRINCIPLE 3: PROTECT THE HEALTH AND GENETIC INTEGRITY OF WILD POPULATIONS</b>						
<i>Criterion 3.1 Introduced or amplified parasites and pathogens [38,39]</i>						
<b>Compliance Criteria (Required Client Actions):</b>			<b>Auditor Evaluation (Required CAB Actions):</b>			
Footnote	[38] Farm sites for which there is no release of water that may contain pathogens into the natural (freshwater or marine) environment are exempt from the standards under Criterion 3.1.					
Footnote	[39] 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 [38], farm sites for which there is no release of water that may contain pathogens into the natural (freshwater or marine) environment are exempt from the requirements under Criterion 3.1. More specifically, farms are only eligible for exemption from Criterion 3.1 if it can be shown that either of the following holds:						
1) the farm does not release any water to the natural environment; or						
2) any effluent released by the farm to the natural environment has been effectively treated to kill pathogens (e.g. UV and/or chemical treatment of water with testing demonstrating efficacy).						
Auditors shall fully document the rationale for any such exemptions in the audit report.						
3.1.1	<p><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.</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All except farms that release no water as noted in [38]</p>	<p>a. Keep record of farm's participation in an ABM scheme.</p> <p>b. Submit to the CAB a description of how the ABM (3.1.1a) coordinates management of disease and resistance to treatments, including:</p> <ul style="list-style-type: none"> <li>- coordination of stocking;</li> <li>- fallowing;</li> <li>- therapeutic treatments; and</li> <li>- information sharing.</li> </ul> <p>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.</p> <p>d. Submit dates of following period(s) as per Appendix VI to ASC at least once per year.</p>	<p>A. Review records of farm participation in ABM scheme. Contact other ABM participants as necessary to confirm the accuracy of client records.</p> <p>B. Review description of ABM to verify that the management activities address each of the four element from Indicator 3.1.1.</p> <p>C. Evaluate documents to confirm the ABM complies with Appendix II-1.</p> <p>D. Confirm that client has submitted dates of following periods to ASC (Appendix VI).</p>	1		Doc. Troms and Finnmark Fylker reg. ABM scheme, including plan for 2013. Doc. Records from Fish talk system.
				1		Doc. Troms and Finnmark Fylker reg. ABM scheme, vet. Reports and Fish-talk production system
				1		Doc. In ABM scheme, vet reports and Fish Talk
				1		Dates submitted to ASC
3.1.2	<p><b>Indicator:</b> A demonstrated commitment [40] to collaborate with NGOs, academics and governments on areas of mutually agreed research to measure possible impacts on wild stocks</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All except farms that release no water as noted in [38]</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>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>c. When the farm and/or its operating company denies a request to collaborate on a research project, ensure that there is written justification for rejecting the proposal.</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>A. Review evidence that the farm and/or its operating company has communicated with external groups to agree on areas of research about possible impacts on wild stocks and is tracking and responding to research requests.</p> <p>B. Review how the farm and/or its operating company has provided non-financial support for research activities.</p> <p>C. As applicable, review the provided record of rejecting proposals to confirm that denials were justified and there is no consistent pattern to indicate that the farm and/or its operating company lacks a demonstrated commitment to collaborate on research activities.</p> <p>D. Verify that the farm's communications with researchers demonstrate a commitment to collaborate on relevant areas of research.</p>	1		Support "Stiftinga Norsk Villaksforvaltning", Bellona, Kunnskapssenter for Laks& Vannmiljø, Sintef Fiskeri og Havbruk, GSI, WWF
				1		Available for UNITØ, FHL, Akvaplan Niva in different projects
				1		Records from FOU activities for FHF, Philips, LSG
				1		Several research reports documented
Footnote	[40] 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 [38]</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>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>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>d. Submit the maximum sea lice load for the ABM to ASC as per Appendix VI at least once per year.</p>	<p>A. Review records to confirm compliance.</p> <p>B. Confirm that sea lice load is reviewed annually and, if applicable, the review incorporates information from monitoring of wild salmon.</p> <p>C. Evaluate documents to confirm the ABM complies with requirements of Appendix II-2 for establishing and reviewing maximum sea lice loads.</p> <p>D. Confirm that client has submitted the ABM maximum lice load to ASC (Appendix VI).</p>	1		Doc. Reports from January until week 39/40
				1		Doc. In the records and in Fish-talk
				1		Doc. In the records and in Fish-talk
				1		Data submitted to ASC
3.1.4	<p><b>Indicator:</b> Frequent [41] on-farm testing for sea lice, with test results made easily publicly available [42] 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 [38]</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>b. Maintain records of results of on-farm testing for sea lice. If farm deviates from schedule due to weather [41] maintain documentation of event and rationale.</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, follows accepted minimum sample size, use random sampling, and record the species and life-stage of the sea lice. If farm uses a closed production system and would like to use an alternate method (i.e. video), farm shall provide the CAB with details on the method and efficacy of the method.</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>e. Keep records of when and where test results were made public.</p> <p>f. Submit test results to ASC (Appendix VI) at least once per year.</p>	<p>A. Review sea lice testing schedule to confirm that weekly testing coincides with known sensitive periods for wild salmon (e.g. during and immediately prior to outmigration of juveniles).</p> <p>B. Review records to confirm that testing follows the farm's annual schedule. Review the rationale for any deviations from the schedule.</p> <p>C. Review the farm's methodology for testing sea lice. If practicable, observe testing while on-site. If farm is a closed system using an alternate testing method, document the distinction and review evidence of efficacy of the method.</p> <p>D. Test access from an offsite computer to confirm that results are easily publicly available. If applicable, confirm that the farm made hardcopies of test results easily available to stakeholders.</p> <p>E. Review records for the past year to confirm the farm posted test results within 7 days of each test. Cross-check against testing schedule (see 3.1.4a).</p> <p>F. Confirm that client has submitted test results to ASC (Appendix VI).</p>	1		Doc. In F. Dir: "forskrift for metode lusetelling" and internally procedure for counting, registrations and reporting of sea lice
				1		Weekly counting
				1		Method as described in the F.dir. Forskrift for lusetelling and internally procedures
				1		Doc. In Lusedata website and LSG website
				1		Documentation from each week verified.
				1		Data submitted to ASC
Footnote	[41] 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	[42] 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 [43], evidence of data [44] and the farm's understanding of that data, around salmonid migration routes, migration timing and stock productivity in major waterways within 50 kilometers of the farm</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 [38]</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 SAD Steering Committee concluded that relevant data sets on wild salmonid health and migration are publicly available in the vast majority of, if not all, jurisdictions with wild salmonids. The information is likely to come from government sources or from research institutions. Therefore farms are not responsible for conducting this research themselves. However farms must demonstrate that they are aware of this basic information in their region, as such information is needed to make management decisions related to minimizing potential impact on those wild stocks.</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><b>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-owning areas in the</b></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>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>c. From data in 3.1.5b, identify any sensitive periods for wild salmonids (e.g. periods of outmigration of juveniles) within 50 km of the farm.</p>	1	1	1	1	1	1	1	1	1	1	1
Footnote	[43] 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	[44] Farms do not need to conduct research on migration routes, timing and the health of wild stocks under this standard if general information is already available. Farms must demonstrate an understanding of this information at the general level for salmonid populations in their region, as such information is needed to make management decisions related to minimizing potential impact on those stocks.												
3.1.6	<p><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.</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 [38]</p>	<p>a. Inform the CAB if the farm operates in an area of wild salmonids. If not, then indicator 3.1.6 does not apply.</p> <p>b. Keep records to show the farm participates in monitoring of sea lice on wild salmonids.</p> <p>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.</p> <p>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.</p> <p>e. Submit to ASC the results from monitoring of sea lice levels on wild salmonids as per Appendix VI.</p>	1	1	1	1	1	1	1	1	1	1	
3.1.7	<p><b>Indicator:</b> In areas of wild salmonids, maximum on-farm lice levels during sensitive periods for wild fish [45]. See detailed requirements in Appendix II, subsection 2.</p> <p><b>Requirement:</b> 0.1 mature female lice per farmed fish</p> <p><b>Applicability:</b> All farms operating in areas with wild salmonids except farms that release no water as noted in [38]</p>	<p>a. Inform the CAB if the farm operates in an area of wild salmonids. If not, then indicator 3.1.7 does not apply.</p> <p>b. Establish the sensitive periods [45] of wild salmonids in the area where the farm operates. Sensitive periods for migrating salmonids is during juvenile outmigration and approximately one month before.</p> <p>c. Maintain detailed records of monitoring on-farm lice levels (see 3.1.4) during sensitive periods as per Appendix II-2.</p> <p>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).</p>	1	1	1	1	1	1	1	1	1	1	
Footnote	[45] Sensitive periods for migrating salmonids is during juvenile outmigration and approximately one month before.												
<b>Criterion 3.2 Introduction of non-native species</b>													
<b>Compliance Criteria (Required Client Actions):</b>													
<b>Auditor Evaluation (Required CAB Actions):</b>													
3.2.1	<p><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 SAD standard</p> <p><b>Requirement:</b> Yes [47]</p> <p><b>Applicability:</b> All farms except as noted in [47]</p>	<p>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.</p> <p>a. Inform the CAB if the farm produces a non-native species. If not, then indicator 3.2.1 does not apply.</p> <p>b. Provide documentary evidence that the non-native species was widely commercially produced in the area before publication of the SAD Standard (i.e. before June 13, 2012).</p> <p>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.</p> <p>d. If the farm cannot provide evidence for 3.2.1b or 3.2.1c, provide documented evidence that the production system is closed to the natural environment and for each of the following: 1) non-native species are separated from wild fish by effective physical barriers that are in place and well maintained; 2) barriers ensure there are no escapes of reared fish specimens that might survive and subsequently reproduce (47); and 3) barriers ensure there are no escapes of biological material (47) that might survive and subsequently reproduce (e.g. UV or other effective treatment of any effluent water exiting the system to the natural environment).</p>	1	1	1	1	1	1	1	1	1	1	
Footnote	[47] 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 or reared specimens or biological material that might survive and subsequently reproduce.												
3.2.2	<p><b>Indicator:</b> If a non-native species is being produced, evidence of scientific research [48] completed within the past five years that investigates the risk of establishment of the species within the farm's jurisdiction and these results submitted to ASC for review [49]</p> <p><b>Requirement:</b> Yes, within five years of publication of the SAD standard [50,51]</p> <p><b>Applicability:</b> All</p>	<p><b>Instruction to clients for indicator 3.2.2 - Exceptions to allow production of non-native species</b> Farms have 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, 2012).</p> <p>a. Inform the ASC of the species in production (Appendix VI).</p> <p>b. Inform the CAB if the farm produces a non-native species. If not, then indicator 3.2.2 does not apply.</p> <p>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).</p> <p>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.</p> <p>e. Submit evidence from 3.2.2c to ASC for review.</p>	1	1	1	1	1	1	1	1	1	1	
Footnote	[48] 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	[49] 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.												
Footnote	[50] Farms have five years to demonstrate compliance with this standard from the time of publication of the final SAD standards and accompanying auditing guidelines.												



Footnote	[51] 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.	A. Confirm whether the farms uses fish for sea lice control. If no, auditor response to 3.2.3A-C is "not applicable" (NA).	1	No use of fish for sea lice control
		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.	B. Review purchase records to confirm the origin and identity of all species that are used for sea lice control on farm.	1	No use of fish for sea lice control
		c. Collect documentary evidence or first hand accounts as evidence that the species used is not non-native to the region.	C. Review evidence for compliance with the requirement. Acceptable documentary evidence: peer-reviewed literature, government documentation confirming species is not non-native to the region. Acceptable first hand accounts: community testimonials and direct evidence for historical presence of the species in the water body captured with cast nets, trapping devices, or fishing.	1	No use of fish for sea lice control
<b>Criterion 3.3 Introduction of transgenic species</b>					
		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>	
3.3.1	<b>Indicator:</b> Use of transgenic [53] 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.	A. Verify declaration of no use of transgenic salmon.	1	Statements: Stofnfiskur LTD, March 2012, Aqua gen, 20.10.2011
		b. Maintain records for the origin of all cultured stocks including the supplier name, address and contact person(s) for stock purchases.	B. Review records to confirm compliance with the requirement.	1	Records form Aqua gen and Stofnfiskur
		c. Ensure purchase documents confirm that the culture stock is not transgenic.	C. If the auditor suspects that transgenic fish are being cultured, test stock identity by collecting 3 fish and sending to an ISO 17025 certified laboratory for genetic analysis.	1	Not allowed in Norway
Footnote	[53] 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 ( <a href="http://www.csrees.usda.gov/nea/biotech/res/biotechnology_res_glossary.html">http://www.csrees.usda.gov/nea/biotech/res/biotechnology_res_glossary.html</a> ).				
<b>Criterion 3.4 Escapes [55]</b>					
		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>	
Footnote	[55] 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 escapees [56] in the most recent production cycle  <b>Requirement:</b> 300 [57]  <b>Applicability:</b> All farms except as noted in [57]	a. Maintain monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapees.	A. Review client submission for completeness and accuracy of information. Cross-check with the estimate of unexplained loss, maintenance records for small tears in net, predator attacks, etc.	1	Records from FishTalk - production in the sea now,
		b. Aggregate cumulative escapes in the most recent production cycle.	B. Review the calculation and confirm compliance with the requirement.	1	Doc in production reports from FishTalk
		c. Maintain the monitoring records described in 3.4.1a for at least 10 years beginning with the production cycle for which farm is first applying for certification (necessary for farms to be eligible to apply for the exception noted in [57]).	C. Confirm that farm documents show continuous monitoring of escapes.	1	Doc. In production reports from FishTalk
		d. If an escape episode occurs (i.e. an incident where > 300 fish escaped), the farm may request a rare exception to the Standard [57]. Requests must provide a full account of the episode and must document how the farm could not have predicted the events that caused the escape episode.	D. Review the farm's request for a rare exception to the Standard for an escape event. Confirm no prior exceptional events were documented during the previous 10 years, or since the date of the start of the production cycle during which the farm first applied for certification. An example of an exceptional event is vandalism of the farm. Events that are not considered exceptional include failures in moorings due to bad weather, boat traffic incidents due to poor marking of the farm, human error, and predation.	1	Doc. 0 escapes from 2008
		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).	E. Confirm that client has submitted escape monitoring data to ASC (Appendix VI).	1	Data submitted to ASC
Footnote	[56] Farms shall report all escapes; the total aggregate number of escapees per production cycle must be less than 300 fish. Data on date of escape episode(s), number of fish escaped and cause of escape episode shall be reported as outlined in Appendix VI.				
Footnote	[57] 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 [58] 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.	A. Confirm that the farm keeps records of counting accuracy for the counting technology or method used on site at stocking and harvest.	1	Counters on well boat, Aqua Scan Registration Unit, on arrival as smolt and prior to slaughter
		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).	B. Verify the client obtains information from smolt suppliers (if applicable).	1	Reports doc. From smolt suppliers
		c. During audits, arrange for the auditor to witness calibration of counting machines (if used by the farm).	C. Verify that the farm calibrates counting equipment as recommended by the manufacturer.	1	Doc. Analysis reg. To counting from the well boats
		-	D. Confirm the stated accuracy of the farm's counting technology or counting method is ≥ 98% at both stocking and harvest. Stated accuracy shall be determined by the spec sheet for counting machines and through common estimates of error for any hand-counts.	1	Doc regarding to the method shows results 0,6% NC.
		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).	E. Confirm that client has submitted counting technology accuracy to ASC (Appendix VI).	1	Data submitted to ASC
Footnote	[58] 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 [59] 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:  $EUL = (\text{stocking count}) - (\text{harvest count}) - (\text{mortalities}) - (\text{recorded escapes})$ Units for input variables are number of fish (i.e. counts) per production cycle. Where possible, farms should use the pre-smolt vaccination count as the stocking count. This formula is adapted from footnote 59 of the ASC Salmon Standard.			
		a. Maintain detailed records for mortalities, stocking count, harvest count, and escapes (as per 3.4.1).	A. Review records for completeness.	1	Doc. Records from FishTalk.
		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.	B. Verify accuracy of farm calculations for estimated unexplained loss.	1	Production report from Årgya verified.
		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.	C. Verify that the farm makes the information available to the public.	1	No unexplained loss in the farm
		d. Submit estimated unexplained loss to ASC as per Appendix VI for each production cycle.	D. Confirm that client has submitted estimated unexplained loss to ASC (Appendix VI).	1	Data submitted to ASC
-	E. Compare EUL values (3.4.3a) and counting accuracy (3.4.2a) to recorded escapes to check whether farm reporting is plausible. If EUL is greater than the combined margin of error related to fish counts, investigate potential sources of error as it could indicate the farm under reported mortalities or escapes.	1	Based on the individual smolt counting		
Footnote	[59] 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.				
	a. Prepare an Escape Prevention Plan and submit it to the CAB before the first audit. This plan may be part of a more comprehensive farm planning document as long as it addresses all required elements of Indicator 3.4.4.	A. Obtain and review the farm's escape prevention plan prior to scheduling the first audit.	1	Doc in procedures regarding to eventually escapes. Doc. Tests system of the nets, procedures for the site equipment	

3.4.4	<p><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</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>b. If the farm operates an open (net pen) system, ensure the plan (3.4.4a) covers the following areas:</p> <ul style="list-style-type: none"> <li>- net strength testing;</li> <li>- appropriate net mesh size;</li> <li>- net traceability;</li> <li>- system robustness;</li> <li>- predator management;</li> <li>- record keeping;</li> <li>- reporting risk events (e.g. holes, infrastructure issues, handling errors);</li> <li>- planning of staff training to cover all of the above areas; and</li> <li>- planning of staff training on escape prevention and counting technologies.</li> </ul>	B. Confirm the farm's Escape Prevention Plan contains all required elements for open (net pen) systems as applicable.	1			Well documented Escape Prevention Plans for the site
		<p>c. If the farm operates a closed system, ensure the plan (3.4.4a) covers the following areas:</p> <ul style="list-style-type: none"> <li>- system robustness;</li> <li>- predator management;</li> <li>- record keeping;</li> <li>- reporting risk events (e.g. holes, infrastructure issues, handling errors);</li> <li>- planning of staff training to cover all of the above areas; and</li> <li>- planning of staff training on escape prevention and counting technologies.</li> </ul>	C. Confirm the farm's Escape Prevention Plan contains all required elements for closed systems as applicable.			1	This is an open system
		d. Maintain records as specified in the plan.	D. Review documentary evidence showing implementation of the plan.	1			Doc. Records of regularly testing and controls of the site and equipment
		e. Train staff on escape prevention planning as per the farm's plan.	E. Review records (i.e. attendance records, meeting notes) to confirm that farm staff attend training on escape prevention planning.	1			Doc. In training records for all employees
		-	F. Interview farm workers to confirm that the plan is implemented.	1			Interviews with the employees
<p><b>PRINCIPLE 4: USE RESOURCES IN AN ENVIRONMENTALLY EFFICIENT AND RESPONSIBLE MANNER</b></p> <p><i>Criterion 4.1 Traceability of raw materials in feed</i></p>							
		<b>Compliance Criteria (Required Client Actions):</b>	<b>Auditor Evaluation (Required CAB Actions):</b>				
<p><b>Instruction to Clients for Indicators 4.1.1 through 4.4.2 - Sourcing of Responsibly Produced Salmon Feeds</b></p> <p>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 incorporates 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).</p>							
4.1.1	<p><b>Indicator:</b> Evidence of traceability, demonstrated by the feed producer, of feed ingredients that make up more than 1% of the feed [62].</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	a. Maintain detailed records of all feed suppliers and purchases including contact information and purchase and delivery records.	A. Review feed records for completeness and confirm the number of feed suppliers to the client.	1			Main feed supplier is Ewos, from Skretting 2,5 % of total supply of feed. Feed records reviewed from 13.7.2012-7.10.2013 for Araya farm
		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.	B. Review farm records to verify that the farm has informed all of its feed suppliers of relevant ASC requirements for feed production.	1			Information from Lerøy Aurora to Ewos and Skretting, 6.6.2013 regarding 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.	C. Verify that the farm obtains current audit reports from all relevant feed producers, that these audits were performed by an audit firm or CAB against an ASC-acknowledged certification scheme, and that audit results demonstrate compliance with requirements.	1			There has been audits of feed producer Ewos (ISO 22000, 9001, 14000) expire 29.5.2015, GlobalGAP/expire 24.6.2014, for Skretting iso 22000/expire 28.7.2016. there is no audit results (rapports) at site
		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.	D. Review which method the farm will use and confirm that independent audit results (4.1.1c) show compliance of feed producers.	1			The farm will use method #1
		e. Obtain declaration from feed supplier(s) stating that the company can assure traceability of all feed ingredients that make up more than 1% of the feed to a level of detail required by the ASC Salmon Standard [62].	E. Review declaration from each feed supplier to confirm the company assures traceability to the level of detail required by Standard.	1			Declaration from Ewos 10.7.2013, Skretting January 2013
-	F. Cross-check the declarations against results from audits of feed suppliers (4.1.1c) to verify evidence of required levels of traceability.	1			There are no audit results (rapports) at site		
Footnote	[62] Traceability shall be at a level of detail that permits the feed producer to demonstrate compliance with the standards in this document (i.e., marine raw ingredients must be traced back to the fishery, soy to the region grown, etc.). Feed manufacturers will need to supply the farm with third-party documentation of the ingredients covered under this standard.						
<p><i>Criterion 4.2 Use of wild fish for feed [63]</i></p>							
		<b>Compliance Criteria (Required Client Actions):</b>	<b>Auditor Evaluation (Required CAB Actions):</b>				
Footnote	[63] See Appendix VI for transparency requirements for 4.2.1 and 4.2.2.						
4.2.1	<p><b>Indicator:</b> Fishmeal Forage Fish Dependency Ratio (FFDRm) for grow-out (calculated using formulas in Appendix IV-1)</p> <p><b>Requirement:</b> &lt; 1.35</p> <p><b>Applicability:</b> All</p>	<p><b>Instruction to Clients for Indicator 4.2.1 - Calculation of FFDRm</b></p> <p>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 &gt; 1.35) if the farm can satisfactorily demonstrate to the auditor that:</p> <ul style="list-style-type: none"> <li>- the client understands how to accurately calculate FFDRm;</li> <li>- the client maintains all information needed to accurately calculate FFDRm (i.e. all feed specs for &gt; 6 months) for the current production cycle; and</li> <li>- 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 &lt; 1.35).</li> </ul>					
		a. Maintain a detailed inventory of the feed used including:	A. Verify completeness of records and that values are stated in a declaration from the feed manufacturer.	1			Declaration from Ewos 9.5.2013, amount, content and source of fishmeal
		b. For FFDRm calculation, exclude fishmeal derived from rendering of seafood by-products (e.g. the "trimmings" from a human consumption fishery).	B. Verify that the client excludes from the FFDRm calculation any fishmeal rendered from seafood by-products.	1			FFDRm calculation result 0,659, including seafood by-products. Result without seafood by-products 0,510
		c. Calculate eFCR using formula in Appendix IV-1 (use this calculation also in 4.2.2 option #1).	C. Verify that eFCR calculation was done correctly.	1			eFCR calculated according to Appendix IV-1
		d. Calculate FFDRm using formulas in Appendix IV-1.	D. Verify that FFDRm calculations were done correctly and confirm the value complies with the requirement.	1			FFDRm calculation result 0,659, including seafood by-products. Result without seafood by-products 0,51
e. Submit FFDRm to ASC as per Appendix VI for each production cycle.	E. Confirm that client has submitted FFDRm to ASC (Appendix VI).	1					
4.2.2	<p><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 [64] (calculated according to Appendix IV-2)</p> <p><b>Requirement:</b> FFDRo &lt; 2.95 or EPA + DHA &lt; 30 g/kg feed</p> <p><b>Applicability:</b> All</p>	<p>Note: Under indicator 4.2.2, farms can choose to calculate FFDRo (Option #1) or EPA + DHA (Option #2). Farms do not have to demonstrate that they meet both threshold values. Client shall inform the CAB which option they will use.</p>					
		a. Maintain a detailed inventory of the feed used as specified in 4.2.1a.	A. Verify completeness of feed records as in 4.2.1a.	1			Feed records complete
		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).	B. Verify client excludes fish oil rendered from byproducts from the FFDRo or (EPA + DHA) calculation.	1			No use of fish oil from byproducts
		c. Inform the CAB whether the farm chose option #1 or option #2 to demonstrate compliance with the requirements of the Standard.	C. Record which option the client chose.	1			Use of option #1
		d. For option #1, calculate FFDRo using formulas in Appendix IV-1 and using the eFCR calculated under 4.2.1c.	D. Verify that FFDRo calculations were done correctly and confirm the value complies with the standard.	1			FFDRo calculation result 2,448, calculation according to Appendix IV-1
		e. For option #2, calculate amount of EPA + DHA using formulas in Appendix IV-2.	E. Verify that (EPA+DHA) calculations were done correctly and confirm the value complies with the standard.	1		1	
f. Submit FFDRo or EPA & DHA to ASC as per Appendix VI for each production cycle.	F. Confirm that client has submitted FFDRo or EPA & DHA to ASC (Appendix VI)	1					



Footnote	[64] 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> ).						
<b>Criterion 4.3 Source of marine raw materials</b>							
		<b>Compliance Criteria (Required Client Actions):</b>	<b>Auditor Evaluation (Required CAB Actions):</b>				
		Note: Indicator 4.3.1 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.					
4.3.1	<p><b>Indicator:</b> Timeframe for all fishmeal and fish oil used in feed to come from fisheries [65] certified under a scheme that is an ISEAL member [66] and has guidelines that specifically promote responsible environmental management of small pelagic fisheries</p> <p><b>Requirement:</b> &lt; 5 years after the date of publication [67] of the SAD standards (i.e. full compliance by June 13, 2017)</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 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.</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 4.3.1a</p> <p>c. Starting on or before June 13, 2017, use feed inventory and feed supplier declarations in 4.2.1a to develop a list of the origin of all fish products used as feed ingredients.</p> <p>d. Starting on or before June 13, 2017, provide evidence that fishmeal and fish oil used in feed come from fisheries [65] certified under a scheme that is an ISEAL member [66] and has guidelines that specifically promote responsible environmental management of small pelagic fisheries.</p>	<p>A. Verify that the client's policy supports responsible feed sourcing (e.g. programs at <a href="http://www.isealliance.org/portrait/full%20member">http://www.isealliance.org/portrait/full%20member</a>).</p> <p>B. Obtain a copy of the client's letter of intent.</p> <p>C. As of June 13, 2017, confirm that the farm has sufficient evidence for the origin of all fish products in feed to demonstrate compliance with indicator 4.3.1. Prior to June 13, 2017, 4.3.1c does not apply.</p> <p>D. As of June 13, 2017, review evidence and confirm compliance. Prior to June 13, 2017, 4.3.1d does not apply.</p>	1	1	1	<p>There is not a policy from client to support responsible feed sourcing</p> <p>There is not a letter of intent to source feed containing fishmeal and fish oil originating from fisheries certified under the type of certification scheme noted in 4.3.1a</p>
Footnote	[65] This standard and standard 4.3.2 applies to fishmeal and oil from forage fisheries, pelagic fisheries, or fisheries where the catch is directly reduced (including krill) and not to by-products or trimmings used in feed.						
Footnote	[66] Meets ISEAL guidelines as demonstrated through full membership in the ISEAL Alliance, or equivalent as determined by the Technical Advisory Group of the ASC.						
Footnote	[67] Publication: Refers to the date when the final standards and accompanying guidelines are completed and made publicly available. This definition of publication applies throughout this document.						
4.3.2	<p><b>Indicator:</b> Prior to achieving 4.3.1, the FishSource score [68] for the fishery(ies) from which all marine raw material in feed is derived</p> <p><b>Requirement:</b> All individual scores ≥ 6, and biomass score ≥ 8</p> <p><b>Applicability:</b> All, until June 13, 2017</p>	<p><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> select "Species" drop down tab to the left and select the relevant species confirm that the search identifies the correct species, then select the top tab that reads "Scores"</p> <p>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).</p> <p>b. Confirm that each individual score ≥ 6 and the biomass score is ≥ 8.</p> <p>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.</p> <p>D. If the species does not have a FishSource score then the fish feed does not comply with the requirement.</p>	<p>A. Cross-check against 4.2.1a to confirm that client recorded a score for each species used in feed.</p> <p>B. Cross-check a sample of the farm's scores against the FishSource website to verify that no individual score is &lt; 6 and no biomass score is &lt; 8.</p> <p>C. If the client provides an independent assessment, review the assessment and the qualifications of the independent third party to verify that the assessment was done in accordance with the FishSource methodology.</p>	1	1	1	<p>Fish source score for deliveries to Arøya seafarm, is recorded for each species used in feed</p> <p>Fish source score for deliveries to Arøya seafarm, is recorded, for Sandeel and Sprat one or more score &lt;6, no recording of biomass score for pilchard, Mexico, Sandeel and Sprat</p>
Footnote	[68] Or equivalent score using the same methodology. See Appendix IV-3 for explanation of FishSource scoring.						
4.3.3	<p><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.</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All, until June 13, 2017</p>	<p><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.</p> <p>a. Obtain from the feed supplier documentary evidence that the origin of all fishmeal and fish oil used in the feed is traceable via a third-party verified chain of custody or traceability program.</p> <p>b. Ensure evidence covers all the species used (as consistent with 4.3.2a, 4.2.1a, and 4.2.2a).</p>	<p>A. Review evidence and confirm that a third party verified chain of custody or traceability program was used for the fishmeal and fish oil.</p> <p>B. Verify that demonstration of third-party verified chain-of-custody is in place for all species used.</p>	1	1	1	<p>There is not a rapport from third party traceability program to show compliance with 4.3.2</p> <p>There is a list of species used, but not a demonstration of third party chain-of-custody in place for the species used</p>
4.3.4	<p><b>Indicator:</b> Feed containing fishmeal and/or fish oil originating from by-products [69] or trimmings from IUU [70] catch or from fish species that are categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species [71]</p> <p><b>Requirement:</b> None [72]</p> <p><b>Applicability:</b> All except as noted in [72]</p>	<p>a. Compile and maintain, consistent with 4.2.1a and 4.2.2a, a list of the fishery of origin for all fishmeal and fish oil originating from by-products and trimmings.</p> <p>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.</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 [71] and explaining how they are able to demonstrate this (i.e. through other certification scheme or through their independent audit).</p> <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 [72].</p>	<p>A. Review list and confirm consistent with 4.2.1a, 4.2.2a, 4.3.3b.</p> <p>B. Verify that the farm obtains declarations from feed suppliers.</p> <p>C. Review declaration to confirm compliance. The International Fishmeal and Fish Oil Organization's Global Standard for Responsible Supply and the Marine Stewardship Council standards are two options for demonstrating compliance with Indicator 4.3.4c</p> <p>D. Review evidence to support exception (if applicable).</p>	1	1	1	<p>There is a list of fishmeal from by-product used, with origin</p> <p>Statement from Ewos 17.6.2013 no use of fishmeal or fish oil originating from IUU catch was used to produce the feed.</p> <p>No species from IUCN red list used for fishmeal or fish oil</p>
Footnote	[69] 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	[70] IUU: Illegal, Unregulated and Unreported.						
Footnote	[71] The International Union for the Conservation of Nature reference can be found at <a href="http://www.iucnredlist.org/static/introduction">http://www.iucnredlist.org/static/introduction</a> .						
Footnote	[72] 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.						
<b>Criterion 4.4 Source of non-marine raw materials in feed</b>							
		<b>Compliance Criteria (Required Client Actions):</b>	<b>Auditor Evaluation (Required CAB Actions):</b>				
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 [75] and local laws [76]</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>A. Review feed supplier list and cross-check against feed purchases. (See also 4.1.1a)</p> <p>B. Review policies from each feed supplier to confirm required sourcing policy is in place.</p> <p>C. Verify that the scope of third-party audits of feed suppliers includes review of policies and evidence of implementation.</p>	1	1	1	<p>Main feed supplier is Ewos, from Skretting 2.5 % of total supply of feed. Feed records reviewed from 13.7.2012-7.10.2013 for Arøya farm</p> <p>There is not a sourcing policy in place from feed producer</p> <p>Third-party audits from feed suppliers are not seen reviewed</p>
Footnote	[75] 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	[76] 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	<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 [77] <b>Requirement:</b> 100%, within five years of the publication [78] of the SAD standards <b>Applicability:</b> All, after June 13, 2017	a. Prepare a policy stating the company's support of efforts to shift feed manufacturers' purchases of soya to soya certified under the Roundtable for Responsible Soy (RTRS) or equivalent.	A. Verify that the client's policy supports responsible sourcing of soya or soya-derived feed ingredients.	1		There is not a policy from client to support responsible sourcing of soya
		b. Prepare a letter stating the farm's intent to source feed containing soya certified under the RTRS (or equivalent)	B. Obtain a copy of the client's letter of intent.	1		There is not a letter of intent to source feed containing soya certified under the RTRS (or equivalent)
		c. Notify feed suppliers of the farm's intent (4.4.2b).	C. Verify that farm notifies feed suppliers.		1	Feed suppliers are not notified
		d. Obtain and maintain declaration from feed supplier(s) detailing the origin of soya in the feed.	D. Confirm that the farm has sufficient and supportive evidence for the origin of soya products in feed to demonstrate compliance with indicator 4.4.2	1		Origin of soya is declared
		e. Starting on or before June 13, 2017, provide evidence that soya used in feed is certified by the Roundtable for Responsible Soy (RTRS) or equivalent [77]	E. As of June 13, 2017, review evidence and confirm compliance. Prior to June 13, 2017, 4.4.2e does not apply.		1	
Footnote	[77] Any alternate certification scheme would have to be approved as equivalent by the Technical Advisory Group of the ASC.					
Footnote	[78] Publication: Refers to the date when the final standards and accompanying guidelines are completed and made publicly available. This definition of publication applies throughout this document.					
4.4.3	<b>Indicator:</b> Evidence of disclosure to the buyer [79] of the salmon of inclusion of transgenic [80] plant raw material, or raw materials derived from transgenic plants, in the feed <b>Requirement:</b> Yes, for each individual raw material containing > 1% transgenic content [81] <b>Applicability:</b> All	a. Obtain from feed supplier(s) a declaration detailing the content of soya and other plant raw materials in feed and whether it is transgenic.	A. Review feed supplier declaration and ensure declarations from all suppliers are present (see also 4.4.1A).	1		Declaration from feed suppliers, no use of vegetable GM
		b. Disclose to the buyer(s) a list of any transgenic plant raw material in the feed and maintain documentary evidence of this disclosure. For first audits, farm records of disclosures must cover > 6 months.	B. Verify evidence of disclosure to all buyers, cross-checking with plant material list (4.4.3a) to see that all transgenic plant ingredients were disclosed	1		No use of transgenic plant ingredients
		c. Inform ASC whether feed contains transgenic ingredients (yes or no) as per Appendix VI for each production cycle.	C. Confirm that the farm has informed ASC whether feeds containing transgenic ingredients are used on farm (Appendix VI).	1		
Footnote	[79] 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	[80] 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	[81] See Appendix VI for transparency requirement for 4.4.3.					
<b>Criterion 4.5 Non-biological waste from production</b>						
<b>Compliance Criteria (Required Client Actions):</b>			<b>Auditor Evaluation (Required CAB Actions):</b>			
4.5.1	<b>Indicator:</b> Presence and evidence of a functioning policy for proper and responsible [83] treatment of non-biological waste from production (e.g., disposal and recycling) <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Prepare a policy stating the farm's commitment to proper and responsible treatment of non-biological waste from production. It must explain how the farm's policy is consistent with best practice in the area of operation.	A. Review policy to verify the farm's commitment to proper and responsible treatment of non-biological waste from production in a manner consistent with best practice in the area.	1		Waste policy is described in doc. 11.1.3.12, and 1.1.04
		b. Prepare a declaration that the farm does not dump non-biological waste into the ocean.	B. Verify the client makes a declaration.	1		Waste policy include no dumps of waste to ocean
		c. Provide a description of the most common production waste materials and how the farm ensures these waste materials are properly disposed of.	C. During the on-site inspection look for evidence of proper waste disposal.	1		On-site inspection show proper waste disposal
		d. Provide a description of the types of waste materials that are recycled by the farm.	D. During the on-site inspection look for evidence of recycling of waste materials as described by client.	1		All types of waste material, as battery, oil, bags, steel, metal, empty painting boxes, nets, are described with action
Footnote	[83] 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)	A. During the on-site inspection look for evidence of proper waste disposal. (See also 4.5.1C)	1		Waste disposal as planned
		b. Provide a description of the types of waste materials that are recycled by the farm. (See also 4.5.1d)	B. During the on-site inspection look for evidence of recycling of waste materials as described by client. (See also 4.5.1D)	1		Nets are sent to NOFI for scrap, seen for 4.10.2013
		c. Inform the CAB of any infractions or fines for improper waste disposal received during the previous 12 months and corrective actions taken.	C. Review infractions and corrective actions.	1		There are not reported improper waste disposal
		d. Maintain records of disposal of waste materials including old nets and cage equipment.	D. Review records to verify waste disposal and/or recycling is consistent with client description and policy.	1		Records (in Team) for disposal of nets and cage equipment (rings), for 25.9.2013 scrap of 16 net with ID, sent to NOFI
<b>Criterion 4.6 Energy consumption and greenhouse gas emissions on farms [84]</b>						
<b>Compliance Criteria (Required Client Actions):</b>			<b>Auditor Evaluation (Required CAB Actions):</b>			
Footnote	[84] See Appendix VI for transparency requirements for 4.6.1, 4.6.2 and 4.6.3.					
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/mt fish/production cycle <b>Applicability:</b> All	<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).				
		a. Maintain records for energy consumption by source (fuel, electricity) on the farm throughout each production cycle.	A. Verify that the farm maintains records for energy consumption.	1		Registration of petrol, diesel and electricity in Team, for Lerøy Aurora 1.7.2012-1.10.2013, for Årøya Seafarm from 1.11.2012-1.10.2013
		b. Calculate the farm's total energy consumption in kilojoules (kJ) during the last production cycle.	B. Review the farm's calculations for completeness and accuracy.	1		Total farm energy consumption KJ reported per month for Årøya
		c. Calculate the total weight of fish in metric tons (mt) produced during the last production cycle.	C. Confirm that the farm accurately reports total weight of fish harvested per production cycle. Cross-check against other farm datasets (e.g. harvest counts, escapes, and mortalities).	1		Total fish weight mt reported in detail
		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.	D. Review the farm's calculations for completeness and accuracy.	1		Calculation of kilojoule/mt fish/production cycle reviewed
		e. Submit results of energy use calculations (4.6.1d) to ASC as per Appendix VI for each production cycle.	E. Confirm that client has submitted energy use calculations to ASC (Appendix VI).	1		Calculation as described in Appendix V-1
		f. Ensure that the farm has undergone an energy use assessment that was done in compliance with requirements of Appendix V-1	F. Confirm that the farm has undergone an energy use assessment verifying the farm's energy consumption.	1		Energy use assessment undergone
4.6.2	<b>Indicator:</b> Records of greenhouse gas (GHG [85]) emissions [86] on farm and evidence of an annual GHG assessment, as outlined in Appendix V-1 <b>Requirement:</b> Yes <b>Applicability:</b> All	<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).				
		a. Maintain records of greenhouse gas emissions on the farm.	A. Verify that the farm maintains records of GHG emissions.		1	Farm has maintained records for CO2 emission, based on use of diesel, oil and gas
		b. At least annually, calculate all scope 1 and scope 2 GHG emissions in compliance with Appendix V-1.	B. Confirm that calculations are done annually and in compliance with Appendix V-1.		1	The calculation of CO2 have been done from July 2012 to date of audit
		c. For GHG calculations, select the emission factors which are best suited to the farm's operation. Document the source of those emissions factors.	C. Verify that the farm records all emissions factors used and their sources.		1	All sources have been recorded for CO2
		d. For GHG calculations involving conversion of non-CO2 gases to CO2 equivalents, specify the Global Warming Potential (GWP) used and its source.	D. Verify that the farm records all GWPs used and their sources.		1	There has not been calculation of non-CO2 gasses
		e. Submit results of GHG calculations (4.6.2d) to ASC as per Appendix VI at least once per year.	E. Confirm that the farm has submitted GHG calculations to ASC (Appendix VI).	1		GHG calculation of CO2 emission has been submitted
	f. Ensure that the farm undergoes a GHG assessment as outlined in Appendix V-1 at least annually.	F. Confirm that the farm undergoes a GHG assessments annually and that the methods used comply with requirements of Appendix V-1.		1	GHG assessments has been shown for CO2 annually, but not for other GHG	
Footnote	[85] 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	[86] GHG emissions must be recorded using recognized methods, standards and records as outlined in Appendix V.					



	Requirement: Yes	b. Ensure that the farm's current fish health management plan was reviewed and approved by the farm's designated veterinarian [96].	B. Verify there is evidence to show that the farm's designated veterinarian [96] reviewed and approved the current version of the plan.	1		Signed by fish health resp. H. Hårstad 15.09.2013	
5.1.2	Indicator: Site visits by a designated veterinarian [96] at least four times a year, and by a fish health manager [97] at least once a month  Requirement: Yes Applicability: All	a. Maintain records of visits by the designated veterinarian [96] and fish health managers [97]. If schedule cannot be met, a risk assessment must be provided.	A. Review documentary evidence of site visits to confirm a minimum number of visits as outlined in 5.1.2. Or review risk assessment.	1		Min. 12 visits each year by vet. H. Hårstad and E. Monsen	
		b. Maintain a current list of personnel who are employed as the farm's designated veterinarian(s) [96] and fish health manager(s) [97].	B. Confirm visits in 5.1.2a were performed by the farm's designated health professionals.	1		Doc. Fish health journals from all the visits	
		c. Maintain records of the qualifications of persons identified in 5.1.2b.	C. Review evidence for qualifications of the farm's health professionals.	1		Doc. Certificates from H. Hårstad and E. Monsen	
Footnote	[96] 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	[97] A fish health manager is someone with professional expertise in managing fish health, who may work for a farming company or for a veterinarian, but who does not necessarily have the authority to prescribe medicine.						
5.1.3	Indicator: Percentage of dead fish removed and disposed of in a responsible manner  Requirement: 100% [98] Applicability: All	a. Maintain records of mortality removals to show that dead fish are removed regularly and disposed of in a responsible manner.	A. Review records of mortality removals to confirm completeness and accuracy. Cross-check against 5.1.4 and calculations of escapes and unexplained loss.	1		Removed on daily basis to the ensilage tank. Registered in the daily journals and in FishTalk.	
		b. Collect documentation to show that disposal methods are in line with practices recommended by fish health managers and/or relevant legal authorities.	B. Review client submission. Inspect the farm's system for mortality removals and disposals during the on site audit.	1		The ensilage is kept in tanks and removed by approved company Akvaren. There is also agreement if there will be a mass mortality	
		c. For any exceptional mortality event where dead fish were not collected for post-mortem analysis, keep a written justification.	C. Review the farm's justification for any exceptional mortality event where dead fish were not collected for post-mortem analysis (this situation should be a rare occurrence).		1		No exceptional mortality in the farm
Footnote	[98] The SAD recognizes that not all mortality events will result in dead fish present for collection and removal. However, such situations are considered the exception rather than the norm.						
	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	Indicator: Percentage of mortalities that are recorded, classified and receive a post-mortem analysis  Requirement: 100% [99] Applicability: All	a. Maintain detailed records for all mortalities and post-mortem analyses including: - date of mortality and date of post-mortem analysis; - total number of mortalities and number receiving post-mortem analysis; - name of the person or lab conducting the post-mortem analyses; - qualifications of the individual (e.g. veterinarian [96], fish health manager [97]); - cause of mortality (specify disease or pathogen) where known; and - classification as 'unexplained' when cause of mortality is unknown (see 5.1.6).	A. Review records of mortalities to verify completeness and to confirm that post-mortem analyses were done by qualified individuals or labs.	1		Doc. In FishTalk, vet.health reports and results of analysis made by Veterinærinstituttet	
		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.	B. Review records to confirm the farm had post-mortem analysis done for each mortality event and that a statistically relevant number of fish were analyzed from each mortality event.	1		Doc. In Vet. Journals and reports from Veterinærinstituttet	
		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).	C. Review records to confirm that any inconclusive on-site diagnoses were sent to an off-site laboratory for further testing.	1		Doc. Reports from Veterinærinstituttet 15. January 2013: Yersinose	
		d. Using results from 5.1.3a-c, classify each mortality event and keep a record of those classifications.	D. Review mortality events to confirm the farm's classification was consistent with results from post-mortem analyses. Where cause was not determined verify that classification was plausible given available info.	1		All the mortality of the fish is reported in vet. Reports, FishTalk and daily journals	
		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).	E. Review evidence to confirm compliance with requirements.	1		Doc. In vet. Reports, last 24.09.2013	
		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).	F. Confirm that client has submitted data from post-mortem analyses and cause and number of mortalities to ASC (Appendix VI).	1		Data submitted to ASC	
Footnote	[99] If on-site diagnosis is inconclusive, this standard requires or shall be analyzed. A qualified professional must conduct an 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						
5.1.5	Indicator: Maximum viral disease-related mortality [100] on farm during the most recent production cycle  Requirement: ≤ 10% Applicability: All	a. Calculate the total number of mortalities that were diagnosed (see 5.1.4) as being related to viral disease.	A. Review and confirm the calculated number of viral disease-related mortalities.	1		No viral disease in the farm. Doc. From vet. Rapports	
		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.	B. Verify that the sum of confirmed viral disease-related mortalities plus unspecified & unexplained mortalities is ≤ 10% of the total number of fish produced during the most recent production cycle	1		Calculated mortality in the farm is: 8,13%	
		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).	C. Confirm that client has submitted data on mortality to ASC (Appendix VI).	1		Data submitted to ASC	
Footnote	[100] Viral disease-related mortality count shall include unspecified and unexplained mortality as it could be related to viral disease.						
5.1.6	Indicator: Maximum unexplained mortality rate from each of the previous two production cycles, for farms with total mortality > 6%  Requirement: ≤ 40% of total mortalities Applicability: All farms with > 6% total mortality in the most recent complete production cycle.	a. Use records in 5.1.4a to calculate the unexplained mortality rate (%) for the most recent full production cycle. If rate was ≤ 6%, then the requirement of 5.1.6 does not apply. If total mortality rate was > 6%, proceed to 5.1.6b.	A. Review, confirm, and document whether 5.1.6 is applicable to the client. If applicable, proceed to 5.1.6b.	1		Calculated Mortality is 5,31%	
		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.	B. Review and confirm that ≤ 40% of total mortalities were from unexplained causes for each of the two previous production cycles		1		Below 6%
		c. Submit data on maximum unexplained mortality to ASC as per Appendix VI for each production cycle.	C. Confirm that client has submitted data on unexplained mortality to ASC (Appendix VI).		1		Below 6%
5.1.7	Indicator: A farm-specific mortalities reduction program that includes defined annual targets for reductions in mortalities and reductions in unexplained mortalities  Requirement: Yes Applicability: All	Note: Farms have the option to integrate their farm-specific mortality reduction program into the farm's fish health management plan (5.1.1).					
		a. Use records in 5.1.4a to assemble a time-series dataset on farm-specific mortalities rates and unexplained mortality rates.	A. Confirm that the farm used mortalities records to assemble a detailed dataset on mortality rates which covers the required timeframe (see 5.1.4).	1		Doc. In VHP mortality rates and in FishTalk	
		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.	B. Review program to confirm that targets for mortality reduction are reasonable and based on historical data.	1		Doc. In VHP: targets for mortality, based on historical data	
		c. Ensure that farm management communicates with the veterinarian, fish health manager, and staff about annual targets and planned actions to meet targets.	C. Interview workers to confirm their understanding of mortalities recording, classification, and annual targets for reduction (see also 5.1.1, 5.1.3).	1		Well understanding demonstrated	
Criterion 5.2 Therapeutic treatments [101]							
Footnote	[101] 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		Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):			
5.2.1	Indicator: On-farm documentation that includes, at a minimum, detailed information on all chemicals [102] and therapeutants used during the most recent production cycle, the amounts used (including grams per ton of fish produced), the dates used, which group of fish were treated and against which diseases, proof of proper dosing, and all disease and pathogens detected on the site  Requirement: Yes Applicability: All	a. Maintain a detailed record of all chemical and therapeutant use that includes: - name of the veterinarian prescribing treatment; - product name and chemical name; - reason for use (specific disease) - date(s) of treatment; - amount (g) of product used; - dosage; - mt of fish treated; - the WHO classification of antibiotics (also see note under 5.2.8); and - the supplier of the chemical or therapeutant.	A. Review records of chemical and therapeutant use. Verify accuracy through cross-check with purchase orders and sales records, inventories, documentation from feed manufacturer for any in-feed treatment, and veterinary records.	1		No therapeutic have been used in Årgava. Only Benzozak for sedating the fish when counting sea lice. Doc. In vet. Rapports and FishTalk	
		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.	B. Confirm that farm has detailed records for chemical and therapeutant use that covers the previous two production cycles.	1		Detailed records in FishTalk and in vet. Journals	
		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).	C. Confirm that client has submitted therapeutant information to ASC (Appendix VI).		1		Data not submitted to ASC

Footnote	[102] Chemicals used for the treatment of fish.					
5.2.2	<p><b>Indicator:</b> Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [103] in any of the primary salmon producing or importing countries [104]</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All</p>	<p>a. Prepare a list of therapeutants, including antibiotics and chemicals, that are proactively banned for use in food fish for the primary salmon producing and importing countries listed in [104].</p> <p>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>A. Review list and supporting evidence. If ASC has agreed to maintain a list of relevant therapeutants, farm can demonstrate that they have this list.</p> <p>B. Verify records.</p> <p>C. Cross-check records of therapeutant use (5.2.1a) against the list of banned therapeutants to verify compliance with requirements.</p>	1	1	<p>Doc. In the official list " Grenseverdier for legemidler i næringsmidler for dyr 30.5.2012"</p> <p>No treatment used of that type of treatments. Doc. in Vet. reports</p> <p>Verified " List of EU and US banned substances</p>
Footnote	[103] "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	[104] 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 [96] 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>A. Review documentary evidence (on-farm records, veterinary records, and prescriptions) to confirm all therapeutants were prescribed by a qualified individual. See [96] for definition of veterinarian.</p> <p>B. Cross-check with results from chemical residue testing provided under 5.2.2b.</p>	1	1	<p>Doc. Certificates for the veterinarian and journals from the visits and in FishTalk.</p> <p>Reviewed doc. From veterinarian and results of analysis.</p>
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>A. Review the farm's fish health management plan to confirm inclusion of withholding periods and interview farm staff to verify implementation.</p> <p>B. Review documentation for completeness and accuracy. Compare to records of therapeutant use (5.2.1a).</p> <p>C. Review documentary evidence and, if applicable, results from chemical residue testing (5.2.2b), to confirm legal withholding periods were met for the most recent production cycle and harvest.</p>	1	1	<p>Doc. In the VHP. No treatments in Årgøya so far</p> <p>Doc. From VHP and FishTalk</p> <p>Doc. From FishTalk and vet. Journals. No use of treatments in the farm</p>
5.2.5	<p><b>Indicator:</b> Maximum farm level cumulative parasiticide treatment index (PTI) score as calculated according to the formula in Appendix VII</p> <p><b>Requirement:</b> PTI score ≤ 13</p> <p><b>Applicability:</b> All</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 PTI score.</p> <p>c. Submit data on farm level cumulative PTI score to ASC as per Appendix VI for each production cycle.</p>	<p>A. Review the farm's calculations to verify that the PTI score was calculated correctly and that the scores are accurate. Cross-check with records of parasiticide use.</p> <p>B. Verify that the farm level cumulative PTI score ≤ 13.</p> <p>C. Confirm that client has submitted data on cumulative PTI score to ASC (Appendix VI).</p>	1	1	<p>No treatments in the farm, only Benzoak for counting sea lice</p> <p>No treatments in the farm</p> <p>Data submitted to ASC</p>
5.2.6	<p><b>Indicator:</b> For farms with a cumulative PTI ≥ 6 in the most recent production cycle, demonstration that parasiticide load [105] is at least 15% less than that of the average of the two previous production cycles</p> <p><b>Requirement:</b> Yes, within five years of the publication of the SAD standard (i.e. by June 13, 2017)</p> <p><b>Applicability:</b> All farms with a cumulative PTI ≥ 6 in the most recent production cycle</p>	<p>Note: Indicator 5.2.6 does not take effect until June 13, 2017. Nonetheless farms should start collecting data on parasiticide load beforehand in case farms have to demonstrate compliance with Indicator 5.2.6 at some point in the future using data from the two previous production cycles.</p> <p>a. Review PTI scores from 5.2.5a to determine if cumulative PTI ≥ 6 in the most recent production cycle. If yes, proceed to 5.2.6b; if no, indicator 5.2.6 does not apply.</p> <p>b. Using results from 5.2.5 and the weight of fish treated (kg), calculate parasiticide load in the most recent production cycle [105].</p> <p>c. Calculate parasiticide load in the two previous production cycles as above (5.2.6b) and compute the average. Calculate the percent difference in parasiticide load between current cycle and average of two previous cycles. For first audit, calculation must cover one full production cycle immediately prior to the current cycle.</p> <p>d. As applicable, submit data to ASC on parasiticide load for the most recent production cycle and the two previous production cycles (Appendix VI).</p>	<p>A. Review farm's cumulative PTI score to determine if indicator 5.2.6 is applicable.</p> <p>B. Review the farm's calculation of parasiticide load to verify accuracy.</p> <p>C. Review farm's calculations to verify that parasiticide load for the most recent production cycle is at least 15% less than that of the two previous cycles.</p> <p>D. Confirm that client has submitted data on parasiticide load to ASC (Appendix VI) as applicable.</p>		1	<p>No treatments</p> <p>No treatments</p> <p>No treatments</p> <p>Not started yet</p>
Footnote	[105] Parasiticide load = Sum (kg of fish treated x PTI). Reduction in load required regardless of whether production increases on the site. Farms that consolidate production across multiple sites within an ABM can calculate reduction based on the combined parasiticide load of the consolidated sites.					
5.2.7	<p><b>Indicator:</b> Allowance for prophylactic use of antimicrobial treatments [106]</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>A. Review purchase records and calculate total amount procured by client. Inspect storage areas to verify quantities on-site.</p> <p>B. Review log of medication events to verify that the quantity of antibiotic applied by the client does not suggest prophylactic use.</p> <p>C. Verify that the total amount of antibiotics used in the current production cycle is equal to the total amount prescribed.</p>		1	<p>No treatments in the farm</p> <p>No treatments in the farm</p> <p>No treatments in the farm</p>
Footnote	[106] The designated veterinarian must certify that a pathogen or disease is present before prescribing medication.					
5.2.8	<p><b>Indicator:</b> Allowance for use of antibiotics listed as critically important for human medicine by the World Health Organization (WHO [107])</p> <p><b>Requirement:</b> None [108]</p> <p><b>Applicability:</b> All</p>	<p>Note 1: Farms have the option to certify only a portion of the fish or farm site when WHO-listed [107] antibiotics have been used at the production facility (see 5.2.8d). To pursue this option, farms must request an exemption from the CAB in advance of the audit and provide sufficient records giving details on which pens were treated and traceability of those treated fish.</p> <p>a. Maintain a current version of the WHO list of antimicrobials critically and highly important for human health [107].</p> <p>b. If the farm has <u>not</u> used any antibiotics listed as critically important (5.2.8a) in the current production cycle, inform the CAB and proceed to schedule the audit.</p> <p>c. If the farm <u>has</u> used antibiotics listed as critically important (5.2.8a) to treat any fish during the current production cycle, inform the CAB prior to scheduling audit.</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>A. Confirm that the farm has the current copy of the WHO list of antibiotics.</p> <p>B. During the on-site audit, verify that no antibiotics listed as "critically important" have been used on the farm through cross-check of records for 5.2.1 and 5.2.7.</p> <p>C. Make note of the farm's antibiotic usage and do not schedule an on-site audit until the client provides additional information as specified in 5.2.8d.</p> <p>D. Review the farm's exemption request and supporting documents to verify that the farm can satisfactorily demonstrate traceability [108] to merit an exemption.</p>		1	<p>No treatments in the farm</p> <p>No treatments in the farm</p> <p>No treatments in the farm</p> <p>No treatments in the farm</p>
Footnote	[107] The third 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	[108] 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.					
5.2.9	<p><b>Indicator:</b> Number of treatments [109] of antibiotics over the most recent production cycle</p> <p><b>Requirement:</b> ≤ 3</p> <p><b>Applicability:</b> All</p>	<p>Note: for the purposes of Indicator 5.2.9, "treatment" means a single course of medication given to address a specific disease issue and that may last a number of days and be applied in one or more pens (or cages).</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>A. Review documents to confirm that the client maintains a record of all treatments of antibiotics. Cross-check against records of on-farm chemical &amp; therapeutant use (5.2.1a), medication events (5.2.3a), and prescription records (5.2.3b).</p> <p>B. Confirm that the client used ≤ 3 treatments of antibiotics over the most recent production cycle.</p>		1	<p>No treatments in the farm</p> <p>No treatments in the farm</p>
Footnote	[109] A treatment is a single course medication given to address a specific disease issue and that may last a number of days.					
5.2.10	<p><b>Indicator:</b> If more than one antibiotic treatment is used in the most recent production cycle, demonstration that the antibiotic load [110] is at least 15% less than that of the average of the two previous production cycles</p> <p><b>Requirement:</b> Yes [111], within five years of the publication of the SAD standard (i.e. full compliance by June 13, 2017)</p> <p><b>Applicability:</b> All</p>	<p>Note: Indicator 5.2.10 requires that farms must demonstrate a reduction in load required, regardless of whether production increases on the site. Farms that consolidate production across multiple sites within an ABM can calculate reduction based on the combined antibiotic load of the consolidated sites.</p> <p>a. Use results from 5.2.9b to show whether more than one antibiotic treatment was used in the most recent production cycle. If not, then the requirement of 5.2.10 does not apply. If yes, then proceed to 5.2.10b.</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 cycle immediately prior to the current cycle.</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>	<p>A. Review results to confirm whether 5.2.10 is applicable to the client. Record the results and, if applicable, proceed to 5.2.10b.</p> <p>B. Review farm's calculations for accuracy and completeness of coverage. Cross-check against treatment records (5.2.1a).</p> <p>C. Review evidence to verify that farm complies with requirement.</p> <p>D. Confirm that client has submitted data on antibiotic load to ASC (Appendix VI) as applicable.</p>		1	<p>No treatments in the farm</p> <p>No treatments in the farm</p> <p>No treatments in the farm</p> <p>No use of antibiotics</p>
Footnote	[110] Antibiotic load = the sum of the total amount of active ingredient of antibiotics used (kg).					

Footnote	[111] Reduction in load required, regardless of whether production increases on the site. Farms that consolidate production across multiple sites within an ABM can calculate reduction based on the combined antibiotic load of the consolidated sites.					
5.2.11	<p><b>Indicator:</b> Presence of documents demonstrating that the farm has provided buyers [112] 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 [112] 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>	<p>A. Review the farm's procedure and confirm implementation based on relevant documentary evidence (e.g. sales records, invoices).</p> <p>B. Review sales records for completeness and cross-check against treatment records (5.2.1a) to verify that buyers were adequately informed about therapeutants used in production.</p>	1		Doc. Verified used if necessary. Using results doc. In vet. Reports and FishTalk
Footnote	[112] Buyer: The company or entity to which the farm or the producing company is directly selling its product.					
<b>Criterion 5.3 Resistance of parasites, viruses and bacteria to medicinal treatments</b>						
<b>Compliance Criteria (Required Client Actions):</b>			<b>Auditor Evaluation (Required CAB Actions):</b>			
5.3.1	<p><b>Indicator:</b> Bio-assay analysis to determine resistance when two applications of a treatment have not produced the expected effect</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p><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.</p> <p>a. In addition to recording all therapeutic treatments (5.2.1a), keep a record of all cases where the farm uses two successive medicinal treatments.</p> <p>b. Whenever the farm uses two successive treatments, keep records showing how the farm evaluates the observed effect of treatment against the expected effect of treatment.</p> <p>c. For any result of 5.3.1b that did not produce the expected effect, ensure that a bio-assay analysis of resistance is conducted.</p> <p>d. Keep a record of all results arising from 5.3.1c.</p>	<p>A. Review farm records to confirm recording of all successive medicinal treatments.</p> <p>B. If applicable, review how the farm evaluates the observed effect of treatment against the expected effect of treatment.</p> <p>C. Review farm records to confirm that bio-assays were done in every case where successive treatments did not produce the expected effect. Confirm that bio-assays were performed by a qualified independent laboratory.</p> <p>D. Verify that farm maintains records from bio-assays (as applicable).</p>	1		No treatments in the farm
5.3.2	<p><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</p> <p><b>Requirement:</b> Yes</p>	<p>a. Review results of bio-assay tests (5.3.1d) for evidence that resistance has formed. If yes, proceed to 5.3.2b. If no, then Indicator 5.3.2 is not applicable.</p> <p>b. When bio-assay tests show evidence that resistance has formed, keep records showing that the farm took one of two actions: - used an alternative treatment (if permitted in the area of operation); or - immediately harvested all fish on site.</p>	<p>A. Review evidence from bio-assay tests to determine whether indicator 5.3.2 is applicable.</p> <p>B. If applicable, review records to verify that the farm either used an alternative treatment that is permitted in the area of operation or else harvested all fish on site.</p>	1		If needed the decision is reg. To ABM for the area to use Betamax  Records from vet. Journals and the ABM for the area
<b>Criterion 5.4 Biosecurity management [113]</b>						
<b>Compliance Criteria (Required Client Actions):</b>			<b>Auditor Evaluation (Required CAB Actions):</b>			
Footnote	[113] See Appendix VI for transparency requirements for 5.4.2 and 5.4.4.					
5.4.1	<p><b>Indicator:</b> Evidence that all salmon on the site are a single-year class [114]</p> <p><b>Requirement:</b> 100% [115]</p> <p><b>Applicability:</b> All farms except as noted in [115]</p>	<p>a. Keep records of the start and end dates of periods when the site is fully fallow after harvest.</p> <p>b. Provide evidence of stocking dates (purchase receipts, delivery records) to show that there were no gaps &gt; 6 months for smolt inputs for the current production cycle.</p>	<p>A. Review records and verify fallow periods by cross-checking during interviews with farm staff and community representatives.</p> <p>B. Review evidence to confirm there were no gaps in smolt inputs &gt; 6 months. Inspect pens during the on-site audit to see if fish size (which may be variable) is consistent with the production of a single-year class.</p> <p>C. Verify that the available evidence shows that salmon on the site are from a single-year class.</p>	1		Doc. In Fish health report frm 22.07.2012, Doc. Single years class, Last slaughterdate25.4.2012  Doc. In fishtalk: From 22.4.2012 until 1.9.2012  Vet. Reports shows single years class
Footnote	[114] 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	[115] 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	<p><b>Indicator:</b> Evidence that if the farm suspects an unidentifiable transmissible agent, or if the farm experiences unexplained increased mortality, [116] the farm has: 1. Reported the issue to the ABM and to the appropriate regulatory authority 2. Increased monitoring and surveillance [117] on the farm and within the ABM 3. Promptly [118] made findings publicly available</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. For mortality events logged in 5.1.4a, show evidence that the farm promptly evaluated each to determine whether it was a statistically significant increase over background mortality rate on a monthly basis [116]. The accepted level of significance (for example, p &lt; 0.05) should be agreed between farm and CAB.</p> <p>b. For mortality events logged in 5.1.4a, record whether the farm did or did not suspect (yes or no) an unidentified transmissible agent.</p> <p>c. Proceed to 5.4.2d if, during the most recent production cycle, either: - 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.</p> <p>d. If required, ensure that the farm takes and records the following steps: 1) Report the issue to the ABM and to the appropriate regulatory authority; 2) Increase monitoring and surveillance [117] on the farm and within the ABM; and 3) Promptly (within one month) make findings publicly available.</p> <p>e. As applicable, submit data to ASC as per Appendix VI about unidentified transmissible agents or unexplained increases in mortality. If applicable, then data are to be sent to ASC on an ongoing basis (i.e. at least once per year and for each production cycle).</p>	<p>A. Review evidence to confirm that the farm evaluated mortality events for statistically significant increases relative to background mortality rates (compare to farm's time-series dataset in 5.1.7a).</p> <p>B. Determine if the farm suspected any unidentified transmissible agents associated with mortality events during the most recent production cycle. An abrupt increase in unexplained mortality should be cause for suspicion.</p> <p>C. Confirm that the farm took the correct action based on results from 5.4.2a and 5.4.2b and whether 5.4.2d is applicable to the farm.</p> <p>D. If applicable, verify that the farm keeps records to show how each of the required steps was completed.</p> <p>E. Confirm that client submits data to ASC (Appendix VI) about unidentified transmissible agents or unexplained increases in mortality as applicable.</p>	1		No unexplained mortalities. Vet reports  No unexplained mortalities  No unexplained mortalities  No unexplained mortalities  Data submitted to ASC
Footnote	[116] Increased mortality: A statistically significant increase over background rate on a monthly basis.					
Footnote	[117] Primary aim of monitoring and surveillance is to investigate whether a new or adapted disease is present in the area.					
Footnote	[118] Within one month.					
<b>Instruction to Clients for Indicator 5.4.3 - Compliance with the OIE Aquatic Animal Health Code</b>						
5.4.3	<p><b>Indicator:</b> Evidence of compliance [119] with the OIE Aquatic Animal Health Code [120]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</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: - depopulation of the infected site; - implementation of quarantine zones (see note below) in accordance with guidelines from OIE for the specific pathogen; and - additional actions as required under Indicator 5.4.4.</p> <p>a. Maintain a current version of the OIE Aquatic Animal Health Code on site or ensure staff have access to the most current version.</p> <p>b. Develop policies and procedures as needed to ensure that farm practices remain consistent with the OIE Aquatic Animal Health Code (5.4.3a) and with actions required under indicator 5.4.4.</p>	<p>A. Verify that farm management is aware of practices described in the most current version of the code during interviews.</p> <p>B. Review farm policies and procedures to verify that the farm has documented how its practices are consistent with the OIE Aquatic Animal Health Code and Indicator 5.4.4.</p> <p>C. During the on-site inspection look for evidence that policies and procedures in 5.4.3a are implemented. Cross-check in interviews with staff.</p>	1		Doc in OIE AquaticHealth Code, version 2013  Doc in several procedures for health controls, and extra controls if IAS  Well implemented to the staff
Footnote	[119] 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	[120] 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	<p><b>Indicator:</b> If an OIE-notifiable disease [121] is confirmed on the farm, evidence that: 1. the farm has, at a minimum, immediately culled the pen(s) in</p>	<p>a. Ensure that farm policies and procedures in 5.4.3a describe the four actions required under Indicator 5.4.4 in response to an OIE-notifiable disease on the farm.</p> <p>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 or 5.4.4d do not apply.</p>	<p>A. Review farm policies and procedures (see 5.4.3A) to verify that the farm has documented actions in response to an OIE-notifiable disease.</p> <p>B. Record whether there were any OIE-notifiable diseases confirmed on the farm during the current or two previous production cycles.</p>	1		Doc. In procedures. Will be managed by the authority Mattilsynet  No diseases in the previous production cycles



5.4.4	which the disease was detected 2. the farm immediately notified the other farms in the ABM [122] 3. the farm and the ABM enhanced monitoring and conducted rigorous testing for the disease 4. the farm promptly [123] made findings publicly available  <b>Requirement:</b> Yes <b>Applicability:</b> All	c. If an OIE-notifiable disease was confirmed on the farm (see 5.4.4b), then retain documentary evidence to show that the farm: 1) immediately culled the pen(s) in which the disease was detected; 2) immediately notified the other farms in the ABM [122] 3) enhanced monitoring and conducted rigorous testing for the disease; and 4) promptly (within one month) made findings publicly available.	C. If applicable, review documentary evidence to verify the farm's response complied with the four actions required under Indicator 5.4.4.	1			Doc. In the farms procedures
		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).	D. Confirm that client submits data to ASC (Appendix VI) about any OIE-notifiable disease that was confirmed on the farm (as applicable).	1			Data submitted to ASC
		-	E. If an OIE-notifiable disease was confirmed on the farm, verify that notifications were made to regulatory bodies required under law and the OIE Aquatic Animal Health Code [122].	1			No diseases in the farm
Footnote	[121] 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	[122] This is in addition to any notifications to regulatory bodies required under law and the OIE Aquatic Animal Health Code.						
Footnote	[123] Within one month.						
<b>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.</b>							
<b>PRINCIPLE 6: DEVELOP AND OPERATE FARMS IN A SOCIALLY RESPONSIBLE MANNER</b>							
<b>6.1 Freedom of association and collective bargaining [124]</b>							
<b>Compliance Criteria</b>							
Footnote	[124] 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 these criteria.	1				Freedom of trade union is not included in the workers agreements
		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."	1			The representative is chosen by the workers	
		c. Trade union representatives (or worker representatives) have access to their members in the workplace at reasonable times on the premises.	1			They have access to all the workplaces	
		d. Be advised that workers and union representatives (if they exist) will be interviewed to confirm the above.	1			Performed interview of all the staff in the farm	
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.	1				Doc. In the workers contracts
		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).	1			Doc. In workers contracts	
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	c. Be advised that workers will be interviewed to confirm the above.	1				Interviews of all the staff
		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.	1			No outstanding in the local trade union. Verified by the representative.	
		b. Employer has explicitly communicated a commitment to ensure the collective bargaining rights of all workers.	1				Verified in interviews by staff
		c. There is documentary evidence that workers are free and able to bargain collectively (e.g. collective bargaining agreements, meeting minutes, or complaint resolutions).	1				
<b>Criterion 6.2 Child labor</b>							
<b>Compliance Criteria</b>							
6.2.1	<b>Indicator:</b> Number of incidences of child [125] labor [126]  <b>Requirement:</b> None	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 125L) b. Minimum age of permanent workers is 15 or older (except in countries as noted above). c. Employer maintains age records for employees that are sufficient to demonstrate compliance.	1				No employees below 15 years in the farm
Footnote	[125] 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.						No employees below 15 years in the farm
Footnote	[126] Child Labor: Any work by a child younger than the age specified in the definition of a child.						Doc. In the agreements for the employees
6.2.2	<b>Indicator:</b> Percentage of young workers [127] that are protected [128]  <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.	1				None in the farm is under 18 years old
		b. All young workers (from age 15 to less than 18) are identified and their ages are confirmed with copies of IDs.	1			All workers are identified	
		c. Daily records of working hours (i.e. timesheets) are available for all young workers.	1			Daily records of working hours are made by themselves. Documented	
		d. For young workers, the combined daily transportation time and school time and work time does not exceed 10 hours.	1			None in the farm is under 18 years old	
		e. Young workers are not exposed to hazards [129] and do not perform hazardous work [130]. Work on floating cages in poor weather conditions shall be considered hazardous.	1			None in the farm is under 18 years old	
		f. Be advised that the site will be inspected and young workers will be interviewed to confirm compliance.	1			None in the farm is under 18 years old	
Footnote	[127] Young Worker: Any worker between the age of a child, as defined above, and under the age of 18.						
Footnote	[128] 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	[129] 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	[130] 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).						
<b>Criterion 6.3 Forced, bonded or compulsory labor</b>							
<b>Compliance Criteria</b>							
6.3.1	<b>Indicator:</b> Number of incidences of forced, [131] bonded [132] 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).	1				All the contracts are clearly stated and understood by the employees. Confirmed by interviews
		b. Employees are free to leave workplace and manage their own time.	1			Documented by interviews	
		c. Employer does not withhold employee's original identity documents.	1			Documented by interviews and agreements	
		d. Employer does not withhold any part of workers' salaries, benefits, property or documents in order to oblige them to continue working for employer.	1			Documented by interviews	
		e. Employees are not to be obligated to stay in job to repay debt.	1			Records of interviewed employees	
		f. Maintain payroll records and be advised that workers will be interviewed to confirm the above.	1				
Footnote	[131] Forced (compulsory) labor: All work or service that is extracted from any person under the menace or any penalty for which a person has not offered himself voluntarily or for which such work or service is demanded as a repayment or 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	[132] Bonded labor: When a person is forced by the employer or creditor to work to repay a financial debt to the crediting agency.						
<b>Criterion 6.4 Discrimination [133]</b>							
<b>Compliance Criteria</b>							
Footnote	[133] 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 [134] and proactive anti-discrimination policies, procedures and practices  <b>Requirement:</b> Yes	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.	1				Doc. in "Ethical commitment" for the farm.
		b. Employer has clear and transparent company procedures that outline how to raise, file, and respond to discrimination complaints.	1			Clearly and transparent procedures	
		c. Employer respects the principle of equal pay for equal work and equal access to job opportunities, promotions and raises.	1			Principles respected by the employer	
		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.	1			Doc. Internal training	

Footnote	[134] 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.	1			No cases so far. Verified in the interviews
		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.	1			Confirmed in interviews of the employees in the farm
<b>Criterion 6.5 Work environment health and safety</b>						
<b>Compliance Criteria</b>						
6.5.1	<b>Indicator:</b> Percentage of workers trained in health and safety practices, procedures [135] 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.	1			Employees has documented training for operation of crane at feeding boat, seen for Runo, March 2010
		b. Employees know and understand emergency response procedures.	1			Employees shows understanding for the procedures. Weekly meetings regarding these questions
		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.	1			Doc. Training for all employees by start in the farm, regularly updated.
Footnote	[135] Health and safety training shall include emergency response procedures and practices.					
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).	1			All employees know and can see the list documented in the risk analysis
		b. Employer provides workers with PPE that is appropriate to known health and safety hazards.	1			All employees have PPE.
		c. Employees receive annual training in the proper use of PPE (see 6.5.1c). For workers who participated in the initial training(s) previously an annual refreshment training may suffice, unless new PPE has been put to use.	1			Weekly meeting, monthly reports and regularly training.
		d. Be advised that workers will be interviewed to confirm the above.	1			Interviews of the employees
6.5.3	<b>Indicator:</b> Presence or 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).		1		Doc. Risk analysis for the farm, do not include control of fire extinguisher and truck service
		b. Employees are trained in how to identify and prevent known hazards and risks (see also 6.5.1c).			1	Employees are well trained in hazards, there are gas mask with expire due date
		c. Health and safety procedures are adapted based on results from risk assessments (above) and changes are implemented to help prevent accidents.	1			Doc procedures for health and safety
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.	1			All the health and safety accidents are reported. Doc. From monthly reports
		b. Employer maintains complete documentation for all occupational health and safety violations and investigations.	1			Doc. In the farm non conformity system
		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.	1			Verified in the interviews
		d. Employees working in departments where accidents have occurred can explain what analysis has been done and what steps were taken or improvements made.	1			Doc. Improvements where necessary
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.	1			Doc. In the agreements with the company.
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.				
		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.	1			Doc. In the agreements with Skjervøy Dykkeservice and in the diving reports.
	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.	1				Doc in diving reports kept in the farm
<b>Criterion 6.6 Wages</b>						
<b>Compliance Criteria</b>						
6.6.1	<b>Indicator:</b> The percentage of workers whose basic wage [136] (before overtime and bonuses) is below the minimum wage [137] <b>Requirement:</b> 0 (None)	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.	1			Doc. In the agreements for the employees
		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 wage.	1			Working time regarding to the Norwegian laws documented in the agreements for the employee
		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.	1			Doc. In the timesheets for the employees
Footnote	[136] Basic wage: The wages paid for a standard working week (no more than 48 hours).					
Footnote	[137] 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 [138] <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.	1			Wage for employees regarding to the tariff for Hovedavitalen 2010 - 2013 LO-NHO documented
		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.	1			Regarding to the tariff handled by the employees
		c. Employer demonstrates how they have taken steps toward paying a basic needs wage to their workers.	1			Regularly meetings between employees and the staff for handling the wages
Footnote	[138] 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 [139] <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Wages and benefits are clearly articulated to workers and documented in contracts.	1			Wages and other benefits are clearly documented in the contracts and timesheets for all employees
		b. The method for setting wages is clearly stated and understood by workers.	1			The method is clearly stated and understood
		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.	1			Electronic payment for all the employees
		d. Be advised that workers will be interviewed to confirm the above.	1			Conformed by interviews of all the employees
Footnote	[139] Payments shall be rendered to workers in a convenient manner.					
<b>Criterion 6.7 Contracts (labor) including subcontracting</b>						
<b>Compliance Criteria</b>						
6.7.1	<b>Indicator:</b> Percentage of workers who have contracts [141] <b>Requirement:</b> 100% <b>Applicability:</b> All	a. Employer maintains a record of all employment contracts.	1			Documented records of all contracts for employees
		b. There is no evidence for labor-only contracting relationships or false apprenticeship schemes.	1			No evidence
		c. Be advised that workers will be interviewed to confirm the above.	1			Documented by interviews
Footnote	[141] 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.					
	<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.	1			Declaration of policies in place for divers and subcontractors



b.7.2	Requirement: Yes	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.	1			Declaration in place for all suppliers and subcontractors
<b>Criterion 6.8 Conflict resolution</b>						
<b>Compliance Criteria</b>						
6.8.1	Indicator: Evidence of worker access to effective, fair and confidential grievance procedures Requirement: Yes	a. Employer has a clear labor conflict resolution policy for the presentation, treatment, and resolution of worker grievances in a confidential manner. b. Workers are familiar with the company's labor conflict policies and procedures. There is evidence that workers have fair access. c. Maintain documentary evidence (e.g. complaint or grievance filings, minutes from review meetings) and be advised that workers will be interviewed to confirm the above.	1			Documented in the policy and in warning signs in the farm
		a. Employer maintains a record of all grievances, complaints and labor conflicts that are raised. b. Employer keeps a record of follow-up (i.e. corrective actions) and timeframe in which grievances are addressed.	1		1	Documented by interviews and records from meetings
6.8.2	Indicator: Percentage of grievances handled that are addressed [142] within a 90-day timeframe Requirement: 100% 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.	1		1	No grievances exist regarding to interviews
Footnote [142] Addressed: Acknowledged and received, moving through the company's process for grievances, corrective action taken when necessary.						
<b>Criterion 6.9 Disciplinary practices</b>						
<b>Compliance criteria</b>						
6.9.1	Indicator: Incidences or excessive or abusive disciplinary actions Requirement: None Applicability: All	a. Employer does not use threatening, humiliating or punishing disciplinary practices that negatively impact a worker's physical and mental health or dignity. b. Allegations of corporal punishment, mental abuse [144], physical coercion, or verbal abuse will be investigated by auditors. c. Be advised that workers will be interviewed to confirm there is no evidence for excessive or abusive disciplinary actions.	1			Documented in the policy for the company and personal handbook
Footnote [144] Mental Abuse: Characterized by the intentional use of power, including verbal abuse, isolation, sexual or racial harassment, intimidation or threat of physical force.						
6.9.2	Indicator: Evidence of a functioning disciplinary action policy whose aim is to improve the worker [143]	a. Employer has written policy for disciplinary action which explicitly states that its aim is to improve the worker [143]. 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.	1			Doc. In the procedure for personal
Footnote [143] 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.						
<b>Criterion 6.10 Working hours and overtime</b>						
<b>Compliance criteria</b>						
6.10.1	Indicator: Incidences, violations or abuse of working hours and overtime laws [145] Requirement: None Applicability: All	Note: Working hours, night work and rest periods for workers in agriculture should be in accordance with national laws and regulations or collective agreements (e.g. The Safety and Health in Agriculture Convention, 2001). Additional information can be found on the website of the International Labour Organization (www.ilo.org). a. Employer has documentation showing the legal requirements for working hours and overtime in the region where the farm operates. If local legislation allows workers to exceed internationally accepted recommendations (48 regular hours, 12 hours overtime) then requirements of the international standards apply. b. Records (e.g. time sheets and payroll) show that farm workers do not exceed the number of working hours allowed under the law. c. If an employer requires employees to work shifts at the farm (e.g. 10 days on and six days off), the employer compensates workers with an equivalent time off in the calendar month and there is evidence that employees have agreed to this schedule (e.g. in the hiring contract). d. Be advised that workers will be interviewed to confirm there is no abuse of working hours and overtime laws.	1			Working hours reg. To the national laws
Footnote [145] In cases where local legislation on working hours and overtime exceed internationally accepted recommendations (48 regular hours, 12 hours overtime), the international standards will apply.						
6.10.2	Indicator: Overtime is limited, voluntary [146], paid at a premium rate and restricted to exceptional circumstances Requirement: Yes	a. Payment records (e.g. payslips) show that workers are paid a premium rate for overtime hours. b. Overtime is limited and occurs in exceptional circumstances as evidenced by farm records (e.g. production records, time sheets, and other records of working hours). c. Be advised that workers will be interviewed to confirm that all overtime is voluntary except where there is a collective bargaining agreement which specifically allows for compulsory overtime.	1			Doc. In the timesheets for the employees
Footnote [146] Compulsory overtime is permitted if previously agreed to under a collective bargaining agreement.						
Footnote [147] Premium rate: A rate of pay higher than the regular work week rate. Must comply with national laws/regulations and/or industry standards.						
<b>Criterion 6.11 Education and training</b>						
<b>Compliance criteria</b>						
6.11.1	Indicator: Evidence that the company encourages and sometimes supports education initiatives for all workers (e.g., courses, certificates and degrees) Requirement: Yes	a. Company has written policies related to continuing education of workers. Company provides incentives (e.g. subsidies for tuition or textbooks, time off prior to exams, flexibility in work schedule) that encourage workers to participate in educational initiatives. Note that such offers may be contingent on workers committing to stay with the company for a pre-arranged time. b. Employer maintains records of worker participation in educational opportunities as evidenced by course documentation (e.g. list of courses, curricula, certificates, degrees). c. Be advised that workers will be interviewed to confirm that educational initiatives are encouraged and supported by the company.	1			The company is recommending education for all the employees and is helping with internally training and covering costs.
Doc. Records of training for all employees						
Doc. Evidence by interview of the employees						
<b>Criterion 6.12 Corporate policies for social responsibility</b>						
<b>Compliance criteria</b>						
6.12.1	Indicator: Demonstration of company-level [148] policies in line with the standards under 6.1 to 6.11 above Requirement: Yes Applicability: All	a. Company-level policies are in line with all social and labor requirements presented in 6.1 through 6.11. 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).	1			Policies regarding to the line in the Norwegian laws and requirements
Approved by the headquarters of the company						
The policies covers all aspects in the salmon producing industry						
All company levels policies are available.						
Footnote [148] 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.						
<b>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.</b>						
<b>PRINCIPLE 7: BE A GOOD NEIGHBOR AND CONSCIENTIOUS CITIZEN</b>						
<b>Criterion 7.1 Community engagement</b>						
<b>Compliance Criteria</b>						
7.1.1	Indicator: Evidence of regular and meaningful [149] consultation and engagement with community representatives and organizations Requirement: Yes Applicability: All	a. The farm pro-actively arranges for consultations with the local community at least twice every year (bi-annually). 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.	1			Doc. Meetings with the local community, F.dir and Mattilsynet 2times in 2013
Meaningful consultation with planned agenda. Records doc.						
As doc. Above						
Environmental questions, health, contingency plans and competence is main questions						
Doc. Reports from the meetings						
No interviews with representative from local community						
Footnote [149] Regular and meaningful: Meetings shall be held at least bi-annually with elected representatives of affected communities. The agenda for the meetings should in part be set by the community representatives. Participatory Social Impact Assessment methods may be one option to consider here.						
7.1.2	Indicator: Presence and evidence of an effective [150] policy and mechanism for the presentation, treatment and resolution of complaints by community stakeholders and organizations Requirement: Yes Applicability: All	a. Farm policy provides a mechanism for presentation, treatment and resolution of complaints lodged by stakeholders, community members, and organizations. b. The farm follows its policy for handling stakeholder complaints as evidenced by farm documentation (e.g. follow-up communications with stakeholders, reports to stakeholder describing corrective actions). c. The farm's mechanism for handling complaints is effective based on resolution of stakeholder complaints (e.g. follow-up correspondence from stakeholders). d. Be advised that representatives from the local community, including complainants where applicable, may be interviewed to confirm the above.	1			All claims are reported to the headquarter and followed up
Doc. from a claim against noise 4.7.2013. Doc. Following up by headquarter. No claims from Årøya						
The claims are followed up from the headoffice. Documentation						
No interviews performed						
Footnote [150] Effective: In order to demonstrate that the mechanism is effective, evidence of resolutions of complaints can be given.						

7.1.3	<p><b>Indicator:</b> Evidence that the farm has posted visible notice [151] at the farm during times of therapeutic treatments and has, as part of consultation with communities under 7.1.1, communicated about potential health risks from treatments</p> <p><b>Requirement:</b> Yes</p>	a. Farm has a system for posting notifications at the farm during periods of therapeutic treatment. (use of anaesthetic baths is not regarded a therapeutant)	1		Visually signs at the farm are in place reg. To the Norwegian laws. No treatments so far in the farm.
		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).	1		Visually signs are placed at the farm close to gateways
		c. Farm communicates about the potential health risks from treatments during community consultations (see 7.1.1)	1		Health and environmental question is a part of the meetings
		d. Be advised that members of the local community may be interviewed to confirm the above.	1		No interviews of the community are performed
Footnote [151] 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					
<b>Compliance Criteria</b>					
<p><b>Instruction to Clients and Cases on Criterion 7.2 - Traditional Territories of Indigenous Groups</b></p> <p>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.</p> <p>The intent behind the ASC Salmon Standard is that the farm will identify all stakeholders 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 it.</p>					
7.2.1	<p><b>Indicator:</b> Evidence that indigenous groups were consulted as required by relevant local and/or national laws and regulations</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [152]</p>	a. Documentary evidence establishes that the farm does or does not operate in an indigenous territory (to include farms that operate in proximity to indigenous or aboriginal people [152]). If not then the requirements of 7.2.1 do not apply.			1 Doc for no ingenious groups
		b. Farm management demonstrates an understanding of relevant local and/or national laws and regulations that pertain to consultations with indigenous groups.			1 No ingenious 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.			1 No ingenious groups
		d. Be advised that representatives from indigenous groups may be interviewed to confirm the above.			1 No ingenious groups
7.2.2	<p><b>Indicator:</b> Evidence that the farm has undertaken proactive consultation with indigenous communities</p> <p><b>Requirement:</b> Yes [152]</p> <p><b>Applicability:</b> All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [152]</p>	a. See results of 7.2.1a (above) to determine whether the requirements of 7.2.2 apply to the farm.			1 No ingenious groups
		b. Be advised that representatives from indigenous communities may be interviewed to confirm that the farm has undertaken proactive consultations.			1 No ingenious groups
Footnote [152] All standards related to indigenous rights only apply where relevant, based on proximity of indigenous territories.					
7.2.3	<p><b>Indicator:</b> Evidence of a protocol agreement, or an active process [153] to establish a protocol agreement, with indigenous communities</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [152]</p>	a. See results of 7.2.1a (above) to determine whether the requirements of 7.2.3 apply to the farm. -firm retains evidence to show that the farm has either: -a protocol's protocol agreement with the indigenous community and this fact is documented, or			1 No ingenious groups
		b. Be advised that representatives from indigenous communities may be interviewed to confirm that the farm has not restricted access to vital resources without prior community approval.			1 No ingenious groups
		c. Be advised that representatives from indigenous communities may be interviewed to confirm either 7.2.3b1 or b2 (above) as applicable.			1 No ingenious groups
Footnote [153] 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					
<b>Compliance Criteria</b>					
7.3.1	<p><b>Indicator:</b> Changes that restrict access to vital community resources [154] without community approval</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All</p>	a. Resources that are vital [155] to the community have been documented and are known by the farm (i.e. through the assessment process required under Indicator 7.3.2).	1		A part of the farms license
		b. The farm seeks and obtains community approval before undertaking changes that restrict access to vital community resources. Approvals are documented.	1		The authorities must be contacted and accept before any movements is performed
		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.	1		No interviews are performed
Footnote [154] 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	<p><b>Indicator:</b> Evidence of assessments of company's impact on access to resources</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	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.	1		This is a part of the license from the authorities
		b. Be advised that representatives from the community may be interviewed to generally corroborate the accuracy of conclusions presented in 7.3.2a.	1		This is a part of the license from the authorities
<b>INDICATORS AND STANDARDS FOR SMOLT PRODUCTION</b>					
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).					
Footnote [155] 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.					
<b>SECTION 8: STANDARDS FOR SUPPLIERS OF SMOLT</b>					
Standards related to Principle 1					
<b>Compliance Criteria (Required Client Actions):</b>					
<b>Auditor Evaluation (Required CAB Actions):</b>					
8.1	<p><b>Indicator:</b> Compliance with local and national regulations on water use and discharge, specifically providing permits related to water quality</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	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).	A. Review the farm's list of smolt suppliers. Confirm that the client submitted to ASC information on the type of production system used by smolt suppliers (Appendix VI).	1	One smolt supplier: Laksefjord AS, locnr. 13140 internally supplier
		b. Where legal authorisation related to water quality are required, obtain copies of smolt suppliers' permits.	B. Verify that client obtains copies of legal authorisation from smolt suppliers (if applicable).	1	Doc. From Finnmark Fylkeskommune and Mattilsynet, 18.2.2011
		c. Obtain records from smolt suppliers showing monitoring and compliance with discharge laws, regulations, and permit requirements as required.	C. Verify that farm obtains records from smolt suppliers to show compliance with discharge laws, regulations, and permit requirements.	1	Doc. From Fylkesmannen, 23.09.2010 license 7,5 mill smolt,
		a. Obtain declarations from smolt suppliers affirming compliance with labor laws and regulations.	A. Verify farm obtains declaration from smolt suppliers.	1	Doc.declaration from Laksefjord .

8.2	<p><b>Indicator:</b> Compliance with labor laws and regulations</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>b. Keep records of supplier inspections for compliance with national labor laws and codes (only if such inspections are legally required in the country of operation; see 1.1.3a)</p>	<p>B. Verify that farm obtains inspection records from suppliers (as applicable).</p>	1			<p>Inspection reports from:F.dir: 6.11.2011, Mattilsynet: 12.4.2013, NVE 2013</p>
<b>Standards related to Principle 2</b>							
		<b>Compliance Criteria (Required Client Actions):</b>	<b>Auditor Evaluation (Required CAB Actions):</b>				
8.3	<p><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</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>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.</p> <p>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.</p> <p>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.</p>	<p>A. Review the assessment to confirm that it complies with all components outlined in Appendix I-3.</p> <p>B. Review declaration.</p>	1			<p>Doc. Results from analysis April 2013: Grade 1</p> <p>Declaration from Laksefjord AS nov. 2011</p>
8.4	<p><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)</p> <p><b>Requirement:</b> 5 kg/mt of fish produced over a 12-month period; within three years of publication of the SAD standards, 4 kg/mt of fish produced over a 12-month period</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p><b>Instruction to Clients for Indicator 8.4 - Calculating Total Phosphorus Released per Ton of Fish Produced</b></p> <p>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 5 kg/mt for the first three years from date of publication of the ASC Salmon Standard (i.e. from June 13, 2012 until June 12, 2015), dropping to 4 kg/mt thereafter. The calculation of total phosphorus released is made using a "mass balance" approach. Detailed instructions and formulas are given in Appendix VIII-1.</p> <p>a. Obtain records from smolt suppliers showing amount and type of feeds used for smolt production during the past 12 months.</p> <p>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).</p> <p>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.</p> <p>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.</p> <p>e. Calculate the amount of phosphorus in fish biomass produced (result from 8.4d) using the formula in Appendix VIII-1.</p> <p>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.</p> <p>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.</p>	<p>A. Verify that farm has records for feeds used by smolt suppliers over the relevant time period.</p> <p>B. Verify that farm has records showing that smolt supplier determined phosphorus content in feeds.</p> <p>C. Confirm that calculations are done according to Appendix VIII-1.</p> <p>D. Verify that farm obtained from the smolt supplier all records needed to calculate the amount of biomass produced during the past 12 months.</p> <p>E. Confirm that calculations are done according to Appendix VIII-1.</p> <p>F. As applicable, verify farm has records showing that smolt supplier determined the amount of phosphorus removed from the system as sludge.</p> <p>G. Review calculations to confirm that the farm's smolt supplier(s) do not exceed requirements for release of phosphorus.</p>	1			<p>Records from Skretting with all types of feed used in the period</p> <p>Doc. Records from Laksefjord</p> <p>Estimated calculations from feed supplier reg. To appendix</p> <p>All needed records from the smolt supplier in place</p> <p>Calculations regarding to the requirements demonstrated</p> <p>No phosphorus are removed</p> <p>No calculations yet from the smolt supplier</p>
<b>Standards related to Principle 3</b>							
		<b>Compliance Criteria (Required Client Actions):</b>	<b>Auditor Evaluation (Required CAB Actions):</b>				
8.5	<p><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 [156] of the SAD standards</p> <p><b>Requirement:</b> Yes [157]</p> <p><b>Applicability:</b> All Smolt Producers except as noted in [157]</p>	<p>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.</p> <p>b. Provide the farm with documentary evidence that the non-native species was widely commercially produced in the area before publication of the SAD Standard. (See definition of area under 3.2.1.)</p> <p>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.</p> <p>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.</p> <p>e. Retain evidence as described in 8.5d necessary to show compliance of each facility supplying smolt to the farm.</p>	<p>A. Verify that the farm has evidence that their smolt suppliers do not produce non-native species. If the farm can show that smolt suppliers produce only native species, then Indicator 8.5 does not apply.</p> <p>B. If applicable, verify the farm has evidence from smolt suppliers confirming when the non-native species was first brought into wide commercial production in the area where production is occurring now.</p> <p>C. Review evidence to confirm that smolt suppliers use only 100% sterile fish.</p> <p>D. Review evidence that the farm's smolt suppliers comply with each point raised in 8.5d.</p> <p>E. Verify that farm retains evidence of compliance by all smolt suppliers.</p>	1			<p>Doc. In the license: Atlantic salmon and rainbow trout</p> <p>No native species</p> <p>No native species</p> <p>No native species</p> <p>No native species</p> <p>No native species</p>
Footnote	[156] Publication: Refers to the date when the final standards and accompanying guidelines are completed and made publicly available. This definition of publication applies throughout this document.						
Footnote	[157] 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	<p><b>Indicator:</b> Maximum number of escapes [158] in the most recent production cycle</p> <p><b>Requirement:</b> 300 fish [159]</p> <p><b>Applicability:</b> All Smolt Producers except as noted in [159]</p>	<p>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.</p> <p>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.</p> <p>c. Inform smolt suppliers in writing that monitoring records described in 8.6a must be maintained for at least 10 years beginning with the production cycle for which the farm is first applying for certification (necessary for farms to be eligible to apply for the exception noted in [159]).</p> <p>d. If an escape episode occurs at the smolt production facility (i.e. an incident where &gt; 300 fish escaped), the farm may request a rare exception to the Standard [159]. Requests must provide a full account of the episode and must document how the smolt producer could not have predicted the events that caused the escape episode.</p>	<p>A. Review the farm's records for escape monitoring by the smolt supplier to confirm completeness and accuracy of information.</p> <p>B. Review the farm's calculation and confirm that the smolt supplier complied with the requirement.</p> <p>C. Confirm that the farm informs their smolt suppliers that they must maintain records for escape monitoring for &gt; 10 years.</p> <p>D. Review the farm's request for a rare exception to the Standard for an escape event at the smolt production site. Confirm no prior exceptional events were documented during the previous 10 years, or since the date of the start of the production cycle during which the farm first applied for certification. An example of an exceptional event is vandalization of the farm. Events that are not considered exceptional include failures in moorings due to bad weather and boat traffic incidents due to poor marking of the smolt production facility.</p>	1			<p>Declaration from Laksefjord October 2013: No escapes.</p> <p>Doc. In FishTalk system</p> <p>Doc. Declaration from Laksefjord reg. Escapes</p> <p>No escapes in the farm: Doc. Production analysis Oct. 2012 – Oct. 2013</p>
Footnote	[158] Farms shall report all escapes; the total aggregated number of escapes per production cycle must be less than 300 fish.						
Footnote	[159] 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	<p><b>Indicator:</b> Accuracy [160] of the counting technology or counting method used for calculating the number of fish</p> <p><b>Requirement:</b> ≥98%</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>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.</p> <p>B. Review records to verify that accuracy of the smolt supplier's counting technology or counting method is ≥ 98%.</p>	<p>A. Confirm that the farm keeps records of counting accuracy for the counting technology or method used on site at stocking and harvest.</p> <p>B. Verify that farm has records showing that the accuracy of the smolt supplier's counting technology or counting method is ≥ 98%.</p>	1			<p>Doc. Aqua Scan Fisketellere, used in the farm</p> <p>Analyzed regarding to info in FishTalk</p>

Footnote	[160] 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						
		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>		
8.8	<p><b>Indicator:</b> Evidence of a functioning policy for proper and responsible treatment of non-biological waste from production (e.g., disposal and recycling)</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>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.</p>		<p>A. Confirm that the farm has relevant policies on file from each smolt supplier and review those policies to verify the farm's suppliers are in compliance with the requirement.</p>	1	Doc. In the farms policy for environmental aspects
8.9	<p><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)</p> <p><b>Requirement:</b> Yes, measured in kilojoule/mt fish/production cycle</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>Note: see instructions for Indicator 4.6.1.</p> <p>a. Obtain records from the smolt supplier for energy consumption by source (fuel, electricity) at the supplier's facility throughout each year.</p> <p>b. Confirm that the smolt supplier calculates total energy consumption in kilojoules (kJ) during the last year.</p> <p>c. Obtain records to show the smolt supplier calculated the total weight of fish in metric tons (mt) produced during the last year.</p> <p>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.</p> <p>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.</p>		<p>A. Verify that the farm obtains records for energy consumption from smolt suppliers.</p> <p>B. Verify that the farm has reviewed the supplier's calculations for completeness and accuracy.</p> <p>C. Verify that the farm has supplier records for total weight of fish produced during the last year.</p> <p>D. Verify that the farm has records to show that the smolt supplier's calculations are complete and accurate.</p> <p>E. Verify that the farm has evidence that its smolt supplier(s) has undergone an energy use assessment verifying the supplier's energy consumption.</p>	1 1 1 1 1	Doc energy use from Laksefjord last year. Doc includes energy use in KJ Doc of metric tons of fish last year Accurate records made from FishTalk Doc. Energy use assessment: GHG
8.10	<p><b>Indicator:</b> Records of greenhouse gas (GHG [161]) emissions [162] at the smolt production facility and evidence of an annual GHG assessment (See Appendix V, subsection 1)</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>Note: see instructions for Indicator 4.6.2.</p> <p>a. Obtain records of greenhouse gas emissions from the smolt supplier's facility.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>e. Obtain evidence to show that the smolt supplier has undergone a GHG assessment in compliance with requirements Appendix V-1 at least annually.</p>		<p>A. Verify that the farm obtains records of GHG emissions from smolt suppliers.</p> <p>B. Verify that the farm confirms that calculations by smolt suppliers are done annually and in compliance with Appendix V-1.</p> <p>C. Verify that the farm has records from smolt suppliers for all emissions factors used and their sources.</p> <p>D. Verify that the farm has records from smolt suppliers for all GWPs used and their sources.</p> <p>E. Verify that the farm has evidence that smolt suppliers undergo a GHG assessment annually and that the methods used are in compliance with requirements of Appendix V-1.</p>	1 1 1 1 1	Doc. GHG from the feed supplier for the last year Calculation is performed annually GHG calculation from the smolt supplier Doc. From the smolt supplier GHG assessment for last year
Footnote	[161] 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	[162] GHG emissions must be recorded using recognized methods, standards and records as outlined in Appendix V.					
Standards related to Principle 5						
		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>		
8.11	<p><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</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Obtain a copy of the supplier's fish health management plan for the identification and monitoring of fish disease and parasites.</p> <p>b. Keep documentary evidence to show that the smolt supplier's health plans were approved by the supplier's designated veterinarian.</p>		<p>A. Verify that the farm obtains copies of fish health management plans from smolt suppliers.</p> <p>B. Verify that farm has evidence that supplier's fish health management plan was approved by designated veterinarian.</p>	1 1	Doc. VHP, signed 3.10.2013 Approved by Erik Monsen, Fish health Responsible
8.12	<p><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 [163]</p> <p><b>Requirement:</b> 100%</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>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.</p> <p>b. Maintain a list of diseases for which effective vaccines exist for the region, developed by the farm veterinarian and supported by scientific evidence.</p> <p>c. Obtain from the smolt supplier(s) a declaration detailing the vaccines the fish received.</p> <p>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.</p>		<p>A. Review list and the supporting analysis.</p> <p>B. Review list and the supporting analysis.</p> <p>C. Verify client has the list from the smolt supplier(s).</p> <p>D. Cross-check lists to verify that all required vaccines were received by all batches of smolt received by the farm during the current production cycle.</p>	1 1 1 1	Doc. List of all possible diseases Doc. In the VHP Doc. In FishTalk system and in the CV from Laksefjord Doc. List of vaccines performed from Laksefjord
Footnote	[163] 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	<p><b>Indicator:</b> Percentage of smolt groups [164] tested for select diseases of regional concern prior to entering the grow-out phase on farm</p> <p><b>Requirement:</b> 100%</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p><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).</p> <p>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.</p> <p>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).</p>		<p>A. Review list. If auditor has questions about the list, request and review supporting analysis.</p> <p>B. Verify records show that each smolt group was tested prior to entering the water at the farm (the grow-out site).</p>	1 1	Doc. List: IPN could be possible Analysis sent Vet. Inst: 24.7.13, tested 14.8.2013. OK
Footnote	[164] 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: - name of the veterinarian prescribing treatment; - product name and chemical name; - reason for use (specific disease) - date(s) of treatment; - amount (g) of product used; - dosage; - mt of fish treated; - the WHO classification of antibiotics (also see note under 5.2.8); and - the supplier of the chemical or therapeutant.</p>		<p>A. Review records of chemical and therapeutant use for completeness and confirm the records were signed by a qualified veterinarian.</p>	1	Doc. In fish health journal. Last report 26.9.2013: 0 treatments
8.15	<p><b>Indicator:</b> Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [165] in any of the primary salmon producing or importing countries [166]</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 [166].</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>A. Verify list has been provided and is consistent with the list in 5.2.2a.</p> <p>B. Verify that the farm informed the smolt supplier.</p> <p>C. Review farm's comparison to verify accuracy.</p>	1 1 1	No banned therapeutic used No banned therapeutic used No treatments performed in the farm
Footnote	[165] "Banned" means proactively prohibited by a government entity because of concerns around the substance.					
Footnote	[166] 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 or antibiotics over the most recent production cycle</p> <p><b>Requirement:</b> &lt; 3</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>A. Verify farm obtains treatment records from smolt supplier (See also 8.14A).</p> <p>B. Confirm that the smolt supplier used ≤ 3 treatments of antibiotics over the most recent production cycle.</p>			1	No treatments performed in the farm
8.17	<p><b>Indicator:</b> Allowance for use of antibiotics listed as critically important for human medicine by the WHO [167]</p> <p><b>Requirement:</b> None [168]</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 [167].</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>A. Confirm that the farm provided smolt supplier with the current copy of the WHO list of antibiotics.</p> <p>B. Verify that the farm informed the smolt supplier.</p> <p>C. Review farm's comparison to verify accuracy.</p>			1	No treatments performed in the farm
Footnote	[167] 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/CLIA_3.pdf">http://www.who.int/foodborne_disease/resistance/CLIA_3.pdf</a> .						
Footnote	[168] 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 [169] with the OIE Aquatic Animal Health Code [170]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>Note: see instructions for Indicator 5.4.3 regarding evidence of compliance with the OIE Aquatic Animal Health Code.</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. Verify that farm has provided the smolt supplier with copies of (or access to) the OIE Aquatic Animal Health Code.</p> <p>B. Confirm that the farm informed its smolt supplier(s) that any supplier to an ASC certified farm must show compliance with the OIE Aquatic Animal Health Code.</p> <p>C. Review the smolt supplier's declaration and supporting policies and procedures to verify compliance with the OIE Aquatic Animal Health Code.</p>	1			Doc. OIE Aquatic Animal Health Code
Footnote	[169] 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	[170] 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							
		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>			
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>A. Verify that farm obtains copies of company-level policies and procedures from all of its smolt suppliers and a declaration of compliance.</p> <p>B. Review supplier documents provided by the farm to verify compliance of the smolt supplier's policies and procedures with labor requirements.</p>	1			Doc. Copies of Licenses from Finnmark Fylkeskommunen and Mattilsynet 18.2.2011
Standards related to Principle 7							
		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>			
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><b>Instruction to Clients for Indicator 8.20 - Consultation and Engagement with Community Representatives</b></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>					
		a. From each smolt supplier obtain documentary evidence of consultations and engagement with the community.	A. Verify that farm obtains required information from each smolt supplier.	1			Doc. From consultation with Lebesby Kommune
		b. Review documentation from 8.20a to verify that the smolt supplier's consultations and community engagement complied with requirements.	B. Review evidence for compliance.	1			Doc. Regarding to the requirements
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>	a. Obtain a copy of the smolt supplier's policy for presentation, treatment and resolution of complaints by community stakeholders and organizations.	A. Verify that farm obtains copies of supplier's complaints procedures from each of its smolt suppliers.	1			No complaints from the local community and stakeholders doc.
8.22	<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><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</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.	A. Review evidence to determine whether Indicator 8.22 is applicable to the farm's smolt supplier(s).			1	No indigenous groups consulted
		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.	B. Verify that the smolt supplier complies with relevant requirements.			1	No indigenous groups consulted
8.23	<p><b>Indicator:</b> Where relevant, evidence that the farm has undertaken proactive consultation with indigenous communities</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	a. See results of 8.22a (above) to determine whether the requirements of 8.23 apply to the smolt supplier.	A. Review evidence to determine whether Indicator 8.23 is applicable to the farm's smolt supplier(s).	1			No indigenous groups consulted, meetings with the local community doc.
		b. Where relevant, obtain documentary evidence that smolt suppliers undertake proactive consultations with indigenous communities.	B. Review documentary evidence to confirm that the smolt supplier has undertaken proactive consultations.	1			Doc. From the meetings with the community
<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:							
<b>Instruction to Clients for Indicators 8.24 through 8.31 - Requirements for Smolt Produced in Open Systems</b>							
Client shall provide documentary evidence to the CAB about the production system(s) from which they source smolt. If smolt used by the farm are produced, for part or all of the growth phase from alevin to smolt, in open (net-pen) systems, indicators 8.24 - 8.31 are applicable.							
8.24	<p><b>Indicator:</b> Allowance for producing or holding smolt in net pens in water bodies with native salmonids</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All Smolt Producers Using Open Systems</p>	<p><b>Scope of Exemption Allowed Under Indicator 8.24:</b></p> <p>For the first audit, farms that were stocked prior to the publication of the standard on June 13, 2012 may request an exemption, applicable for that production cycle, to the requirement under 8.24. A farm that sourced smolt that were produced in an open system (net pen) in a water body with native salmonids may request this exemption if:</p> <ol style="list-style-type: none"> <li>1. the farm was stocked prior to June 13, 2012; and</li> <li>2. the farm demonstrates through supporting evidence (e.g. purchasing agreement) that they will source smolt from a semi-closed or closed production system for their next production cycle.</li> </ol> <p>If the CAB determines that the farm has fulfilled the above criteria, then an exemption may be granted and the farm may be awarded certification. However, no salmon products originating from a farm which utilizes this exemption shall be eligible to bear the ASC logo or otherwise claim to be an ASC-certified product until the farm can demonstrate that smolt were sourced in full compliance with Indicator 8.24. The CAB shall fully document the exemption in the audit report and explain how the farm has addressed any risks that may be associated with non-certified products entering into further certified chains of custody.</p>					
		a. Obtain a declaration from the farm's smolt supplier stating whether the supplier operates in water bodies with native salmonids.	A. Verify that the farm obtains relevant declarations from its smolt supplier(s).			1	No net pens in water bodies
		b. Request smolt suppliers to identify all water bodies in which they operate net pens for producing smolt and from which facilities they sell to the client.	B. Confirm that the farm obtains information on the water bodies in which its suppliers are operating net pens for smolt production.			1	No net pens in water bodies

		c. For any water body identified in 8.24b as a source of smolt for the farm, determine if native salmonids are present by doing a literature search or by consulting with a reputable authority. Retain evidence of search results.	C. Review search results and cross-check against the other lines of evidence for salmonid distribution in the region (e.g. results from 3.1.5a).				1	No net pens in water bodies
8.25	<p><b>Indicator:</b> Allowance for producing or holding smolt in net pens in any water body</p> <p><b>Requirement:</b> Permitted until five years from publication of the SAD standards (i.e. full compliance by June 13, 2017)</p> <p><b>Applicability:</b> All Smolt Producers Using Open Systems</p>	a. Take steps to ensure that by June 13, 2017 the farm does not source smolt that was produced or held in net pens.	A. Prior to the effective date, confirm that the client understands the requirement of Indicator 8.25. After the effective date, confirm that the farm is in full compliance with the requirement.				1	
8.26	<p><b>Indicator:</b> Evidence that carrying capacity (assimilative capacity) of the freshwater body has been established by a reliable entity [171] within the past five years [172], and total biomass in the water body is within the limits established by that study (see Appendix VIII-5 for minimum requirements)</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers Using Open Systems</p>	a. For the water body(s) where the supplier produces smolt for the client (see 8.24b), obtain a copy of the most recent assessment of assimilative capacity.	A. Verify that the farm obtains copies of assimilative capacity assessments as are relevant to the water bodies in which its smolt supplier(s) operate.				1	
		b. Identify which entity was responsible for conducting the assessment (8.26a) and obtain evidence for their reliability.	B. Verify that the assessment was done by a reliable entity (e.g. government body or academic institution).				1	
		c. Review the assessment (8.26a) to confirm that it establishes a carrying capacity for the water body, it is less than five years old, and it meets the minimum requirements presented in Appendix VIII-5.	C. Verify that the assessment report is in compliance with requirements.				1	
		d. Review information to confirm that the total biomass in the water body is within the limits established in the assessment (8.26a).	D. Verify that the farm confirms that total biomass in the water body does not exceed carrying capacity.				1	
		e. If the study in 8.26a is more than two years old and there has been a significant increase in nutrient input to the water body since completion, request evidence that an updated assessment study has been done.	E. Verify that the farm requests an updated assessment (< 2 years old) if there was a significant increase in nutrient inputs to the water body.				1	
Footnote	[171] E.g., Government body or academic institution.							
Footnote	[172] If the study is older than two years, and there has been a significant increase in nutrient input to the water body since the completion of the study, a more recent assessment is required.							
	<b>INSTRUCTIONS TO CLIENTS FOR INDICATOR 8.27 AND 8.28 - MONITORING TP AND DO IN RECEIVING WATER FOR OPEN SMOLT SYSTEMS</b>							
	Clients must confirm that any smolt supplier using an open (net-pen) system is also engaged in monitoring of water quality in receiving water. Requirements for the supplier's water quality monitoring program are presented in detail in Appendix VIII-6.							
8.27	<p><b>Indicator:</b> Maximum baseline total phosphorus concentration of the water body (see Appendix VIII-6)</p> <p><b>Requirement:</b> ≤ 20 µg/l [174]</p> <p><b>Applicability:</b> All Smolt Producers Using Open Systems</p>	a. Obtain documentary evidence to show that smolt suppliers conducted water quality monitoring in compliance with the requirements of Appendix VIII-6.	A. Verify that the farm obtains copies of the smolt supplier's monitoring records (datasets, protocols, reports).				1	
		b. Obtain from smolt suppliers a map with GPS coordinates showing the sampling locations.	B. Review and confirm that the spatial arrangement of sampling stations complies with requirements of Appendix VIII-6.				1	
		c. Obtain from smolt suppliers the TP monitoring results for the past 12 months and calculate the average value at each sampling station.	C. Review TP monitoring results.				1	
		d. Compare results to the baseline TP concentration established below (see 8.29) or determined by a regulatory body.	D. Repeat comparison.				1	
		e. Confirm that the average value for TP over the last 12 months did not exceed 20 µg/l at any of the sampling stations nor at the reference station.	E. Verify that TP ≤ 20 µg/l in the receiving water body.				1	
Footnote	[173] This concentration is equivalent to the upper limit of the Mesotrophic Trophic Status classification as described in Appendix VIII-7.							
	<b>Note: see instructions for Indicator 8.27.</b>							
8.28	<p><b>Indicator:</b> Minimum percent oxygen saturation of water 50 centimeters above bottom sediment (at all oxygen monitoring locations described in Appendix VIII-6)</p> <p><b>Requirement:</b> ≥ 50%</p> <p><b>Applicability:</b> All Smolt Producers Using Open Systems</p>	a. Obtain evidence that smolt supplier conducted water quality monitoring in compliance with the requirements (see 8.27a).	A. Verify as above (see 8.27A).				1	
		b. Obtain from smolt suppliers the DO monitoring results from all monitoring stations for the past 12 months.	B. Verify that farm has copies of supplier's DO monitoring results.				1	
		c. Review results (8.28b) to confirm that no values were below the minimum percent oxygen saturation.	C. Review the supplier's monitoring results to verify compliance with requirements.				1	
8.29	<p><b>Indicator:</b> Trophic status classification of water body remains unchanged from baseline (see Appendix VIII-7)</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers Using Open Systems</p>	a. Obtain documentary evidence from the supplier stating the trophic status of water body if previously set by a regulator body (if applicable).	A. Verify that farm obtains evidence from suppliers (as applicable).				1	
		b. If the trophic status of the waterbody has not been classified (see 8.29a), obtain evidence from the supplier to show how the supplier determined trophic status based on the concentration of TP.	B. Review how supplier determined trophic status (as applicable).				1	
		c. As applicable, review results from 8.29b to verify that the supplier accurately assigned a trophic status to the water body in accordance with the table in Appendix VIII-7 and the observed concentration of TP over the past 12 months.	C. Verify that the farm conducts a review of the supplier's results and conclusions regarding trophic status of the water body.				1	
		d. Compare the above results (8.29c) to trophic status of the water body as reported for all previous time periods. Verify that there has been no change.	D. Review the farm's conclusion to verify compliance with the requirement.				1	
8.30	<p><b>Indicator:</b> Maximum allowed increase in total phosphorus concentration in lake from baseline (see Appendix VIII-7)</p> <p><b>Requirement:</b> 25%</p> <p><b>Applicability:</b> All Smolt Producers Using Open Systems</p>	a. Determine the baseline value for TP concentration in the water body using results from either 8.29a or 8.29b as applicable.	A. Verify that farm has supplier's records for baseline TP concentrations in the water body.				1	
		b. Compare the baseline TP concentration (result from 8.30a) to the average observed TP concentration over the past 12 months (result from 8.27e).	B. Repeat comparison.				1	
		c. Verify that the average observed TP concentration did not increase by more than 25% from baseline TP concentration.	C. Repeat calculation to verify compliance with the requirement.				1	
8.31	<p><b>Indicator:</b> Allowance for use of aeration systems or other technological means to increase oxygen levels in the water body</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All Smolt Producers Using Open Systems</p>	a. Obtain a declaration from the farm's smolt supplier stating that the supplier does not use aeration systems or other technological means to increase oxygen levels in the water bodies where the supplier operates.	A. Verify that the farm obtains relevant declarations from its smolt supplier(s).				1	
							1	
<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 [177].								
<b>Instructions to Client for Indicators 8.32-8.35 - Requirement for smolts produced in open systems</b>								
Client shall provide documentary evidence to the CAB about the production system(s) from which they source smolt.								
-If smolt used by the farm are not produced, for part or all of the growth phase from alvein to smolt, in open (net-pen) systems, indicators 8.32 - 8.35 are applicable.								
-If the production system is closed or semi-closed and does not discharge into freshwater, Indicators 8.32 - 8.35 are not applicable to smolt producers as per [176]. For such an exemption, farms must provide documentary evidence to the CAB. Auditors shall fully document their rationale for awarding exemptions in the audit report.								
Footnote	[176] Production systems that don't discharge into fresh water are exempt from these standards.							
8.32	<p><b>Indicator:</b> Water quality monitoring matrix completed and submitted to ASC (see Appendix VIII-2)</p> <p><b>Requirement:</b> Yes [177]</p>	a. Obtain records from smolt suppliers showing that water quality monitoring was conducted at least quarterly (i.e. once every 3 months) over the last 12 months.	A. Verify that farm has records to show smolt suppliers conducted water quality monitoring at the required frequency and duration.				1	
		b. Obtain water quality monitoring matrix from smolt suppliers and review for completeness.	B. Confirm that smolt supplier's water quality monitoring program covers sampling of all parameters given in Appendix VIII-2 (i.e. TP, TN, BOD, TSS).				1	

8.32	<p><b>Requirement:</b> 163 [4.7.2]</p> <p><b>Applicability:</b> All Smolt Producers Using Semi-Closed or Closed Production Systems</p>	<p>c. Submit the smolt supplier's water quality monitoring matrix to ASC as per Appendix VIII-2 and Appendix VI at least once per year.</p>	<p>C. Confirm that client has submitted to ASC the smolt supplier's water quality monitoring matrix for the last 12 month period.</p>			1		Data not submitted to ASC
<p><b>Footnote</b> [177] See Appendix VI for transparency requirements for 8.32.</p>								
8.33	<p><b>Indicator:</b> Minimum oxygen saturation in the outflow (methodology in Appendix VIII-2)</p> <p><b>Requirement:</b> 60% [178,179]</p> <p><b>Applicability:</b> All Smolt Producers Using Semi-Closed or Closed Production Systems</p>	<p>a. Obtain the water quality monitoring matrix from each smolt supplier (see 8.32b).</p> <p>b. Review the results (8.33a) for percentage dissolved oxygen saturation in the effluent to confirm that no measurements fell below 60% saturation.</p> <p>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).</p>	<p>A. Verify that the farm obtains water quality monitoring records from its smolt supplier(s).</p> <p>B. Review the supplier's monitoring results to verify compliance with requirements.</p> <p>C. Verify that the farm obtained evidence for enhanced DO monitoring by the smolt supplier (as applicable).</p>			1		
<p><b>Footnote</b> [178] 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.</p>								
<p><b>Footnote</b> [179] See Appendix VI for transparency requirements for 8.33.</p>								
8.34	<p><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)</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers Using Semi-Closed or Closed Production Systems</p>	<p>a. Obtain documentation from smolt supplier(s) showing the results of macro-invertebrate surveys.</p> <p>b. Review supplier documents (8.34a) to confirm that the surveys followed the prescribed methodology (Appendix VIII-3).</p> <p>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.</p>	<p>A. Verify that the farm has documentation of macro-invertebrate benthic surveys from its smolt supplier(s).</p> <p>B. Review documents from the farm's smolt supplier to verify the surveys were conducted as required in Appendix III-3.</p> <p>C. Review documents to verify that survey results demonstrate compliance with requirements.</p>			1		
8.35	<p><b>Indicator:</b> Evidence of implementation of biosolids (sludge) Best Management Practices (BMPs) (Appendix VIII-4)</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers Using Semi-Closed or Closed Production Systems</p>	<p>a. Maintain a copy of smolt supplier's biosolids (sludge) management plan and confirm that the plan addresses all requirements in Appendix VIII-2.</p> <p>b. Obtain from smolt suppliers a process flow diagram (detailed in Appendix VIII-2) showing how the farm is dealing with biosolids responsibly.</p> <p>c. Obtain a declaration from smolt supplier stating that no biosolids were discharged into natural water bodies in the past 12 months.</p> <p>d. Obtain records from smolt suppliers showing monitoring of biosolid (sludge) cleaning maintenance, and disposal as described in Appendix VIII-2.</p>	<p>A. Review the supplier's biosolids management plan for compliance with Appendix VIII-2.</p> <p>B. Review the supplier's biosolids process flow diagram for compliance with Appendix VII-2.</p> <p>C. Confirm that farm obtains declarations from smolt suppliers.</p> <p>D. Review the farm's records from smolt suppliers to verify there is evidence of implementation of biosolids management as required in Appendix VIII-2.</p>			1		

*Including Written of other documented information and Bureau Veritas Certification responses to each submission.*

*If no submission, precise " no submissions received"*

<b>Public Consultation period</b>	<b>Stakeholder submission</b>	<b>BV Response</b>
Audit announcement ( 30 days prior to audit)		
	No submission received	NA
Draft public report ( 10 days from publication)		
	No submission received	NA



Table 1. Data collections and record keeping farms must initiate prior to first audit. The minimum timeframe covered by data sets or records are given relative to the first audit

No.	Brief Description of Data Set or Record	Indicator(s)	Minimum Timeframe Prior to First Audit
1	Records for redox potential or sulphide concentration in sediments outside AZE	2.1.1	current production cycle
2	Records for faunal index scores of sediments outside AZE	2.1.2	current production cycle
3	Records for faunal taxa in sediments inside AZE	2.1.3	current production cycle
4	Results of monitoring weekly average percent saturation of DO	2.2.1	≥ 6 months
5	Analysis of data from weekly DO monitoring in mg/l	2.2.2	≥ 6 months
6	Ta	2.2.4	≥ 6 months
7	Calculation of BOD	2.2.5	current production cycle
8	Records from quarterly testing of fines in feed	2.3.1	≥ 6 months
9	Records for use of ADDs or AHDs	2.5.2	≥ 6 months
10	Records related to monitoring of mortality of red listed and endangered species	2.5.3	≥ 6 months
11	Records related to lethal action taken against predators	4, 2.5.5, 2.5.6, 2.	≥ 6 months
12	Results of on-farm testing for sea lice	3.1.4, 3.1.7	≥ 6 months
13	Monitoring of escapes	3.4.1	≥ 6 months
14	Records for accuracy of counting technology	3.4.2	≥ 6 months
15	Records of all feed purchases	4.1, 4.2.1, 4.2.2, 4.	≥ 6 months
16	List of all feed suppliers	4.1.1, 4.4.1	≥ 6 months
17	Detailed records on feed composition and ingredients	4.2.1, 4.2.2, 4.3.4	≥ 6 months
18	FishSource scores for ingredients of purchased feeds	4.3.2	≥ 6 months
19	Evidence that feed producers have traceability systems for handling fishmeal and fish oil ingredients	4.3.3	≥ 6 months
20	Feed supplier declaration - no fishmeal or fish oil ingredients were derived from IUU fisheries	4.3.4	≥ 6 months
21	Feed supplier declaration - no fishmeal or fish oil ingredients were derived from endangered species	4.3.4	≥ 6 months
22	Feed supplier declaration - use of transgenic soya and plant material in feed	4.4.3	≥ 6 months
23	Records of farm disclosures to fish buyers about transgenic content of feeds	4.4.3	≥ 6 months
24	List of fish buyers	4.4.3, 5.2.11	≥ 6 months
25	Records of energy use	4.6.1	≥ 6 months
26	Records of greenhouse gas emissions	4.6.2	≥ 6 months
27	Records of antifoulants and chemicals used on nets	4.7.1, 4.7.5	≥ 6 months
28	Results of copper testing in sediments outside AZE and at reference sites (if applicable)	4.7.3, 4.7.4	current production cycle
29	Record of visits by farm veterinarians and fish health managers	5.1.2	≥ 6 months
30	Records of mortality removals	5.1.3	≥ 6 months
31	Records for disposal of mortalities	5.1.3	≥ 6 months
32	Records for mortalities & post-mortem analyses	5.1.4, 5.4.2	≥ 6 months
33	Records for viral disease-related mortalities	5.1.5	≥ 6 months
34	Records for unexplained mortality rates	5.1.6	≥ 1 full production cycle
35	Record of chemical and therapeutic use	5.1, 5.2.4, 5.2.7, 5.	≥ 1 full production cycle
36	Calculation of antibiotic load (not applicable until date + 5 years)	5.2.10	≥ 1 full production cycle
37	Results of voluntary and mandatory chemical residue testing	5.2.2	≥ 1 full production cycle
38	Records of prescriptions for all medication events	5.2.3, 5.2.7, 5.2.9	≥ 1 full production cycle
39	Records related to determination of PTI scores	5.2.5	≥ 6 months
40	Records related to calculation of parasiticide load (not applicable until June 13, 2017)	5.2.6	≥ 1 full production cycle
41	Calculation of the total amount of antibiotic used	5.2.7, 5.2.10	≥ 1 full production cycle
42	Calculation of the total number of antibiotic treatments used	5.2.9	≥ 1 full production cycle
43	Records related to unidentifiable transmissible agent and unexplained increased mortality	5.4.2	≥ 6 months

## Explanation to Timeframe Categories:

- "Production cycle" means the period of approximately 14 to 24 month period during which salmon are held in the water at the farm site.
- "≥ 6 months" means data or records covering fish production for a full six months or more immediately prior to the first audit.
- "Current production cycle" means data or records covering those fish currently in production (i.e. pre-harvest) at the time of the first audit
- "≥ 1 full production cycle" means data or records covering those fish from the full production cycle completed (i.e. harvested) immediately prior to the current production cycle

Table 2. Farm records to be submitted to the CAB prior to the first audit\* in addition to those items listed in Table 1.

No.	Description of Farm Record	Indicator(s)	Yes / No / NA
1	Map of farm showing AZE and sampling stations	2.1.1, 2.1.2	
2	Records for defining a site-specific AZE (not applicable until June 13, 2015)	2.1.4	
3	Assessment of farm impact on biodiversity	2.4.1	
4	Map of farm showing nearby protected areas and HCVA's	2.4.2	
5	Records of farm participation in ABM scheme	3.1.1	
6	Records of farm's external collaborations on research into impacts on wild stocks	3.1.2	
7	Records for setting of sea lice load	3.1.3	
8	Data on wild salmonid migration routes, timing, and stock health (applies in areas of wild salmonids)	3.1.5	
9	Results of monitoring of sea lice levels on wild salmonids	3.1.6	
10	Analysis of sensitive periods for wild fish (applies in areas of wild salmonids)	3.1.7	
11	Evidence for prior wide commercial production of species (applies to farming of non-native species)	3.2.1	
12	Records of use of non-native species for sea lice control (if applicable)	3.2.3	
13	Records for origin of cultured stock	3.3.1	
14	Estimated unexplained loss	3.4.3	
15	Escape prevention plan	3.4.4	
16	Feed supplier declaration - traceability	4.1.1	
17	Audit report from a recent audit of feed supplier	4.1.1, 4.4.1	
18	Farm policy of responsible feed sourcing to promote management of small pelagic fisheries	4.3.1	
19	Feed supplier policy of responsible sourcing of feed ingredients	4.4.1	
20	Farm policy on use of certified soya as feed ingredients	4.4.2	
21	Feed supplier declaration - origin of soya in feed	4.4.2	
22	Farm policy for proper and responsible treatment of non-biological waste	4.5.1	
23	Records of disposal of waste materials including net-pens.	4.5.2	
24	Results of energy use assessment	4.6.1	
25	Results of GHG assessment	4.6.2	
26	Feed supplier declaration - GHG emissions associated with feeds (not applicable until June 13, 2015)	4.6.3	
27	Analysis of GHG emissions associated with feeds (not applicable until June 13, 2015)	4.6.3	
28	Farm procedures for cleaning and use of copper-treated nets (if applicable)	4.7.1	
29	Records of effluent treatment at on-land net-cleaning sites (if applicable)	4.7.2	
30	Fish health management plan	5.1.1, 5.2.4	
31	List of designated farm veterinarians and fish health managers	5.1.2	
32	Records of qualifications of designated farm veterinarians and fish health managers	5.1.2	

33	Program for farm-specific reduction of mortalities	5.1.7	
34	List of therapeutants that are banned in the primary salmon producing and importing countries	5.2.2	
35	Documentation of all legally-required withholding periods	5.2.4	
36	Date of issuing will be the date where BVC will obtain the accreditation for ASC salmon standard	5.2.8	
37	Date of issuing will be three years from the date where BVC will obtain the accreditation for ASC salmon standard	5.3.1, 5.3.2	
38	Records for stocking dates and fallow periods	5.4.1	
39	All major and minor non-conformities raised on 08 october 2013 were closed by 08 Januar 2014	5.4.3	
40	Records related to farm actions in response to OIE-notifiable disease (if applicable)	5.4.4	
41	Daily records of working hours	6.3.1, 6.6.1 - 6.6.3	
42	Policies and records related to the health and safety of workers	.1, 6.5.2, 6.5.3, 6.5.4	
43	Records and personnel qualifications related to farm diving operations	6.5.6	
44	Records of salary or wage payments	6.6.1 - 6.6.3	
45	Policies and records related to compliance of suppliers and contractors with social requirements	6.7.2	
46	Policies and records related to worker conflict resolution	6.8.1, 6.8.2	
47	Company-level policies in line with social requirements of the Standard	6.12.1	
48	Records related to consultations with the community and indigenous groups	.1, 7.2.1, 7.2.2, 7.2.3	
49	Policy for resolution of complaints from the community and stakeholders	7.1.2	
50	Records related to notifying the community about treatments	7.1.3	
51	Assessment of the farm's impact on access to resources	7.3.1, 7.3.2	
52	[Additionally farms need to obtain all records from smolt suppliers as specified under Principle 8]	8.1 thru 8.38	

\* Information that must be gathered prior to the first audit but for which no minimum timeframe has been specified for the duration of data co