

ASC SALMON STANDARD AUDIT REPORT

ASC Initial Audit Final Report

Marine Harvest Norway Oksebåsen site

Report No.: 01, Rev. 01

Date: 06.10.2014



Project name: ASC Salmon Standard Audit Report DNV GL - Business Assurance
Report title: ASC Initial Audit Final Report Veritasveien 1
Customer: Marine Harvest Norway Oksebåsen site , 6050 1322 Høvik
Vigra, Norway Norway
Contact person: Tone Harnes
Date of issue: 06.10.2014 Tel: +47 67 57 99 00
Project No.: PRJC-504134-2014-MS-C-NOR
Organisation unit: 10181 Oksebåsen Site
Report No 01 01, Rev. 01

Prepared by: Kjell Bekkevold
Verified by: J.Rios

Darius Pamakstys
SA8000 auditor

[Name]
[title]

- Draft report (client's review)
 Public comment draft report (stakeholders review)
 Final report
- Initial audit
 Surveillance audit
 Recertification audit

Rev. No.	Date	Reason for Issue	Prepared by	Verified by	Approved by
0	04.10.2014	First issue	KRBE	J. Rios	KIMAK



Table of contents

1	SUMMARY	1
2	THE APPLICANT FARM	2
3	SCOPE.....	2
4	AUDIT PLAN	3
4.1	Audit team	3
4.2	Audit activities	3
4.3	Previous audits (if applicable)	3
4.4	Individuals involved in the audit	3
4.5	Stakeholder submissions	4
5	FINDINGS.....	5
5.1	Summary Major NCs	5
5.2	Summary Minor NCs	5
5.3	Summary Observations	6
6	DETERMINATION OF START OF CHAIN OF CUSTODY	7
7	DECISION.....	7
8	EVALUATION RESULTS	1
9	CONFIDENTIAL COMMERCIALY SENSITIVE INFORMATION.....	1
	APPENDIX 1: CHECKLIST	2

1 SUMMARY

The Report

This report covers the results of the Initial audit of Marine Harvest Norway AS (hereafter in the report called "The Organisation" or "The Company") "Oksebåsen" farm, with the aim of the company to certify "Oksebåsen" on-growing-site, under the ASC Salmon Standard, V1, June 2012.

The Audit The audit was held over three days. The first two days of the audit were held in the company's area head office, focussing on technical and legal matters, mainly, with relevant operational and administrative staff present. The second part of the audit comprised a site visit to Oksebåsen taking place the second part of the audit, covering remaining technical and administrative issues and completed the social responsibility issues. The audit was conducted as document reviews (digital and hard-copy information) as well as interviews conducted with relevant staff including Oksebåsen staff, typically a combination of document reviews and staff interviews. Demonstrations of equipment and processes took place, relevant to the scope of the audit, according to the ASC Salmon Standard v1.0 and following guidelines in the ASC Salmon Audit Manual v1.0

Reference is made to ASC Farm certification and Accreditation Requirement 17.4.2 and 17.4.3. As the fish were not at harvest size during the audit, harvest was not overseen by the auditor. Harvest is planned to be observed/assessed during surveillance audit. The harvest plant, "MHN Eggebøneset plant", located at Evangerveien 25, 6092 Fosnavåg, Norway, is in the process of obtaining an ASC CoC certificate, Ref. to WWW.asc-aqua.org where updated information can be found)

The interviews pertinent to the Social Responsibility Section of the ASC Salmon Standard were held in conditions allowing for confidentiality of the dialogues and under no constraints of free speech of the interviewees. These interviewees are not named in the report for the same reason.

Final Results

The evaluation of the company's compliance of the requirements in the ASC Salmon Standard is described in detail later in this report. The findings are documented in detail in section 5, 6 and Annex 2 of this report

Furthermore, there are references to all the 7 Principles of the ASC Salmon Standard and corresponding indicators, criteria, and sub-points of the ASC Salmon Audit Checklist for the Non-conformances (Section 5 – List of findings),

The principles where full compliance was found, is Principle 1; "*Compliance with all applicable local and national legal requirements and regulations*"

For the other principles; 2, 3, 4, 5, 6, 7 and 8, full compliance was not found, although most of these were mainly compliant. The audit hence resulted in a limited number Major Non-conformities. and a limited number of Minor category Non-Conformities **Corrective actions in order to close or sufficient to downgrade Major Non-conformities to Minor Non-conformities have been documented. There were no stakeholders' submissions in response to the publication of the draft report within the designated period of time, with the conclusion that certification, based on the outcome of this follow-up audit, is now recommended.** A satisfactory response by the applicant to close Minor non-conformances, by means of documented corrective actions, is expected to be in place before next Periodic Audit.

Details of compliance and compliance criteria, and evidence references are found in The Initial Audit Check-list (Appendix #1)

2 THE APPLICANT FARM

Name of applicant farm site	MHN on-growing site 10181 Oksebåsen
Description of applicant farm	Oksebåsen is a conventional floating cage salmon farm. The production cages are circular floating plastic rings, (4x 157mCF and 4x 120m CF). Central on the farm is a feed barge, with centralised feeding system and UV camera controls of feeding. All installations are certified after "NYTEK" regulations standard. Site in operation since 2000.
Expected production volume at slaughtering	5680 mt
Description of receiving water body	Oksebåsen site receiving water-body is «Valderøvfjorden». Regional water-body authority is Møre og Romsdal Fylkes-kommune. This is a coastal water area. Categorized as a coastal fjord, of Euhaline nature (>30o/ooS). Ecological quality is assumed to be good. Chemical condition is not defined in public documentation. Details @ " WWW.Vannportalen.no "
Certificates held by the applicant farm	IFA GLOBAL GAP, ISO 9001, ISO 14001, ISO 22 000
Contact person	Mrs. Tone Harnes/Catarina Martins

3 SCOPE

Standard	ASC Salmon Standard Version 1.0 June 2012
Activity	Initial Audit
Species	Atlantic salmon (<i>Salmo salar</i>)
Legal name of company	Marine Harvest Norway AS
Legal address	Sandviksboder 77A, 5035 Bergen, Norway
Name of site	10181 Oksebåsen
Address of site	6040 Vigra, Norway

4 AUDIT PLAN

4.1 Audit team

Role	Name
Lead auditor	Mr. Kjell Bekkevold DNVGL. Also in audit team Mr. Kim A. Karslen DNVGL
SA8000 auditor	Mr Darius Pamakstys, DNVGL.

4.2 Audit activities

Activity	Date
Pre-audit document review	Week 18-19, 2014
On-site audit	23.06.2014-27.06.2014 and 02.07.2014-04.07.2014
Publication of public comment draft report	06.09.2014
Publication of final report	06.10.2014

4.3 Previous audits (Not applicable)

4.4 Individuals involved in the audit

Role	Name / affiliation
Representative of the client	Lars E. Uksnøy, Area Manager Tone Harnes, Quality Manager Arne Kvalvik, Env & Auth. Coord. Ingrid Moan, FH Biologist Asgeir Hasund, Prod. Manager Kathrine Larsen, HR Manager Per R. Gjerde, Regional Director Tone Bu, Quality Coord. Jan O. Kolseth, Feed Coord. Inge Bjørlow, FH Biologist Sven A. Skotheim, FH Biologist
Employee	Oksebåsen site staff/operators
Contractor	NA

Stakeholders	See list below
Observers participating in the audit	Not applicable

4.5 Stakeholder submissions

The following stakeholders, as defined by the Auditee, were contacted at audit notification and at the point of publishing the draft report. No comments have been received prior to the audit, nor in the defined period of publication of the draft report.

Local:

Giske Kommune	Rådhuset, 6050 Valderøya T: 70 18 80 00. Fax: 70 18 80 01 Epost: post@giske.kommune.no
Giske Fiskarlag	v/Rolf S. Giske, 6052 Giske. T: 70 18 05 06 / epost: giskefiskarlag@live.no
Giske Fiskarlag	ved Arild Gjørund, Valderhaugstranda, 6050 Valderøy T: 70 18 35 19 / 92 23 07 24 / epost: giskefiskarlag@live.no
Roald Velforening	ved Solveig Helen Roald. Budafjellveien 60, 6040 Vigra T: 90 10 95 06
Røysa Velforening	ved Ingeborg Godø, 6040 Vigra. T: 95 18 85 67
Oksneset Velforening	Johan Giskeødegård T: 47 48 73 28

National:

Mattilsynet	Epost: postmottak@mattilsynet.no T: 22 40 00 00
Møre og Romsdal Fylkeskommune	Fylkeshuset, Julsundveien 9 6414 Molde T: 71 25 80 00 / Epost: postmottak@mrfylke.no
Kystverket, region Vest	Ålesund H-kontor, Postboks 1502, 6025 Ålesund T: 07847 / Epost: post@kystverket.no
Fylkesmannen i Møre og Romsdal	Fylkeshuset, Julsundveien 9, 6404 Molde T: 71 25 84 43 / F: 71 25 85 10 / Epost: fmmrpostmottak@fylkesmannen.no
Fiskeridirektoratets region Møre og Romsdal	Postboks 185 Sentrum, 5804 Bergen T: 03495 / F: 55 23 80 90 / Epost: postmottak@fiskeridir.no

5 FINDINGS

The following tables include a summary description of NCs raised during this audit. The full NC reports are in section 8 of this report.

5.1 Summary Major NCs

N	Standard reference	NC Summary description	Status*
1	2.1.3 a-e	Number of Macrofaunal taxa in the sediment within the AZE, following the sampling methodology outlined in Appendix I-1. No information on Macrofaunal taxa demonstrated, as report from survey is still pending.	Downgraded to Minor NCs or closed

*O Open; C Closed

5.2 Summary Minor NCs

N	Standard reference	NC Summary description	Status*
2	2.1.1.e	The requirement is to measure and record redox potential (mV) in sediment samples using an appropriate, nationally or internationally recognized testing method. Redox potential found was variable between stations, ranging from -177/-157 and +29/ +43 outside AZE. Background levels in remote stations are low, indicating a natural occurring clay bottom. MOM-C as per national regulations (NS 9410)	Open
3	2.1.1.g	The requirement is to submit test results to ASC as per Appendix VI at least once for each production cycle. Results not submitted to ASC.	Open
4	2.1.2.e	Faunal index score indicating good [4] to high ecological quality in sediment outside the AZE has to be demonstrated. No FIS demonstrated as report from survey is still pending.	Closed
5	2.1.2i	Submit faunal index scores to ASC (Appendix VI) at least once for each production cycle. Results not submitted to ASC.	Open
6	2.5.5 b	Ensure that information about all lethal actions listed in 2.5.5a are made easily publicly available (e.g. on a website). Results are now submitted to Altinn. Direct access to data for actual site should be established e.g on a MH ASC website.	Open
7	3.1.4d,e	Frequent [41] on-farm testing for sea lice, with test results made easily publicly available [42] within seven days of testing is required. Results are now submitted to Altinn and directly to "Lusennettverket". NFSA publishes in public reports when data is processed. Direct access to data for actual site should be established e.g on a MH ASC website. No records on results made publicly available demonstrated.	Open
8	3.4.3 c	Requirement is that estimated unexplained loss [59] of farmed salmon is made publicly available. Results are not made publicly available.	Open
9	4.4.3.c	Requirement is to inform ASC whether feed contains transgenic ingredients (yes or no) as per Appendix VI for each production-cycle. Not informed to ASC.	Open
10	5.4.4.a	Farm policies and procedures (see 5.4.3A) to verify that the farm has documented actions in response to an OIE-notifiable disease is required. Int. procedure in TQM on practices in accordance with OIE AHC" Beredningsplan MH" page 12, Notification of diseases. "Fiskehelsenettverk" cooperation on fish health is notified, as voluntary cooperation agreement in area. Required steps not clearly defined in procedure to inform ABM members and publishing in e.g MHN web-site for ASC issues.	Open
11	6.5.1c	Requirement is that 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,	Open

		Occupational Safety and Health (OSH) and effective use of PPE. The apprentice was not trained for OHS.	
12	6.7.2.b	NC: No criteria present for evaluation of suppliers and contractors against requirements in clause 6 of the standard.	Open
13	6.7.2 c	NC: No records are available of communications with suppliers and subcontractors that relate to compliance with 6.7.2	Open
14	8.1.a	Requirement is that the client submits to ASC information on the type of production system used by smolt suppliers (Appendix VI). Info not submitted to ASC.	Open
15	8.1.d	No inspections/inspection reports available. No records	Open
16	8.4 g	It is required that the farm's smolt supplier(s) do not exceed requirements for release of phosphorus. All smolt sites` values above limits	Closed
17	8.6 d	No statement sent ext. supplier	Open
18	8.11.b	Evidence of a fish health management plan, approved by the designated veterinarian, for the identification and monitoring of fish diseases and parasites is required. Seen FHMP, approval not documented.	Open
19	8.15 a, b	It is required to 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]. Documentation of list communicated to FW site is not presented.	Open
20	8.17 a, b	It is required to provide to smolt supplier(s) a current version of the WHO list of antimicrobials critically and highly important for human health [167]. Documentation of list communicated to FW site is not presented.	Open
21	8.18 a, b, c	Evidence of compliance [169] with the OIE Aquatic Animal Health Code [170] is required. Documentation of list communicated to FW site is not presented. Documentation of suppliers declaration of compliance site is not presented.	Open
22	8.19a b	No copies company level policies or procedures available from external smolt suppliers and no review done.	Open
23	8.20	No evidences of consultation with community by external smolt suppliers.	Open
24	8.21	No evidence of policy for presentation, treatment and resolution of complaints from external smolt suppliers.	Open

*O Open; C Closed; A Corrective action accepted, effectiveness to be verified at next periodical audit

5.3 Summary Observations

N	Standard reference	Observation summary description
25	3.4.3.d	Requirement is to submit estimated unexplained loss to ASC as per Appendix VI for each production cycle. Incorrect calculation submitted.
26	6.2.2.d, e	(e)The travel time for young employees is not checked. (d) No familiarity with training plan and limitation applied to the work apprentices do. The risk assessment for young worker is not conducted
27	6.4.1 d	The managers had general training on CoC, no specific diversity and anti-discrimination training delivered. No evidences that training was effective for managers and personnel, as no questions in test about anti-discrimination.
28	6.5.4 c	The root cause analysis is not evident in OHS incidents reporting documents.
29	6.10.1.b	The monitoring of OT is not efficient. E.g. 21.5 hours of one day overtime has been presented.
30	8.3.a,b	Requirement is to 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. MOM-B survey voluntarily every 5th year and Rådg. Biol 3rd part assessment also RA. Assessment could be more comprehensive covering all ecosystems.
31	8.10 b	It is required that the farm confirms that calculations by smolt suppliers are done annually and in compliance with Appendix V-1. Results show 92474 kg and 74520 diesel OBS el missing.

On the basis of the audit evidences and relevant follow up activities, the lead auditor does recommend the organisation for certification.

6 DETERMINATION OF START OF CHAIN OF CUSTODY

The products included in the scope of this audit and of the relevant ASC Certificate

- May enter further certified chains
- Are eligible to apply to carry the ASC label

The determination is based on the considerations of the items described in the following table.

Item	Evaluation
Tracking, tracing and segregation systems within the aquaculture operation	All stages of fish live cycle within the scope of this certification standard are traceable. Documents describe a satisfactory control with incoming products, from own and external freshwater sites, and corresponding documentation of production site, suppliers lists and reception control, both in harvesting and processing. Digital information is handled in Mercatus Aqua Farmer for all freshwater stages and on-growing phase in seawater. Subsequent harvest, processing and sales are handled in Maritech system. It comprises sufficient information of traceability from Broodstock and ova to harvestable fish, purchases, invoices and suppliers registers.
Use of transshipment	Wellboat/live fish carrier used
Eligible operators and point(s) of landing	ASC CoC certified plant will be used
The opportunity of substitution of certified with non-certified product within the unit of certification.	ASC CoC certified plant will be used
Point from which Chain of Custody certification is required	Products are authorised to enter an ASC Chain of Custody certification at the point where the fish is moved from the wellboat/live fish carrier and pumped into the waiting cages.

7 DECISION

Certification status of the applicant	<p>The final certification decision has been taken after needed activities, as per ASC Farm Certification and Accreditation Requirements Version 1 March 2012.</p> <p>The organization described in section 3 of this report for the activities described in the section 3 itself is:</p> <ul style="list-style-type: none"> • Compliant and thus certified
Date of certificate issue	
Date of certificate expiry	
Scope of certificate	Production (on-growing) of Atlantic salmon (<i>S. Salar</i>) in sea-cages, and subsequent transport to harvest site waiting cages. Unloading from wellboat/live fish carrier and the stay in waiting cages is under the harvest plant ASC CoC certificate.
Start of Chain of	Products are authorised to enter an ASC Chain of Custody certification at the



custody	point where the fish is moved from the wellboat/live fish carrier and pumped into the waiting cages.
----------------	--

The outstanding minor non-conformities are listed in the relevant table of section 5 of this report. The relevant corrective actions plan has to be approved and the implementation of corrective actions will be verified at next periodical audit.

8 EVALUATION RESULTS

This section presents the results of the audit of the operation against the specific elements in the standard and guidance documents, including audit evidence that demonstrates reliable and reproductive conclusions. . Further details on open, closed or downgraded non conformities can be found in Appendix 2.

NC number	NC source audit activity	Standard reference	Description of Non conformity	Root cause analysis	Corrective action report	Accepted date	Major	Minor	Observation
1	Head office and site document reviews and staff interviews.	2.1.3 a-e	Number of Macrofaunal taxa in the sediment within the AZE, following the sampling methodology outlined in Appendix I-1. No information on Macrofaunal taxa demonstrated, as report from survey is still pending.	Results were not available at point of initial audit. Results are now available	CLOSED 04.10.14 KRBE: Number of Macrofaunal Taxa inside AZE are variable, but consistently above requirement and appears not to be dominated by pollution indicator species (2.1.3.e still open, but downgraded to MI)	04.10.14		(2.1.3 e now as MI)	
2	Head office and site document reviews and staff interviews.	2.1.1.e	The requirement is to measure and record redox potential (mV) in sediment samples using an appropriate, nationally or internationally recognized testing method. Redox potential found was variable between stations, ranging from -133/-49 to +43/+29		04.10.14 KRBE: Redox potential is variable between stations, ranging from -177/-157 and +29/ +43 outside AZE. Background levels in remote stations are low, indicating a natural			MI	

			outside AZE -. Background levels in remote stations also low, indicating a natural occurring clay bottom. MOM-C as per national regulations (NS 9410)		occurrence of clay bottom. MOM-C as per national regulations (NS 9410). Further monitoring and control of site`s carrying capacity over time, with new environmental surveys, is required. Documentation of this to be followed up next surveillance audit.				
3	Head office and site document reviews and staff interviews.	2.1.1.g	The requirement is to submit test results to ASC as per Appendix VI at least once for each production cycle. Results not submitted to ASC.					MI	
4	Head office and site document reviews and staff interviews.	2.1.2.e	Faunal index score indicating good [4] to high ecological quality in sediment outside the AZE has to be demonstrated. No FIS demonstrated as report from survey is still pending.	Results were not available at point of initial audit. Results are now available	CLOSED 04.10.14 KRBE: Shannon-Wiener scores outside AZE are consistently above requirements, ranging from 4.19 to 4,84.	04.10.14			
5	Head office and site document	2.1.2i	Submit faunal index scores to ASC (Appendix VI) at least					MI	

	reviews and staff interviews.		once for each production cycle. Results not submitted to ASC.						
6	Head office and site document reviews and staff interviews.	2.5.5 b	Frequent [41] on-farm testing for sea lice, with test results made easily publicly available [42] within seven days of testing					MI	
7	Head office and site document reviews and staff interviews.	3.1.4 d, e	Frequent [41] on-farm testing for sea lice, with test results made easily publicly available [42] within seven days of testing is required. Results are now submitted to Altinn and directly to "Lusenettverket". NFSA publishes in public reports when data is processed. Direct access to data for actual site should be established e.g on a MH ASC website. No records on results made publicly available demonstrated.					MI	
8	Head office and site document reviews and staff interviews.	3.4.3 c	Requirement is that estimated unexplained loss [59] of farmed salmon is made publicly available. Results are not made publicly available.					MI	
9	Head office and site document	4.4.3.c	Requirement is to inform ASC whether feed contains transgenic					MI	

	reviews and staff interviews.		ingredients (yes or no) as per Appendix VI for each production-cycle. Not informed to ASC.						
10	Head office and site document reviews and staff interviews.	5.4.4.a	. Farm policies and procedures (see 5.4.3A) to verify that the farm has documented actions in response to an OIE-notifiable disease is required. Int. procedure in TQM on practices in accordance with OIE AHC" Beredskapsplan MH" page 12, Notification of diseases. "Fiskehelse-nettverk" cooperation on fish health is notified, as voluntary cooperation agreement in area. Required steps not clearly defined in procedure to inform ABM members and publish in e.g MHN web-site for ASC issues.					MI	
11	Head office and site document reviews and staff interviews.	6.5.1c	Requirement is that 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,					MI	

			Occupational Safety and Health (OSH) and effective use of PPE. The apprentice was not trained for OHS.						
12	Head office and site document reviews and staff interviews.	6.7.2.b	NC: No criteria present for evaluation of suppliers and contractors against requirements in clause 6 of the standard.					MI	
13	Head office and site document reviews and staff interviews.	6.7.2 c	NC: No records are available of communications with suppliers and subcontractors that relate to compliance with 6.7.2					MI	
14	Head office and site document reviews and staff interviews.	8.1.a	Requirement is that the client submits to ASC information on the type of production system used by smolt suppliers (Appendix VI). Info not submitted to ASC.					MI	
15	Head office and site document reviews and staff interviews.	8.1.d	No inspections/inspection reports available. No records					MI	
16	Head office and site document reviews and staff interviews.	8.4 g	It is required that the farm's smolt supplier(s) do not exceed requirements for release of phosphorus. All smolt sites` values above limits	Smolt plant discharges without cleaning/filtering applied will inevitably exceed the limit	CLOSED 04.10.14 KRBE: Ref VR acceptance from ASC. Since smolt plant discharge directly to seawater.			MI	

17	Head office and site document reviews and staff interviews.	8.6 d	No statement sent ext. supplier					MI	
18	Head office and site document reviews and staff interviews.	8.11.b	Evidence of a fish health management plan, approved by the designated veterinarian, for the identification and monitoring of fish diseases and parasites is required. Seen FHMP, approval not documented.					MI	
19	Head office and site document reviews and staff interviews.	8.15 a, b	It is required to 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]. Documentation of list communicated to FW site is not presented.					MI	
20	Head office and site document reviews and staff interviews.	8.17 a, b	It is required to provide to smolt supplier(s) a current version of the WHO list of antimicrobials critically and highly important for human health [167]. Documentation of list					MI	

			communicated to FW site is not presented.						
21	Head office and site document reviews and staff interviews.	8.18 a, b, c	Evidence of compliance [169] with the OIE Aquatic Animal Health Code [170] is required. Documentation of list communicated to FW site is not presented. Documentation of suppliers declaration of compliance site is not presented.					MI	
22	Head office and site document reviews and staff interviews.	8.19	NC: No copies company level policies or procedures available from external smolt suppliers and no review done.					MI	
23	Head office and site document reviews and staff interviews.	8.20	NC: No evidences of consultation with community by external smolt suppliers.					MI	
24	Head office and site document reviews and staff interviews.	8.21	NC: No evidence of policy for presentation, treatment and resolution of complaints from external smolt suppliers.					MI	
25	Head office and site document reviews and staff interviews.	3.4.3.d	Requirement is to submit estimated unexplained loss to ASC as per Appendix VI for each production cycle. Incorrect calculation submitted.						OBS
26	Head office	6.2.2.d	The travel time for						OBS

	and site document reviews and staff interviews.		young employees is not checked.						
27	Head office and site document reviews and staff interviews.	6.4.1 d	The managers had general training on CoC, no specific diversity and anti- discrimination training delivered. No evidences that training was effective for managers and personnel, as no questions in test about anti-discrimination.						OBS
28	Head office and site document reviews and staff interviews.	6.5.4 c	The root cause analysis is not evident in OHS incidents reporting documents.						OBS
29	Head office and site document reviews and staff interviews.	6.10.1.b	The monitoring of OT is not efficient. E.g. 21.5 hours of one day overtime has been presented.						OBS
30	Head office and site document reviews and staff interviews.	8.3.a,b	Requirement is to 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-						OBS



			3. MOM-B surveys voluntarily every 5th year and Rådg. Biol 3rd part assessment also RA. Assessment could be more comprehensive covering all ecosystems.						
31	Head office and site document reviews and staff interviews.	8.10 b	It is required that the farm confirms that calculations by smolt suppliers are done annually and in compliance with Appendix V-1. Results show 92474 kg and 74520 diesel OBS el missing.						OBS





9 CONFIDENTIAL COMMERCIALY SENSITIVE INFORMATION

To enhance transparency the company decided to leave all submitted information open and accessible

APPENDIX 1: STAKEHOLDER SUBMISSIONS

The stakeholders, as defined by the Auditee, were contacted at audit notification and at the point of publishing the draft report. No comments have been received prior to the audit, nor in the defined period of publication of the draft report.

Local:

Giske Kommune	Rådhuset, 6050 Valderøya T: 70 18 80 00. Fax: 70 18 80 01 Epost: post@giske.kommune.no
Giske Fiskarlag	v/Rolf S. Giske, 6052 Giske. T: 70 18 05 06 / epost: giskefiskarlag@live.no
Giske Fiskarlag	ved Arild Gjørund, Valderhaugstranda, 6050 Valderøy T: 70 18 35 19 / 92 23 07 24 / epost: giskefiskarlag@live.no
Roald Velforening	ved Solveig Helen Roald. Budafjellveien 60, 6040 Vigra T: 90 10 95 06
Røysa Velforening	ved Ingeborg Godø, 6040 Vigra. T: 95 18 85 67
Oksneset Velforening	Johan Giskeødegård T: 47 48 73 28

National:

Mattilsynet	Epost: postmottak@mattilsynet.no T: 22 40 00 00
Møre og Romsdal Fylkeskommune	Fylkeshuset, Julsundveien 9 6414 Molde T: 71 25 80 00 / Epost: postmottak@mrfylke.no
Kystverket, region Vest	Ålesund H-kontor, Postboks 1502, 6025 Ålesund T: 07847 / Epost: post@kystverket.no
Fylkesmannen i Møre og Romsdal	Fylkeshuset, Julsundveien 9, 6404 Molde T: 71 25 84 43 / F: 71 25 85 10 / Epost: fmmrpostmottak@fylkesmannen.no
Fiskeridirektoratets region Møre og Romsdal	Postboks 185 Sentrum, 5804 Bergen T: 03495 / F: 55 23 80 90 / Epost: postmottak@fiskeridir.no





APPENDIX 2: CHECKLIST (EVALUATION RESULTS)



ABOUT DNV GL

Driven by our purpose of safeguarding life, property and the environment, DNV GL enables organizations to advance the safety and sustainability of their business. We provide classification and technical assurance along with software and independent expert advisory services to the maritime, oil and gas, and energy industries. We also provide certification services to customers across a wide range of industries. Operating in more than 100 countries, our 16,000 professionals are dedicated to helping our customers make the world safer, smarter and greener.

AUDIT MANUAL - ASC Salmon Standard			Oksebåsen			
Scope: species belonging to the genus <i>Salmo</i> and <i>Oncorhynchus</i>						
INSTRUCTION TO FARMS/AUDITORS: This audit manual was developed to accompany the version of the ASC Salmon Standard developed through the Salmon Aquaculture Dialogue, dated June 13, 2012. <u>References in this Audit Manual to Appendices can be found in the ASC Salmon Standard document.</u> The manual is complemented by a separate pre-audit checklist that outlines the minimum information that a client must have prior to the first audit. Prior to audit, the client and their conformity assessment body (CAB) shall reach agreement on whether the audit requires visits to both the client headquarters and the farm site, which information is held at each location, and the acceptable format of records (e.g. electronic or hard copy files).			CONFIRMITY		COMMENTS	
PRINCIPLE 1: COMPLY WITH ALL APPLICABLE NATIONAL LAWS AND LOCAL REGULATIONS			CO	Min	Mal	NA
Criterion 1.1 Compliance with all applicable local and national legal requirements and regulations			NI	or	or	
			IR	NC	NC	
			M			
			TV			
	Indicator: Presence of documents demonstrating compliance with local and national regulations and requirements on land and water use Requirement: Yes Applicability: All	Compliance Criteria (Required Client Actions): a. Maintain digital or hard copies of applicable land and water use laws. b. Maintain original (or legalised copies of) lease agreements, land titles, or concession permit on file as applicable. c. Keep records of inspections for compliance with national and local laws and regulations (if such inspections are legally required in the country of operation)	Auditor Evaluation (Required CAB Actions): A. Review compliance with applicable land and water use laws. B. Confirm client holds original (or legalised copies of) lease agreements or land titles. C. Review inspection records for compliance with national and local laws and regulations (as applicable).	Y		
1.1.1						Laws and regs in Lovdata with updates. Governed by int. proc.
						Fmannen I MR dt29.09.10 change of area use permit. F mannen discharge permit for site dt 23..09.10 for 4680 t MT .NFSA Approved Ops. Plan 201 2014 dt 10.12.12
						Ex: NFSA inspection report 06.10.12 and 12.12.12
						Seen map from "Naturbase" with bird protected area. Int declaration on site vs HVCAs. And F. Dir approval dt 17.12.13

1.1.2	Indicator: Presence of documents demonstrating compliance with all tax laws Requirement: Yes Applicability: All	a. Maintain records of tax payments to appropriate authorities (e.g. land use tax, water use tax, revenue tax). Note that CABs will not disclose confidential 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.	Y			Authorised auditor report/statement for Org. Nr 959352887 dt 27.06.13 Ernst & Young
		b. Maintain copies of tax laws for jurisdiction(s) where company operates.	B. Confirm client has a basic knowledge of tax requirements for farm.	Y			Lovdata access to updated versions in TQM system
		c. Register with national or local authorities as an "aquaculture activity".	C. Verify client is registered with local or national authorities.	Y			Org. Nr 959352887 F.mannen MR dt 02.05.11 change of area use permit. F mannen discharge permit for site dt 07.05.10 for 4680 t MTB. NFSA Approved Ops. Plan 2013-2014 dt 10.12.12
1.1.3	Indicator: Presence of documents demonstrating compliance with all relevant national and local labor laws and regulations Requirement: Yes Applicability: All	a. Maintain copies of national labor codes and laws applicable to farm (scope restricted to the farm sites within the unit certification.)	A. Confirm client has specified documentation	Y			Lovdata access to updated versions in TQM system
		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).	Y			Arbejstilsynet report dt 03.10.11 with NCs. CA sendt Arbejdstilsynet.
1.1.4	Indicator: Presence of documents demonstrating compliance with regulations and permits concerning water quality impacts Requirement: Yes Applicability: All	a. Obtain permits for water quality impacts where applicable.	A. Verify that client obtains permits as applicable.	Y			Fmnnen I MR dt 29.09.10 change of area use permit. F mannen discharge permit for site dt 23..09.10 for 4680 t MT .NFSA Approved Ops. Plan 2013-2014 dt 10.12.12. .MOM-C every 6th yr (done every 4th)
		b. Compile list of and comply with all discharge laws or regulations.	B. Review evidence of compliance with discharge laws or regulations.	Y			As 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.	Y				MTB reported to Altinn end of month. No indications of non compliance.
PRINCIPLE 2: CONSERVE NATURAL HABITAT, LOCAL BIODIVERSITY AND ECOSYSTEM FUNCTION								
<i>Criterion 2.1 Benthic biodiversity and benthic effects [1]</i>								
Compliance Criteria (Required Client Actions):			Auditor Evaluation (Required CAB Actions):					
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.								
Instruction to Clients and CABs on Criterion 2.1 - Modification of the Benthic Sampling Methodology								
2.1.1	<p>Indicator: Redox potential or [2] sulphide levels in sediment outside of the Allowable Zone Effect (AZE) [3], following the sampling methodology outline in Appendix I-1</p> <p>Requirement: Redox potential > 0 millivolts (mV) or Sulphide ≤ 1,500 microMoles/l</p> <p>Applicability: All farms except as noted in [1]</p>	<p>Note: Under Indicator 2.1.1, farms can choose to measure redox potential (Option #1) or sulphide concentration (Option #2)</p> <p>a. Prepare a map of the farm showing boundary of AZE (30 m) and GPS location of all sediment collections stations. If the farm uses a site-specific AZE, provide justification [3] to the CAB.</p>	<p>b. Review map to verify appropriate siting of sampling stations (Appendix I-1) and evidence (if applicable) to justify use of a site specific AZE.</p>	Y				Seen Olex map with 6 points. Modified MOM-C (doubled). Point adapted to bathymetric conditions. Performed by Fiskeliv dt 13.06.14
		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.			NA		Soft 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.	Y				Opt# 1
		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 map and harvest records.	Y				GPS coordinates in Olex map

		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.	N	MI			04.10.14 KRBE: Redox potential variable between stations, ranging from -177/-157 and +29/ +43 outside AZE Background levels in remote stations also low, indicating a natural occurrence of clay bottom. MOM-C as per national regulations (NS 9410). Further monitoring and control of site carrying capacity over time, with new environmental surveys, is required. Documentation of this to be followed up next surveillance audit.
		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.				NA	
		g. Submit test results to ASC as per Appendix VI at least once for each production cycle. If site has hard bottom and cannot complete tests, report this to ASC.	g. Confirm that client has submitted test results.	N	MI			Not submitted to ASC
Footnote		[2] Farm sites can choose whether to use redox or sulphide. Farms do not have to demonstrate that they meet both.						
Footnote		[3] Allowable Zone of Effect (AZE) is defined under this standard as 30 meters. For farm sites where a site-specific AZE has been defined using a robust and credible						
2.1.2	Indicator: Faunal Index score indicating good [4] to high ecological quality in sediment outside the AZE, following the sampling methodology outlined in Appendix I-1 Requirement: AZTI Marine Biotic Index (AMBI [5]) scores ≥ 3, or Shannon-Wiener Index score ≥ 3, or Benthic Quality Index (BQI) score ≥ 15, or Infaunal Trophic Index (ITI) score ≥ 25 Applicability: All farms except as noted in [1]	Notes: a. Prepare a map showing the AZE (30 m or site specific) and sediment collection stations (see 2.1.1). b. Inform the CAB whether the farm chose option #1, #2, #3, or #4 to demonstrate compliance with the requirement. c. Collect sediment samples in accordance with Appendix I-1 (see 2.1.1).	A. Review map to verify appropriate siting of sampling stations (see 2.1.1). B. Record which option the client chose for scoring faunal index. C. Confirm sample collection followed Appendix I-1 (see 2.1.1).	Y				Seen Olex map with 6 points. Modified MOM-C (doubled). Point adapted to bathymetric conditions. Performed by Fiskeliv dt 13.05.14 according to NS9410 #2 Shannon Wiener used Van Veen grab used according to site specific MOM-C (NS9410)

	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 3.3 at each sampling station outside the AZE.			NA	Opt 2 used
	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.	Y			CLOSED 04.10.14 KRBE: Shannon-Wiener scores outside AZE are consistently above requirements, ranging from 4.19 to 4.84.
	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 15 at each sampling station outside the AZE.			NA	#2 Shannon Wiener used
	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 25 at each sampling station outside the AZE.			NA	#2 Shannon Wiener used
	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.	Y			Performed by accredited service "Fiskeliv" (www.fiskeliv.no)
	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.	N			Not submitted 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-s					
Footnote	[5] http://www.azti.es/en/ambi-azti-marine-biotic-index.html .					

2.1.3	<p>Indicator: Number of macrofaunal taxa in the sediment within the AZE, following the sampling methodology outlined in Appendix I-1</p> <p>Requirement: ≥ 2 highly abundant [6] taxa that are not pollution indicator species</p> <p>Applicability: All farms except as noted in [1]</p>	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.	Y				CLOSED 04.10.14 KRBE in site specific MOM-C survey dt 13.05.14. according to NS 9410. Performed by accredited service "Fiskeliv" (www.fiskeliv.no)
		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.	Y				CLOSED 04.10.14 KRBE in site specific MOM-C survey dt 13.05.14. according to NS 9410. Performed by accredited service "Fiskeliv" (www.fiskeliv.no)
		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 ≥ 2 highly abundant [6] taxa (exclusive of pollution indicator species).	Y				CLOSED 04.10.14 KRBE: Number of MT inside AZE are consistently above requirement and appears not to be dominated by pollution indicator species.
		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 suitably qualified independent laboratory performed the scoring of faunal index.	Y				CLOSED 04.10.14 KRBE: In MOM-C survey dt 13.05.14. according to NS 9410. Performed by accredited service "Fiskeliv" (www.fiskeliv.no)
		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	N	MI			DOWNGRADED 04.10.14 KRBE: Submitted 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>Indicator: Definition of a site-specific AZE based on a robust and credible [7] modeling system</p> <p>Requirement: Yes, within three years of the publication [8] of the SAD standard (i.e. full compliance by June 13, 2015)</p> <p>Applicability: All farms except as noted in [1]</p>	<p>Note: Farms may define a site-specific AZE at any time before this date as long as they demonstrate full compliance by June 2012.</p> <p>a. Undertake an analysis to determine the site-specific AZE and depositional pattern before 3 years have passed since publication of the Standard on June 2012.</p>	A. Review documentation to confirm that the farm has undertaken an analysis before the required date.	3.			NA	Site specific approach as described above

		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.			NA	Site specific approach as described above
		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').			NA	Site specific approach as described above
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					
Footnote	[8]	Publication: Refers to the date when the final standards and accompanying guidelines are completed and made publicly available. This definition of publication					
Criterion 2.2 Water quality in and near the site of operation [12]							
Compliance Criteria (Required Client Actions):				Auditor Evaluation (Required CAB Actions):			
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	Indicator: Weekly average percent saturation [13] of dissolved oxygen (DO) [14] on farm, calculated following methodology in Appendix 1-4 Requirement: ≥ 70% [15] Applicability: All farms except as noted in [15]	Instruction to Clients for Indicator 2.2.1 - Monitoring Average Weekly Percent Saturation of Dissolved Oxygen a. Monitor and record on-farm percent saturation of DO at a minimum of twice daily using a calibrated oxygen meter or equivalent method. For first audits, farm records must cover 6 months.		a. Do not schedule audit until client provides Y minimum of 6 months of DO data.			Records submitted for period 21.12.13 to 21.06.14 with automatic measurements in cage (5 & 10m), GPRS logger. (Oxybox Nortec)
		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 1-4	Y			As above
		c. Calculate weekly average percent saturation based on data.	c. Review calculation and confirm all weekly averages ≥ 70%.				All and weekly values above 70% (90-95)
		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).			NA	All above limit

		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.	Y				All above limit
		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 at least once per year.	Y				Submitted in zipped files.
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							
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>Indicator: Maximum percentage of weekly samples from 2.2.1 that fall under 2 mg/liter DO</p> <p>Requirement: 5%</p> <p>Applicability: 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 ≤ 5% of weekly samples fall under 2 mg/l DO.	Y				All above limits.
		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 at least once per year.	Y				Submitted in zipped files.
2.2.3	<p>Indicator: For jurisdictions that have national or regional coastal water quality targets [16], demonstration through third-party analysis that the farm is in an area recently [17] classified as having "good" or "very good" water quality [18]</p> <p>Requirement: Yes [19]</p> <p>Applicability: 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.	Y				EU Water Directive 2000 gives WQ objectives for area. (ref "vannportalen.no")
		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.	Y				(ref "vannportalen.no") for Vigrafjorden dt 17.06.14. F. Mannen.
		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.	Y				Assumed to be good. (ref "vannportalen.no") for Vigrafjorden
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							
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							

2.2.4	<p>Indicator: For jurisdictions without national or regional coastal water quality targets, evidence of weekly monitoring of nitrogen and phosphorous [20] levels on farm and at a reference site, following methodology in Appendix I-5</p> <p>Requirement: Yes</p> <p>Applicability: All farms except as noted in [19]</p>	<p>a. Develop, implement, and document a weekly monitoring plan for N, NH4, NO3, total P, and ortho-P in compliance with Appendix I-5 testing a minimum of once weekly in both locations. For first audit, farm records must cover 6 months.</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>				NA	EU Water Directive 2000 (WFD) gives WQ objectives for area. (ref "vannportalen.no"). Nordre Sunnmøre W area.
		<p>b. Calibrate all equipment according to the manufacturer's recommendations.</p>	<p>B. Verify that client calibrates equipment as needed.</p>				NA	As above
		<p>c. Submit data on N and P to ASC as per Appendix VI at least once per year.</p>	<p>C. Confirm that client has submitted N and P data to ASC (Appendix VI).</p>				NA	As above
Footnote [20] Farms shall monitor total N, NH4, NO3, total P and Ortho-P in the water column. Results shall be submitted to the ASC database. Methods such as a Hatch kit								
2.2.5	<p>Indicator: Demonstration of calculation of biochemical oxygen demand (BOD [21]) of the farm on a production cycle basis</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>Instruction to Clients for Indicator 2.2.5 - Calculating Biochemical Oxygen Demand</p> <p>a. Collect data throughout the course of the production cycle and calculate BOD according to formula in the instruction box.</p>		<p>B. Review calculation, cross-check data used with feed and harvest records.</p>	Y			BOD calculated to 10159567 kg for previous complete cycle 2011G
		<p>b. Submit calculated BOD as per Appendix VI to ASC for each production cycle</p>	<p>B. Confirm that client has submitted calculated BOD a to ASC (Appendix VI).</p>	Y				Submitted in zipped file
Footnote [21] BOD calculated as: $((\text{total N in feed} - \text{total N in fish}) * 4.57) + ((\text{total C in feed} - \text{total C in fish}) * 2.67)$. A farm may deduct N or C that is captured, filtered or								
Criterion 2.3 Nutrient release from production								
		Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):				
2.3.1	<p>Indicator: Percentage of fines [22] in the feed at point of entry to the farm [23] (calculated following methodology in Appendix I-2)</p> <p>Requirement: < 1% by weight of the feed</p> <p>Applicability: All farms except as noted in [23]</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.</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>A. Review timing and location of testing. If testing off-site, verify rationale and ensure consistent with [23].</p>	Y			According to reqs. Ranging from 0,17 to 2%, weighted avg below 1%..

		b. If using a sieving machine, calibrate equipment according to manufacturer's recommendations.	B. Verify that client has appropriate testing technology on site and that, if applicable, it is calibrated as required.	Y			As per ASC
		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.	C. Review testing results and confirm that the pooled sample for each quarter has a percent fines of <1%.	Y			According to reqs. Ranging from 0,15 to 0,76 %.
Footnote	[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						
Footnote	[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						
<i>Criterion 2.4 Interaction with critical or sensitive habitats and species</i>							
		Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):			
2.4.1	Indicator: Evidence of an assessment of the farm's potential impacts on biodiversity and nearby ecosystems that contains at minimum the components outlined in Appendix I-3 Requirement: Yes Applicability: All	Note: If a farm has previously undertaken an independent assessment of biodiversity impact (e.g. as part of the regulatory assessment) that addresses all components outlined in Appendix I-3. 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.		A. Review the assessment to confirm that it complies with all components outlined in Appendix I-3.	Y		DN Naturbase map with all known protected areas defined. Int Statemnt dt 20.06.14 that site operation is not in conflict with protected areas. HCVA or CAs.
		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 a plan to address those potential impacts.	B. Verify the farm has a plan to address all potential impacts identified in the assessment	Y			In Risk Analysis matrix with site specific identification of potential impacts of operation and contingency plans for reducing or eliminating impacts.

		c. Keep records to show how the farm implements plan(s) from 2.4.1b to minimize potential impacts to critical or sensitive habitats and species.	C. Verify that the farm implements the plan(s)	Y			OK verified on site visit
2.4.2	<p>Indicator: Allowance for the farm to be sited in a protected area [24] or High Conservation Value Areas [25] (HCVAs)</p> <p>Requirement: None [26]</p> <p>Applicability: All farms except as noted in [26]</p>	<p>Instruction to Clients for Indicator 2.4.2 - Exceptions to Requirements that Farms are not sited within Protected Areas or HCVAs:</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>		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 HCVA.	Y		DN Naturbase map with all known protected areas defined. Int Statemnt dt 20.06.14 that site operation is not in conflictwith protected areas. HCVA or CAS.
		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.	B. Obtain a copy of the farm's declaration stating that the farm is not sited in a protected area or HCVA (as applicable).	Y			DN Naturbase map with all known protected areas defined. Int Statemnt dt 20.06.14 that site operation is not in conflictwith protected areas. HCVA or CAS.
		c. If the farm is sited in a protected area or HCVA, review the scope of applicability of Indicator 2.4.2 (see Instructions above) to determine if your farm is allowed an exception to the requirements. If yes, inform the CAB which exception (#1, #2, or #3) is allowed and provide supporting evidence.	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		NA		Not within CAS

		d. If the farm is sited in a protected area or HCVA and the exceptions provided in Indicator 2.4.2 do not apply then the farm does not comply with the requirement and is ineligible for ASC certification.	D. Review evidence to determine whether the farm is allowed to be sited in a protected area HCVA and hence eligible for ASC certification.			NA	Not within HVCAs
Footnote	[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 biodiversity."						
Footnote	[25] High Conservation Value Areas (HCVA): Natural habitats where conservation values are considered to be of outstanding significance or critical importance.						
Footnote	[26] The following exceptions shall be made for Standard 2.4.2:						
<i>Criterion 2.5 Interaction with wildlife, including predators [27]</i>							
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):				
Footnote	[27] See Appendix VI for transparency requirements for 2.5.2, 2.5.5 and 2.5.6.						
2.5.1	<p>Indicator: Number of days in the production cycle when acoustic deterrent devices (ADDs) or acoustic harassment devices (AHDs) were used</p> <p>Requirement: 0, within three years of the date of publication [28] of the SAD standard (i.e. full compliance by June 13, 2015)</p> <p>Applicability: 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>A. Confirm that farm management has prepared a written statement of commitment</p>			NA	No ADDs/AHDs in use nor has been used. Ref statment 19.06.14 on deviced not used.
		<p>b. Compile documentary evidence to show that no ADDs or AHDs were used on the farm after June 13, 2015 (applicable only after the specified date).</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>			NA	No ADDs/AHDs in use nor has been used
			<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>			NA	Verified not in use
Footnote	[28] Publication: Refers to the date when the final standards and accompanying guidelines are completed and made publicly available. This definition of						
2.5.2	<p>Indicator: Prior to the achievement of 2.5.1, if ADDs or AHDs are used, maximum percentage of days [29] in the production cycle that the devices are operational</p> <p>Requirement: ≤ 40%</p> <p>Applicability: All, until June 13 2015</p>	<p>Instruction to Clients for Indicator 2.5.2 - Percentage of Days that ADDs or AHDs were used</p> <p>a. Maintain a log for the use of any ADDs or AHDs on farm that includes record of 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>			NA	No ADDs/AHDs in use nor has been used. Ref statment 19.06.14 on deviced not used.

		b. Calculate the percentage of days in the production cycle that the devices were operational in the most recent complete production cycle.	B. Verify calculations and cross-check against records for the duration of the production cycle.			NA	No ADDs/AHDs in use nor has been used
		-	C. Confirm devices were operational 40% of the days of the production cycle.			NA	Verified not in use
		d. Submit data on number of days that ADDs/AHDs were used to the ASC as per Appendix VI. Data must be sent to ASC on an ongoing basis (i.e. at least once per year and for each production cycle).	D. Confirm that client has submitted data on ADDs/AHDs to ASC (Appendix VI).	Y			Submitted to ASC
Footnote [29] Day: 24-hour cycle.							
2.5.3	Indicator: Number of mortalities [30] of endangered or red-listed [31] marine mammals or birds on the farm. Requirement: 0 (zero) Applicability: All	a. Prepare a list of all predator control devices and their locations.	A. Review list.	Y			Birdnets only
		b. Maintain a record of all predator incidents.	B. Review farm records of predator incidents and cross-check against relevant records (e.g. escapes).	Y			Entanglement of seabirds; 1 cormorant dead
		c. Maintain a record of all mortalities of marine mammals and birds on the farm identifying the species, date, and apparent cause of death.	C. Review records for completeness. Cross-check mortality records against interviews with farm staff and community representatives.	Y			Verified on site
		d. Maintain an up-to-date list of endangered or red-listed marine mammals and birds in the area (see 2.4.1)	D. Review list for consistency with 2.4.1	Y			Red list from "naturbase"
		-	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.			NA	Not red listed
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>Indicator: Evidence that the following steps were taken prior to lethal action [32] against a predator:</p> <ol style="list-style-type: none"> All other avenues were pursued prior to using lethal action Approval was given from a senior manager above the farm manager Explicit permission was granted to take lethal action against the specific animal from the relevant regulatory authority 	<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>A. Review list of lethal actions taken by the farm and cross-check against 2.5.3b.</p>		NA	No lethal actions taken. Int records checked
	<p>Requirement: Yes [33]</p> <p>Applicability: All except cases where human safety is endangered as noted in [33]</p>	<p>b. For each lethal action identified in 2.5.4a, keep record of the following:</p> <ol style="list-style-type: none"> a rationale showing how the farm pursued all other reasonable avenues prior to using lethal action; approval from a senior manager above the farm manager of the lethal action; where applicable, explicit permission was granted by the relevant regulatory authority to take lethal action against the animal. 	<p>B. Review documentation to confirm that the farm shows evidence of compliance with requirements in steps 1-3.</p>		NA	No lethal actions taken
		<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>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>		NA	No lethal actions taken
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				
Instruction to Clients and CABs on Indicators 2.5.5, 2.5.6, and 2.5.7 - Clarification about the ASC Definition of "Lethal Incident"						

2.5.5	Indicator: Evidence that information about any lethal incidents [35] on the farm has been made easily publicly available [34] Requirement: Yes Applicability: All	a. For all lethal actions (see 2.5.4), keep records showing that the farm made information available within 30 days of occurrence.	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.	Y			Reported to Altinn monthly
		a. For all lethal actions (see 2.5.4), keep records showing that the farm made information available within 30 days of occurrence.	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.	Y			Reported to Altinn monthly
		b. Ensure that information about all lethal actions listed in 2.5.5a are made easily publicly available (e.g. on a website).	B. Verify that required information is easily publicly available.	N	MI		Evaluate publishing on website Reported to Altinn monthly
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 1				Y	FC		
2.5.6	Indicator: Maximum number of lethal incidents [35] on the farm over the prior two years Requirement: < 9 lethal incidents [36], with no more than two of the incidents being marine mammals Applicability: All	a. Maintain log of lethal incidents (see 2.5.4a) for a minimum of two years. For first audit, > 6 months of data are required.	A. Review log.	Y			In Monthly Env. Report with number and species identified.
		b. Calculate the total number of lethal incidents and the number of incidents involving marine mammals during the previous two year period.	B. Verify that over the previous two years there were < 9 lethal incidents in total and that 2 of those incidents were marine mammal deaths.	Y			No mammals affected

		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).	c. Confirm that data on all lethal incidents has been submitted to ASC (Appendix VI).	Y			Submitted to ASC
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, 2.5.7.						
2.5.7	<p>Indicator: In the event of a lethal incident, evidence that an assessment of the risk of lethal incident(s) has been undertaken and demonstration of concrete steps taken by the farm to reduce the risk of future incidences</p> <p>Requirement: Yes</p> <p>Applicability: 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>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>	Y			Preventive actions taken to eliminate incidents of birds entanglement.
		<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>B. Verify that the farm implements steps to reduce the risk of future lethal incidents.</p>	Y			Historic records in Miljørapport
PRINCIPLE 3: PROTECT THE HEALTH AND GENETIC INTEGRITY OF WILD POPULATIONS							
<i>Criterion 3.1 Introduced or amplified parasites and pathogens [38,39]</i>							
Compliance Criteria (Required Client Actions):				Auditor Evaluation (Required CAB Actions):			
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						
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.						
Instruction to Clients and CABs on Exemptions to Criterion 3.1							
3.1.1	<p>Indicator: Participation in an Area-Based Management (ABM) scheme for managing disease and resistance to treatments that includes coordination of stocking, fallowing, therapeutic treatments and information-sharing. Detailed requirements are in Appendix II-1.</p>	<p>a. Keep record of farm's participation in an ABM scheme.</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>	Y			Records and overview over ABM in zones defined by NFS. Weekly updates to Altinn, where info is available for all farms in zone. 100% of farms included. Records from "Lusenettverket" treatments and disease notification, if any included.

	<p>Requirement: Yes</p> <p>Applicability: All except farms that release no water as noted in [38]</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"> - coordination of stocking; - fallowing; - therapeutic treatments; and - information sharing. 	<p>B. Review description of ABM to verify that the management activities address each of the four elements from Indicator 3.1.1.</p>	Y			<p>ABM defined in reg. West "Luseplanen Romsdal & Nordfjord". Containing elements of compulsory sealid control, fallowing and stocking coordination. Weekly updates of shared information.</p>
		<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. Evaluate documents to confirm the ABM complies with Appendix II-1.</p>	Y			<p>As above</p>
		<p>d. Submit dates of fallowing period(s) as per Appendix VI to ASC at least once per year.</p>	<p>B. Confirm that client has submitted dates of fallowing periods to ASC (Appendix VI).</p>	Y			<p>Submitted to ASC as "MHN operations calendar" for site.</p>
3.1.2	Indicator: A demonstrated	Note: Indicator 3.1.2 requires that farms demonstrate a commitment to collaborate with NGOs, academics and governments					

<p>commitment [40] to collaborate with NGOs, academics and governments on areas of mutually agreed research to measure possible impacts on wild stocks</p> <p>Requirement: Yes</p> <p>Applicability: All except farms that release no water as noted in [38]</p>	<p>a. Retain records to show how the farm and/or its operating company has communicated with external groups (NGOs, academics, governments) to agree on and collaborate towards areas of research to measure impacts on wild stocks including records of requests for research support and collaboration and responses to those requests.</p>	<p>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>	Y			Cooperation agreement with WWF, signed Feb 2011. Also non financial support to: Fiskefellen i Utne, Hardeanger Pitt project, Vossalauget, Genetical studies, Sealice monitoring in Romsdalsfj. Also "PD in Romsdal", HS i Ålesund planned, in cooperation with farming companies and academia.
	<p>b. Provide non-financial support to research activities in 3.1.2.a by either: - providing researchers with access to farm-level data; - granting researchers direct access to farm sites; or - facilitating research activities in some equivalent way.</p>	<p>B. Review how the farm and/or its operating company has provided non-financial support for research activities.</p>	Y			As above
	<p>c. When the farm and/or its operating company denies a request to collaborate on a research project, ensure that there is a written justification for rejecting proposal.</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>			NA	Denied projects not known by staff in audit.
	<p>d. Maintain records from research collaborations (e.g. communications with researchers) to show that the farm has supported the research activities identified in 3.1.2.a.</p>	<p>D. Verify that the farm's communications with researchers demonstrate a commitment to collaborate on relevant areas of research.</p>	Y			In FHF PD projectmail dt 23.06.14 and agreements as described in 3.1.2.a

Footnote	[40] Commitment: At a minimum, a farm and/or its operating company must demonstrate this commitment through providing farm-level data to researchers,						
3.1.3	<p>Indicator: Establishment and annual review of a maximum sea lice load for the entire ABM and for the individual farm as outlined in Appendix II-2</p> <p>Requirement: Yes</p> <p>Applicability: 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: - the entire ABM; and - the individual farm.</p>	<p>A. Review records to confirm compliance.</p>	Y			<p>NFSA set limits and govern treatment regime, reported vi Altinn. Also Int proc. In TQM "Lakselus- forbygging kontroll og behandling" ID 24.98.5. Registered on farm in AquaFarmer.</p>
		<p>b. Maintain evidence that the established maximum sea lice load (3.1.3.a) 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>B. Confirm that sea lice load is reviewed annually and, if applicable, the review incorporates information from monitoring of wild salmon.</p>	Y			<p>NFSA set limits and govern treatment regime, reported vi Altinn. Continuous review by NFSA and Luse -nettverket monthly review.</p>
		<p>c. Provide the CAB access to documentation which is sufficient for the auditor to evaluate whether the ABM has set (3.1.3.a) and annually reviewed (3.1.3.b) maximum sea lice load in compliance with requirements in Appendix II-2.</p>	<p>D. Evaluate documents to confirm the ABM complies with requirements of Appendix II-2 for establishing and reviewing maximum sea lice loads.</p>	Y			<p>NFSA set limits and govern treatment regime, reported vi Altinn. Continuous review by NFSA and Luse -nettverket monthly review. Sensitive periods for wild salmon migration considered</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>D. Confirm that client has submitted the ABM maximum lice load to ASC (Appendix VI).</p>	Y			<p>Submitted to ASC</p>

3.1.4	<p>Indicator: Frequent [41] on-farm testing for sea lice, with test results made easily public available [42] within seven days of testing</p> <p>Requirement: Yes</p> <p>Applicability: 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>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>	Y			Weekly sampling and regs to NFA by Altinn. Sensitive periods for migration. Spring coordinated delicing set by NFA for region.
		<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>B. Review records to confirm that testing follows the farm's annual schedule. Review the rationale for any deviations from the schedule.</p>	Y			To Altinn weekly. No deviation registered.
		<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>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>	Y			Weekly testing form predetermined cages, according NFA regulation. Sea lice lifestage identified and recorded.

		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.	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.	N	MI			To Altinn and directly to "Lusenettverket". NFSA publishes in public reports when data is processed. Direct access to data for actual site should be established e.g on NFSA website.	MI
		e. Keep records of when and where test results were made public.	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).	N	MI			No records available	MI
		f. Submit test results to ASC (Appendix VI) at least once per year.	F. Confirm that client has submitted test results to ASC (Appendix VI).	Y				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							
Footnote	[42]	Posting results on a public website is an example of "easily publicly available."							
3.1.5		Instruction to Clients for Indicator 3.1.5 - Evidence for Wild Salmonid Health and Migration							
	Indicator: In areas with wild salmonids [43], evidence of data [44] and the farm's understanding of that data, around salmonid migration routes, migration timing and stock productivity in major waterways within 50 kilometers of the farm	a. Identify all salmonid species that naturally occur within 75 km of the farm through literature search or by consulting with a reputable authority. If the farm is not in an area with wild salmonids, then 3.1.5b and c do not apply.	A. Review salmonid species list for accuracy and cross-check source references. Confirm whether 3.1.5 b and c are applicable.	Y				<i>S. salar</i> and <i>S. trutta</i> and <i>S. salvelinus</i> naturally occurring in area.	
	Requirement: Yes Applicability: All farms operating in areas with wild salmonids except farms that release no water as noted in [38]	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.	B. Review the accuracy of the farm's information on local salmonid migratory patterns and stock productivity. Cross-check source references as necessary.	Y				Migratory routes as defined (article in Env. Biology of fishes 71:2004, on migration routes and periods for Romsdalfjorde. Also map from DN with rivers identified.	

		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.	C. Confirm accuracy of farm's understanding. Cross-check against 'sensitive periods' listed in the farm's annual schedule for testing for sea lice.	Y			Sufficient awareness and also participation related scientific projects by MH staff.
			D. Confirm the farm's understanding of this information through interviews.	Y			Sufficient awareness and also participation related scientific projects by MH staff.
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					
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					
3.1.6	<p>Indicator: In areas of wild salmonids, monitoring of sea lice levels on wild out-migrating salmon juveniles or on coastal sea trout or Arctic char, with results made publicly available. See requirements in Appendix III-1.</p> <p>Requirement: Yes</p> <p>Applicability: All farms operating in areas with wild salmonids except farms that release no water as noted in [38]</p>	a. Inform the CAB if the farm operates in an area of wild salmonids. If not, the Indicator 3.1.6 does not apply.	A. Confirm whether the farm operates in an area of wild salmonids based on results from 3.1.5a (above). If not, then Indicator 3.1.6 does not apply.	Y			NINA report #919 "lakselus og luseovervåking i Romsdalsfjorden (co-auhtor A. Kvalvik MH)
		b. Keep records to show the farm participates in monitoring of sea lice on wild salmonids.	B. Review evidence to confirm farm's participation.	Y			As above
		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.	C. Evaluate documents to confirm methodology used for monitoring of sea lice on wild salmonids complies with requirements of Appendix III-1.			NA	Private interference with wild stocks generally illegal.
		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.	D. Confirm that results are easily publicly available and that they were posted within the required timeframe.	Y			NINA reports publicly available
		e. Submit to ASC the results from monitoring of sea lice levels on wild salmonids per Appendix VI.	E. Confirm that client has submitted monitoring results to ASC (Appendix VI).	Y			Report submitted to ASC

3.1.7	<p>Indicator: In areas of wild salmonids, maximum on-farm lice levels during sensitive periods for wild fish [45]. See detailed requirements in Appendix II, subsection 2.</p> <p>Requirement: 0.1 mature female lice per farmed fish</p> <p>Applicability: All farms operating in areas with wild salmonids except farms that release no water as noted in [38]</p>	a. Inform the CAB if the farm operates in an area of wild salmonids. If not, the Indicator 3.1.7 does not apply.	A. Confirm whether the farm operates in an area of wild salmonids based on results from 3.1.5a (above). If not, then Indicator 3.1.7 does not apply.	Y				S. salar and S. trutta and S. salvelinus naturally occurring in area.	
		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.	B. Review farm's designation of sensitive periods and cross-check against datasets presented in 3.1.4 and 3.1.5.	Y				Migratory routes as defined (article in Env, Biology of fishes 71:2004, on migration routes and periods for Romsdalfjarde. Also map from DN with rivers identified.	
		c. Maintain detailed records of monitoring on-farm lice levels (see 3.1.4) during sensitive periods as per Appendix II-2.	C. Review records from the farm's sea lice monitoring program to confirm that lice levels are in compliance with the requirement based on farm-wide average lice levels per farmed fish (not values from individual net-pens).	Y				Weekly testing form predetrmined cages, according NFSA regulation. Sealice lifestage identified and recorded.	
		d. Provide the CAB with evidence there is a 'feedback loop' between the target for on-farm lice levels and the results of monitoring of lice levels on wild salmonids (Appendix II-2).	D. Confirm that monitoring data for lice levels are used in a feedback loop as required by Appendix II-2.			NA		Continuous wild fish sealice monitoring not possible, as describe above. Direct feedback loop hence impossible to obtain.	
Footnote [45] Sensitive periods for migrating salmonids is during juvenile outmigration and approximately one month before.									
Criterion 3.2 Introduction of non-native species									
Compliance Criteria (Required Client Actions):			Auditor Evaluation (Required CAB Actions):						
3.2.1	<p>Indicator: If a non-native species is being produced, demonstration that the species was widely commercially produced in the area by the date of publication of the SAD standard</p> <p>Requirement: Yes [47]</p> <p>Applicability: 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 characteristics of the area.</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>A. Confirm the farm does not produce a non-native species by comparing local species (results from 3.1.5a) to the species produced. Cross-check against record from smolt supplier (e.g. 3.3.1b). If the farm only produces a native species, then Indicator 3.2.1 does not apply.</p>				NA	S. salar native to region
		<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>B. Review evidence to confirm when the non-native species was first brought into wide commercial production in the area of the farm.</p>				NA	S. salar native to region

		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.	C. Review evidence to confirm that the farm uses only 100% sterile fish (N.B. at the time of this writing, the SAD Steering Committee was uncertain that any existing technology could reliably deliver 100% sterile fish). Cross-check against smolt purchase records (e.g. invoices).			NA	S. salar native to region
		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).	D. Review evidence that the farm complies with each point raised in 3.2.1d and confirm by inspection during on-site audit. Cross check against related farm records for escapes (3.4.1), unexplained loss (3.4.2), and escape prevention (3.4.4).			NA	S. salar native to region
		-	E. Verify compliance.			NA	S. salar native to region
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.					
3.2.2	Indicator: If a non-native species is being produced, evidence of scientific research [48] completed within the past five years that investigates the risk of establishment of the species within the farm's jurisdiction and these results submitted to ASC for review [49] Requirement: Yes, within five years of publication of the SAD	Instruction to Clients for Indicator 3.2.2 - Exceptions to Allow Production of Non-Native Species					
		a. Inform the ASC of the species in production (Appendix VI).	A. Confirm the farm has informed ASC which species is in production (Appendix VI).			NA	S. salar native to region
		b. Inform the CAB if the farm produces a non-native species. If not, then Indicator 3.2.2 does not apply.	B. Confirm the farm does not produce a non-native species as for 3.2.1. If the farm only produces a native species, then Indicator 3.2.2 does not apply.			NA	S. salar native to region

standard [50,51] Applicability: All	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).	C. Confirm that the scientific research includes multi-year monitoring for non-native farmed species; used credible methodologies & analyses; and underwent peer review. If the farm requests an exemption then enter "NA" and proceed to 3.2.2d.			NA	S. <i>salar</i> native to region
	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.	D. As applicable, review the farm's request for exemption. Verify that the evidence shows how the farm meets all three conditions specified above.			NA	S. <i>salar</i> native to region
	e. Submit evidence from 3.2.2c to ASC for review.	E. Confirm the farm submits required evidence to ASC.			NA	S. <i>salar</i> native to region
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 the standard.					
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 instructions.					
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 species is native to the region.					
3.2.3 Indicator: Use of non-native species for sea lice control for on-farm management purposes Requirement: None Applicability: All	a. Inform the CAB if the farm uses fish (e.g. cleaner fish or wrasse) for the control of sea lice.	A. Confirm whether the farms uses fish for sea lice control. If no, auditor response to 3.2.3A-4 is "not applicable" (NA).			NA	Cleaning fish: Rognkjek, grønngylte, bergylte and bergnebb are all native to region
	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.			NA	Cleaning fish: Rognkjeks, grønngylte, bergylte and bergnebb are all native to region
	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.			NA	Cleaning fish: Rognkjeks, grønngylte, bergylte and bergnebb are all native to region
Criterion 3.3 Introduction of transgenic species						
Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):				

3.3.1	Indicator: Use of transgenic [53] salmon by the farm Requirement: None Applicability: All	a. Prepare a declaration stating that the farm does not use transgenic salmon.	A. Verify declaration of no use of transgenic salmon.	Y			Statement from genetics provider on MOWI stock that conventional breeding and genetics only, are applied.
		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.	Y			Internal genetics/ova provider (ST Stamfisk & Tveitvågen)
		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.	Y			Statement from genetics provider on MOWI stock that conventional breeding and genetics only, are applied.
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							
Criterion 3.4 Escapes [55]							
		Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):			
Footnote [55] See Appendix VI for transparency requirements for 3.4.1, 3.4.2 and 3.4.3.							
3.4.1	Indicator: Maximum number of escapees [56] in the most recent production cycle Requirement: 300 [57] Applicability: All farms except as noted in [57]	a. Maintain monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapees.	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.	Y			No escapees registered for the last three production cycles. In monthly env. Reports 2013-2014
		b. Aggregate cumulative escapes in the most recent production cycle.	B. Review the calculation and confirm compliance with the requirement.	Y			No escapees registered for the last three production cycles. In monthly env. Reports 2013-2014
		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.	Y			As above

		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 failure in moorings due to bad weather, boat traffic incidents due to poor marking of the farm, human error, and predation.			NA	No escapes registered for the last three production cycles. In monthly env. Reports 2013-2014
		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).	Y			Submitted to ASC
Footnote	[56] Farms shall report all escapes; the total aggregate number of escapes per production cycle must be less than 300 fish. Data on date of escape episode(s).						
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 exception per production cycle.						
3.4.2	<p>Indicator: Accuracy [58] of the counting technology or counting method used for calculating stocking and harvest numbers</p> <p>Requirement: ≥ 98%</p> <p>Applicability: All</p>	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.	Y			Counting performed at FW site. Vaccination numbers used, manually or AquaScan and VAK and finale check at stocking with wheel boat AquaScan. Final accurate numbers at harvest plant where individual fish in handled and registered. Stament from Aqascan of 98-100% accuracy.
		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).	Y			As above

		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.	Y				Live fish carrier procedure/manual on scanner calibration pg 15 . For stocking and any grading spilltilt/counting operations on site.
			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.	Y				Described in pt A and C above
		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).	Y				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	Indicator: Estimated unexplained loss [59] of farmed salmon is made publicly available Requirement: Yes Applicability: All	Instruction to Clients for indicator 3.4.3 - Calculation of Estimated Unexplained Loss						
		a. Maintain detailed records for mortalities, stocking count, harvest count, and escapes (as per 3.4.1).	A. Review records for completeness.	Y				
		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.	Y				2011G= +0,87% and present cycle not established as cycle is not closed. (harvested number used for closing)
		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 publicly.	N	MI			Not made publicly available MI

		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).	Y				OBS incorrect calculation submitted	OBS
			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 farm under reported mortalities or escapes.				NA	Within accepted counting error	
Footnote	[59] Calculated at the end of the production cycle as: Unexplained loss = Stocking count – harvest count – mortalities – other known escapes. Where possible, use								
3.4.4	<p>Indicator: Evidence of escape prevention planning and related employee training, including: net strength testing appropriate net mesh size; net traceability; system robustness; predator management; record keeping and reporting of risk events (e.g., holes, infrastructure issues, handling errors, reporting and follow up of escape events); and worker training on escape prevention and counting technologies</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>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.</p> <p>b. If the farm operates an open (net pen) system, ensure the plan (3.4.4a) covers the following areas:</p> <ul style="list-style-type: none"> - net strength testing; - appropriate net mesh size; - net traceability; - system robustness; - predator management; - record keeping; - reporting risk events (e.g. holes, infrastructure issues, handling errors); - planning of staff training to cover all of the above areas; and - planning of staff training on escape prevention and counting technologies. 	<p>A. Obtain and review the farm's escape prevention plan prior to scheduling the first audit.</p> <p>B. Confirm the farm's Escape Prevention Plan contains all required elements for open (net pen) systems as applicable.</p>	Y				<p>In central RA in escape prevention. Contingency plan. Int proc. doc ID 27.01.7 and with contingency plan. "Rømming". Doc ID 16.36.4. Site specific. Net individually tagged. Net registers in "Selstad log" with stretch test and certificates available. External training courses in escape prevention for all site staff. Contingency plan posted on site.</p> <p>In procedures as in pt 3.4.4a. Diving inspection after any net handling operations. All structures NYTEK certified.</p>	

		c. If the farm operates a closed system, ensure the plan (3.4.4a) covers the following areas: - system robustness; - predator management; - record keeping; - reporting risk events (e.g. holes, infrastructure issues, handling errors); - planning of staff training to cover all of the above areas; and - planning of staff training on escape prevention and counting technologies.	C. Confirm the farm's Escape Prevention Plan contains all required elements for closed systems as applicable.	Y				Internal training(exercises in escape emergency actions, contingency plans awareness etc)
		d. Maintain records as specified in the plan.	D. Review documentary evidence showing implementation of the plan.	Y				Records in site logs on routine checks and training activities in competency matrix.
		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.	Y				Training event 29.01.14
		-	F. Interview farm workers to confirm that the plan is implemented.	Y				Awareness verified on site visit/interviews
PRINCIPLE 4: USE RESOURCES IN AN ENVIRONMENTALLY EFFICIENT AND RESPONSIBLE MANNER								
<i>Criterion 4.1 Traceability of raw materials in feed</i>								
Compliance Criteria (Required Client Actions):			Auditor Evaluation (Required CAB Actions):					
Instruction to Clients for Indicators 4.1.1 through 4.4.2 - Sourcing of Responsibly Produced Salmon Feeds								
4.1.1	Indicator: Evidence of traceability, demonstrated by the feed producer, of feed ingredients that make up more than 1% of the feed [62]. Requirement: Yes Applicability: All	a. Maintain detailed records of all feed suppliers and purchases including contact information and purchase and delivery records.	A. Review feed records for completeness and confirm the number of feed suppliers to the client.	Y				Records of purchase and use in AquaFarmer
		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.	Y				In mail of 08.04.14 to supplier. Separate mail to Rogne

		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 CAB against an ASC-acknowledged certification scheme, and that audit results demonstrate compliance with requirements.	Y				Main feed suppliers Skretting CoC certified GGN 4050373469207.
		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.	Y				#1 Mass balance
		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.	Y				Statement for Skretting dt 12.05.14
			F. Cross-check the declarations against results from audits of feed suppliers (4.1.1c) to verify evidence of required levels of traceability .	Y				Global Gap CFM certified
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							
	Criterion 4.2 Use of wild fish for feed [63]							
	Compliance Criteria (Required Client Actions):				Auditor Evaluation (Required CAB Actions):			
Footnote	[63] See Appendix VI for transparency requirements for 4.2.1 and 4.2.2.							
4.2.1	Indicator: Fishmeal Forage Fish Dependency Ratio (FFDRm) for grow-out (calculated using formulas in Appendix IV- 1)	Instruction to Clients for Indicator 4.2.1 - Calculation of FFDRm						
		a. Maintain a detailed inventory of the feed used including:- Quantities used of ea	A. Verify completeness of records and that values are stated in a declaration from the feed manufacturer.	Y				Feed usage 01.08.13 to 13.05.14. I e-tracing for details of sourcing.

Requirement: < 1.35 Applicability: All	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.	Y				In Skretting statement above (Trimmings 6,8% of FM)	
	c. Calculate eFCR using formula in Appendix IV-1 (use this calculation also in 4.2.1 option #1).	C. Verify that eFCR calculation was done correctly.	Y				In AquaFarmer control system	
	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.	Y				FFDRm 0,61	
	e. Submit FFDRm to ASC as per Appendix VI for each production cycle.	E. Confirm that client has submitted FFDRm to ASC (Appendix VI).	Y				Submitted to ASC	
4.2.2	Indicator: Fish Oil Forage Fish Dependency Ratio (FFDRo) for grow-out (calculated using formulas in Appendix IV- 1), OR Maximum amount of EPA and DHA from direct marine sources [64] (calculated according to Appendix IV-2) Requirement: FFDRo < 2.95 or (EPA + DHA) < 30 g/kg feed Applicability: All	Note: Under indicator 4.2.2, farms can choose to calculate FFDRo (Option #1) or EPA & DHA (Option #2). Farms do not have to 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.	Y				In AquaFarmer and form CF supplier
		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.	Y				Feed usage 01.08.13 to 13.05.14. I e-tracing for details of sourcing. (28,5% form trimmings)
		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.	Y				Option # 1 FFDRo used
		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.	Y				Verified in audit FFDRo = 1,6

		e. For option #2, calculate amount of EPA + DHA using formulas in Appendix IV.	e. Verify that (EPA+DHA) calculations were done correctly and confirm the value complies with the standard.			NA	Option # 1 FFDRo used
		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)			NA	Option # 1 FFDRo used
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							
Criterion 4.3 Source of marine raw materials							
		Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):			
4.3.1	<p>Indicator: Timeframe for all fishmeal and fish oil used in feed to come from fisheries [65] certified under a scheme that is an ISEAL member [66] and has guidelines that specifically promote responsible environmental management of small pelagic fisheries</p> <p>Requirement: < 5 years after the date of publication [67] of the SAD standards (i.e. full compliance by June 13, 2017)</p> <p>Applicability: All</p>	<p>Note: Indicator 4.3.1 applies to fishmeal and oil from forage fisheries, pelagic fisheries, or fisheries where the catch is directly from fisheries.</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>A. Verify that the client's policy supports responsible feed sourcing (e.g. programs at http://www.isealliance.org/portrait/full%20member).</p>			NA	2017
		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	B. Obtain a copy of the client's letter of intent			NA	2017
		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 ingredients.	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.			NA	2017

		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.	D. As of June 13, 2017, review evidence and confirm compliance. Prior to June 13, 2017, 4.3.1d does not apply.			NA	2017
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						
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						
Footnote	[67] Publication: Refers to the date when the final standards and accompanying guidelines are completed and made publicly available. This definition of						
4.3.2	Indicator: Prior to achieving 4.3.1, the FishSource score [68] for the fishery(ies) from which all marine raw material feed is derived Requirement: All individual scores ≥ 6, and biomass score ≥ 8 Applicability: All, until June 13 2017	Instruction to Clients for Indicator 4.3.2 - FishSource Score of Fish Used in Feed a. Record FishSource score for each species from which fishmeal or fish oil was derived and used as a feed ingredient (all species listed in 4.2.1a).		A. Cross-check against 4.2.1a to confirm that client recorded a score for each species used in feed.	Y		Fish source score verified and found above limits of 8
		b. Confirm that each individual score ≥ 6 and the biomass score is ≥ 8.	B. Cross-check a sample of the farm's scores against the FishSource website to verify that no individual score is < 6 and no biomass score is < 8.	Y			Correspond OK
		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.	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	NA			Data available

		-	D. If the species does not have a FishSource score then the fish feed does not comply with the requirement.			NA	Data available
Footnote: [68] Or equivalent score using the same methodology. See Appendix IV-3 for explanation of FishSource scoring.							
4.3.3	<p>Indicator: Prior to achieving 4.3.1, demonstration of third-party verified chain of custody and traceability for the batches of fishmeal and fish oil which are in compliance with 4.3.2.</p> <p>Requirement: Yes</p> <p>Applicability: All, until June 13 2017</p>	<p>Instruction to Clients for Indicator 4.3.3 - Third-Party Verification of Traceability</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>		A. Review evidence and confirm that a third party verified chain of custody or traceability program was used for the fishmeal and fish oil.	Y		Global GAP CFM certified GGN 5050373469207
		b. Ensure evidence covers all the species used (as consistent with 4.3.2a, 4.2.1 and 4.2.2a).	b. Verify that demonstration of third-party verified chain-of-custody is in place for all species used.	Y			Global GAP CFM certified GGN 5050373469207
4.3.4	<p>Indicator: Feed containing fishmeal and/or fish oil originating from by-products [69] or trimmings from IUU [70] catch or from fish species that are categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species [71]</p> <p>Requirement: None [72]</p> <p>Applicability: All except as noted in [72]</p>	a. Compile and maintain, consistent with 4.2.1a and 4.2.2a, a list of the fishery origin for all fishmeal and fish oil originating from by-products and trimmings.	A. Review list and confirm consistent with 4.2.1a, 4.2.2a, 4.3.3b.	Y			In Skretting statement above ref to proc 09.05.02 on traceability
		b. Obtain a declaration from the feed supplier stating that no fishmeal or fish originating from IUU catch was used to produce the feed.	B. Verify that the farm obtains declarations from feed suppliers.	Y			In Skretting statement above

		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).	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	Y				In Skretting statement above ref to proc 09.05.02 on traceability
		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].	d. Review evidence to support exception (if any)	Y				In Skretting statement above ref to proc 09.05.02 on traceability
		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						
		Footnote [70] IUU: Illegal, Unregulated and Unreported.						
		Footnote [71] The International Union for the Conservation of Nature reference can be found at http://www.iucnredlist.org/static/introduction .						
		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						
		Criterion 4.4 Source of non-marine raw materials in feed						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):					
4.4.1	Indicator: Presence and evidence of a responsible sourcing policy for the feed manufacturer for feed ingredients that comply with recognized crop moratoriums [75] and local laws [76] Requirement: Yes Applicability: All	a. Compile and maintain a list of all feed suppliers with contact information. (See also 4.1.1a)	a. Review feed supplier list and cross-check against feed purchases. (See also 4.1.1a)	Y				In Skretting Raw material CV and reponsibel sourcing policy dt 24.02.14
		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.	B. Review policies from each feed supplier to confirm required sourcing policy is in place.	Y				In Skretting Raw material CV and reponsibel sourcing policy dt 24.02.14 and ref to policy 09.011.12 from Skretting

		c. Confirm that third party audits of feed suppliers (4.1.1c) show evidence that supplier's responsible sourcing policies are implemented.	C. Verify that the scope of third-party audits of feed suppliers includes review of policies and evidence of implementation.	Y				Ref to Global Gap certificate/GGN above
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							
Footnote	[76] Specifically, the policy shall include that vegetable ingredients, or products derived from vegetable ingredients, must not come from areas of the Amazon							
4.4.2	<p>Indicator: Percentage of soya or soya-derived ingredients in the feed that are certified by the Roundtable for Responsible Soy (RTRS) or equivalent [77]</p> <p>Requirement: 100%, within five years of the publication [78] of the SAD standards</p> <p>Applicability: All, after June 13 2017</p>	a. Prepare a policy stating the company's support of efforts to shift feed manufacturers' purchases of soya to soya certified under the Roundtable for Responsible Soy (RTRS) or equivalent.	A. Verify that the client's policy supports responsible sourcing of soya or soya-derived feed ingredients.	Y				MHN statement on policy of sust. Sources of non-marine raw materials. Dt29.11.13.
		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	Y				MHN statement on policy of sust. Sources of non-marine raw materials. Dt29.11.13.
		c. Notify feed suppliers of the farm's intent (4.4.2b).	C. Verify that farm notifies feed suppliers.	Y				In mail dt 22.03.14
		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	Y				In Skretting Raw material CV and reponisbel sourcing policy dt 24.02.14
		e. Starting on or before June 13, 2017, provide evidence that soya used in feed 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.			NA	2017	
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							
	<p>Indicator: Evidence of disclosure to the buyer [79] of the salmon of inclusion of transgenic [80] plant raw material, or raw materials derived from transgenic plants in the feed</p> <p>Requirement: Yes, for each individual raw material</p>	a. Obtain from feed supplier(s) a declaration detailing the content of soya and other plant raw materials in feed and whether it is transgenic.	A. Review feed supplier declaration and ensure declarations from all suppliers are present (see also 4.4.1A).					In Skretting statement above that no GMO is used.

	containing > 1% transgenic content [81] Applicability: All	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	Y				Seen disclosure mail to client 01.11.13	
		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).	N	MI			Not informed	MI
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									
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									
Footnote [81] See Appendix VI for transparency requirement for 4.4.3.									
Criterion 4.5 Non-biological waste from production									
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):						
4.5.1	Indicator: Presence and evidence of a functioning policy for proper and responsible [83] treatment of non-biological waste from production (e.g., disposal and recycling) Requirement: Yes Applicability: All	a. Prepare a policy stating the farm's commitment to proper and responsible treatment of non-biological waste from production. It must explain how the farm's policy is consistent with best practice in the area of operation.	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.	Y				Policy is in General procedure on waste handling ID 30.3.46.	
		b. Prepare a declaration that the farm does not dump non-biological waste into the ocean.	B. Verify the client makes a declaration.	Y				MH Statement	
		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.	Y				Defined in site specific waste handling plan, incl. Authorised retrieval services defined, inc. special waste. Ex condemned nets to "Selstad" according to contract 07.05.14 and mørenot contragt dt 20.05.14. Register on disposed nets in m from Mørenot 29.1.13.	

		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.	Y			Condemned cages and plastics to authorised recycling service Detailed in site specific "Avfallsplan" ID 30.11.6.
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							
4.5.2	Indicator: Evidence that non-biological waste (including net pens) from grow-out site is either disposed of properly or recycled Requirement: Yes Applicability: All	a. Provide a description of the most common production waste materials and how the farm ensures these waste materials are properly disposed of. (See also 4.5.1c)	A. During the on-site inspection look for evidence of proper waste disposal. (See also 4.5.1C)	Y			Condemned cages and plastics to authorised recycling service Detailed in site specific "Avfallsplan" ID 30.11.6. Domestic/general waste to Retura
		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)	Y			Condemned cages and plastics (e.g feed pipes) to authorised recycling service. Detailed in site specific "Avfallsplan" ID 30.11.6.
		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.	Y			No infractions identified.
		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.	Y			Ex condemned nets to "Selstad" according to contract 07.05.14 and marenot contract dt 20.05.14. Register on disposed nets in mail form Marenot 29.1.13. and 04.10.13
Criterion 4.6 Energy consumption and greenhouse gas emissions on farms [84]							
		Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):			
Footnote [84] See Appendix VI for transparency requirements for 4.6.1, 4.6.2 and 4.6.3.							
4.6.1	Indicator: Presence of an energy use assessment verifying the energy consumption on the farm and representing the whole life cycle at sea, as outlined in Appendix V-1 Requirement: Yes, measured in kilojoule/mt fish/production cycle Applicability: All	Instruction to Clients for Indicator 4.6.1 - Energy Use Assessment					
		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.	Y			Records OK
		b. Calculate the farm's total energy consumption in kilojoules (kj) during the production cycle.	B. Review the farm's calculations for completeness and accuracy.	Y			4951505 kj

		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)	Y				8276kg biomass produced
		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.	Y				589 297 kJ/mt MB
		e. Submit results of energy use calculations (4.6.1d) to ASC as per Appendix V-1 each production cycle.	E. Confirm that client has submitted energy use calculations to ASC (Appendix V-1).	Y				Submitted to ASC
		f. Ensure that the farm has undergone an energy use assessment that was done in compliance with requirements of Appendix V-1.	F. Confirm that the farm has undergone an energy use assessment verifying the farm's energy consumption.	Y				Assesed and compard between sites and production forms.
4.6.2	Indicator: Records of greenhouse gas (GHG [85]) emissions [86] on farm and evidence of an annual GHG assessment, as outlined in Appendix V-1 Requirement: Yes Applicability: All	Instruction to Clients for Indicator 4.6.2 - Annual GHG Assessment						
		a. Maintain records of greenhouse gas emissions on the farm.	A. Verify that the farm maintains records of GHG emissions.					
		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.	Y				366324 kg CO2 scope 1 & 2
		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.	Y				598297el 366324 oil

		d. For GHG calculations involving conversion of non-CO ₂ gases to CO ₂ equivalents, specify the Global Warming Potential (GWP) used and its source.	D. Verify that the farm records all GWPs used and their sources.			NA	CO2 used
		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).			NA	CO2 used
		f. Ensure that the farm undergoes a GHG assessment as outlined in Appendix V at least annually.	F. Confirm that the farm undergoes a GHG assessment annually and that the methods used comply with requirements of Appendix V.1.			NA	CO2 used
Footnote		[85] For the purposes of this standard, GHGs are defined as the six gases listed in the Kyoto Protocol: carbon dioxide (CO ₂); methane (CH ₄); nitrous oxide (NO ₂).					
Footnote		[86] GHG emissions must be recorded using recognized methods, standards and records as outlined in Appendix V.					
4.6.3	<p>Indicator: Documentation of GHG emissions of the feed [87] used during the previous production cycle, as outlined in Appendix V, subsection 2</p> <p>Requirement: Yes, within three years of the publication [88] of the SAD standards (i.e. by June 13, 2015)</p> <p>Applicability: All, after June 13, 2015</p>	<p>Instruction to Clients for Indicator 4.6.3 - GHG Emissions of Feed</p> <p>a. Obtain from feed supplier(s) a declaration detailing the GHG emissions of the feed (per kg feed).</p> <p>b. Multiply the GHG emissions per unit feed by the total amount of feed from each supplier used in the most recent completed production cycle.</p> <p>c. If client has more than one feed supplier, calculate the total sum of emissions from feed by summing the GHG emissions of feed from each supplier.</p> <p>d. Submit GHG emissions of feed to ASC as per Appendix VI for each production cycle.</p>		<p>A. Verify declaration from feed supplier(s) and confirm client has declarations from all feed suppliers.</p> <p>B. Verify calculations cross-checking with feed purchase and use records.</p> <p>C. Verify calculations.</p> <p>D. Confirm that the farm has submitted GHG calculations for feed to ASC (Appendix VI).</p>			<p>NA</p> <p>2015</p> <p>2015</p> <p>2015</p> <p>2015</p>
Footnote		[87] GHG emissions from feed can be given based on the average raw material composition used to produce the salmon (by weight) and not as documentation.					
Footnote		[88] Publication: Refers to the date when the final standards and accompanying guidelines are completed and made publicly available. This definition of Criterion 4.7 Non-therapeutic chemical inputs [89,90]					
		Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):			
Footnote		[89] Closed production systems that do not use nets and do not use antifoulants shall be considered exempt from standards under Criterion 4.7.					

Footnote	[90] See Appendix VI for transparency requirements for 4.7.1, 4.7.3 and 4.7.4.						
4.7.1	<p>Indicator: For farms that use copper-treated nets [91], evidence that nets are not cleaned [92] or treated in situ the marine environment</p> <p>Requirement: Yes</p> <p>Applicability: All farms except as noted in [89]</p>	<p>a. Prepare a farm procedure for net cleaning and treatment that describes techniques, technologies, use of off-site facilities, and record keeping.</p> <p>b. Maintain records of antifoulants and other chemical treatments used on nets</p> <p>c. Declare to the CAB whether copper-based treatments are used on nets.</p> <p>d. If copper-based treatments are used, maintain documentary evidence (see 4.7.1b) that farm policy and practice does not allow for heavy cleaning of copper-treated nets in situ.</p> <p>e. Inform ASC whether copper antifoulants are used on farm (yes or no) as per Appendix VI for each production cycle.</p>	<p>A. Review procedure for completeness.</p> <p>B. Review documentary evidence and records for completeness, including traceability records of the nets where available.</p> <p>C. Verify whether copper-based treatments are used. If no, Indicator 4.7.1d does not apply to the client. If yes, proceed to 4.7.1d.</p> <p>D. Review evidence and interview farm manager to confirm that farm does not do any heavy cleaning of copper-treated nets in situ.</p> <p>E. Confirm that the farm has informed ASC whether copper antifoulants are used on farm (Appendix VI).</p>	Y			<p>Seen proc from Selstad dt 24.09.12 on external washing. Also Internal proc on net washing og nets under ASC from TQM. Nets IDed and handling reports.</p> <p>Netwax IF 3</p> <p>Cu treated nets Used</p> <p>Seen proc from Selstad dt 24.09.12 on external washing. Also Internal proc on net washing og nets under ASC from TQM. Nets IDed and handling reports.</p> <p>Submitted</p>
Footnote	[91] Under the SAD, "copper-treated net" is defined as a net that has been treated with any copper-containing substance (such as a copper-based antifoulant)						
Footnote	[92] Light cleaning of nets is allowed. Intent of the standard is that, for example, the high-pressure underwater washers could not be used on copper treated nets						
4.7.2	<p>Indicator: For any farm that cleans nets at on-land sites, evidence that net-cleaning sites have effluent treatment [93]</p> <p>Requirement: Yes</p> <p>Applicability: All farms except as noted in [89]</p>	<p>a. Declare to the CAB whether nets are cleaned on-land.</p> <p>b. If nets are cleaned on-land, obtain documentary evidence from each net-cleaning facility that effluent treatment is in place.</p>	<p>A. Review declaration and cross-check with records from 4.7.1b. If nets are not cleaned on land, Indicator 4.7.2 does not apply. If nets are cleaned on land, proceed to 4.7.2b.</p> <p>B. Review documentary evidence to confirm that each net-cleaning facility has effluent treatment in place.</p>	Y			<p>Nets cleaned on land by ext. Service.</p> <p>Discharge permit from service "Selstad" and int proc /process description from Selstad ID 7.07.12, KLIF discharge permit and F. Mannen control report7 adherence to Zero emission status. Also invoice on deliveries for 28.04.14 for special net waste disposal.</p>

		c. If yes to 4.7.2b, obtain evidence that effluent treatment used at the cleaning site is an appropriate technology to capture of copper in effluents.	C. If applicable, review documentary evidence to confirm that land-based cleaning sites have appropriate technologies in place to capture copper in effluents and that they function as intended.	Y				As above
Footnote [93] Treatment must have appropriate technologies in place to capture copper if the farm uses copper-treated nets.								
4.7.3	Indicator: For farms that use copper nets or copper-treated nets, evidence of testing for copper level in the sediment outside of the AZE, following methodology in Appendix I-1 Requirement: Yes Applicability: All farms except as noted in [89]	Note: If the benthos throughout and immediately outside the full AZE is hard bottom, provide evidence to the CAB and request a a. Declare to the CAB whether the farm uses copper nets or copper-treated nets (See also 4.7.1c). If "no", Indicator 4.7.3 does not apply.	A. Review declaration and cross-check against declaration from 4.7.1c. Record whether Indicator 4.7.3 is applicable to the client.	Y				Cu antifouling used at present on some nets.
		b. If "yes" in 4.7.3a, measure and record copper in sediment samples from the reference stations specified in 2.1.1d and 2.1.2c which lie outside the AZE.	B. As applicable, verify the farm tested sediment samples for copper from the reference stations specified in 2.1.1d and 2.1.2c which lie outside the AZE.	Y				Values OK
		c. If "yes" in 4.7.3a, maintain records of testing methods, equipment, and laboratories used to test copper level in sediments from 4.7.3b.	C. Verify the measurements were taken using appropriate equipment and testing methods.	Y				"Fiskeliv" performed service as described in 2.1.1. Ranging from 8,13 -18 mg/kg dry matter
4.7.4	Indicator: Evidence that copper levels [94] are < 34 mg Cu/kg dry sediment weight OR in instances where the Cu in the sediment exceeds 34 mg Cu/kg dry sediment weight, demonstration that the Cu concentration falls within the range of background concentrations as measured at three reference sites in the water body Requirement: Yes Applicability: All farms except as noted in [89] and excluding those farms shown to be exempt from indicator 4.7.3	a. Inform the CAB whether: 1) Farm is exempt from Indicator 4.7.4 (as per 4.7.3a), or 2) Farm has conducted testing of copper levels in sediment.	A. Document and verify applicability of 4.7.4 to client (see also 4.7.3A)	Y				Tested
		b. Provide evidence from measurements taken in 4.7.3b that copper levels are < 34 mg Cu/kg dry sediment weight.	B. Verify that copper levels are < 34 mg Cu/kg sediment. If no, proceed to 4.7.4C.	Y				"Fiskeliv" performed service as described in 2.1.1. Ranging from 8,13 -18 mg/kg dry matter

		c. If copper levels in 4.7.4b are ≥ 34 mg Cu/kg dry sediment weight, provide evidence the farm tested copper levels in sediments from reference sites as described in Appendix I-1 (also see Indicators 2.1.1 and 2.1.2).	C. If applicable, review evidence to confirm that farm followed Appendix I-1 for testing copper levels at reference sites.			NA	Below limit
		d. Analyze results from 4.7.4c to show the background copper concentrations measured at three reference sites in the water body.	D. As applicable, review data to confirm that copper levels fall within the range of background concentrations as measured at reference sites.			NA	Below limit
		e. Submit data on copper levels in sediments to ASC as per Appendix VI for each production cycle.	E. Confirm that farm has submitted to ASC data on copper levels in sediment (Appendix VI).			NA	Below limit
Footnote [94] According to testing required under 4.7.3. The standards related to testing of copper are only applicable to farms that use copper-based nets or copper							
4.7.5	Indicator: Evidence that the type of biocides used in net antifouling are approved according to legislation in the European Union, or the United States, or Australia Requirement: Yes Applicability: All farms except as noted in [89]	a. Identify all biocides used by the farm in net antifouling. b. Compile documentary evidence to show that each chemical used in 4.7.5a is approved according to legislation in one or more of the following jurisdictions: European Union, the United States, or Australia.	A. Review list of biocides and cross-check against treatment records (see 4.7.2b) and purchase records. B. Review documentary evidence to confirm the			NA	Not in use
							As above
PRINCIPLE 5: MANAGE DISEASE AND PARASITES IN AN ENVIRONMENTALLY RESPONSIBLE MANNER							
Criterion 5.1 Survival and health of farmed fish [95]							
Compliance Criteria (Required Client Actions):				Auditor Evaluation (Required CAB Actions):			
Footnote [95] See Appendix VI for transparency requirements for 5.1.4, 5.1.5 and 5.1.6.							

5.1.1	Indicator: Evidence of a fish health management plan for the identification and monitoring of fish diseases and parasites Requirement: Yes Applicability: All	a. Prepare a fish health management plan that incorporates components related to identification and monitoring of fish disease and parasites. This plan may be part of a more comprehensive farm planning document.	A. Obtain and review the farm's fish health management plan.	Y			Seen FHMP covering relevant issues of fish health and pathogens. Doc ID, dt13.01.14 in TQM
		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.	Y			Singnd by Fish H. Resp vet
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.	Y			Vet visits records as in schedule 6xyr (månedlig kontroll in site log book) of vet and site manager, defined in int. statement covered by procedures
		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.	Y			"Fiskehelse personell Rogne with 4 internal and 1 external
		c. Maintain records of the qualifications of persons identified in 5.1.2b.	C. Review evidence for qualifications of the farm's health professionals.	Y			Doc sin "helsepersonleregisteret" adressert "www. Fiskeliv.no"
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 treatment.					
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 is not a veterinarian.					
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.	Y			Daily in AquaFarmer reports. Mortality to silage. Scanbio on silage collection. Contract signed dt 08.03.13 after int proc. Mortality handling ...in TQM system

		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.	Y			System approved by NFSA, control. Trade doc. Ex 75m3 Silage dt 01.0614
		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).			NA	No exceptional morts
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							
5.1.4	Indicator: Percentage of mortalities that are recorded, classified and receive a post-mortem analysis Requirement: 100% [99] Applicability: All	Note: Farms are required to maintain mortality records from the current and two previous production cycles. For first audit, including: a. Maintain detailed records for all mortalities and post-mortem analyses - 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.	Y			Morts categorised for last 3 G, from AquaFarmer13G (2,02% - 2,47%dd) present cycle (13G), (0,75% unspec +viral00). For 11G 9,37% total. (Viral 3,48%+uspec 1,48%=4,94%)
		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.	Y			All morts diagnoses (ref unspecified numbers above). Lab analyses routinely.

		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.	Y			Ex Vet Institute report dt 12.02.14 and Vet visit reports
		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.	Y			Record is in AquaFarmer, categorised
		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.	Y			Record is in AquaFarmer, categorised
		f. Submit data on numbers and causes of mortalities to ASC as per Appendix V 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).	Y			Submitted to ASC
Footnote [99] If on-site diagnosis is inconclusive, this standard requires off-site laboratory diagnosis. A qualified professional must conduct all diagnosis. One hundred per cent							
5.1.5	Indicator: Maximum viral disease-related mortality [100] on farm during the most recent production cycle Requirement: ≤ 10%	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.	Y			0,75% viral related/diagnosed, Unspec+viral =0,75

	Applicability: All	b. Combine the results from 5.1.5a with the total number of unspecified and unexplained mortalities from the most recent complete production cycle. Divide this by the total number of fish produced in the production cycle (x100) to calculate percent maximum viral disease-related mortality.	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.	Y			0,75% viral related/diagnosed, Unspec+viral =0,75
		c. Submit data on total mortality and viral disease-related mortality to ASC as Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle).	er Confirm that client has submitted data on mortality to ASC (Appendix VI).				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	<p>Indicator: Maximum unexplained mortality rate from each of the previous two production cycles, for farms with total mortality > 6%</p> <p>Requirement: ≤ 40% of total mortalities</p> <p>Applicability: All farms with > 6% total mortality in the most recent complete production cycle.</p>	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.	Y			11G@9.37% Viral @3.48%
		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	Y			As above

		c. Submit data on maximum unexplained mortality to ASC as per Appendix VI each production cycle.	d. Confirm that client has submitted data on unexplained mortality to ASC (Appendix VI).	Y			Submitted to ASC
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 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).	Y			Mortality rate reduction programme (Corporate level or <5% morts). Specified in FHMP on iste level with concrete objectives for actions to reduce to less than 5%.
		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.	Y			Mortality rate reduction programme (Corporate level or <5% morts). Specified in FHMP on iste level with concrete objectives for actions to reduce to less than 5%.
		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).	Y			Communicated to relevant persons
Criterion 5.2 Therapeutic treatments [101]							
Compliance Criteria (Required Client Actions):			Auditor Evaluation (Required CAB Actions):				
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							

5.2.1	<p>Indicator: On-farm documentation that includes, at a minimum, detailed information on all chemicals [102] and therapeutants used during the most recent production cycle, the amounts used (including grams per ton of fish produced), the dates used, which group of fish were treated and against which diseases, proof of proper dosing, and all disease and pathogens detected on the site.</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Maintain a detailed record of all chemical and therapeutant use that includes:</p> <ul style="list-style-type: none"> - name of the veterinarian prescribing treatment; - product name and chemical name; - reason for use (specific disease) - date(s) of treatment; - amount (g) of product used; - dosage; - mt of fish treated; - the WHO classification of antibiotics (also see note under 5.2.8); and - the supplier of the chemical or therapeutant. 	<p>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.</p>	Y			<p>Regs in AquaFarmer in Treatments reports. Include delicing, lice sampling, NoABs used. Includes btach numbers of sealice chemical, withdrawal times etc.</p>
		<p>b. If not already available, assemble records of chemical and therapeutant use to address all points in 5.2.1a for the previous two production cycles. For first audits, available records must cover one full production cycle immediately prior to the current cycle.</p>	<p>B. Confirm that farm has detailed records for chemical and therapeutant use that covers the previous two production cycles.</p>	Y			<p>Regs in AquaFarmer in Treatments reports. Include delicing, lice sampling, NoABs used. Includes btach numbers of sealice chemical, withdrawal times etc. also for 09G and 11G</p>
		<p>c. Submit information on therapeutant use (data from 5.2.1a) to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle).</p>	<p>C. Confirm that client has submitted therapeutant information to ASC (Appendix V).</p>	Y			<p>Submitted to ASC</p>
<p>Footnote [102] Chemicals used for the treatment of fish.</p>							

5.2.2	<p>Indicator: Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [103] in any of the primary salmon producing or importing countries [104]</p> <p>Requirement: None</p> <p>Applicability: All</p>	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].	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.	Y			MH Positive list (allowed and banned substances) from TQM with market acceptance status and levels defined
		b. Maintain records of voluntary and/or mandatory chemical residue testing conducted or commissioned by the farm from the prior and current production cycles.	B. Verify records.	Y			NFSA mandatory testing by NIFES on site and/or at harvest line. Example report dt27.03.14. In OK programme. Also voluntary MRL testing from 2009-2013.
		-	C. Cross-check records of therapeutant use (5.2.1a) against the list of banned therapeutants to verify compliance with requirements.	Y			Correspond with reports and usage.
Footnote [103] "Banned" means proactively prohibited by a government entity because of concerns around the substance. A substance banned in any of the primary							
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>Indicator: Percentage of medication events that are prescribed by a veterinarian</p> <p>Requirement: 100%</p> <p>Applicability: All</p>	a. Obtain prescription for all therapeutant use in advance of application from farm veterinarian (or equivalent, see [96] for definition of veterinarian).	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.	Y			In Prescription register for site.Ex: Seen prescription for therapeutants used for Tricaine dt07.04.14 By Vet. Moan
		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.	B. Cross-check with results from chemical residue testing provided under 5.2.2b.	Y			Original prescr, in site folder and register

5.2.4	<p>Indicator: Compliance with all withholding periods after treatments</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Incorporate withholding periods into the farm's fish health management plan (see 5.1.1a).</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>	Y					<p>In AquaFarmer, automatically notified/blocked according to deereedays in prescription. According to FHMP/VHP on withholding periods defined in AquaFarmer and specific prescription.</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 withdrawal of a drug from the treatment of the salmon before the salmon can be harvested for use as food.</p>	<p>B. Review documentation for completeness and accuracy. Compare to records of therapeutic use (5.2.1a).</p>	Y					<p>In AquaFarmer, automatically notified according to deereedays in prescription.</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>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>	Y					<p>In Fish CV, where tmt dates are specified and compared to harvest dates. According to FHMP/VHP on withholding periods defined. Ex CV M6 treatment dt 16.08.12. First harvest M06 20.03.13. Deltametrin AMX 5dgrd withhold. Oksebåsen.</p>
5.2.5	<p>Indicator: Maximum farm level cumulative parasiticide treatment index (PTI) score as calculated according to the formula in Appendix VII</p> <p>Requirement: PTI scores ≤ 13</p> <p>Applicability: 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>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>	Y					<p>PTI one tmt 17-21.03.14 AMX PTI=4.8</p>

		b. Provide the auditor with access to records showing how the farm calculated the PTI score.	B. Verify that the farm level cumulative PTI score \leq 13.	Y			PTI one tmt 17-21.03.14 AMX PTI=4.8
		c. Submit data on farm level cumulative PTI score to ASC as per Appendix VI for each production cycle.	C. Confirm that client has submitted data on cumulative PTI score to ASC (Appendix VI).	Y			Submitted in general zipped file
5.2.6	<p>Indicator: For farms with a cumulative PTI \geq 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>Requirement: Yes, within five years of the publication of the SAD standard (i.e. by June 13, 2017)</p> <p>Applicability: All farms with a cumulative PTI \geq 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</p> <p>a. Review PTI scores from 5.2.5a to determine if cumulative PTI \geq 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>A. Review farm's cumulative PTI score to determine if Indicator 5.2.6 is applicable.</p>			NA	Below 6 - 2017
		b. Using results from 5.2.5 and the weight of fish treated (kg), calculate parasiticide load in the most recent production cycle [105].	B. Review the farm's calculation of parasiticide load to verify accuracy.			NA	Below 6 - 2017
		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.	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.			NA	Below 6 - 2017

		d. As applicable, submit data to ASC on parasiticide load for the most recent production cycle and the two previous production cycles (Appendix VI).	D. Confirm that client has submitted data on parasiticide load to ASC (Appendix VI) as applicable.			NA	Below 6 - 2017
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						
5.2.7	Indicator: Allowance for prophylactic use of antimicrobial treatments [106] Requirement: None Applicability: All	a. Maintain records for all purchases of antibiotics (invoices, prescriptions) for current and prior production cycles.	A. Review purchase records and calculate total amount procured by client. Inspect storage areas to verify quantities on-site.			NA	No ABs used the recent cycles
		b. Maintain a detailed log of all medication-related events (see also 5.2.1a and 5.2.3)	B. Review log of medication events to verify that the quantity of antibiotic applied by the client does not suggest prophylactic use.			NA	No ABs used the recent cycles
		c. Calculate the total amount (g) and treatments (#) of antibiotics used during the current and prior production cycles (see also 5.2.9).	C. Verify that the total amount of antibiotics used in the current production cycle is equal to the total amount prescribed.			NA	No ABs used the recent cycles
Footnote	[106] The designated veterinarian must certify that a pathogen or disease is present before prescribing medication.						
5.2.8	Indicator: Allowance for use of antibiotics listed as critically important for human medicine by the World Health Organization (WHO [107]) Requirement: None [108] Applicability: All	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. a. Maintain a current version of the WHO list of antimicrobials critically and highly important for human health [107].					List presented, no ABs used
		b. If the farm has not used any antibiotics listed as critically important (5.2.8a) the current production cycle, inform the CAB and proceed to schedule the audit.		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.	Y		

		c. If the farm has used antibiotics listed as critically important (5.2.8a) to treat any fish during the current production cycle, inform the CAB prior to scheduling an audit.	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.				List presented, no ABs used	
		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 traceability and separation of treated fish through and post-harvest.	D. Review the farm's exemption request and supporting documents to verify that the farm can satisfactorily demonstrate traceability [108] to merit an exemption.				List presented, no ABs used	
Footnote	[107] The third edition of the WHO list of critically and highly important antimicrobials was released in 2009 and is available at:							
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	Indicator: Number of treatments [109] of antibiotics over the most recent production cycle Requirement: < 3 Applicability: All	Note: for the purposes of indicator 5.2.9, "treatment" means a single course of medication given to address a specific disease issue. 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 and supply a verifiable statement.		A. Review documents to confirm that the client maintains a record of all treatments of antibiotics. Cross-check against records of on-farm chemical & therapeutic use (5.2.1a), medication events (5.2.3a), and prescription records (5.2.3b).		NA	No ABs used	
		b. Calculate the total number of treatments of antibiotics over the most recent production cycle and supply a verifiable statement of this calculation.	B. Confirm that the client uses < 3 treatments of antibiotics over the most recent production cycle.			NA	No ABs used	
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	Indicator: If more than one	Note: Indicator 5.2.10 requires that farms must demonstrate a reduction in load required, regardless of whether production						

<p>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>Requirement: Yes [111], within five years of the publication of the SAD standard (i.e. full compliance by June 13, 2017)</p> <p>Applicability: All</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>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>			NA	No ABs used
	<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>B. Review farm's calculations for accuracy and completeness of coverage. Cross-check against treatment records (5.2.1a).</p>			NA	No ABs used
	<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>C. Review evidence to verify that farm complies with requirement.</p>			NA	No ABs used
	<p>d. Submit data on antibiotic load to ASC as per Appendix VI (if applicable) for production cycle.</p>	<p>D. Confirm that client has submitted data on antibiotic load to ASC (Appendix VI) as applicable.</p>			NA	No ABs used
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		BM	can		

5.2.11	<p>Indicator: Presence of documents demonstrating that the farm has provided buyers [112] of its salmon a list of all therapeutants used in production</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Prepare a procedure which outlines how the farm provides buyers [112] of salmon with a list of all therapeutants used in production (see 4.4.3b).</p>	<p>A. Review the farm's procedure and confirm implementation based on relevant documentary evidence (e.g. sales records, invoices).</p>	Y					In "Oppsett på produkt fra MOVEX" Int Proc in TQM. Fish CV follows fish automatically through to customer	
		<p>b. Maintain records showing the farm has informed all buyers of its salmon about all therapeutants used in production.</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>	Y					Example: Produkt CV from Rogne with all feed types, treatment and anaesthetics used for sealice counts stated.	
<p>Footnote [112] Buyer: The company or entity to which the farm or the producing company is directly selling its product.</p>										
<p>Criterion 5.3 Resistance of parasites, viruses and bacteria to medicinal treatments</p>										
		Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):						
		Instruction to Clients for Indicator 5.3.1 - Identifying the 'Expected Effect' of Medicinal Treatment								
5.3.1	<p>Indicator: Bio-assay analysis to determine resistance when two applications of a treatment have not produced the expected effect</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. In addition to recording all therapeutic treatments (5.2.1a), keep a record of all cases where the farm uses two successive medicinal treatments.</p>		<p>A. Review farm records to confirm recording of all successive medicinal treatments.</p>				NA	Two successive tmts with same therapeutant not applied. Effect evaluation after every tmt, submitted to Altinn portal. Ex june-14, 96-100% reduction in sealice form tmt with H3O, but to low levels pre-tmt to evaluate. Performed to evaluate possible new tmt.	
		<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>B. If applicable, review how the farm evaluates the observed effect of treatment against the expected effect of treatment.</p>		Y			As above	
		<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>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>					NA	Good results as expected
		<p>d. Keep a record of all results arising from 5.3.1c.</p>		<p>D. Verify that farm maintains records from bio-assays (as applicable).</p>		Y				Records available to authorities and other farming activities in are. Transparent attitude.

5.3.2	<p>Indicator: When bio-assay tests determine resistance is forming, use of an alternative, permitted treatment, or an immediate harvest of all fish on the site</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Review results of bio-assay tests (5.3.1d) for evidence that resistance has formed. If yes, proceed to 5.3.2b. If no, then Indicator 5.3.2 is not applicable.</p>	<p>A. Review evidence from bio-assay tests to determine whether Indicator 5.3.2 is applicable.</p>	Y					Bioassays when/if evaluation not as expected. Situation has not occurred and bioassays performed periodically to check.
		<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>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>	Y					Detailed records of evaluation and reports from accredited lab.
Criterion 5.4 Biosecurity management [113]									
		Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):					
Footnote [113] See Appendix VI for transparency requirements for 5.4.2 and 5.4.4.									
5.4.1	<p>Indicator: Evidence that all salmon on the site are a single year class [114]</p> <p>Requirement: 100% [115]</p> <p>Applicability: 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>A. Review records and verify fallow periods by cross-checking during interviews with farm staff and community representatives.</p>	Y					F. Dir approval of ops. Plan dt 17.12.13 for all sites in area. (01.06.13 to 30.07.13) Last harvest date 11G 20.03.13, First stocking date 23.08.13.
		<p>b. Provide evidence of stocking dates (purchase receipts, delivery records) to show that there were no gaps > 6 months for smolt inputs for the current production cycle.</p>	<p>B. Review evidence to confirm there were no gaps in smolt inputs > 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>	Y					Stcking report in AquaFarmer, 1st stocking dt; 23.08.13 last stocking dt 01.11.13
			<p>C. Verify that the available evidence shows that salmon on the site are from a single-year class</p>	Y					As above
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 fallow.									
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 wastewater 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>Indicator: Evidence that if the farm suspects an unidentified transmissible agent, or if the farm experiences unexplained increased mortality, [116] the farm has:</p> <ol style="list-style-type: none"> 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>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. For mortality events logged in 5.1.4a, show evidence that the farm promptly evaluated each to determine whether it was a statistically significant increase over background mortality rate on a monthly basis [116]. The accepted level of significance (for example, $p < 0.05$) should be agreed between farm and CAB.</p>	<p>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>	Y			<p>Continuous evaluation. No events of this category. Morts categorised for last 3 G, from AquaFarmer13G (2,02% - 2,47%dd) present cycle (13G), (0,75% unspc +viral00). For 11G 9,37% total. (Viral 3,48%+uspec 1,48%=4,94%)</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>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>	Y			<p>Morts categorised for last 3 G, from AquaFarmer13G (2,02% - 2,47%dd) present cycle (13G), (0,75% unspc +viral00). For 11G 9,37% total. (Viral 3,48%+uspec 1,48%=4,94%)</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>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>			NA	<p>No stat. sign elevation of mort.</p>

		<p>d. If required, ensure that the farm takes and records the following steps:</p> <ol style="list-style-type: none"> 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>D. If applicable, verify that the farm keeps records to show how each of the required steps was completed.</p>			NA	No stat. sign elevation of mort.
		<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 each production cycle).</p>	<p>E. Confirm that client submits data to ASC (Appendix VI) about unidentified transmissible agents or unexplained increases in mortality as applicable.</p>			NA	No stat. sign elevation of mort.
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.					
5.4.3	<p>Indicator: Evidence of compliance [119] with the OIE Aquatic Animal Health Code [120]</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>Instruction to Clients for Indicator 5.4.3 - Compliance with the OIE Aquatic Animal Health Code</p> <p>Indicator 5.4.3 requires that farms show evidence of compliance with the OIE Aquatic Animal Health Code (see http://www.oie.int/index.php?id=171). Compliance is defined as farm practices consistent with the intentions of the Code. For purposes of the ASC Salmon Standard, this means that the farm must have written procedures stating how the farm will initiate an aggressive response to detection of an exotic OIE-notifiable disease on the farm ['exotic' = not previously found in the area or has been fully eradicated (area declared free of the pathogen)]. An aggressive response will involve, at a minimum, the following actions:</p> <ul style="list-style-type: none"> - 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>To demonstrate compliance with Indicator 5.4.3, clients have the option to describe how farm practices are consistent with the intentions of the OIE Aquatic Animal Health Code by developing relevant policies and procedures and integrating them in farm's fish health management plan.</p> <p>Note: The Steering Committee recognizes that establishment of quarantine zones will likely incorporate mandatory depopulation of sites close to the infected site and affect some, though not necessarily all, of the ABM.</p>					

		a. Maintain a current version of the OIE Aquatic Animal Health Code on site or ensure staff have access to the most current version.	A. Verify that farm management is aware of practices described in the most current version of the code during interviews.	Y				Awareness demonstrated
		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.	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.	Y				Int. procedure in TQM on practices in accordance with OIE AHC Beredskapsplan MH page 12, Notification of diseases. "Fiskehelsenettverk" are cooperation on fish health is notified, as voluntary cooperation in area.
			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.	Y				P&P apparently implemented
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. http://www.oie.int/index.php?id=171 .						
5.4.4	Indicator: If an OIE-notifiable disease [121] is confirmed on the farm, evidence that: 1. the farm has, at a minimum immediately culled the pen(s) in which the disease was detected 2. the farm immediately notified the other farms in the ABM [122] 3. the farm and the ABM enhanced monitoring and conducted rigorous testing for the disease 4. the farm promptly [123] made findings publicly available Requirement: Yes Applicability: All	a. Ensure that farm policies and procedures in 5.4.3a describe the four actions required under indicator 5.4.4 in response to an OIE-notifiable disease on the farm. b. Inform the CAB if an OIE-notifiable disease has been confirmed on the farm during the current production cycle or the two previous production cycles. If yes, proceed to 5.4.4c. If no, then 5.4.4c and 5.4.4d do not apply.	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. B. Record whether there were any OIE-notifiable diseases confirmed on the farm during the current or two previous production cycles.	N	MI			MINOR Int. procedure in TQM on practices in accordance with OIE AHC Beredskapsplan MH page 12, Notification of diseases. "Fiskehelsenettverk" cooperation on fish health, is notified, as voluntary cooperation agreement in area. Required steps not clearly defined in procedure to inform ABM members and publish in e.g MHN web-site for ASC issues
			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.			NA	No occurrence of notifiable diseases.
							NA	No occurrence of notifiable diseases.

		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).			NA	No occurrence of notifiable diseases.
			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 (22).			NA	No occurrence of notifiable diseases.
Footnote	[121] At the time of publication of the final draft standards, OIE-notifiable diseases relevant to salmon aquaculture were: Epizootic 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.						
Social requirements in the standards shall be audited by an individual who is a lead auditor in conformity with SAAS Procedure 200 section 3.1.							
PRINCIPLE 6: DEVELOP AND OPERATE FARMS IN A SOCIALLY RESPONSIBLE MANNER							
6.1 Freedom of association and collective bargaining [124]							
Compliance Criteria							
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	<p>Indicator: Evidence that workers have access to trade unions (if they exist) and union representative(s) chosen by themselves without managerial interference</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Workers have the freedom to join any trade union, free of any form of interference from employers or competing organizations set up or backed by the employer. Farms shall prepare documentation to demonstrate to the auditor that domestic regulation fully meets these criteria.</p> <p>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."</p> <p>c. Trade union representatives (or worker representatives) have access to their members in the workplace at reasonable times on the premises.</p> <p>d. Be advised that workers and union representatives (if they exist) will be interviewed to confirm the above.</p>	Y				The information is presented in Code of conduct and personal handbook
			Y				Election of representative at annual employee meetings. No interference from management.
			Y				Good support from management
6.1.2	<p>Indicator: Evidence that workers are free to form organizations, including unions, to advocate for and protect their rights</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Employment contract explicitly states the worker's right of freedom of association.</p> <p>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).</p> <p>c. Be advised that workers will be interviewed to confirm the above.</p>	Y				From contract is a link to Code of conduct of the Company
			Y				Communicated via training of Code of Conduct with following test
			Y				Off: The site managers could be provided with training material with wider explanations of CoC principles.
6.1.3	<p>Indicator: Evidence that workers are free and able to bargain collectively for their rights</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>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.</p> <p>b. Employer has explicitly communicated a commitment to ensure the collective bargaining rights of all workers.</p>	Y				No outstanding cases what are in conflict with standard requirements.
			Y				Trade union initiates the collective bargaining agreements.

		c. There is documentary evidence that workers are free and able to bargain collectively (e.g. collective bargaining agreement meeting minutes, or complaint resolutions).	Y				Collective bargaining agreement in place.
Criterion 6.2 Child labor							
Compliance Criteria							
6.2.1	Indicator: Number of incidences of child [125] labor [126]	a. In most countries, the law states that minimum age for employment is 15 years. There are two possible exceptions: - in developing countries where the legal minimum age may be set to 14 years (see footnote 125); or 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.	Y				No children are involved Older than 15 Records available
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.						
Footnote	[126] Child Labor: Any work by a child younger than the age specified in the definition of a child.						
6.2.2	Indicator: Percentage of young workers [127] that are protected [128] Requirement: 100% Applicability: All	a. Young workers are appropriately identified in company policies & training programs, and job descriptions are available for all young workers at the site. b. All young workers (from age 15 to less than 18) are identified and their ages are confirmed with copies of IDs. c. Daily records of working hours (i.e. timesheets) are available for all young workers. d. For young workers, the combined daily transportation time and school time and work time does not exceed 10 hours. e. Young workers are not exposed to hazards [129] and do not perform hazardous work [130]. Work on floating cages in poor weather conditions shall be considered hazardous. f. Be advised that the site will be inspected and young workers will be interviewed to confirm compliance.	Y				General procedure for employees under 18 years old with risk assessment at each site. Identified. Timesheets are available Obs.: The travel time for young employees is not checked. Obs: No familiarity with training plan and limitation applied to the work apprentice do. The risk assessment for young workers is not conducted. Confirmed
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).						
Criterion 6.3 Forced, bonded or compulsory labor							
Compliance Criteria							
6.3.1	Indicator: Number of incidences of forced, [131] bonded [132] or compulsory labor Requirement: None Applicability: All	a. Contracts are clearly stated and understood by employees. Contracts do not lead to workers being indebted (i.e. no 'pay to work' schemes through labor contractors or training credit programs). b. Employees are free to leave workplace and manage their own time. c. Employer does not withhold employee's original identity documents. d. Employer does not withhold any part of workers' salaries, benefits, property or documents in order to oblige them to continue working for employer. e. Employees are not to be obligated to stay in job to repay debt. f. Maintain payroll records and be advised that workers will be interviewed to confirm the above.	Y				No cases identified Confirmed by interview. No cases identified No cases identified No cases identified
Footnote	[131] Forced (Compulsory) labor: All work or service that is extracted from any person under the menace of any penalty for which a person has not offered himself/herself voluntarily or for which such work or service is demanded as a repayment of debt. "Penalty" can imply monetary sanctions, physical punishment or the loss of rights and privileges or restriction of movement (e.g., withholding of identity documents).						

Footnote	[132] Bonded labor: When a person is forced by the employer or creditor to work to repay a financial debt to the crediting agency.						
Criterion 6.4 Discrimination [133]							
Compliance Criteria							
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	Indicator: Evidence of comprehensive [134] and proactive anti-discrimination policies, procedures and practices Requirement: Yes Applicability: All	a. Employer has written anti-discrimination policy in place, stating that the company does not engage in or support discrimination. b. Employer has clear and transparent company procedures that outline how to raise, file, and respond to discrimination complaints. c. Employer respects the principle of equal pay for equal work and equal access to job opportunities, promotions and raises. d. All managers and supervisors receive training on diversity and non-discrimination. All personnel receive non-discrimination training. Internal or external training acceptable if proven effective.	Y				Code of conduct. The code of conduct states general principles. The grandfather approach is used to solve incidents Via collective bargaining contract by TU. Obs: The managers had general training on CoC, no specific diversity and anti discrimination training delivered. No evidences that training was effective for managers and personnel, as no questions in test about anti-discrimination.
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	Indicator: Number of incidences of discrimination Requirement: None Applicability: All	a. Employer maintains a record of all discrimination complaints. These records do not show evidence for discrimination. b. Be advised that worker testimonies will be used to confirm that the company does not interfere with the rights of persons 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.	Y				No complaints Confirmed on interview
Criterion 6.5 Work environment health and safety							
Compliance Criteria							
6.5.1	Indicator: Percentage of workers trained in health and safety practices, procedures [135] and policies on a yearly basis Requirement: 100% Applicability: All	a. Employer has documented practices, procedures (including emergency response procedures) and policies to protect employees from workplace hazards and to minimize risk of accident or injury. The information shall be available to employees. b. Employees know and understand emergency response procedures. 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.	Y				Procedures are in place Confirmed via interview NC: The apprentice was not trained for OHS.
Footnote	[135] Health and safety training shall include emergency response procedures and practices.						
6.5.2	Indicator: Evidence that workers use Personal Protective Equipment (PPE) effectively Requirement: Yes Applicability: All	a. Employer maintains a list of all health and safety hazards (e.g. chemicals). b. Employer provides workers with PPE that is appropriate to known health and safety hazards. c. Employees receive annual training in the proper use of PPE (see 6.5.1c). For workers who participated in the initial training previously an annual refreshment training may suffice, unless new PPE has been put to use. d. Be advised that workers will be interviewed to confirm the above.	Y				The register maintained PPE is provided Dedicated procedure and forms in place. Training is done together with OHS training. OK

6.5.3	Indicator: Presence of a health and safety risk assessment and evidence of preventive actions taken Requirement: Yes Applicability: All	a. Employer makes regular assessments of hazards and risks in the workplace. Risk assessments are reviewed and updated annually (see also 6.5.1a).				Risk assessment is conducted annually.
		b. Employees are trained in how to identify and prevent known hazards and risks (see also 6.5.1c).	Y			Via brain safe training.
		c. Health and safety procedures are adapted based on results from risk assessments (above) and changes are implemented to help prevent accidents.	Y			Adapted.
6.5.4	Indicator: Evidence that all health- and safety-related accidents and violations are recorded and corrective actions are taken when necessary Requirement: Yes Applicability: All	a. Employer records all health- and safety-related accidents.	Y			The TQM system database is used.
		b. Employer maintains complete documentation for all occupational health and safety violations and investigations.	Y			The TQM system database is used.
		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.				Obs.: The root cause analysis is not evident in OHS incidents reporting documents.
		d. Employees working in departments where accidents have occurred can explain what analysis has been done and what steps were taken or improvements made.	Y			The situations are discussed during the site meetings.
6.5.5	Indicator: Evidence of employer responsibility and/or proof of insurance (accident or injury) for 100% of worker costs in a job-related accident or injury when not covered under national law Requirement: Yes Applicability: All	a. Employer maintains documentation to confirm that all personnel are provided sufficient insurance to cover costs related to occupational accidents or injuries (if not covered under national law). Equal insurance coverage must include temporary, migrant or foreign workers. Written contract of employer responsibility to cover accident costs is acceptable evidence in place of insurance.	Y			Insurance is provided.
6.5.6	Indicator: Evidence that all diving operations are conducted by divers who are certified Requirement: Yes Applicability: All	Note: If the farm outsources its diving operations to an independent company, the farm shall ensure that auditors have access to				
		a. Employer keeps records of farm diving operations and a list of all personnel involved. In case an external service provider is hired, a statement that provider conformed to all relevant criteria must be made available to the auditor by this provider.	Y			Evaluations of Diver companies are in place. The records of diving activities maintained.
		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.	Y			Copies of divers certificates are maintained.
Criterion 6.6 Wages						
Compliance Criteria						

6.6.1	Indicator: The percentage of workers whose basic wage [136] (before overtime and bonuses) is below the minimum wage [137] Requirement: 0 (None) Applicability: All	a. Employer keeps documents to show the legal minimum wage in the country of operation. If there is no legal minimum wage in the country, the employer keeps documents to show the industry-standard minimum wage. b. Employer's records (e.g. payroll) confirm that worker's wages for a standard work week (48 hours) always meet or exceed the legal minimum wage. If there is no legal minimum wage, the employer's records must show how the current wage meets or exceeds industry standard. If wages are based on piece-rate or pay-per-production, the employer's records must show how workers can reasonably attain (within regular working hours) wages that meet or exceed the legal minimum wage. c. Maintain documentary evidence (e.g. payroll, timesheets, punch cards, production records, and/or utility records) and be advised that workers will be interviewed to confirm the above.	Y				Salaries are defined in protocol of collective bargaining agreements' with TU. Timesheets are managed at sites. Interview confirms fair salaries
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	Indicator: Evidence that the employer is working toward the payment of basic needs wage [138] Requirement: Yes Applicability: All	a. Proof of employer engagement with workers and their representative organizations, and the use of cost of living assessments from credible sources to assess basic needs wages. Includes review of any national basic needs wage recommendations from credible sources such as national universities or government. b. Employer has calculated the basic needs wage for farm workers and has compared it to the basic (i.e. current) wage for their farm workers. c. Employer demonstrates how they have taken steps toward paying a basic needs wage to their workers.	Y				The BNW calculation based on statistical data. Comparison is done. It is paid above the BNW
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	Indicator: Evidence of transparency in wage-setting and rendering [139] Requirement: Yes Applicability: All	a. Wages and benefits are clearly articulated to workers and documented in contracts. b. The method for setting wages is clearly stated and understood by workers. c. Employer renders wages and benefits in a way that is convenient for the worker (e.g. cash, check, or electronic payment methods). Workers do not have to travel to collect benefits nor do they receive promissory notes, coupons or merchandise in lieu of payment. d. Be advised that workers will be interviewed to confirm the above.	Y				Complicated bonus system document in Bonus definition document. Understood. OK OK
Footnote [139] Payments shall be rendered to workers in a convenient manner.							
Criterion 6.7 Contracts (labor) including subcontracting							
Compliance Criteria							
6.7.1	Indicator: Percentage of workers who have contracts [141] Requirement: Yes Applicability: All	a. Employer maintains a record of all employment contracts. b. There is no evidence for labor-only contracting relationships or false apprenticeship schemes. c. Be advised that workers will be interviewed to confirm the above.	Y				Contracts OK No Labor-only contracting OK
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.							
6.7.2	Indicator: Evidence of a policy to ensure social compliance of its suppliers and contractors Requirement: Yes Applicability: All	a. Farm has a policy to ensure that all companies contracted to provide supplies or services (e.g. divers, cleaning, maintenance) have socially responsible practices and policies. b. Producing company has criteria for evaluating its suppliers and contractors. The company keeps a list of approved supplier contractors.	N	M	I		The requirements in contracts to follow CoC. Nc: No criteria present for evaluation of suppliers and contractors against requirements in clause 6 of the standard.

		c. Producing company keeps records of communications with suppliers and subcontractors that relate to compliance with 6.7.2	2	MI			NC: No records are available of communications with suppliers and subcontractors that relate to compliance with 6.7.2
Criterion 6.8 Conflict resolution							
Compliance Criteria							
6.8.1	Indicator: Evidence of worker access to effective, fair and confidential grievance procedures Requirement: Yes Applicability: All	a. Employer has a clear labor conflict resolution policy for the presentation, treatment, and resolution of worker grievances in a confidential manner.	Y				Off: The more clear definition of the involvement of Worker representative, HR employees, OHS representative and OHS committee in cases of conflict solving.
		b. Workers are familiar with the company's labor conflict policies and procedures. There is evidence that workers have fair access.	Y				Woker are familiar with Grandfather approach. Some of the know of possibility to communicate to other responsible employees/groups
		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.	Y				Known small conflicts solved in line manager level without delay.
6.8.2	Indicator: Percentage of grievances handled that are addressed [142] within a 90-day timeframe Requirement: 100% Applicability: All	a. Employer maintains a record of all grievances, complaints and labor conflicts that are raised.	Y				Only few and small conflicts are known.
		b. Employer keeps a record of follow-up (i.e. corrective actions) and timeframe in which grievances are addressed.	Y				Solved immediately
		c. Maintain documentary evidence and be advised that workers will be interviewed to confirm that grievances are addressed within a 90-day timeframe.	Y				No documented respond needed
Footnote [142] Addressed: Acknowledged and received, moving through the company's process for grievances, corrective action taken when necessary.							
Criterion 6.9 Disciplinary practices							
Compliance criteria							
6.9.1	Indicator: Incidences of excessive or abusive disciplinary actions Requirement: None Applicability: All	a. Employer does not use threatening, humiliating or punishing disciplinary practices that negatively impact a worker's physical and mental health or dignity.	Y				No evidences of incorrect behavior.
		b. Allegations of corporeal punishment, mental abuse [144], physical coercion, or verbal abuse will be investigated by auditors.	Y				It is checked during OHS checks at the site. HR organised annual personnel surveys as well.
		c. Be advised that workers will be interviewed to confirm there is no evidence for excessive or abusive disciplinary actions.					
Footnote [144] Mental Abuse: Characterized by the intentional use of power, including verbal abuse, isolation, sexual or racial harassment, intimidation or threat of physical							
6.9.2	Indicator: Evidence of a functioning disciplinary action policy whose aim is to improve the worker [143] Requirement: Yes	a. Employer has written policy for disciplinary action which explicitly states that its aim is to improve the worker [143].	Y				Presented in Code of conduct
		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.	Y				Interview confirmed fair implementation.
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							
Criterion 6.10 Working hours and overtime							
Compliance criteria							
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.	Y				The scheme 12-9 is used as agreed with Trade unions.

		b. Records (e.g. time sheets and payroll) show that farm workers do not exceed the number of working hours allowed under law.	Me				Off: The monitoring of OT needs be more systematic
		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).	Y				According to mutual agreement
		d. Be advised that workers will be interviewed to confirm there is no abuse of working hours and overtime laws.	Y				Interview confirmed occasional overtime
Footnote	[145] In cases where local legislation on working hours and overtime exceed internationally accepted recommendations (48 regular hours, 12 hours overtime).						
6.10.2	<p>Indicator: Overtime is limited to voluntary [146], paid at a premium rate and restricted to exceptional circumstances</p> <p>Requirement: Yes</p> <p>Applicability: All except as noted in [146]</p>	a. Payment records (e.g. payslips) show that workers are paid a premium rate for overtime hours.	Y				Overtime is paid at premium rate
		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).	Y				Overtime is limited to exceptional circumstances
		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.	Y				Interview confirms that.
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.						
Criterion 6.11 Education and training							
Compliance criteria							
6.11.1	<p>Indicator: Evidence that the company encourages and sometimes supports education initiatives for all workers (e.g. courses, certificates and degrees)</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	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.	Y				The financial support for training is given
		b. Employer maintains records of worker participation in educational opportunities as evidenced by course documentation (e.g. list of courses, curricula, certificates, degrees).	Y				Records available in personal files
		c. Be advised that workers will be interviewed to confirm that educational initiatives are encouraged and supported by the company.	Y				Training is encouraged by managers
Criterion 6.12 Corporate policies for social responsibility							
Compliance criteria							
6.12.1	<p>Indicator: Demonstration of company-level [148] policies in line with the standards under 6.1 to 6.11 above</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	a. Company-level policies are in line with all social and labor requirements presented in 6.1 through 6.11.	Y				Company level policies in place
		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.	Y				Approved
		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).	N				Applied in whole company
		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).	Y				Policies verified
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.						
Social requirements in the standards shall be audited by an individual who is a lead auditor in conformity with SAAS Procedure 200 section 3.1.							
PRINCIPLE 7: BE A GOOD NEIGHBOR AND CONSCIOUS CITIZEN							
Criterion 7.1 Community engagement							
Compliance Criteria							
7.1.1	<p>Indicator: Evidence of regular and meaningful [149] consultation and engagement with community representatives and organizations</p>	a. The farm pro-actively arranges for consultations with the local community at least twice every year (bi-annually).	Y				Meetings were on 2-06-2014 and 18-06-2014.

	Requirement: Yes Applicability: All	b. Consultations are meaningful. OPTIONAL: the farm may choose to use participatory Social Impact Assessment (pSIA) or an equivalent method for consultations.	Y			OK
		c. Consultations include participation by representatives from the local community who were asked to contribute to the agenda.	Y			Representative participated
		d. Consultations include communication about, or discussion of, the potential health risks of therapeutic treatments (see Ind 7.1.3).	Y			To specify in agenda questions about potential health risks of therapeutic treatments and reflect in minutes.
		e. Maintain records and documentary evidence (e.g. meeting agenda, minutes, report) to demonstrate that consultations comply with the above.	Y			Records available
		f. Be advised that representatives from the local community and organizations may be interviewed to confirm the above.			NA	No interview
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.	Y			The meetings are arranged or communication is organised via electronic means.
		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).	Y			No incidents to verify
		c. The farm's mechanism for handling complaints is effective based on resolution of stakeholder complaints (e.g. follow-up correspondence from stakeholders).	Y			No incidents to verify
		d. Be advised that representatives from the local community, including complainants where applicable, may be interviewed to confirm the above.				No interview
Footnote	[150] Effective: In order to demonstrate that the mechanism is effective, evidence of resolutions of complaints can be given.					
7.1.3	Indicator: Evidence that the farm has posted visible notice [151] at the farm during times of therapeutic treatments and has, as part of consultation with communities under 7.1.1, communicated about potential health risks from treatments Requirement: Yes	a. Farm has a system for posting notifications at the farm during periods of therapeutic treatment. (use of anaesthetic baths is not regarded a therapeutic)	Y			The signs are used at the sites during the treatment.
		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).	Y			The signs are used at the sites during the treatment.

	Applicability: All	c. Farm communicates about the potential health risks from treatments during community consultations (see 7.1.1)	Y			Off: Use of ordered articles in local newspapers and internet portals.
		d. Be advised that members of the local community may be interviewed to confirm the above.			NA	No interview
Footnote	[151] Signage shall be visible to mariners and, for example, to fishermen passing by the farm.					
<i>Criterion 7.2 Respect for indigenous and aboriginal cultures and traditional territories</i>						
Compliance Criteria						
Instruction to Clients and CABs on Criterion 7.2 - Traditional Territories of Indigenous Groups						
7.2.1	Indicator: Evidence that indigenous groups were consulted as required by relevant local and/or national laws and regulations Requirement: Yes Applicability: All farms that operate in indigenous territory or in proximity to indigenous or aboriginal people [152]	a. Documentary evidence establishes that the farm does or does not operate in an indigenous territory (to include farms that operate in proximity to indigenous or aboriginal people [152]). If not then the requirements of 7.2.1 do not apply.			NA	No indigenous communities
		b. Farm management demonstrates an understanding of relevant local and/or national laws and regulations that pertain to consultations with indigenous groups.			NA	No indigenous communities
		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.			NA	No indigenous communities
		d. Be advised that representatives from indigenous groups may be interviewed to confirm the above.			NA	No indigenous communities
7.2.2	Indicator: Evidence that the farm has undertaken proactive consultation with indigenous communities Requirement: Yes [152] Applicability: All farms that operate in indigenous territory or in proximity to indigenous or aboriginal people [152]	a. See results of 7.2.1a (above) to determine whether the requirements of 7.2.2 apply to the farm.			NA	No indigenous communities

	aboriginal people [152]	b. Be advised that representatives from indigenous communities may be interviewed to confirm that the farm has undertaken proactive consultations.			NA		No indigenous communities				
Footnote		[152] All standards related to indigenous rights only apply where relevant, based on proximity of indigenous territories.									
7.2.3	Indicator: Evidence of a protocol agreement, or an active process [153] to establish a protocol agreement, with indigenous communities	a. See results of 7.2.1a (above) to determine whether the requirements of 7.2.3 apply to the farm.			NA		No indigenous communities				
	Requirement: Yes	b. Maintain evidence to show that the farm has either: 1) reached a protocol agreement with the indigenous community and this fact is documented; or 2) continued engagement in an active process [153] to reach a protocol agreement with the indigenous community.			NA		No indigenous communities				
	Applicability: All farms that operate in indigenous territory or in proximity to indigenous or aboriginal people [152]				NA		No indigenous communities				
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											
Compliance Criteria											
7.3.1	Indicator: Changes undertaken restricting access to vital community resources [154] without community approval	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).			NA						
	Requirement: None	b. The farm seeks and obtains community approval before undertaking changes that restrict access to vital community resources. Approvals are documented.									
	Applicability: All	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.									
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, for example, a community's sole access point to a needed freshwater resource, this would be unacceptable under the Dialogue standard.									
7.3.2	Indicator: Evidence of assessments of company's impact on access to resources	a. There is a documented assessment of the farm's impact upon access to resources. Can be completed as part of community consultations under 7.1.1.									
		b. Be advised that representatives from the community may be interviewed to generally corroborate the accuracy of conclusions presented in 7.3.2a.									
INDICATORS AND STANDARDS FOR SMOLT PRODUCTION											
A farm seeking certification must have documentation from all of its smolt suppliers to demonstrate compliance with the following standards. The requirements are, in general, a subset of the standards in Principles 1 through 7, focusing on the impacts that are most relevant for smolt facilities. In addition, specific standards are applied to open systems (net pens), and to closed and semi-closed systems (recirculation and flow-through).											
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.									
SECTION 8: STANDARDS FOR SUPPLIERS OF SMOLT											
<i>Standards related to Principle 1</i>											
Compliance Criteria (Required Client Actions):											
Auditor Evaluation (Required CAB Actions):											

8.1	Indicator: Compliance with local and national regulations on water use and discharge, specifically providing permits related to water quality Requirement: Yes Applicability: All Smolt Producers	a. Identify all of the farm's smolt suppliers. For each supplier, identify the type of smolt production system used (e.g. open, semi or closed systems) and submit information to ASC (Appendix VI).	c. 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).	N	MI			Info not submitted	N	MI			Info not submitted	MI
		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).	Y				F. Mannen loc #12474 permit. 20.09.10 7,5 mill smolt 1350 t BM. Discharge permit 1620 t feed. Cleaning reqs 80 % on SS 50% on organics on discharge, NVE permit on abstriction, dt 14.02.11 @ 12m3 to 22m3 dep on period of yr. /min and minimum tail of 50/s.	Y				F. Mannen loc #1 2269 permit. 19.05.10, for 5 mill smolt. Discharge permit. Cleaning reqs <300ym filter of organics on discharge, NVE permit on abstriction, dt 06.04.10 @ 80m3./min in total and minimum tail of 200 to 80 l/s dep o time of yr.	
		c. Obtain records from smolt suppliers showing monitoring and compliance with discharge laws, regulations, and permit requirements as required.	d. Verify that farm obtains records from smolt suppliers to show compliance with discharge laws, regulations, and permit requirements.	Y				No inspection last cycle	Y				NVE insp report 26.11. 2013. NFSA insp report 25.0313. CA confirmed and approved by NFSA, F. dir insp. Dt 19.11 13, CA approved.	
		-	d. Verify that farm keeps records to show how smolt suppliers comply with regulations on discharge and applicable permitting requirements related to water quality.	Y				Records show no indication of noncompliance	N	MI		No inspections/inspection reports not available. No records	MI	
8.2	Indicator: Compliance with labor laws and regulations Requirement: Yes Applicability: All Smolt Producers	a. Obtain declarations from smolt suppliers affirming compliance with labor laws and regulations.	a. Verify farm obtains declaration from smolt suppliers.	Y				Int. statement presented (Code of conduct)	Y				Int. statement presented vartdal FO	
		b. Keep records of supplier inspections for compliance with national labor law and codes (only if such inspections are legally required in the country of operation; see 1.1.3a)	b. Verify that farm obtains inspection records from suppliers (as applicable).	Y				Records show no indication of noncompliance	Y			Records show no indication of noncompliance		
Standards related to Principle 2														
Compliance Criteria (Required Client Actions):			Auditor Evaluation (Required CAB Actions):											
8.3	Indicator: Evidence of an	Note: If the smolt facility has previously undertaken an independent assessment of biodiversity impact (e.g. as part of the												
								Nordheim					Urke	

	assessment of the farm's potential impacts on biodiversity and nearby ecosystems that contains the same components as the assessment for grow-out facilities under 2.4.1 Requirement: Yes Applicability: All Smolt Producers	a. Obtain from the smolt supplier(s) a documented assessment of the smolt's potential impact on biodiversity and nearby ecosystems. The assessment must address all components outlined in Appendix I-3.	Review the assessment to confirm that it complies with all components outlined in Appendix I-3.	Y				OBS MOM-B survey voluntarily every 5th yr. And Rådg. Biol 3rd part assessment report 22.09.08. also RA	Y			OBS Most elements in place but, not covering all requirements	
		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.	B. Review declaration.	Y				OBS Cont plan in site specific R	Y			OBS Most elements in place but, not covering all requirements	
8.4	Indicator: Maximum total amount of phosphorus released into the environment per metric ton (mt) of fish produced over a 12-month period (see Appendix VIII-1) Requirement: 5 kg/mt of fish produced over a 12-month period; within three years of publication of the SAD standards, 4 kg/mt of fish produced over a 12-month period Applicability: All Smolt Producers	Instruction to Clients for Indicator 8.4 - Calculating Total Phosphorus Released per Ton of Fish Produced											
		a. Obtain records from smolt suppliers showing amount and type of feeds used for smolt production during the past 12 months.	A. Verify that farm has records for feeds used by smolt suppliers over the relevant time period.	Y				749125 kg feed	Y			360 000kg feed	Y
		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).	B. Verify that farm has records showing that smolt supplier determined phosphorus content in feeds.	Y				1,44 %	Y			1,44 %	Y
		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.	C. Confirm that calculations are done according to Appendix VIII-1.	Y				9,89kg P/Mt BM	Y			8,41 kg P / mt BM	Y

		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.	D. Verify that farm obtained from the smolt supplier all records needed to calculate the amount of biomass produced during the past months.	Y				654603 kg BM	Y			370000 kg BM	Y
		e. Calculate the amount of phosphorus in fish biomass produced (result from 8.4d) using the formula in Appendix VIII-1.	E. Confirm that calculations are done according to Appendix VIII-1.	Y				OK	Y			OK	Y
		f. If applicable, obtain records from smolt suppliers showing the total amount removed as sludge (formula in Appendix VIII-1) during the past 12 months.	F. As applicable, verify farm has records showing that smolt supplier determined the amount of phosphorus removed from the system as sludge.	Y				No sludge produced	Y				Y
		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 smolt supplier is in compliance with requirements.	G. Review calculations to confirm that the farm's smolt supplier(s) do not exceed requirements for release of phosphorus.	Y				Closed 04.10.14 KRBE: ref Vr from ASC	Y			Closed 04.10.14 KRBE: ref Vr from ASC	Y
Standards related to Principle 3													
		Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):									
8.5	<p>Indicator: If a non-native species is being produced, the species shall have been widely commercially produced in the area prior to the publication [156] of the SAD standards</p> <p>Requirement: Yes [157]</p> <p>Applicability: All Smolt</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.	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.	Y				S. salar native to region.	Y			S. salar native to region.	Y

Producers except as noted in [157]	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).	8. 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.	Y			S. salar native to region.	Y		S. salar native to region.
	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.	C. Review evidence to confirm that smolt suppliers use only 100% sterile fish.	Y			S. salar native to region.	Y		S. salar native to region.
	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.	D. Review evidence that the farm's smolt suppliers comply with each point raised in 8.5d.	Y			S. salar native to region.	Y		S. salar native to region.
	e. Retain evidence as described in 8.5a-d necessary to show compliance of each facility supplying smolt to the farm.	E. Verify that farm retains evidence of compliance.	Y			S. salar native to region.	Y		S. salar native to region.
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	Indicator: Maximum number of escapees [158] in the most recent production cycle Requirement: 300 fish [159] Applicability: All Smolt Producers except as noted in [159]	a. Obtain documentary evidence to show that smolt suppliers maintained monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapees.	A. Review the farm's records for escape monitoring by the smolt supplier to confirm completeness and accuracy of information.	Y				Int RA with instruction for regs and reporting. No incident reported.	Y			Int RA with instruction for regs and reporting. No incident reported.	
		b. Using smolt supplier records from 8.6a, determine the total number of fish that escaped. Verify that there were fewer than 300 escapees from the smolt production facility in the most recent production cycle.	B. Review the farm's calculation and confirm that the smolt supplier complied with the requirement.	Y			Int RA with instruction for regs and reporting. No incident reported.	Y		Int RA with instruction for regs and reporting. No incident reported.			
		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 in which the farm is first applying for certification (necessary for farms to be eligible to apply for the exception noted in [159]).	C. Confirm that the farm informs their smolt suppliers that they must maintain records for escape monitoring for > 10 years.	Y			Int RA with instruction for regs and reporting. No incident reported.	Y		Int RA with instruction for regs and reporting. No incident reported.			

		d. If an escape episode occurs at the smolt production facility (i.e., an incident where > 300 fish escaped), the farm may request a rare exception to the Standard [159]. Requests must provide a full account of the episode and must document how the smolt producer could not have predicted the events that caused the escape episode.	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.	Y				Int RA with instruction for regs and reporting. No incident reported.	N	MI			No statment sent ext supp	MI
Footnote	[158] Farms shall report all escapes; the total aggregated number of escapees 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 w farm is applying for certification. The farmer must demonstrate that there was no reasonable way to predict the events that caused the episode. Extreme weather (e.g., 100-year storms) or accidents caused by farms located near high-traffic waterways are not intended to be covered under this exception.													
8.7	Indicator: Accuracy [160] of the counting technology or counting method used for calculating the number of fish Requirement: ≥98% Applicability: All Smolt Producers	a. Obtain records showing the accuracy of the counting technology used by smolt suppliers. Records must include copies of spec sheets for counting machines and common estimates of error for hand-counts.	A. Confirm that the farm keeps records of counting accuracy for the counting technology or method used on site at stocking and harvest.	Y				Aqauscan electronic counting system. Decl +/- max 2%.	Y				VAKI electronic counting system. Decl +/- max 2%.	
		B. Review records to verify that accuracy of the smolt supplier's counting technology or counting method is 98%.	B. Verify that farm has records showing that accuracy of the smolt supplier's counting technology or counting method is 98%.	Y				Seen counter product specs. of 98%	Y				Seen counter product specs. of 98%	
Footnote	[160] Accuracy shall be B735 by the spec sheet for counting machines and through common estimates of error for any hand counts.													
Standards related to Principle 4														
Compliance Criteria (Required Client Actions):			Auditor Evaluation (Required CAB Actions):											

8.8	<p>Indicator: Evidence of a functioning policy for proper and responsible treatment of non-biological waste from production (e.g., disposal and recycling)</p> <p>Requirement: Yes</p> <p>Applicability: 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>	Y				MH int doc "Avfallsplan" with authorities service providers defined, type of waste defined	Y			Int. proc 3.01.03 "Avfallsplan" with authorities service providers defined, type of waste defined.
8.9	<p>Indicator: Presence of an energy-use assessment verifying the energy consumption at the smolt production facility (see Appendix V subsection 1 for guidance and required components of the records and assessment)</p> <p>Requirement: Yes, measured in kilojoule/mt fish/production cycle</p> <p>Applicability: 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>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>	Y				Nordheim	Y			Urke
								Records OK	Y			Records OK
								1 2581 851 kj (oil & el)	Y			5 400 000kj (oil&el)
								654603 kg	Y			370 000kg
								192 000kj/mt fish produced	Y			13,7 jL/mt fish produced

		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.	E. Verify that the farm has evidence that its smolt supplier(s) has undergone an energy use assessment verifying the supplier's energy consumption.	Y				Asses and comparnd between sites and production forms.	Y			Assed and comparnd between sites and production forms.
8.10	<p>Indicator: Records of greenhouse gas (GHG [161] emissions [162] at the smolt production facility and evidence of an annual GHG assessment (See Appendix V, subsection 1)</p> <p>Requirement: Yes</p> <p>Applicability: 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 facilities.</p>	A. Verify that the farm obtains records of GHG emissions from smolt suppliers.				Records OK				Records OK	
		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.	B. Verify that the farm confirms that calculations by smolt suppliers are done annually and in compliance with Appendix V-1.	Y OB S			92474 kg CO2 diesel. OBS EI missing	Y OB S			74520 kg CO2 diesel OBS EI missing	
		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.	C. Verify that the farm has records from smolt suppliers for all emissions factors used and their sources.	Y OB S			Records from smolt suppliers for all emissions factors used and their sources are required. EI missing	Y OB S			Records from smolt suppliers for all emissions factors used and their sources are required. EI missing	
		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.	D. Verify that the farm has records from smolt suppliers for all GWPs used and their sources.			NA	CO2 used				NA CO2 used	

		e. Obtain evidence to show that the smolt supplier has undergone a GHG assessment in compliance with requirements Appendix V-1 at least annually.	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.			NA		CO2 used				NA	CO2 used
Footnote	[161] For the purposes of this standard, GHGs are defined as the six gases listed in the Kyoto Protocol: carbon dioxide (CO ₂); methane (CH ₄); nitrous oxide (N ₂ O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF ₆)												
Footnote	[162] GHG emissions must be recorded using recognized methods, standards and records as outlined in Appendix V.												
Standards related to Principle 5													
		Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):				nordheim					urke
8.11	Indicator: Evidence of a fish health management plan, approved by the designated veterinarian, for the identification and monitoring of fish diseases and parasites Requirement: Yes Applicability: All Smolt Producers	a. Obtain a copy of the supplier's fish health management plan for the identification and monitoring of fish disease and parasites.	A. Verify that the farm obtains copies of fish health management plans from smolt supplier	Y			Seen FHMP	N					Seen FHM , but not adequate in content
		b. Keep documentary evidence to show that the smolt supplier's health plans were approved by the supplier's designated veterinarian.	B. Verify that farm has evidence that supplier's fish health management plan was approved by designated veterinarian.	N	MI		Seen FHMP, approval not documented.	N	MI				Seen FHMP, approval not documented.
8.12	Indicator: Percentage of fish that are vaccinated for selected diseases that are known to present a significant risk in the region and for which an effective vaccine exists [163] Requirement: 100% Applicability: All Smolt Producers	a. Maintain a list of diseases that are known to present a significant risk in the region, developed by farm veterinarian and supported by scientific evidence.	A. Review list and the supporting analysis.	Y			In FHMP/VHP type of disease and vaccine type/product name	Y					In FHMP/VHP type of disease and vaccine type/product name
		b. Maintain a list of diseases for which effective vaccines exist for the region, developed by the farm veterinarian and supported by scientific evidence.	B. Review list and the supporting analysis.	Y			In FHMP/VHP type of disease and vaccine type/product name	Y					In FHMP/VHP type of disease and vaccine type/product name
		c. Obtain from the smolt supplier(s) a declaration detailing the vaccines the fish received.	C. Verify client has the list from the smolt supplier	Y			In smolt CV	Y					In smolt CV

		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.	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.	Y				100% vaccinated according to legislation. And verified in smolt CV.	Y			100% vaccinated according to legislation. And verified in smolt CV.
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>Indicator: Percentage of smolt groups [164] tested for select diseases of regional concern prior to entering the grow-out phase on farm</p> <p>Requirement: 100%</p> <p>Applicability: All Smolt Producers</p>	<p>Instruction to Clients for Indicator 8.13-- Testing of Smolt for Select Diseases</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>		A. Review list. If auditor has questions about the list, request and review supporting analysis.				Nordheim			Urke	
		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 (8.13a).	B. Verify records show that each smolt group was tested prior to entering the water at the farm (the grow-out site).	Y				Vets visits, list according to VHP.	Y			Vets visits, list according to VHP.
								Vets visits according to VHP. Smolt group health certificate dt30.03 .14 signed Vet. L. Martinsen	Y			Vets visits according to VHP. Smolt group health certificate form Fjordlab dt 12.09.13 signed Vet S. Lillebø
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.											

8.14	<p>Indicator: Detailed information, provided by the designated veterinarian, of all chemicals and therapeutants used during the smolt production cycle, the amounts used (including grams per ton of fish produced), the dates used, which group of fish were treated and against which diseases, proof of proper dosing and all disease and pathogens detected on the site</p> <p>Requirement: Yes</p> <p>Applicability: All Smolt Producers</p>	<p>a. Obtain from the smolt supplier(s) a detailed record of all chemical and therapeutant use for the fish sold to the farm that is signed by their veterinarian and includes:</p> <ul style="list-style-type: none"> - 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>A. Review records of chemical and therapeutant use for completeness and confirm the records were signed by a qualified veterinarian.</p>	Y			<p>Vaccines only as in fish CV in AquaFarmer - type and producer and batch. Prescription signed by resp. FHB/Vet. No other chemical/therapeutant used on fish.</p>	Y			<p>Vaccines only as in fish CV in AquaFarmer - type and producer and batch. Prescription signed by resp. FHB/Vet. No other chemical/therapeutant used on fish.</p>
8.15	<p>Indicator: Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [165] in any of the primary salmon producing or importing countries [166]</p> <p>Requirement: Yes</p> <p>Applicability: 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 primary salmon producing and importing countries listed in [166].</p>	<p>A. Verify list has been provided and is consistent with the list in 5.2.2a.</p>	Y			<p>MH Positive list (allowed and banned substances) from TQM with market acceptance status and levels defined</p>	N	MI	<p>Documentation of list at FW site not is presented.</p>	
		<p>b. Inform smolt supplier that the treatments on the list cannot be used on fish to a farm with ASC certification.</p>	<p>B. Verify that the farm informed the smolt supplier</p>	Y			<p>MH Positive list (allowed and banned substances) from TQM with market acceptance status and levels defined</p>	N	MI	<p>Documentation of list communicated to FW site not presented.</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 smolt purchased by the farm.</p>	<p>C. Review farm's comparison to verify accuracy.</p>	Y			<p>Vaccines only as in fish CV in AquaFarmer - type and producer and batch. Prescription signed by resp. FHB/Vet. No other chemical/therapeutant used on fish.</p>	Y		<p>Vaccines only as in fish CV in AquaFarmer - type and producer and batch. Prescription signed by resp. FHB/Vet. No other chemical/therapeutant used on fish.</p>	
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.									

		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.	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.	Y				OIE list in internal system. Procedures and instructions in common system.	N	MI		Documentation of list communicated to FW site not presented.
		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.	C. Review the smolt supplier's declaration and supporting policies and procedures to verify compliance with the OIE Aquatic Animal Health Code.	Y				OIE list in internal system. Procedures and instructions in common system.	N	MI		Documentation of suppliers declaration of compliance site is not presented.
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. http://www.oie.int/index.php?id=171 .											
Standards related to Principle 6												
		Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):								
8.19	Indicator: Evidence of company-level policies and procedures in line with the labor standards under 6.1 to 6.11 Requirement: Yes Applicability: All Smolt Producers	a. Obtain copies of smolt supplier's company-level policies and procedures and declaration of compliance with the labor standards under 6.1 to 6.11.	A. Verify that farm obtains copies of company level policies and procedures from all of its smolt suppliers and a declaration of compliance.	MI				NC: No copies company level policies or procedures available from external smolt suppliers and no review done.				
		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.	B. Review supplier documents provided by the farm to verify compliance of the smolt supplier's policies and procedures with labor requirements.	MI								
Standards related to Principle 7												
		Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):								
8.20	Indicator: Evidence of regular	Instruction to Clients for Indicator 8.20 - Consultation and Engagement with Community Representatives										

	consultation and engagement with community representatives and organizations Requirement: Yes Applicability: All Smolt Producers	a. From each smolt supplier obtain documentary evidence of consultations and engagement with the community.	A. Verify that farm obtains required information from each smolt supplier.	N	MI			NC: No evidences of consultation with community by external smolt suppliers.				
		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.	N	MI			NC: No evidences of consultation with community by external smolt suppliers.				
8.21	Indicator: Evidence of a policy for the presentation, treatment and resolution of complaints by community stakeholders and organization Requirement: Yes Applicability: All Smolt Producers	a. Obtain a copy of the smolt supplier's policy for presentation, treatment and resolution of complaints by community stakeholders and organizations.	A. Verify that farm obtains copies of supplier's complaints procedures from each of its smolt suppliers.	N	MI			NC: No evidence of policy for presentation, treatment and resolution of complaints from external smolt suppliers.				
8.22	Indicator: Where relevant, evidence that indigenous groups were consulted as required by relevant local and/or national laws and regulations Requirement: Yes Applicability: All Smolt Producers	a. Obtain documentary evidence showing that the smolt supplier does or does not operate in an indigenous territory (to include farms that operate in proximity to indigenous or aboriginal people (see Indicator 7.2.1). If not then the requirements of 8.22 do not apply.	A. Review evidence to determine whether Indicator 8.22 is applicable to the farm's smolt supplier(s).								NA	

		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.								NA	
8.23	Indicator: Where relevant, evidence that the farm has undertaken proactive consultation with indigenous communities Requirement: Yes Applicability: All Smolt Producers	a. See results of 8.22a (above) to determine whether the requirements of 8.23 apply to the smolt supplier.	A. Review evidence to determine whether Indicator 8.23 is applicable to the farm's smolt supplier(s).								NA	
		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.									NA
ADDITIONAL REQUIREMENTS FOR OPEN (NET-PEN) PRODUCTION OF SMOLT In addition to the requirements above, if the smolt is produced in an open system, evidence shall be provided that the following are met:												NA for all below
Instruction to Clients for Indicators 8.24 through 8.31 - Requirements for Smolt Produced in Open Systems Client shall provide documentary evidence to the CAB about the production system(s) from which they source smolt. If smolt used by the farm are produced, for part or all of the growth phase from alevin to smolt, in open (net-pen) systems, indicators 8.24 - 8.31 are applicable.												

8.24	<p>Indicator: Allowance for producing or holding smolt in net pens in water bodies with native salmonids</p> <p>Requirement: None</p> <p>Applicability: All Smolt Producers Using Open Systems</p>	<p>Scope of Exemption Allowed Under Indicator 8.24:</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"> 1. the farm was stocked prior to June 13, 2012; and 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. <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> <p>Native: native to the area and with a history of naturally occurring and also if intentionally stocked for restorative purposes. Areas with a combination of wild native and enhanced native populations are included.</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).															
		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 of the water bodies in which its suppliers are operating net pens for smolt production.															
		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).															
8.25	<p>Indicator: Allowance for producing or holding smolt in net pens in any water body</p> <p>Requirement: Permitted until five years from publication of the SAD standards (i.e. full compliance by June 13, 2017)</p> <p>Applicability: All Smolt</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.															
8.26	<p>Indicator: Evidence that carrying capacity (assimilative capacity) of the freshwater body has been established by 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>Requirement: Yes</p> <p>Applicability: 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															
		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).															
		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.															
		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.															
		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.															
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.																	

8.27	<p>Indicator: Maximum baseline total phosphorus concentration of the water body (see Appendix VIII-6)</p> <p>Requirement: ≤ 20 µg/l [174]</p> <p>Applicability: All Smolt Producers Using Open Systems</p>	<p>Instruction to Clients for Indicator 8.27 and 8.28 - Monitoring TP and DO in Receiving Water for Open Smolt Systems</p> <p>Farms must confirm that any smolt supplier using an open (net-pen) system is also engaged in monitoring of water quality of receiving waters. Requirements for the supplier's water quality monitoring program are presented in detail in Appendix VIII-6 and only re-stated briefly here. Monitoring shall sample total phosphorus (TP) and dissolved oxygen (DO). TP is measured in water samples taken from a representative composite sample through the water column to a depth of the bottom of the cages. Samples are submitted to an accredited laboratory for analysis of TP to a method detection limit of < 0.002 mg/L. DO measurements will be taken at 50 centimeters from the bottom sediment.</p> <p>The required sampling regime is as follows:</p> <ul style="list-style-type: none"> - all stations are identified with GPS coordinates on a map of the farm and/or available satellite imagery; - stations are at the limit of the farm management zone on each side of the farm, roughly 50 meters from the edge of enclosures; - the spatial arrangement of stations is shown in the table in Appendix VIII-6; - sampling is done at least quarterly (1X per 3 months) during periods without ice, including peak biomass; and - samples are also collected at two reference stations located ~ 1-2 km upcurrent and downcurrent from the farm. <p>Note: Some flexibility on the exact location and method of sampling is allowed to avoid smolt suppliers needing to duplicate sampling for their local regulatory regime.</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).							
		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.							
		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.							
		d. Compare results to the baseline TP concentration established below (see 8.27) or determined by a regulatory body.	D. Repeat comparison.							
		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.							
Footnote	[173] This concentration is equivalent to the upper limit of the Mesotrophic Trophic Status classification as described in Appendix VIII-7.									
8.28	<p>Indicator: Minimum percent oxygen saturation of water 50 centimeters above bottom sediment (at all oxygen monitoring locations described in Appendix VIII-6)</p> <p>Requirement: ≥ 50%</p> <p>Applicability: All Smolt Producers Using Open Systems</p>	<p>Note: see instructions for Indicator 8.27.</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).							
		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.							
		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.							
8.29	<p>Indicator: Trophic status classification of water body remains unchanged from baseline (see Appendix VIII-7)</p> <p>Requirement: Yes</p> <p>Applicability: All Smolt</p>	<p>a. Obtain documentary evidence from the supplier stating the trophic status of water body if previously set by a regulator body (if applicable).</p> <p>b. If the trophic status of the waterbody has not been classified (see 8.29a), obtain evidence from the supplier to show how the supplier determined trophic status based on the concentration of TP.</p>	A. Verify that farm obtains evidence from suppliers (as applicable).	B. Review how supplier determined trophic status (as applicable).						

	Producers Using Open System	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.							
		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.							
8.30	Indicator: Maximum allowed increase in total phosphorus concentration in lake from baseline (see Appendix VIII-7) Requirement: 25% Applicability: All Smolt Producers Using Open System	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.							
		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.							
		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.							
8.31	Indicator: Allowance for use of aeration systems or other technological means to increase oxygen levels in the water body Requirement: None Applicability: All Smolt Producers Using Open System	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).							
ADDITIONAL REQUIREMENTS FOR SEMI-CLOSED AND CLOSED PRODUCTION OF SMOLTS Additionally, if the smolt is produced in a closed or semi-closed system (flow through or recirculation) that discharges into freshwater, evidence shall be provided that the following are met [177]:										

<p>Instructions to Client for Indicators 8.32-8.35 - Requirement for smolts produced in open systems</p> <p>Client shall provide documentary evidence to the CAB about the production system(s) from which they source smolt.</p> <p>-If smolt used by the farm are not produced, for part or all of the growth phase from alevin to smolt, in open (net-pen) systems, indicators 8.32 - 8.35 are applicable.</p> <p>-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.</p>																				
Footnote		[176] Production systems that don't discharge into fresh water are exempt from these standards.																		
8.32	<p>Indicator: Water quality monitoring matrix completed and submitted to ASC (see Appendix VIII-2)</p> <p>Requirement: Yes [177]</p> <p>Applicability: All Smolt Producers Using Semi-Closed or Closed Production Systems</p>	<p>a. Obtain records from smolt suppliers showing that water quality monitoring conducted at least quarterly (i.e. once every 3 months) over the last 12 months.</p> <p>b. Obtain water quality monitoring matrix from smolt suppliers and review for completeness.</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>A. Verify that farm has records to show smolt suppliers conducted water quality monitoring the required frequency and duration.</p> <p>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).</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>																	
Footnote		[177] See Appendix VI for transparency requirements for 8.32.																		
8.33	<p>Indicator: Minimum oxygen saturation in the outflow (methodology in Appendix VIII-2)</p> <p>Requirement: 60% [178,179]</p> <p>Applicability: 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 at 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>																	
Footnote		[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.																		
Footnote		[179] See Appendix VI for transparency requirements for 8.33.																		
8.34	<p>Indicator: Macro-invertebrate surveys downstream from the farm's effluent discharge demonstrate benthic health that is similar or better than surveys upstream from the discharge (methodology in Appendix VIII-3)</p> <p>Requirement: Yes</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>																	
8.35	<p>Indicator: Evidence of implementation of biosolids (sludge) Best Management Practices (BMP)</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>A. Review the supplier's biosolids management plan for compliance with Appendix VIII-2.</p>																	

Practices (BMPs) (Appendix VIII-4) Requirement: Yes Applicability: All Smolt Producers Using Semi-Closed or Closed Production Systems	b. Obtain from smolt suppliers a process flow diagram (detailed in Appendix VII-2) showing how the farm is dealing with biosolids responsibly.	B. Review the supplier's biosolids process flow diagram for compliance with Appendix VII-2.																	
	c. Obtain a declaration from smolt supplier stating that no biosolids were discharged into natural water bodies in the past 12 months.	C. Confirm that farm obtains declarations from smolt suppliers.																	
	d. Obtain records from smolt suppliers showing monitoring of biosolid (sludge) cleaning maintenance, and disposal as described in Appendix VIII-2.	D. Review the farm's records from smolt suppliers to verify there is evidence of implementation of biosolids management as																	