

Form 3 - Public Disclosure Form

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

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

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

This form should be translated into local languages when appropriate

PDF 1 Public Disclosure Form

PDF 1.1 Name of CAB

DNV GL

PDF 1.2 Date of Submission

25-11-2020

PDF 1.3 CAB Contact Person

PDF 1.3.1 Name of Contact Person

Jan Petter Kosmo

PDF 1.3.2 Position in the CAB's-
organisation

Lead Auditor

PDF 1.3.3 Mailing address

DNV GL Business Assurance Norway AS
Veritasveien 1
1322 Høvik
NORWAY

PDF 1.3.4 Email address

jan.petter.kosmo@dnvgl.com

PDF 1.3.5 Phone number

+47 957 48 769

PDF 1.3.6 Other

PDF 1.4 ASC Name of Client

PDF 1.4.1 Name of the Client

Nova Sea AS

PDF 1.4.1.a Name of the unit of
certification

36217 Kalvhylla

PDF 1.4.2 Name of Contact Person

Sabine Fossmo

PDF 1.4.3 Position in the client's
organisation

Quality manager

PDF 1.4.4 Mailing address

Nova Sea AS
8764 LOVUND, NORWAY

PDF 1.4.5 Email address

sabine.fossmo@novasea.no

PDF 1.4.6 Phone number

+47 976 89 537

PDF 1.4.7 Other

Phone +47 75 09 19 00

PDF 1.5 Unit of Certification

PDF 1.5.1 Single Site

Single site

PDF 1.5.2 Multi-site

PDF 1.5.2.a Ownership status

Owned

PDF 1.5.3 Group certification

PDF 1.6 Sites to be audited

Site Name	GPS Coordinates	List all species per site and indicate if they are in the scope of the standard	Ownership status (owned/ subcontracted)	Date of planned audit and type of audit (Initial, SA1, SA2, recertification, etc.)	Status (new, in production/ fallowing /in harvest)
36217 Kalvhylla	N 65.748267 S 12.540533	Atlantic salmon is in the scope of the standard	Owned	RC: 18. - 29.01.2021 remote due to Covid-19.	In production

PDF 1.7 Species and Standards

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

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

Name/organisation	Relevance for this audit	How to involve this stakeholder (in-person/phone interview/input submission)	When stakeholder may be contacted	How this stakeholder will be contacted
Mattilsynet	Authorities	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
Nordland Fylkeskommune	Local authorities	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
Kystverket	Authorities	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications

Fiskeridirektoratet	Authorities	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
Fylkesmannen i Nordland	Local authorities	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
Nordland Fylkes Fiskarlag	Fishermen organization	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
Brønnøy Fiskarlag	Fishermen organization	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
Vevelstad Kommune	Authorities	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications

Stokka Grendeutvalg	Communities	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
Stokka Grendelag	Communities	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
Stokka fritidsklubb	Communities	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
Visit Helgeland	Tourist organization	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
Ivar Smith Nilsen	Neighbour	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications

Naturvernforbundet i Ytre Helgeland	NGO - Environmental area	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
Naturvernforbundet i Nordland	NGO - Environmental area	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
WWF-Norge	NGO - Environmental area	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
Norske Lakseelver	NGO - Environmental area	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
Naturvernforbundet	NGO - Environmental area	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications

Norges Kystfiskarlag	NGO - Environmental area	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
Norsk Ornitologisk Forening	NGO - Environmental area	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
Norges Jeger- og Fiskerforbund	NGO - Environmental area	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
Norges Miljøvernforbund	NGO - Environmental area	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
Norges Fiskarlag	NGO - Environmental area	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications

Sametinget	NGO - social area	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
Miljødirektoratet	Authorities	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications
Fellesforbundet	Labour unions	Written notifications with request for submissions, and if needed telephone	Before audit	Written notifications

PDF 1.9 Proposed Timeline

PDF 1.9.1	Contract Signed:	27-10-2017
PDF 1.9.2	Start of audit:	18-1-2021
PDF 1.9.3	Onsite Audit(s):	RC: 18. - 29.01.2021 remote due to Covid-19.

PDF 1.9.4

Determination/Decision: **Pending final recertification decision in final report.**

PDF 1.10 Audit Team

PDF 1.10.1

PDF 1.10.2

PDF 1.10.3

Column1	Name	ASC Registration Re
Lead Auditor	Jan Petter Kosmo	
Technical Experts		
Social Auditor	Darius Pamakstys	

ASC Audit Report - Opening

General Requirements

- C1** Audit reports shall be written in English and in the most common language spoken in the areas where the operation is located.
- C2** Audit reports may contain confidential annexes for commercially sensitive information.
 - C2.1** The CAB shall agree the content of any commercially sensitive information with the applicant, which can still be accessible by the ASC and the appointed accreditation body upon request as stipulated in the certification contract.
 - C2.2** The public report shall contain a clear overview of the items which are in the confidential annexes.
 - C2.3** Except for the annexes that contain commercially sensitive information all audit reports will be public.
- C3** The CAB is solely responsible for the content of all reports, including the content of any confidential annexes.
- C4 Reporting Deadlines for certification and re-certification audit reports (in working day)**
 - C4.1** Within thirty (30) days of the completing of the audit the CAB shall submit a draft report in English and the national or most common language spoken in the area where the operation is located.
 - C4.2** Within five (5) days the ASC should post the draft report to the ASC website.
 - C4.3** The CAB shall allow stakeholders and interested parties to comment on the report for fifteen (15) days.
 - C4.4** Within twenty (20) days of the close of comments, the CAB shall submit the final report to the ASC in English and the national or most common language spoken in the area where the operation is located.
 - C4.5** Within five (5) days the ASC should post the final report to the ASC website.
 - C4.6** Audit reports shall contain accurate and reproducible results.
- C5 Reporting Deadlines* for surveillance audit reports**
 - C5.1** Within ninety (90) days of the completing of the audit the CAB shall submit a final report in English and the national or most common language spoken in the area where the operation is located.
 - C5.2** Within five (5) days the ASC should post the final report to the ASC website.
 - C5.3** Audit reports shall contain accurate and reproducible results.

1 Title Page

1.1 Name of Applicant

Nova Sea AS

1.2 Report Title [e.g. Public Draft
Certification Report/ Final
certification report/Surveillance
report]

36217 Kalvhylla ASC recertification audit, final report

1.3 CAB name

DNV Business Assurance Norway AS

1.4 Name of Lead Auditor

Jan Petter Kosmo

1.5 Names and positions of report
authors and reviewers

Jan Petter Kosmo - lead auditor, author of report
Darius Pamakstys - social auditor
Paul Casburn - technical reviewer

1.6 Client's Contact person: Name and
Title

Sabine Fossmo - Quality manager

1.7 Date

23-4-2021

2 Table of Contents

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3 Glossary

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

1) MOM-B and MOM-C are surveys of benthic environment at or near farm, according to NS 9410 (Norwegian Standard 9410). 2) NFSA is Norwegian Food safety Authority. 3) ISA is Infectious salmon anemia virus. 4) BNW is basic need wage. 5) VR is variation request. 5) FHP is Fish health plan. 6) CV is "curriculum vitae" for a fish group. 7) IK is internal control system. 7) NINA is Norwegian institute for Nature Research. 9) IMR is Institute of Marine Research. 10) PD is Pancreas Disease. 11) VHP is Veterinary Health Plan. 12) HMS is HSE (Health, Safety and Environment). 13) H&S is Health and Safety. 14) PPE is Personal Protective Equipment. 15) OHS is Occupational Health and Safety. 16) "Nytekt" NS9415 (Norwegian Standard 9415) are technical certifications of Marine fish farms with Requirements for design, dimensioning, production, installation and operation. 17) MTB/MAB is Maximum Allowed Biomass. 18) GG is GLOBALG.A.P. 19) GGN is GLOBALG.A.P. unique registration number. 20) BNW is Basis Needs Wage. 21) Sami population is indigenous population. 22) NIFES is National Institute of Nutrition and Seafood Research. 23) TU is Trade Unions.

4 Summary

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

4.1	A brief description of the scope of the audit (<i>including activities of the UoC being audited</i>)	ASC audit of 36217 Kalvhylla, a seasite for on-growing production of Atlantic Salmon (<i>Salmo Salar</i>)
4.2	A brief description of the operations of the unit of certification	Production of Atlantic Salmon (<i>Salmo salar</i>). Production/on-growing from smolt to harvest size fish in floating circular cages. Centralised feeding system on floating barge is central in site operation and also housing storage of feed, accommodations, technical and control room.
4.3	Type of unit of certification (<i>select only one type of unit of certification in the list</i>)	Single farm

4.4 Type of audit (*select all the types of audit that apply in the list*)

Recertification audit - 2021

4.4.1 Number of sites included in the unit of certification

Initial audit - 02/ 2018

Surveillance audit 1 - 05/ 2019

Surveillance audit 2 - 03/ 2020

Recertification audit - 01/ 2021

Owned by client

Subcontracted by client

36217 Kalvhylla	NA
36217 Kalvhylla	NA
36217 Kalvhylla	NA
36217 Kalvhylla	NA

4.5 A summary of the major findings

Refer to report section II Audit template, Summary of findings and IV Audit Report - Closing for NCs found during audit.

CONFIDENTIAL AND COMMERCIAL SENSITIVE INFORMATION:

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

4.6 The Audit determination

The Audit determination at Final report stage:

No Major Non conformities. Corrective actions for closing or acceptance of Minor Non conformities, subject to corrective action plan for Minor Non conformities are presented and approved by DNV. 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 recertification audit, is now recommended.

The final certification decision has been taken after needed activities, as per ASC Farm Certification and Accreditation Requirements Version 2.2 October 2019.

The organization described in section 3 of this report for the activities described in the section 3 itself is:

- Compliant and thus certified

5 CAB Contact Information

5.1 CAB Name

DNV

5.2 CAB Mailing Address

DNV Business Assurance Norway AS
Veritasveien 1
1322 Høvik
NORWAY

5.3 Email Address

jan.petter.kosmo@dnv.com

5.4 Other Contact Information

Phone to DNV +47 67 57 99 00

6 Background on the Applicant

6.1 Information on the Public Disclosure Form (Form 3) except 1.2-1.3. All information updated as necessary to reflect the audit as conducted.

Yes

6.2 A description of the unit of certification (*for initial audit*) / changes, if any (*for surveillance and recertification audits*)

The site is a conventional floating cage salmon farm. The production cages are floating circular cages with pointed nets. Central on the farm is a feed barge, with centralized feeding system and visual/camera control of feeding. All installations are certified according to Norwegian legislation "NS-9415 NYTEK" regulations standard. Smolts supplied by Helgeland Smolt (site Reppen).

6.3	Other certifications currently held by the unit of certification	GlobalG.A.P. Certified, GGN 4049928437327, valid 2020-05-07 - 2021-05-06.
6.4	Other certification(s) obtained by the UoC before this audit	GlobalG.A.P. Certified, GGN 4049928437327, valid 2020-05-07 - 2021-05-06.
6.5	Estimated annual production volumes of the unit of certification of the <u>current</u> year	2021: 0 tons
6.6	<u>Actual</u> annual production volumes of the unit of certification of the <u>previous</u> year (mandatory for surveillance and recertification audits)	2020: 2 203 tons
6.7	Production system(s) employed within the unit of certification (select one or more in the list)	Net cages at sea
6.8	Number of employees working at the unit of certification (see notes in comment to this cell)	7
6.9	Size, and/or number of ponds, pens (if multi site, per site)	14 pens á 120 meter circumference

7 Scope

7.1	The Standard(s) against which the audit was conducted, including version number	ASC Salmon Standard, version 1.3 July 2019
7.2	The species produced at the applicant farm (in English and Latin names)	Atlantic Salmon (Salmo salar)

<p>7.3 A description of the scope of the audit including a description of whether the unit of certification covers all production or harvest areas (i.e. ponds) managed by the operation or located at the included sites, or whether only a sub-set of these are included in the unit of certification. If only a sub-set of production or harvest areas are included in the unit of certification these shall be clearly named.</p>	<p>The site is a seaside with cages/pens of which all are in use for this generation.</p> <p>All cages were covered by the audit. No sub-sites are operated by the farm and the complete farm is included in the scope of certification. No handling of fish related to harvest is conducted on the farm, on-growing, only.</p>
<p>7.4 The names and addresses of any storage, processing, or distribution sites included in the operation (including subcontracted operations) that will potentially be handling certified products, up until the point where product enters further chain of custody.</p>	<p>Fish goes directly from the seaside to the slaughterhouse(Nova Sea AS, 8764 LOVUND, NORWAY). Only approved wellboats is used during transshipments of salmon between the site and holding cages/harvest plant.</p> <p>Biosecurity legislation and implemented QMS management system and procedures at the site and within the company prevent the wellboats from visiting other salmon farms/sites without cleaning/disinfection. The possibility for mixture of salmon in holding cages from salmon from other farm/sites is also prevented by biosecurity legislation and implemented QMS management system and procedures at the site and within the harvesting/processing plant used.</p> <p>There are slaughtered fish from only one holding cage at a time in the harvest/processing plant. Transports are always identifiable on production unit level (cage).</p> <p>All information is kept in electronic system FishTalk/Landax/Havbruksloggen and in hard copies.</p>

- 7.5** Description of the receiving water body(ies). The farm is located in the fiord Visten - ytre in Nordland county. Site's receiving water-body is Vefsenfjorden - Leirfjorden (Vevelstad municipality). Regional water-body authority is Nordland County. This is a sheltered coastal/fjord water area. Categorized as a sheltered coastal/fjord, of Euhaline nature (>30‰ salinity). Ecological quality is defined as good. Chemical condition is not defined in public documentation. Details www.vann-nett.no
- The site is under voluntary ABM system. There is other salmon farming activity in the area. There are natural wild salmon populations in the area. Overview of salmon watercourses in the area are available at <https://laksekart.fylkesmannen.no> and <http://lakseregister.fylkesmannen.no>

8 Audit Plan

- 8.1** The names of the auditors and the dates when each of the following were undertaken or completed: conducting the audit, writing of the report, reviewing the report, and taking the certification decision.

Jan Petter Kosmo, lead auditor
 Darius Pamakstys, social auditor
 Paul Casburn - technical reviewer
 Remote audit was finished 29.01.2021.
 Draft report was finished 03.03.2021
 Technical Review of draft report was finished 12.03.2021
 Initial audit draft report sent to ASC 12.03.2021
 Final Report finished 23.04.2021
 Technical review of Final Report finished xx.xx.2021
 Final report sent ASC xx.xx.2021

- 8.2** Previous Audits (if applicable):

NC reference number	Standard clause reference	Closing deadline - status - closing date of each NC
8.2.1 Initial audit - 02/ 2018		
IA-2018-1	2.1.1	Minor NC. Closing deadline SA1-2019. Closed in SA1 (10.05.2019).
IA-2018-2	2.1.2	Minor NC. Closing deadline SA1-2019. Closed in SA1 (10.05.2019).
IA-2018-3	2.3.1	Minor NC. Closing deadline SA1-2019. Closed (13.03.2018).
IA-2018-4	4.3.2	Minor NC. Closing deadline SA1-2019. Closed (13.03.2018).
IA-2018-5	4.4.3	Minor NC. Closing deadline SA1-2019. Closed (13.03.2018).

Surveillance audit 1 - 5/ 2019	IA-2018-6	4.6.2	Minor NC. Closing deadline SA1-2019. Closed (13.03.2018).
	IA-2018-7	4.7.1	Major NC. Closing deadline 08.05.2018. Closed (13.03.2018).
	IA-2018-8	4.7.3	Minor NC. Closing deadline SA1-2019. Closed in SA1 (10.05.2019).
	IA-2018-9	5.2.2	Minor NC. Closing deadline SA1-2019. Closed (13.03.2018).
	IA-2018-10	6.1.1	Minor NC. Closing deadline SA1-2019. Closed in SA1 (10.05.2019).
	IA-2018-11	6.2.2	Minor NC. Closing deadline SA1-2019. Closed in SA1 (10.05.2019).
	IA-2018-12	6.4.1	Minor NC. Closing deadline SA1-2019. Closed (11.03.2018).
	IA-2018-13	6.5.1	Minor NC. Closing deadline SA1-2019. Closed in SA1 (10.05.2019).
	IA-2018-14	6.5.3	Minor NC. Closing deadline SA1-2019. Closed (08.04.2018).
	IA-2018-15	6.5.4	Minor NC. Closing deadline SA1-2019. Closed (08.04.2018).
	IA-2018-16	6.5.6	Minor NC. Closing deadline SA1-2019. Closed in SA1 (10.05.2019).
	IA-2018-17	6.6.2	Minor NC. Closing deadline SA1-2019. Closed (08.04.2018).
	IA-2018-18	6.6.3	Minor NC. Closing deadline SA1-2019. Closed in SA1 (10.05.2019).
	IA-2018-19	6.7.2	Minor NC. Closing deadline SA1-2019. Closed in SA1 (10.05.2019).
	IA-2018-20	6.8.1	Minor NC. Closing deadline SA1-2019. Closed (08.04.2018).
	IA-2018-21	7.1.1	Minor NC. Closing deadline SA1-2019. Closed in SA1 (10.05.2019).
	IA-2018-22	7.1.2	Minor NC. Closing deadline SA1-2019. Closed (08.04.2018).
	IA-2018-23	7.1.3	Minor NC. Closing deadline SA1-2019. Closed in SA1 (10.05.2019).
	IA-2018-24	8.1	Minor NC. Closing deadline SA1-2019. Closed in SA1 (10.05.2019).
	IA-2018-25	8.20	Minor NC. Closing deadline SA1-2019. Closed in SA1 (10.05.2019).
	IA-2018-26	8.23	Minor NC. Closing deadline SA1-2019. Closed in SA1 (10.05.2019).
Surveillance audit 2 - 03/ 2020	SA1-2019-1	2.1.4	Minor NC. Closing deadline SA2-2020. Closed (17.06.2019).
	SA1-2019-2	4.3.5	Minor NC. Closing deadline SA2-2020. Closed (05.07.2019).
	SA1-2019-3	4.4.1	Minor NC. Closing deadline SA2-2020. Closed (05.07.2019).
	SA1-2019-4	8.14	Minor NC. Closing deadline SA2-2020. Closed in SA2 (27.03.2020)
	SA2-20-1	2.2.1	Minor NC. Closing deadline 27.06.2020. Closed (26.05.2020).
	SA2-20-2	4.3.2	Minor NC. Closing deadline 27.06.2020. Closed (16.04.2020).
Recertification audit - 01/ 2021	SA2-20-3	4.3.4	Minor NC. Closing deadline 27.06.2020. Closed (15.04.2020).
	SA2-20-4	4.3.5	Minor NC. Closing deadline 27.06.2020. Closed (15.04.2020).
	SA2-20-5	5.1.7	Minor NC. Closing deadline 27.06.2020. Closed (26.05.2020).
	SA2-20-6	8.20	Minor NC. Closing deadline RC-2021. Closed in RC (29.01.2021)
			See Summary of findings

Unannounced audit - mm/ yyyy
 NC close-out audit - mm/ yyyy
 Scope extension audit mm/ yyyy

8.3 Audit plan as implemented including:

8.3.1 Desk Reviews

8.3.2 Onsite audits

8.3.3 Stakeholder interviews and Community meetings

8.3.4 Draft report sent to client

8.3.5 Draft report sent to ASC

8.3.6 Final report sent to Client and ASC

Dates	Locations
January 2021	Lead auditor home office (Slyngveien 63, 6517 KRISTIANSUND, NORWAY)
18. - 29. January 2021	Main office Nova Sea AS at Lovund and production site audited remote due to Covid-19.
	No inputs from stakeholders received after submitted audit notifications or in audit process.
12-3-2021	Recertification - 2021 Report
12-3-2021	Recertification - 2021 Report
xx.xx.2021	Recertification - 2021 Report

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

Sabine Fossmo - Quality manager
Stian Amble - Biology and quality Responsible
Samuel Anderson - Environment responsible
Alexander Solbakken - site manager Kalvhylla
Kristin Ottesen - veterinarian HaVet
John Arve Skarstad - HSE responsible
Odd Stensland - technical responsible sea production
Martin Sagerup - production coordinator
Line Holm - Quality manager Helgeland Smolt
Atle Karlsen - technical coordinator
Bjørg R. Kristensen - HR manager
Birgitte Fjellgaard - HR advisor

First part of the audit was performed remote (using desktop tool Teams) with the company's office at Lovund, focusing on technical and legal matters, mainly, with relevant operational and administrative staff present.

Second part of the audit comprised a visit to the site (due to Covid-19 performed via Teams), covering technical, production administrative and 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 site staff, typically a combination of document reviews and staff interviews. 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. Demonstrations of equipment and processes took place, relevant to the scope of the audit, according to the ASC Salmon Standard v1.3 and following guidelines in the ASC Salmon Audit Manual v1.3.

The audit included inspection (using desktop tool Teams) of the harvest of 150 ton Atlantic salmon 28.01.2021 from netcage 10 at the site Renga S to wellboat "MS Steinar Olaisen". All sites within Nova Sea AS perform the harvest processes according to the same policies and procedures. Inspection of the harvesting process at the site Renga S is therefore equally relevant for the locality Kalvhylle.

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

Name of stakeholder (if permission given to make name public)	Relevance to be contacted	Date of contact	CAB responded Yes/No	Brief summary of points Raised	Use of comment by CAB	Response sent to stakeholder

8.6 E5.1.i List of sites exempted from the scope of an initial audit and how they meet conditions in E5.1.i

NA

8.6.1 E5.1.ii Justification for auditing site(s) meeting conditions under E5.1.i

NA

8.7 E5.1.1.i List of sites removed after the initial audit

NA

8.7.1 E5.2.2 Reason for the removal of sites from the certificate.

NA

8.8 E5.4 Map of sites included in the unit of certification has been attached

NA

8.9 E5.5 Site(s) in following period included in the audit (only for surveillance and re-certification audits)

NA

Audit report- ASC Salmon Standard v.1.3

Corresponds to Salmon standard v. 1.3

PRINCIPLE 1: COMPLY WITH ALL APPLICABLE NATIONAL LAWS AND LOCAL REGULATIONS			
Criterion 1.1 Compliance with all applicable local and national legal requirements and regulations			
Indicator		Compliance Criteria (Use as guidance for audit only)	Audit evidence 1. Write down all audit evidence. Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text. 3. If you see any Compliance Criteria which is not listed below, please describe also in the cells below. A. Review compliance with applicable land and water use laws.
1.1.1	<p>Indicator: Presence of documents demonstrating compliance with local and national regulations and requirements on land and water use</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	a. Maintain digital or hard copies of applicable land and water use laws.	Quality system "Landax" with link to relevant laws, regulations and requirements in procedures. Link to applicable laws and regulations on frontpage of Landax and automatic email to quality manager if new version.
		b. Maintain original (or legalised copies of) lease agreements, land titles, or concession permit on file as applicable.	Discharge license from Fylkesmenn i Nordland 28.05.2020 for Kalvhylla MAB 4680 ton. License for production at 36217 Kalvhylla seen on website Directorate of Fisheries, MAB 4680 tons, licenses N L 0062, N ME0001, N ME0005, N VA0001 and N VS0001.
		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).	Inspection (remote) of Nova Seas AS by Directorate of Fisheries 06.04.-29.05.2020 resulted in one non-conformance and two points for improvement. Letter from Directorate of Fisheries 30.06.2020 states closed non-conformance. No inspection by Fylkesmenn i Nordland in 2020 and so far in 2021. No inspection by Norwegian Labour Inspection Authority in 2020 and so far in 2021. Inspection by NFSA 04.06.2019 resulted in no non-conformances. Notification of document review by Directorate of Fisheries 14.01.2021, documents to be sent within 28.01.2021. Seen email sent to Directorate of Fisheries 28.01.2021 from Nova Sea with attachments.

		d. Obtain permits and maps showing that the farm does not conflict with national preservation areas.	Not within conservation area, seen map from Norwegian Environment Agency with protected areas. Area proposed conserved, but not determined yet. Impact on the area is evaluated in permit documents and further risk assessed.
1.1.2	Indicator: Presence of documents demonstrating compliance with all tax laws Requirement: Yes Applicability: All	a. Maintain records of tax payments to appropriate authorities (e.g. land use tax, water use tax, revenue tax). Note that CABs will not disclose confidential tax information unless client is required to or chooses to make it public.	Nova Sea AS registered in official register "Brønnøysundregistrene" with nr. 961056268. Authorized auditor statement for 2019 from pwc - M.P. 20.04.2020.
		b. Maintain copies of tax laws for jurisdiction(s) where company operates.	Online access to lovdata.no with laws and regulations.
		c. Register with national or local authorities as an "aquaculture activity".	Discharge license from Fylkesmannen i Nordland 28.05.2020 for Kalvhylla MAB 4680 ton. License for production at 36217 Kalvhylla seen on website Directorate of Fisheries, MAB 4680 tons, licenses N L 0062, N ME0001, N ME0005, N VA0001 and N VS0001. Operation plan ("Driftsplan") for 2020 approved by Directorate of Fisheries 10.01.2020 for sites in Nova Sea AS, includes Hjartøy N, Hestholmen, Rensøy N, Skogsholmen, Buktodden NØ, Skonseng, Sundsøy, Stokkasjøen, Igerøy Ø, Klipen, Kalvhylla, Svinvær, Djupvik, Rendalsvik, Skolsvik, Isbergan, Meløysjøen, Teksmona, Storvik, Kokvika, Kalvøya, Nordbotnet, Bukkøy Ø and Renga.
1.1.3	Indicator: Presence of documents demonstrating compliance with all relevant national and local labor laws and regulations Requirement: Yes Applicability: All	a. Maintain copies of national labor codes and laws applicable to farm (scope is restricted to the farm sites within the unit certification.)	Online access to lovdata.no with laws and regulations.
		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).	No inspection by Norwegian Labour Inspection Authority in 2020 and so far in 2021.

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.	Discharge license from Fylkesmannen i Nordland 28.05.2020 for Kalvhylla MAB 4680 ton. License for production at 36217 Kalvhylla seen on website Directorate of Fisheries, MAB 4680 tons, licenses N L 0062, N ME0001, N ME0005, N VA0001 and N VS0001. Operation plan ("Driftsplan") for 2020 approved by Directorate of Fisheries 10.01.2020 for sites in Nova Sea AS, includes Hjartøy N, Hestholmen, Rensøy N, Skogsholmen, Buktodden NØ, Skonseng, Sundsøy, Stokkasjøen, Igerøy Ø, Klipen, Kalvhylla, Svinvær, Djupvik, Rendalsvik, Skolsvik, Isbergan, Meløysjøen, Teksmona, Storvik, Kokvika, Kalvøya, Nordbotnet, Bukkøy Ø and Renga.
		b. Compile list of and comply with all discharge laws or regulations.	As described in above permits. C-survey Kalvhylla by Åkerblå 26.06.2020 (field work 22.04.2020), report 100902-01-000, with ASC assessment. MOM-B report by Åkerblå 25.05.2020, status 1. NC: Biomass (3183 ton 26.04.2020) above Maximum Allowed Biomass (3120 ton before 08.06.2020)
		c. Maintain records of monitoring and compliance with discharge laws and regulations as required.	Biomass reported to government via Altinn end of each month, e.g. report for December 2020, reported 07.01.2021 biomass 138 tons. Environmental reports and surveys reported to Altinn, e.g. MOM-B 29.05.2020 and MOM-C 29.06.2020
PRINCIPLE 2: CONSERVE NATURAL HABITAT, LOCAL BIODIVERSITY AND ECOSYSTEM FUNCTION			
Criterion 2.1 Benthic biodiversity and benthic effects [1]			
Footnote	[1] Closed production systems that can demonstrate that they collect and responsibly dispose of > 75% of solid nutrients from the production system are exempt from standards under Criterion 2.1. See Appendix VI for requirements		
Instruction to Clients and CABs on Criterion 2.1 - Modification of the Benthic Sampling Methodology For farms located in a jurisdiction where specific benthic sampling locations are required under law, clients may request to modify the benthic sampling methodology prescribed in Appendix I-1 to allow for sampling at different locations and/or changes in the total number of samples. Where modifications are sought, farms shall provide a full justification to the CAB for review. Requests for modification shall be supported by mapping of differences in sampling locations. In any event, the sampling locations must at a minimum include samples from the cage edge and samples taken from inside and outside of a defined AZE. CABs shall evaluate client requests to modify benthic methodology based on whether there is a risk that such changes would jeopardize the intent and rigor of the ASC Salmon Standard. If the CAB determines that proposed modifications are low risk, the CAB shall ensure that details of the modified benthic sampling methodology are fully described and justified in the audit report.			
		Note: Under Indicator 2.1.1, farms can choose to measure redox potential (Option #1) or sulphide concentration (Option #2). Farms do not have to demonstrate that they meet both threshold values.	

2.1.1	<p>Indicator: Redox potential or [2] sulphide levels in sediment outside of the Allowable Zone of Effect (AZE) [3], following the sampling methodology outlined in Appendix I-1</p> <p>Requirement: Redox potential > 0 mV or Sulphide ≤ 1,500 µMol/L</p> <p>Applicability: All farms except as noted in [1]</p>	<p>a. Prepare a map of the farm showing boundary of AZE (30 m) and GPS locations of all sediment collections stations. If the farm uses a site-specific AZE, provide justification [3] to the CAB.</p> <p>b. If benthos throughout the full AZE is hard bottom, provide evidence to the CAB and request an exemption from 2.1.1c-f, 2.1.2 and 2.1.3.</p> <p>c. Inform the CAB whether the farm chose option #1 or option #2 to demonstrate compliance with the requirements of the Standard.</p> <p>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).</p> <p>e. For option #1, measure and record redox potential (mV) in sediment samples using an appropriate, nationally or internationally recognized testing method.</p> <p>f. For option #2, measure and record sulphide concentration (µM) using an appropriate, nationally or internationally recognized testing method.</p> <p>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.</p>	<p>C-survey Kalvhylle by Åkerblå 26.06.2020 (field work 22.04.2020), report 100902-01-000, with ASC assessment. Olex map with 6 sampling points, adapted to site specific bathymetric, production, current, etc. (reference station: KAL-REF, stations outside AZE: KAL-2, KAL-3 and KAL-4, stations inside AZE: KAL-1 and ASC-1).</p> <p>Reference station: KAL-REF. Stations outside AZE: KAL-2, KAL-3 and KAL-4. Stations inside AZE: KAL-1 and ASC-1.</p> <p>Option 1</p> <p>ASC survey performed according to NS9410:2016.</p> <p>Stations outside AZE: KAL-2: 259 KAL-3: 381 KAL-4: 385</p> <p>Survey according to ASC Salmon Standard 2019, ISO 16665:2014, NS 9410:2016</p> <p>Submitted to ASC 29.01.2021</p>
Footnote	[2] Farm sites can choose whether to use redox or sulphide. Farms do not have to demonstrate that they meet both.		
Footnote	[3] Allowable Zone of Effect (AZE) is defined under this standard as 30 meters. For farm sites where a site-specific AZE has been defined using a robust and credible modeling system such as the SEPA AUTODEPOMOD and verified th		
		<p>Notes:</p> <ul style="list-style-type: none"> - Under Indicator 2.1.2, farms can choose one of four measurements to show compliance with the faunal index Requirement: AMBI (Option #1); Shannon-Wiener Index (Option #2); BQI (Option #3); or ITI (Option #4). Farms do not have to demonstrate that they meet all four threshold values. - If a farm is exempt due to hard bottom benthos (see 2.1.1b), then 2.1.2 does not apply and this shall be noted in the audit report. 	

2.1.2	<p>Indicator: Faunal index score indicating good [4] to high ecological quality in sediment outside the AZE, following the sampling methodology outlined in Appendix I-1</p> <p>Requirement: AZTI Marine Biotic Index (AMBI [5]) score ≤ 3.3, or Shannon-Wiener Index score > 3, or Benthic Quality Index (BQI) score ≥ 15, or Infaunal Trophic Index (ITI) score ≥ 25</p> <p>Applicability: All farms except as noted in [1]</p>	a. Prepare a map showing the AZE (30 m or site specific) and sediment collections stations (see 2.1.1).	C-survey Kalvhylle by Åkerblå 26.06.2020 (field work 22.04.2020), report 100902-01-000, with ASC assessment. Olex map with 6 sampling points, adapted to site specific bathymetric, production, current, etc. (reference station: KAL-REF, stations outside AZE: KAL-2, KAL-3 and KAL-4, stations inside AZE: KAL-1 and ASC-1).
		b. Inform the CAB whether the farm chose option #1, #2, #3, or #4 to demonstrate compliance with the requirement.	#2 Shannon-Wiener Index used
		c. Collect sediment samples in accordance with Appendix I-1 (see 2.1.1).	ASC survey performed according to NS9410:2016.
		d. For option #1, measure, calculate and record AZTI Marine Biotic Index [5] score of sediment samples using the required method.	#2 Shannon-Wiener Index used
		e. For option #2, measure, calculate and record Shannon-Wiener Index score of sediment samples using the required method.	Stations outside AZE: KAL-2: 4,475 KAL-3: 4,559 KAL-4: 3,627
		f. For option #3, measure, calculate and record Benthic Quality Index (BQI) score of sediment samples using the required method.	#2 Shannon-Wiener Index used
		g. For option #4, measure, calculate and record Infaunal Trophic Index (ITI) score of sediment samples using the required method.	#2 Shannon-Wiener Index 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.	Survey according to ASC Salmon Standard 2019, ISO 16665:2014, NS 9410:2016
		i. Submit faunal index scores to ASC (Appendix VI) at least once for each production cycle.	Submitted to ASC 29.01.2021

Footnote	[4] “Good” Ecological Quality Classification: The level of diversity and abundance of invertebrate taxa is slightly outside the range associated with the type-specific conditions. Most of the sensitive taxa of the type-		
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.	C-survey Kalvhylly by Åkerblå 26.06.2020 (field work 22.04.2020), report 100902-01-000, with ASC assessment. Olex map with 6 sampling points, adapted to site specific bathymetric, production, current, etc. (reference station: KAL-REF, stations outside AZE: KAL-2, KAL-3 and KAL-4, stations inside AZE: KAL-1 and ASC-1).
		b. For sediment samples taken within the AZE, determine abundance and taxonomic composition of macrofauna using an appropriate testing method.	Survey according to ASC Salmon Standard 2019, ISO 16665:2014, V02 (2018), SFT 97:02, NS 9410:2016
		c. Identify all highly abundant taxa [6] and specify which ones (if any) are pollution indicator species.	Stations inside AZE: KAL-1: 3 ASC-1: 4
		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.	Survey according to ASC Salmon Standard 2019, ISO 16665:2014, V02 (2018), SFT 97:02, NS 9410:2016
		e. Submit counts of macrofaunal taxa to ASC (Appendix VI) at least once for each production cycle.	Submitted to ASC 29.01.2021

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	Indicator: Definition of a site-specific AZE based on a robust and credible modelling system Requirement: Yes Applicability: All farms except as noted in [1]	a. Undertake an analysis to determine the site-specific AZE and depositional pattern.	C-survey Kalvhylla by Åkerblå 26.06.2020 (field work 22.04.2020), report 100902-01-000, with ASC assessment. Olex map with 6 sampling points, adapted to site specific bathymetric, production, current, etc. (reference station: KAL-REF, stations outside AZE: KAL-2, KAL-3 and KAL-4, stations inside AZE: KAL-1 and ASC-1).
		b. Maintain records to show how the analysis (in 2.1.4a) is robust and credible based on modeling using a multi-parameter approach [7].	C-survey Kalvhylla by Åkerblå 26.06.2020 (field work 22.04.2020), report 100902-01-000, with ASC assessment. Olex map with 6 sampling points, adapted to site specific bathymetric, production, current, etc. (reference station: KAL-REF, stations outside AZE: KAL-2, KAL-3 and KAL-4, stations inside AZE: KAL-1 and ASC-1).
		c. Maintain records to show that modeling results for the site-specific AZE have been verified with > 6 months of monitoring data.	C-survey Kalvhylla by Åkerblå 26.06.2020 (field work 22.04.2020), report 100902-01-000, with ASC assessment. Olex map with 6 sampling points, adapted to site specific bathymetric, production, current, etc. (reference station: KAL-REF, stations outside AZE: KAL-2, KAL-3 and KAL-4, stations inside AZE: KAL-1 and ASC-1).
Footnote	[7] Robust and credible: The SEPA AUTODEPOMOD modeling system is considered to be an example of a credible and robust system. The model must include a multi-parameter approach. Monitoring must be used to ground		
Criterion 2.2 Water quality in and near the site of operation [8]			
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):
Footnote	[8] See Appendix VI for transparency requirements for 2.2.1, 2.2.2, 2.2.3 and 2.2.5.		

2.2.1	<p>Indicator: Weekly average percent saturation [9] of dissolved oxygen (DO) [10] on farm, calculated following methodology in Appendix I-4</p> <p>Requirement: ≥ 70% [11]</p> <p>Applicability: All farms except as noted in [11]</p>	<p>Instruction to Clients for Indicator 2.2.1 - Monitoring Average Weekly Percent Saturation of Dissolved Oxygen</p> <p>Appendix I-4 presents the required methodology that farms must follow for sampling the average weekly percent saturation of dissolved oxygen (DO). Key points of the method are as follows:</p> <ul style="list-style-type: none"> - measurements may be taken with a handheld oxygen meter or equivalent chemical method; - equipment is calibrated according to manufacturer's recommendations; - measurements are taken at least twice daily: once in the morning (6 -9 am) and once in the afternoon (3-6 pm) as appropriate for the location and season; - salinity and temperature must also be measured when DO is sampled; - sampling should be done at 5 meters depth in water conditions that would be experienced by fish (e.g. at the downstream edge of a net pen array); - each week, all DO measurements are used in the calculation of a weekly average percent saturation. <p>If monitoring deviates from prescribed sampling methodology, the farm shall provide the auditor with a written justification (e.g. when samples are missed due to bad weather). In limited and well-justified situations, farms may request that the CAB approve reduction of DO monitoring frequency to one sample per day.</p> <p><u>Exception [see footnote 12]</u> If a farm does not meet the minimum 70 percent weekly average saturation requirement, the farm must demonstrate the consistency of percent saturation with a reference site. The reference site shall be at least 500 meters from the edge of the net pen array, in a location that is understood to follow similar patterns in upwelling to the farm site and is not influenced by nutrient inputs from anthropogenic causes including aquaculture, agricultural runoff or nutrient releases from coastal communities. For any such exceptions, the auditor shall fully document in the audit report how the farm has demonstrated consistency with the reference site.</p> <p>Note 1: <i>Percent saturation</i> is the amount of oxygen dissolved in the water sample compared to the maximum amount that could be present at the same temperature and salinity.</p>	
		a. Monitor and record on-farm percent saturation of DO at a minimum of twice daily using a calibrated oxygen meter or equivalent method. For first audits, farm records must cover ≥ 6 months.	AkvaGroup and "Realfish" system at site with continuous logging.
		b. Provide a written justification for any missed samples or deviations in sampling time.	No missing data
		c. Calculate weekly average percent saturation based on data.	<p>Seen record for week 12-2019 to 08-2020. Minimum 77,4% oxygen and minimum 6,8 mg oxygen per liter.</p> <p>Seen record for week 9-2020 to 34-2020. Minimum 80,6% oxygen and minimum 6,6 mg oxygen per liter.</p> <p>Seen record for week 49-2020 to 02-2024. Minimum 78,8% oxygen and minimum 6,6 mg oxygen per liter.</p>
		d. If any weekly average DO values are < 70%, or approaching that level, monitor and record DO at a reference site and compare to on-farm levels (see Instructions).	<p>No measurements below 70% dissolved oxygen has been registered/observed.</p> <p>No measurements below 2 mg/l dissolved oxygen has been registered/observed.</p>

		e. Arrange for auditor to witness DO monitoring and calibration while on site.	AkvaGroup sensor system. Change of "cap" every second year. Additional "Realfish" as reference (calibration and service per year/generation at supplier).
		f. Submit results from monitoring of average weekly DO as per Appendix VI to ASC at least once per year.	Submitted to ASC 29.01.2021
Footnote	[9] Percent saturation: Percent saturation is the amount of oxygen dissolved in the water sample compared to the maximum amount that could be present at the same temperature and		
Footnote	[10] Averaged weekly from two daily measurements (proposed at 6 am and 3 pm).		
Footnote	[11] An exception to this standard shall be made for farms that can demonstrate consistency with a reference site in the same water body.		
2.2.2	Indicator: Maximum percentage of weekly samples from 2.2.1 that fall under 2 mg/L DO Requirement: 5% Applicability: All	a. Calculate the percentage of on-farm samples taken for 2.2.1a that fall under 2 mg/L DO.	All above limits.
		b. Submit results from 2.2.2a as per Appendix VI to ASC at least once per year.	Submitted to ASC 29.01.2021
2.2.3	Indicator: For jurisdictions that have national or regional coastal water quality targets [12], demonstration through third-party analysis that the farm is in an area recently [13] classified as having “good” or “very good” water quality [14] Requirement: Yes [15] Applicability: All farms except as noted in [15]	a. Inform the CAB whether relevant targets and classification systems are applicable in the jurisdiction. If applicable, proceed to "2.2.3.b". If not applicable, take action as required under 2.2.4	Classification and targets for water bodies at the website vann-nett (run by The Norwegian Water Resources and Energy Directorate).
		b. Compile a summary of relevant national or regional water quality targets and classifications, identifying the third-party responsible for the analysis and classification.	Good ecologic state for coastal water in "Visten Ytre" at website vann-nett (run by The Norwegian Water Resources and Energy Directorate).
		c. Identify the most recent classification of water quality for the area in which the farm operates.	Good
Footnote	[12] Related to nutrients (e.g., N, P, chlorophyll A).		
Footnote	[13] Within the two years prior to the audit.		
Footnote	[14] Classifications of “good” and “very good” are used in the EU Water Framework Directive. Equivalent classification from other water quality monitoring systems in other jurisdictions are :		

Footnote	[15] Closed production systems that can demonstrate the collection and responsible disposal of > 75% of solid nutrients as well as > 50% of dissolved nutrients (through biofiltration, settling and/or other technologies) are		
2.2.4	Indicator: For jurisdictions without national or regional coastal water quality targets, evidence of monitoring of nitrogen and phosphorous [16] levels on farm and at a reference site, following methodology in Appendix I-5 Requirement: Consistency with reference site Applicability: All farms except as noted in [16]	a. Develop, implement, and document a weekly monitoring plan for N, NH ₄ , NO ₃ , total P, and ortho-P in compliance with Appendix I-5. For first audits, farm records must cover ≥ 6 months.	Classification and targets for water bodies at the website vann-nett (run by The Norwegian Water Resources and Energy Directorate).
		b. Calibrate all equipment according to the manufacturer's recommendations.	Classification and targets for water bodies at the website vann-nett (run by The Norwegian Water Resources and Energy Directorate).
		c. Submit data on N and P to ASC as per Appendix VI at least once per year.	Classification and targets for water bodies at the website vann-nett (run by The Norwegian Water Resources and Energy Directorate).
Footnote	[16] Farms shall monitor total N, NH ₄ , NO ₃ , total P and Ortho-P in the water column. Results shall be submitted to the ASC database. Methods such as a Hach kit are acceptable.		
2.2.5	Indicator: Demonstration of calculation of biochemical oxygen demand (BOD [17]) of the farm on a production cycle basis Requirement: Yes Applicability: All	Instruction to Clients for Indicator 2.2.5 - Calculating Biochemical Oxygen Demand Biochemical Oxygen Demand (BOD) can be calculated based on cumulative inputs of N and C to the environment over the course of the production cycle. $BOD = ((\text{total N in feed} - \text{total N in fish}) * 4.57) + ((\text{total C in feed} - \text{total C in fish}) * 2.67).$ <ul style="list-style-type: none"> A farm may deduct N or C that is captured, filtered or absorbed through approaches such as IMTA or through direct collection of nutrient wasted. In this equation, “fish” refers to harvested fish. In this case, farm must submit breakdown of N & C captured/filtered/absorbed to ASC along with method used to estimate nutrient reduction. Reference for calculation methodology: Boyd C. 2009. Estimating mechanical aeration requirement in shrimp ponds from the oxygen demand of feed. In: Proceedings of the World Aquaculture Society Meeting; Sept 25-29, 2009; VeraCruz, Mexico. And: Global Aquaculture Performance Index BOD calculation methodology available at http://web.uvic.ca/~gapi/explore-gapi/bod.html. Note 1: Calculation requires a full production cycle of data and is required beginning with the production cycle first undergoing certification. If it is the first audit for the farm, the client is required to demonstrate to the CAB that data is being collected and an understanding of the calculations. Note 2: Farms may seek an exemption to Indicator 2.2.5 if: the farm collects BOD samples at least once every two weeks, samples are independently analyzed by an accredited laboratory, and the farm can show that BOD monitoring results do not deviate significantly from calculated annual BOD load.	
		a. Collect data throughout the course of the production cycle and calculate BOD according to formula in the instruction box.	Last full cycle (2019G): BOD (mTO ₂) 5778. Present cycle (2021G): BOD (mTO ₂) 33. Full production cycle of present cycle will be provided when fish is harvested, will be followed up at SA1.
		b. Submit calculated BOD as per Appendix VI to ASC for each production cycle.	Submitted to ASC 29.01.2021

Footnote	[17] BOD calculated as: ((total N in feed – total N in fish)*4.57) + ((total C in feed – total C in fish)*2.67). A farm may deduct N or C that is captured, filtered or absorbed through approaches such as IMTA or through direct collection of nu fish. Reference for calculation methodology: Boyd C. 2009. Estimating mechanical aeration requirement in shrimp ponds from the oxygen demand of feed. In: Proceedings of the World Aquaculture Society Meeting; Sept 25-29, 2009; V Index BOD calculation methodology available at http://web.uvic.ca/~gapi/explore-gapi/bod.html.		
2.2.6	Indicator: Appropriate controls are in place that maintain good culture and hygienic conditions on the farm which extends to all chemicals, including veterinary drugs, thereby ensuring that adverse impacts on environmental quality are minimised. Requirement: Yes Applicability: All	a. Document control systems in good culture and hygiene that includes all appropriate elements.	Approved veterinary drugs according to VHP. Substitution of chemicals to reduce use of harmful chemicals. Weekly cleaning plan and log in Landax, e.g. cleaning updated to 25.01.2021.
		b. Apply the systems ensuring that staff are aware, qualified and trained to properly implement them.	Verified during audit
		-	C-survey Kalvhylla by Åkerblå 26.06.2020 (field work 22.04.2020), report 100902-01-000, with ASC assessment. Olex map with 6 sampling points, adapted to site specific bathymetric, production, current, etc. (reference station: KAL-REF, stations outside AZE: KAL-2, KAL-3 and KAL-4, stations inside AZE: KAL-1 and ASC-1).
Criterion 2.3 Nutrient release from production			
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):
2.3.1	Indicator: Percentage of fines [18] in the feed at point of entry to the farm [20] (calculated following methodology in Appendix I-2) Requirement: < 1% by weight of the feed Applicability: All farms except as noted in [19]	Note: The methodology given in Appendix I-2 is used to determine the fines (dust and small fragments) in finished product of fish feed which has a	
		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.	Procedure "Mottakskontroll av for og foravvikshåndtering" 29.01.2018 describes quarterly testing, sampling method, feed reception, etc. Instruction "Instruks for kontroll av for og foringsanlegg for støv og knus" 10.03.2020 regarding quarterly testing, feed samples (frequency, sieve opening, amount, etc.).
		b. If using a sieving machine, calibrate equipment according to manufacturer's recommendations.	Appropriate testing technology 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.	Seen sampling plan and record for Nova Sea with quarterly sampling. Q1-2020: 0,00% Q2-2020: 0,00% Q3-2020: 0,26% Q4-2020: 0,60%
Footnote	[18] Fines: Dust and fragments in the feed. Particles that separate from feed with a diameter of 5 mm or less when sieved through a 1 mm sieve, or particles that separate from feed with a diameter greater than 5 mm when sieved thro from feed bags after they are delivered to farm).		

Footnote	[19] To be measured every quarter or every three months. Samples that are measured shall be chosen randomly. Feed may be sampled immediately prior to delivery to farm for sites with no feed storage where it is not possible to demonstrate the collection and responsible disposal of > 75% of solid nutrients and > 50% of dissolved nutrients (through biofiltration, settling and/or other technologies) are exempt		
Criterion 2.4 Interaction with critical or sensitive habitats and species			
		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 a 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 permitting process), the farm may use such documents in 2.4.1 as long as all components in Appendix I-3 are explicitly covered.	
		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.	Risk assessments in Landax includes predators, escape, noise, lice, medicaments, light, exhaust, carbon dioxide, etc. Updated in 2020.
		b. If the assessment (2.4.1a) identifies potential impact(s) of the farm on biodiversity or nearby critical, sensitive or protected habitats or species, prepare plan to address those potential impacts.	Risk assessments evaluated and updated regularly. Separate plans for reducing risk.
		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.	Report "Biodiversitetshefte 2020" with species, redlist status for each species and referrals to relevant risk assessments. Report "Lokal miljøvurdering ved bruk av medikamentelle behandlinger" 03.07.2020 regarding potential impact by the use of medicament treatments. Risk assessments in Landax includes predators, escape, noise, lice, medicaments, light, exhaust, carbon dioxide, etc.

2.4.2	<p>Indicator: Allowance for the farm to be sited in a protected area [20] or High Conservation Value Areas [21] (HCVAs)</p> <p>Requirement: None [22]</p> <p>Applicability: All farms except as noted in [22]</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>The following exceptions shall be made for Indicator 2.4.2:</p> <p>Exception #1: For protected areas classified by the International Union for the Conservation of Nature (IUCN) as Category V or VI (these are areas preserved primarily for their landscapes or for sustainable resource management).</p> <p>Exception #2: For HCVAs if the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the HCVA designation. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the core reason an area has been identified as a HCVA.</p> <p>Exception #3: For farms located in a protected area if it was designated as such after the farm was already in operation and provided the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the protected area and it is in compliance with any relevant conditions or regulations placed on the farm as a result of the formation/designation of the protected area. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the core reason an area has been protected.</p> <p>Definitions</p> <p><u>Protected area:</u> “A clearly defined geographical space, recognized, dedicated and managed through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.”</p> <p><u>High Conservation Value Areas (HCVA):</u> Natural habitats where conservation values are considered to be of outstanding significance or critical importance. HCVA are designated through a multi-stakeholder approach that provides a systematic basis for identifying critical conservation values—both social and environmental—and for planning ecosystem management in order to ensure that these high conservation values are maintained or enhanced</p>	
		<p>a. Provide Geographical Information System (GIS) files according to ASC guidelines (see note above) showing the boundaries of the farm relative to nearby protected areas or High Conservation Value Areas (HCVAs) as defined above (see also 1.1.1a)</p>	<p>Not within conservation area, seen map from Norwegian Environment Agency with protected areas. GIS map reviewed during audit and coordinates verified in map database for HCVA's. Coordinates listed at Directorate of Fisheries: North 65.748267, East 12.540533 Coordinates listed at ASC GIS tool: North 65.748283, East 12.5405</p>
		<p>b. If the farm is <u>not</u> sited in a protected area or High Conservation Value Area as defined above, prepare a declaration attesting to this fact. In this case, the requirements of 2.4.2c-d do not apply.</p>	<p>Statement site not in HCVA, 29.11.2017 signed Odd Strøm - Nova Sea AS.</p>
		<p>c. If the farm <u>is</u> sited in a protected area or HCVA, review the scope of applicability of Indicator 2.4.2 (see Instructions above) to determine if your farm is allowed an exception to the requirements. If yes, inform the CAB which exception (#1, #2, or #3) is allowed and provide supporting evidence.</p>	<p>Not within HCVA</p>

		d. If the farm is sited in a protected area or HCVA and the exceptions provided for Indicator 2.4.2 <u>do not apply</u> , then the farm does not comply with the requirement and is ineligible for ASC certification.	Not within HCVA
Footnote	[20] Protected area: “A clearly defined geographical space, recognized, dedicated and managed through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values—both social and environmental—and for planning ecosystem management in order to ensure that these high conservation values are maintained or enhanced (http://www.hcvnetwork.org/)		
Footnote	[21] High Conservation Value Areas (HCVA): Natural habitats where conservation values are considered to be of outstanding significance or critical importance. HCVA are designated through a multi-stakeholder approach that provides values—both social and environmental—and for planning ecosystem management in order to ensure that these high conservation values are maintained or enhanced (http://www.hcvnetwork.org/)		
Footnote	<p>[22] The following exceptions shall be made for Standard 2.4.2:</p> <ul style="list-style-type: none">• For protected areas classified by the International Union for the Conservation of Nature (IUCN) as Category V or VI (these are areas preserved primarily for their landscapes or for sustainable resource management)• For HCVAs if the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the HCVA designation. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the conservation objectives of the HCVA.• For farms located in a protected area if it was designated as such after the farm was already in operation and provided the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the protected area. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the conservation objectives of the protected area.		
Criterion 2.5 Interaction with wildlife, including predators [23]			
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):
Footnote	[23] See Appendix VI for transparency requirements for 2.5.2, 2.5.5 and 2.5.6.		
2.5.1	Indicator: Number of days in the production cycle when acoustic deterrent devices (ADDs) or acoustic harassment devices (AHDs) were used Requirement: 0 Applicability: All	a. Compile documentary evidence to show that no ADDs or AHDs have been used by the farm.	Statement Bukkøya, Kalvhylla, Renga, Stokkasjøen and Rensøya N does not use ADD/AHD and will not use them in the future, 30.01.2018 signed Odd Strøm - Nova Sea AS.
			No ADD/AHD used.
		-	Verified not in use on site.
		a. Prepare a list of all predator control devices and their locations.	Procedure "Fellingstillatelse, avliving, dødsfall av predatorer og/eller røddlistearter og rapportering" 15.01.2021 includes welfare, written approval from production manager/daily manger, reporting, recording, etc. List "Røddlistearter (2015) i Nordland, relevante naturtyper" 04.03.2020 with endangered and critical species in the area.

2.5.2	Indicator: Number of mortalities [25] of endangered or red-listed [26] marine mammals or birds on the farm Requirement: 0 (zero) Applicability: All	b. Maintain a record of all predator incidents.	ASC dashboard at Nova Sea website for previous generations (17G and 19G) and present generation (21G) states 0 deaths of redlisted birds and mammals on this site. FishTalk site diary includes predator records 01.01.2020 - present, 0 mortalities of redlisted species.
		c. Maintain a record of all mortalities of marine mammals and birds on the farm identifying the species, date, and apparent cause of death.	ASC dashboard at Nova Sea website for previous generations (17G and 19G) and present generation (21G) states 0 deaths of redlisted birds and mammals on this site. FishTalk site diary includes predator records 01.01.2020 - present, 0 mortalities of redlisted species.
		d. Maintain an up-to-date list of endangered or red-listed marine mammals and birds in the area (see 2.4.1)	List "Røddlistearter (2015) i Nordland, relevante naturtyper" 04.03.2020 with endangered and critical species in the area.
		-	Submitted to ASC 29.01.2021
Footnote	[25] Mortalities: Includes animals intentionally killed through lethal action as well as accidental deaths through entanglement or other means.		
Footnote	[26] Species listed as endangered or critically endangered by the IUCN or on a national endangered species list.		
2.5.3	Indicator: Evidence that the following steps were taken prior to lethal action [27] against a predator: 1. All other avenues were pursued prior to using lethal action 2. Approval was given from a senior manager above the farm manager 3. Explicit permission was granted to take lethal action against the specific animal from the relevant regulatory authority Requirement: Yes [28] Applicability: All except cases where human safety is endangered as noted in [28]	a. Provide a list of all lethal actions that the farm took against predators during the previous 12-month period. Note: "lethal action" is an action taken to deliberately kill an animal, including marine mammals and birds.	Seen FishTalk log with 0 lethal actions since previous audit (SA2-2020).
		b. For each lethal action identified in 2.5.4a, keep record of the following: 1) a rationale showing how the farm pursued all other reasonable avenues prior to using lethal action; 2) approval from a senior manager above the farm manager of the lethal action; 3) where applicable, explicit permission was granted by the relevant regulatory authority to take lethal action against the animal.	No lethal actions taken at farm since previous audit (SA2-2020).
		c. Provide documentary evidence that steps 1-3 above (in 2.5.4b) were taken prior to killing the animal. If human safety was endangered and urgent action necessary, provide documentary evidence as outlined in [28].	No lethal actions taken at farm since previous audit (SA2-2020).
Footnote	[27] Lethal action: Action taken to deliberately kill an animal, including marine mammals and birds.		

Footnote	[28] Exception to these conditions may be made for a rare situation where human safety is endangered. Should this be required, post-incident approval from a senior manager should be made and relevant a		
<p style="text-align: center;">Instruction to Clients and CABs on Indicators 2.5.4, 2.5.5, and 2.5.6 - Clarification about the ASC Definition of "Lethal Incident"</p> <p>The ASC Salmon Standard has defined "Lethal incident" to include all lethal actions as well as entanglements or other accidental mortalities of non-salmonids [footnote 29]. For the purpose of assisting farms and auditors with understanding how to ev ASC has clarified this definition further:</p> <p style="text-align: center;">Total number of lethal Incidents = sum of all non-salmonid deaths arising from all lethal actions taken by the farm during a given time period</p> <p>There should be a 1:1 relationship between the number of animal deaths and the number of lethal incidents reported by the farm. For example, if a farm has taken one (1) lethal action in past last two years and that single lethal action resulted in killing within a two year period.</p> <p style="text-align: center;">The term "non-salmonid" was intended to cover any predatory animals which are likely to try to feed upon farmed salmon. In practice these animals will usually be seals or birds.</p>			
2.5.4	Indicator: Evidence that information about any lethal incidents [30] on the farm has been made easily publicly available [29] Requirement: Yes Applicability: All	a. For all lethal actions (see 2.5.3), keep records showing that the farm made the information available within 30 days of occurrence.	Company website (www.novasea.no) states 1 lethal incidents (1x Corvus corona cornix) on the 2017G. Company website (www.novasea.no) states 0 lethal incidents on the 2019G. Company website (www.novasea.no) states 0 lethal incidents on the 2021G.
		a. For all lethal actions (see 2.5.3), keep records showing that the farm made the information available within 30 days of occurrence.	Company website (www.novasea.no) states 1 lethal incidents (1x Corvus corona cornix) on the 2017G. Company website (www.novasea.no) states 0 lethal incidents on the 2019G. Company website (www.novasea.no) states 0 lethal incidents on the 2021G.
		b. Ensure that information about all lethal actions listed in 2.5.4a are made easily publicly available (e.g. on a website).	Company website (www.novasea.no) states 1 lethal incidents (1x Corvus corona cornix) on the 2017G. Company website (www.novasea.no) states 0 lethal incidents on the 2019G. Company website (www.novasea.no) states 0 lethal incidents on the 2021G.
Footnote	[29] Posting results on a public website is an example of “easily publicly available.” Shall be made available within 30 days of the incident and see Appendix VI for transparency requirem		

2.5.5	Indicator: Maximum number of lethal incidents [30] on the farm over the prior two years Requirement: < 9 lethal incidents [31], with no more than two of the incidents being marine mammals Applicability: All	a. Maintain log of lethal incidents (see 2.5.3a) for a minimum of two years. For first audit, > 6 months of data are required.	Company website (www.novasea.no) states 1 lethal incidents (1x Corvus corona cornix) on the 2017G. Company website (www.novasea.no) states 0 lethal incidents on the 2019G. Company website (www.novasea.no) states 0 lethal incidents on the 2021G.
		b. Calculate the total number of lethal incidents and the number of incidents involving marine mammals during the previous two year period.	Company website (www.novasea.no) states 1 lethal incidents (1x Corvus corona cornix) on the 2017G. Company website (www.novasea.no) states 0 lethal incidents on the 2019G. Company website (www.novasea.no) states 0 lethal incidents on the 2021G.
		c. Send ASC the farm's data for all lethal incidents [30] of any species other than the salmon being farmed (e.g. lethal incidents involving predators such as birds or marine mammals). Data must be sent to ASC on an ongoing basis (i.e. at least once per year and for each production cycle).	Submitted to ASC 29.01.2021
Footnote	[30] Lethal incident: Includes all lethal actions as well as entanglements or other accidental mortalities of non-salmonids.		
Footnote	[31] Standard 2.5.6 applicable to incidents related to non-endangered and non-red-listed species. This standard complements, and does not contradict, 2.5.3.		
2.5.6	Indicator: In the event of a lethal incident, evidence that an assessment of the risk of lethal incident(s) has been undertaken and demonstration of concrete steps taken by the farm to reduce the risk of future incidences Requirement: Yes Applicability: All	a. Keep records showing that the farm undertakes an assessment of risk following each lethal incident and how those risk assessments are used to identify concrete steps the farm takes to reduce the risk of future incidents.	Internal non-conformances registered for lethal incidents and risk assessment performed.
		b. Provide documentary evidence that the farm implements those steps identified in 2.5.6a to reduce the risk of future lethal incidents.	Risk assessments evaluated and updated yearly. Incidents registered and managed in non-conformance system.
PRINCIPLE 3: PROTECT THE HEALTH AND GENETIC INTEGRITY OF WILD POPULATIONS			
Criterion 3.1 Introduced or amplified parasites and pathogens [34, 35]			
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):
Footnote	[32] Farm sites for which there is no release of water that may contain pathogens into the natural (freshwater or marine) environment are exempt from the standards under Criterion		
Footnote	[33] See Appendix VI for transparency requirements for 3.1.1, 3.1.3, 3.1.4, 3.1.6 and 3.1.7.		

Instruction to Clients and CABs on Exemptions to Criterion 3.1 According to footnote [32], farm sites for which there is no release of water that may contain pathogens into the natural (freshwater or marine) environment are exempt from the requirements under Criterion 3.1. More specifically, farms are only eligible for exemption from Criterion 3.1 if it can be shown that either of the following holds: 1) the farm does not release any water to the natural environment; or 2) any effluent released by the farm to the natural environment has been effectively treated to kill pathogens (e.g. UV and/or chemical treatment of water with testing demonstrating efficacy). Auditors shall fully document the rationale for any such exemptions in the audit report.			
3.1.1	Indicator: Participation in an Area-Based Management (ABM) scheme for managing disease and resistance to treatments that includes coordination of stocking, fallowing, therapeutic treatments and information-sharing. Detailed requirements are in Appendix II-1. Requirement: Yes Applicability: All except farms that release no water as noted in [32]	a. Keep record of farm's participation in an ABM scheme.	ABM agreement "Samarbeide subregion Helgeland" for the area from Nord-Trøndelag to Meløy in Nordland, includes lice and treatments. Cooperation is managed by HaVet and cooperation between all farmers in the region. Agreement still in progress, seen production plan for subregion (from Bolga - Bindal) until 2020. Will be reviewed and approved in February 2021. Operation plan ("Driftsplan") for 2020 approved by Directorate of Fisheries 10.01.2020 for sites in Nova Sea AS, includes Hjartøy N, Hestholmen, Rensøy N, Skogsholmen, Buktodden NØ, Skonseng, Sundsøy, Stokkasjøen, Igerøy Ø, Klipen, Kalvhylla, Svinvær, Djupvik, Rendalsvik, Skolsvik, Isbergan, Meløysjøen, Teksmøna, Storvik, Kokvika, Kalvøya, Nordbotnet, Bukkøy Ø and Renga.
		b. Submit to the CAB a description of how the ABM (3.1.1a) coordinates management of disease and resistance to treatments, including: - coordination of stocking; - fallowing; - therapeutic treatments; and - information sharing.	Seen MoM from HaVet leading a meeting subregion Helgeland in 17.11.2020 regarding status, slice , lice, bio-security, agreement, etc. Participants: HaVet (secretary), Nova Sea, MOWI, Kobbvåglaks, LetSea, Seløy Sjøfarm, Lovundlaks, Selsøyvik Havbruk, Sinkaberg-Hansen, etc. Seen weekly lice report for Subregion Helgeland made by HaVet, updated for week 2 in 2021, includes lice numbers, treatments, temperature in zones. Includes data from all producers/sites in the area.
		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.	Seen MoM from HaVet leading a meeting subregion Helgeland in 17.11.2020 regarding status, slice , lice, bio-security, agreement, etc. Participants: HaVet (secretary), Nova Sea, MOWI, Kobbvåglaks, LetSea, Seløy Sjøfarm, Lovundlaks, Selsøyvik Havbruk, Sinkaberg-Hansen, etc. Seen weekly lice report for Subregion Helgeland made by HaVet, updated for week 2 in 2021, includes lice numbers, treatments, temperature in zones. Includes data from all producers/sites in the area.
		d. Submit dates of fallowing period(s) as per Appendix VI to ASC at least once per year.	Submitted to ASC 29.01.2021

3.1.2	<p>Indicator: A demonstrated commitment [34] to collaborate with NGOs, academics and governments on areas of mutually agreed research to measure possible impacts on wild stocks</p> <p>Requirement: Yes</p> <p>Applicability: All except farms that release no water as noted in [32]</p>	<p>Note: Indicator 3.1.2 requires that farms demonstrate a commitment to collaborate with NGOs, academics and governments on areas of mutually agreed research to measure possible impacts on wild stocks. If the farm does not receive any requests to collaborate on such research projects, the farm may demonstrate compliance by showing evidence of commitment through other proactive means such as published policy statements or directed outreach to relevant organizations.</p>	
		<p>a. Retain records to show how the farm and/or its operating company has communicated with external groups (NGOs, academics, governments) to agree on and collaborate towards areas of research to measure impacts on wild stocks, including records of requests for research support and collaboration and responses to those requests.</p>	<p>Project "Elveovervåking Helgeland" regarding status for anadromous fish stocks in an assumed farming influenced area. Seen project description with participants from Nova Sea, Ferskvannsbiologen and Skandinavisk naturovervåking, signed by Nova Sea, Lovundlaks, Kvarøy fiskeoppdrett, 05.07.2017 regarding financial contribution.</p> <p>Project regarding spawning area in Nordland ("Nordland 2023"), cooperates with GIFAS and Norsk Villaksforvaltning.</p> <p>Participation in project "Marin overvåking Nordland" regarding the influence of farming, with e.g. Akvaplan NIVA, NCE Aquaculture, NINA and University in Nordland. Contributes with man-hours, samples, equipment and financial.</p> <p>Participation in project group in project "Automatisk sorteringsanlegg for anadrom fisk" together with Mosjøen og Omegn Næringsutvikling and Kunnskapsparken Helgeland. Both participation and economic support.</p> <p>Supports master thesis (access to equipment and sites) at University in Nordland.</p> <p>Stated on GIFAS website: GIFAS cooperates with Sundsfjord Smolt.</p> <p>Project "Climefish", financed by European Union. Nova Sea AS delivers data from 7 sites to Nofima. Presentation "Climate change and salmon aquaculture" presented at Arctic Frontiers, Tromsø 20-24. January 2019.</p> <p>Company delivers data to Barentswatch which is a source for data for research, etc.</p>
		<p>b. Provide non-financial support to research activities in 3.1.2a by either:</p> <ul style="list-style-type: none"> - providing researchers with access to farm-level data; - granting researchers direct access to farm sites; or - facilitating research activities in some equivalent way. 	<p>Some of the projects described in 3.1.2 a. includes non-financial support.</p>
		<p>c. When the farm and/or its operating company denies a request to collaborate on a research project, ensure that there is a written justification for rejecting the proposal.</p>	<p>Not denied projects from NGOs, academics and governments in 2016 to so far in 2020.</p> <p>Procedure "Forskningssamarbeid" 11.09.2019 regarding a documented process for handling research requests and cooperation.</p>

		<p>d. Maintain records from research collaborations (e.g. communications with researchers) to show that the farm has supported the research activities identified in 3.1.2a.</p>	<p>Project "Elveovervåking Helgeland" regarding status for anadromous fish stocks in an assumed farming influenced area. Seen project description with participants from Nova Sea, Ferskvannsbiologen and Skandinavisk naturovervåking, signed by Nova Sea, Lovundlaks, Kvarøy fiskeoppdrett, 05.07.2017 regarding financial contribution.</p> <p>Project regarding spawning area in Nordland ("Nordland 2023"), cooperates with GIFAS and Norsk Villaksforvaltning. Seen minutes of meeting 26.-27-08-2019 from Norsk Villaksforvaltning 12.09.2019. Seen agreement between Nova Sea and the project owner signed 05.10.2020.</p> <p>Participation in project "Marin overvåking Nordland" regarding the influence of farming, with e.g. Akvaplan NIVA, NCE Aquaculture, NINA and University in Nordland. Contributes with man-hours, samples, equipment and financial. Seen email from M.J. - NCE Aquaculture 04.10.2017 regarding the project.</p> <p>Supports master thesis (access to equipment and sites) at University in Nordland. Seen master thesis May 2013 naming O.A.F. and S.A. - Nova Sea AS as fatnes og Stian Amble.</p> <p>Stated on GIFAS website: GIFAS cooperates with Sundsfjord Smolt.</p> <p>Project "Climefish", financed by European Union. Nova Sea AS delivers data from 7 sites to Nofima. Seen email from researcher at University of Stirling 05.03.2020 regarding data from Nova Sea AS.</p> <p>Company delivers data to Barentswatch which is a source for data for research, etc.</p>
Footnote	[34] Commitment: At a minimum, a farm and/or its operating company must demonstrate this commitment through providing farm-level data to researchers, granting researchers access to sites, or other similar non-f		
	<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>a. Keep records to show that a maximum sea lice load has been set for:</p> <ul style="list-style-type: none"> - the entire ABM; and - the individual farm. 	<p>Norwegian Food Safety Authority set limits and governmental treatment regime for site and ABM, while ABM/HaVet define actual operations and treatment regime. Sea lice load reported to AltInn weekly and made public on www.barentswatch.no. ABM/HaVet reports status in area monthly to participating companies.</p>
		<p>b. Maintain evidence that the established maximum sea lice load (3.1.3a) is reviewed annually as outlined in Appendix II-2, incorporating feedback from the monitoring of wild salmon where applicable (See 3.1.6).</p>	<p>Sea lice load reported to AltInn weekly and made public on www.barentswatch.no. ABM/HaVet reports status in area monthly to participating companies.</p> <p>No monitoring of wild salmon allowed, feedback from governmental monitoring of wild salmon incorporated.</p>

3.1.3	Requirement: Yes Applicability: All except farms that release no water as noted in [32]	c. Provide the CAB access to documentation which is sufficient for the auditor to evaluate whether the ABM has set (3.1.3a) and annually reviewed (3.1.3.b) maximum sea lice load in compliance with requirements in Appendix II-2.	NFSA set limits and governmental treatment regime for site and ABM. Recorded in FishTalk, and automatic reported to Altinn weekly. Max. 0,41 mature female lice per fish in 2020 (legal limit 0,5). In sensitive period 2020 (week 21-26), max. 0,07 mature female lice per fish (legal limit 0,2). Max. 0,00 mature female lice per fish (week 1) from week 1 in 2021 (legal limit 0,5). See 3.1.7 for sensitive period.
		d. Submit the maximum sea lice load for the ABM to ASC as per Appendix VI at least once per year.	Submitted to ASC 29.01.2021
3.1.4	Indicator: Frequent [35] on-farm testing for sea lice, with test results made easily publicly available [36] within seven days of testing Requirement: Yes Applicability: All except farms that release no water as noted in [32]	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).	Procedure "Kontroll og bekjempelse av lakselus" 08.02.2020 states counting of lice on 20 fish per cage in week 19 to 26, and counting of lice on 10 fish per cage in week 27 to 18. Counting of lice according to regulation "Lakselusforskriften" and guidance to the regulation. Average from count in each cage reported to governments. Includes ASC limit of 0,2 in sensitive period after July 2019. Seen weekly report with ASC limit in sensitive period.
		b. Maintain records of results of on-farm testing for sea lice. If farm deviates from schedule due to weather [35] maintain documentation of event and rationale.	Sea lice load reported to Altinn weekly and made public on www.barentswatch.no . No missing data in 2020- so far in 2021.
		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.	Procedure "Kontroll og bekjempelse av lakselus" 08.02.2020 states counting of lice on 20 fish per cage in week 19 to 26, and counting of lice on 10 fish per cage in week 27 to 18. Counting of lice according to regulation "Lakselusforskriften" and guidance to the regulation. Average from count in each cage reported to governments. Includes ASC limit of 0,2 in sensitive period after July 2019. Seen weekly report with ASC limit in sensitive period.
		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.	Reported weekly to Altinn. Results available at www.barentswatch.no (also link to Barentswatch on company website).
		e. Keep records of when and where test results were made public.	Sea lice load reported to Altinn weekly and made public on www.barentswatch.no .

		f. Submit test results to ASC (Appendix VI) at least once per year.	Submitted to ASC 29.01.2021
Footnote	[35] Testing must be weekly during and immediately prior to sensitive periods for wild salmonids, such as outmigration of wild juvenile salmon. Testing must be at least monthly during the rest of the year, unless water temperature is so low that sea lice are unlikely to be a problem (below 4 degrees C). Within closed production systems, alternative methods for monitoring sea lice, such as video monitoring, may be used.		
Footnote	[36] Posting results on a public website is an example of “easily publicly available.”		
3.1.5	<p>Indicator: In areas with wild salmonids [37], evidence of data [38] and the farm’s understanding of that data, around salmonid migration routes, migration timing and stock productivity in major waterways within 50 kilometers of the farm</p> <p>Requirement: Yes</p>	<p>Instruction to Clients for Indicator 3.1.5 - Evidence for Wild Salmonid Health and Migration</p> <p>In writing this indicator, the SAD Steering Committee concluded that relevant data sets on wild salmonid health and migration are publicly available in the vast majority of, if not all, jurisdictions with wild salmonids. The information is likely to come from government sources or from research institutions. Therefore farms are not responsible for conducting this research themselves. However farms must demonstrate that they are aware of this basic information in their region, as such information is needed to make management decisions related to minimizing potential impact on those wild stocks.</p> <p>This Indicator requires collection and understanding of general data for the major watersheds within approximately 50 km of the farm. A farm does not need to demonstrate that there is data for every small river or tributary or subpopulation. Information should relate to the wild fish stock level, which implies that the population is more or less isolated from other stocks of the same species and hence self-sustaining. A "conservation unit" under the Canadian Wild Salmon Policy is an example of an appropriate fish stock-level definition. However, it must be recognized that each jurisdiction may have slight differences in how a wild salmonid stock is defined in the region.</p> <p>For purposes of these standards, “areas with wild salmonids” are defined as areas within 75 kilometers of a wild salmonid migration route or habitat. This definition is expected to encompass all, or nearly all, of salmon-growing areas in the northern hemisphere [39]. Potentially affected species in these areas are salmonids (i.e. including all trout species). Where a species is not natural to a region (e.g. Atlantic or Pacific Salmon in Chile) the areas are not considered as "areas with wild salmonids" even if salmon have escaped from farms and established themselves as a reproducing species in “the wild”.</p> <p>Farms do not need to conduct research on migration routes, timing and the health of wild stocks under this standard if general information is already available. Farms must demonstrate an understanding of this information at the general level for salmonid populations in their region, as such information is needed to make management decisions related to minimizing potential impact on those stocks. Such “evidence” would consist of, for example, peer review studies; publicly available government monitoring and reporting.</p>	
		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.	Salmo salar naturally occurring in area.

	Applicability: All farms operating in areas with wild salmonids except farms that release no water as noted in [32]	<p>b. For species listed in 3.1.5a, compile best available information on migration routes, migration timing (range of months for juvenile outmigration and returning salmon), life history timing for coastal resident salmonids, and stock productivity over time in major waterways within 50 km of the farm.</p>	<p>Reports "Beiarnelva og Saltdalselva" 2008 - 2012 by Norwegian Institute for Nature Research, "Oppvandring av anadrom laksefisk i 10 vassdrag i Nordland i 2012 - en vurdering av innslag av rømt oppdrettsfisk" by Ferskvannsbiologen and "Sluttrapport til Mattilsynet av lakselussituasjonen på vill laksefisk langs Norskekysten i 2011" by Institute of Marine Research. Risk report "Risikorapport Norsk fiskeoppdrett 2020" by IMR. Seen Map from "lakseregisteret" by Norwegian Environment Agency as basis for map with farm and an area of 80 km around (includes salmon rivers/waterways). Report from NFSA to IMR "Lakselusinfestasjon på vill laksefisk langs Norgeskysten 2020" Participates in research project regarding lice on wild salmon (Sila/Flostrand), report SNA 10/2020 "Video overvåking av anadrom laksefisk i Sila- og Flostrandvassdraget i 2019".</p>
		<p>c. From data in 3.1.5b, identify any sensitive periods for wild salmonids (e.g. periods of outmigration of juveniles) within 50 km of the farm.</p>	<p>Sensitive period defined in regulation "Forskrift om bekjempelse av lakselus i akvakulturanlegg", states less than 0,2 adult female lice per fish from Monday week 21 to Sunday week 26.</p>
		-	<p>Sufficient awareness demonstrated in interview.</p>
Footnote	<p>[37] For purposes of these standards, “areas with wild salmonids” are defined as areas within 75 kilometers of a wild salmonid migration route or habitat. This definition is expected to encompass all, or nearly all, of salmon-</p>		
Footnote	<p>[38] Farms do not need to conduct research on migration routes, timing and the health of wild stocks under this standard if general information is already available. Farms must demonstrate an understanding of this information at the g such information is needed to make management decisions related to minimizing potential impact on those stocks.</p>		
		<p>a. Inform the CAB if the farm operates in an area of wild salmonids. If not, then Indicator 3.1.6 does not apply.</p>	<p>Salmo salar naturally occurring in area.</p>
		<p>b. Keep records to show the farm participates in monitoring of sea lice on wild salmonids.</p>	<p>Private interference with wild salmonids prohibited by law. Participates in research project regarding lice on wild salmon (Sila/Flostrand).</p>

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 [32]</p>	c. Provide the CAB access to documentation which is sufficient for the auditor to evaluate whether the methodology used for monitoring of sea lice on wild salmonids is in compliance with the requirements in Appendix III-1.	Reports "Beiarnelva og Saltdalselva" 2008 - 2012 by Norwegian Institute for Nature Research, "Oppvandring av anadrom laksefisk i 10 vassdrag i Nordland i 2012 - en vurdering av innslag av rømt oppdrettsfisk" by Ferskvannsbiologen and "Sluttrapport til Mattilsynet av lakselussituasjonen på vill laksefisk langs Norskekysten i 2011" by Institute of Marine Research. Risk report "Risikorapport Norsk fiskeoppdrett 2020" by IMR. Seen Map from "lakseregisteret" by Norwegian Environment Agency as basis for map with farm and an area of 80 km around (includes salmon rivers/waterways). Report from NFSA to IMR "Lakselusinfestasjon på vill laksefisk langs Norgeskysten 2020" Participates in research project regarding lice on wild salmon (Sila/Flostrand), report SNA 10/2020 "Video overvåking av anadrom laksefisk i Sila- og Flostrandvassdraget i 2019".
		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.	Official map at https://lakseregisteret.fylkesmannen.no/ Reports at www.nina.no and www.imr.no .
		e. Submit to ASC the results from monitoring of sea lice levels on wild salmonids as per Appendix VI.	Private interference with wild salmonids prohibited by law.
3.1.7	<p>Indicator: In areas of wild salmonids, maximum on-farm lice levels during sensitive periods for wild fish [39]. See detailed requirements in Appendix II, subsection 2.</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 [32]</p>	a. Inform the CAB if the farm operates in an area of wild salmonids. If not, then Indicator 3.1.7 does not apply.	Salmo salar naturally occurring in area.
		b. Establish the sensitive periods [39] of wild salmonids in the area where the farm operates. Sensitive periods for migrating salmonids is during juvenile outmigration and approximately one month before.	Sensitive period defined in regulation "Forskrift om bekjempelse av lakselus i akvakulturanlegg", states less than 0,2 adult female lice per fish from Monday week 21 to Sunday week 26.
		c. Maintain detailed records of monitoring on-farm lice levels (see 3.1.4) during sensitive periods as per Appendix II-2.	In sensitive period 2020 (week 21-26), max. 0,07 mature female lice per fish (legal limit 0,2).
		d. Provide the CAB with evidence there is a 'feedback loop' between the targets for on-farm lice levels and the results of monitoring of lice levels on wild salmonids (Appendix II-2).	Continuos wild fish sealice monitoring not possible (not allowed according to national legislation). Monitoring done by governmental research institutes. Direct feedback loop hence impossible to obtain.
Footnote	[39] 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 ASC Salmon standard</p> <p>Requirement: Yes [40]</p> <p>Applicability: All farms except as noted in [40]</p>	<p>Note: For the purposes of Indicator 3.2.1, "area" is defined as a contiguous body of water with the bio-chemical and temperature profile required to support the farmed species' life and reproduction (e.g. the Northern Atlantic Coast of the U.S. and Canada). Appendix II-1A elaborates further on this definition: "The boundaries of an area should be defined, taking into account the zone in which key cumulative impacts on wild populations may occur, water movement and other relevant aspects of ecosystem structure and function." The intent is that the area relates to the spatial extent that is likely to be put at risk from the non-native salmon. Areas will only rarely coincide with the boundaries of countries.</p>	
		a. Inform the CAB if the farm produces a non-native species. If not, then Indicator 3.2.1 does not apply.	Salmo salar is native in the region. Cyclopterus lumpus is native in the region.
		b. Provide documentary evidence that the non-native species was widely commercially produced in the area before June 13, 2012.	Salmo salar is native in the region. Cyclopterus lumpus is native in the 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.	Salmo salar is native in the region. Cyclopterus lumpus is native in the 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 [40]; and 3) barriers ensure there are no escapes of biological material [40] that might survive and subsequently reproduce (e.g. UV or other effective treatment of any effluent water exiting the system to the natural environment).	Salmo salar is native in the region. Cyclopterus lumpus is native in the region.
		-	Salmo salar is native in the region. Cyclopterus lumpus is native in the region.
Footnote	[40] Exceptions shall be made for production systems that use 100 percent sterile fish or systems that demonstrate separation from the wild by effective physical barriers that are in place and well-maintained to ensure no escapes of re and subsequently reproduce.		
		<p>Instruction to Clients for Indicator 3.2.2 - Exceptions to Allow Production of Non-Native Species</p> <p>Farms have had five years to demonstrate compliance with this standard from the time of publication of the ASC Salmon Standard (i.e. full compliance by June 13, 2017). Farms are exempt from this standard if they are in a jurisdiction where the non-native species became established prior to farming activities in the area and the following three conditions are met: eradication would be impossible or have detrimental environmental effects; the introduction took place prior to 1993 (when the Convention on Biological Diversity (CBD) was ratified); the species is fully self-sustaining.</p> <p>Note: For the purposes of Indicator 3.2.2, "jurisdiction" is defined the same as "area" in 3.2.1.</p>	

3.2.2	Indicator: If a non-native species is being produced, evidence of scientific research [41] completed within the past five years that investigates the risk of establishment of the species within the farm’s jurisdiction and these results submitted to ASC for review [42] Requirement: Yes Applicability: All [43]	a. Inform the ASC of the species in production (Appendix VI).	Submitted to ASC 29.01.2021
		b. Inform the CAB if the farm produces a non-native species. If not, then Indicator 3.2.2 does not apply.	Salmo salar is native in the region. Cyclopterus lumpus is native in the region.
		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).	Salmo salar is native in the region. Cyclopterus lumpus is native in the 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.	Salmo salar is native in the region. Cyclopterus lumpus is native in the region.
		e. Submit evidence from 3.2.2c to ASC for review.	Salmo salar is native in the region. Cyclopterus lumpus is native in the region.
		Footnote	[41] The research must at a minimum include multi-year monitoring for non-native farmed species, use credible methodologies and analysis, and undergo peer review.
Footnote	[42] If the review demonstrates there is increased risk, the ASC will consider prohibiting the certification of farming of non-native salmon in that jurisdiction under this standard. In the event that the risk tools demonstrate “high” risks, the ASC will consider prohibiting the certification of farming of non-native salmon in that jurisdiction. The ASC intends to bring this evidence into future revision of the standard and those results taken forward into the revision process.		
Footnote	[43] Farms are exempt from this standard if they are in a jurisdiction where the non-native species became established prior to farming activities in the area and the following three conditions are met: eradication would be impossible or too costly; the species is fully self-sustaining; and the species was not introduced by the farm. The ASC intends to bring this evidence into future revision of the standard and those results taken forward into the revision process.		
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.	Salmo salar is native in the region. Cyclopterus lumpus is native in the 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.	Health report by HaVet 04.12.2020 for lumpfish at Nordland Rensefisk. Freight letter 14.12.2020 for deliver of cleanerfish from Nordland Rensefisk to Kalvhylla.
		c. Collect documentary evidence or first hand accounts as evidence that the species used is not non-native to the region.	Salmo salar is native in the region. Cyclopterus lumpus is native in the 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 [44] salmon by the farm Requirement: None Applicability: All	a. Prepare a declaration stating that the farm does not use transgenic salmon.	Nova Sea policy "Nova Sea konsernpolitikk for mattrygghet, dyrevelferd, kvalitet, miljø, energi og klima" approved by Tom Eirik Aasjord 11.01.2021, states no use of genmodified fish or feed.
		b. Maintain records for the origin of all cultured stocks including the supplier name, address and contact person(s) for stock purchases.	AquaGen statement, 12.01.2021, FL - AquaGen, no GM.
		c. Ensure purchase documents confirm that the culture stock is not transgenic.	Purchase only smolt of AquaGen origin.
Footnote	[44] Transgenic: Containing genes altered by insertion of DNA from an unrelated organism. Taking genes from one species and inserting them into another species to get		
Criterion 3.4 Escapes [47]			
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):
Footnote	[45] 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 [46] in the most recent production cycle Requirement: 300 [47] Applicability: All farms except as noted in [47]	a. Maintain monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapees.	No escapes registered in the period 2009 - today. Documented by report from company and register at Directorate of Fisheries (www.fiskeridir.no).
		b. Aggregate cumulative escapes in the most recent production cycle.	0 escapes in the most recent production cycle.
		c. Maintain the monitoring records described in 3.4.1a for at least 10 years beginning with the production cycle for which farm is first applying for certification (necessary for farms to be eligible to apply for the exception noted in [47]).	No escapes registered in the period 2009 - today. Documented by report from company and register at Directorate of Fisheries (www.fiskeridir.no).
		d. If an escape episode occurs (i.e. an incident where > 300 fish escaped), the farm may request a rare exception to the Standard [47]. Requests must provide a full account of the episode and must document how the farm could not have predicted the events that caused the escape episode.	No escapes registered in the period 2009 - today. Documented by report from company and register at Directorate of Fisheries (www.fiskeridir.no).
		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).	Submitted to ASC 29.01.2021
Footnote	[46] Farms shall report all escapes; the total aggregate number of escapees per production cycle must be less than 300 fish. Data on date of escape episode(s), number of fish escaped and cause of escape episode shall		

Footnote	[47] A rare exception to this standard may be made for an escape event that is clearly documented as being outside the farm's control. Only one such exceptional episode is allowed in a 10-year period for the purposes of this standard production cycle for which the farm is applying for certification. The farmer must demonstrate that there was no reasonable way to predict the events that caused the episode. See auditing guidance 1		
3.4.2	Indicator: Accuracy [48] of the counting technology or counting method used for calculating stocking and harvest numbers Requirement: ≥ 98% Applicability: All	a. Maintain records of accuracy of the counting technology used by the farm at times of stocking and harvest. Records include copies of spec sheets for counting machines and common estimates of error for hand-counts.	Counting performed at FW site, vaccination numbers used for stocking number at sea net cage. Final accurate numbers at harvest plant where individual fish is handled and registered. Statement from Vaki 98 - 100% accuracy (vaccine machines "Macro and Micro"), machines used by Helgeland Smolt and Sundsfjord Smolt. Statement from AquaScan fishcounter (1 - 30 kg) 98 - 100% accuracy, machines used by wellboat. Fishcounter at calibrated and adjusted, control shows deviation of 1,3% (4 deliveries by Novatrans).
		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).	Vaccination numbers in FW used as accurate number stocked.
		c. During audits, arrange for the auditor to witness calibration of counting machines (if used by the farm).	Counting not performed at site
		-	Counting performed at FW site, vaccination numbers used for stocking number at sea net cage. Final accurate numbers at harvest plant where individual fish is handled and registered. Statement from Vaki 98 - 100% accuracy (vaccine machines "Macro and Micro"), machines used by Helgeland Smolt and Sundsfjord Smolt. Statement from AquaScan fishcounter (1 - 30 kg) 98 - 100% accuracy, machines used by wellboat. Fishcounter at calibrated and adjusted, control shows deviation of 1,3% (4 deliveries by Novatrans).
		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).	Submitted to ASC 29.01.2021
Footnote	[48] Accuracy shall be determined by the spec sheet for counting machines and through common estimates of error for any hand-counts.		
		Instruction to Clients for Indicator 3.4.3 - Calculation of Estimated Unexplained Loss The Estimated Unexplained Loss (EUL) of fish is calculated at the end of each production cycle as follows: $EUL = (\text{stocking count}) - (\text{harvest count}) - (\text{mortalities}) - (\text{recorded escapes})$ Units for input variables are number of fish (i.e. counts) per production cycle. Where possible, farms should use the pre-smolt vaccination count as the stocking count. This formula is adapted from footnote 59 of the ASC Salmon Standard.	

3.4.3	Indicator: Estimated unexplained loss [49] of farmed salmon is made publicly available Requirement: Yes Applicability: All	a. Maintain detailed records for mortalities, stocking count, harvest count, and escapes (as per 3.4.1).	Specific site reports and records documented and available in production and recording system.
		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.	EUL 19G: -0,47% EUL 21G: not harvested yet.
		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.	Seen on ASC dashboard at company website, www.novasea.no
		d. Submit estimated unexplained loss to ASC as per Appendix VI for each production cycle.	Submitted to ASC 29.01.2021
		-	EUL within normal range.
Footnote	[49] Calculated at the end of the production cycle as: Unexplained loss = Stocking count – harvest count – mortalities – other known escapes. Where possible, use of the pre-smolt vaccination count as the s		
	Indicator: Evidence of escape prevention planning and related employee training, including: net strength	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.	Procedure "Forebygge og avdekke rømming" 17.10.2018 regarding escape prevention and to discover escape. Not reviewed within 17.09.2020 (internal limit for review). Contingency plans at site includes escape limitation, information, actions, catch, reporting, measures and evaluation.
		b. If the farm operates an open (net pen) system, ensure the plan (3.4.4a) covers the following areas: - net strength testing; - appropriate net mesh size; - net traceability; - system robustness; - predator management; - record keeping; - reporting risk events (e.g. holes, infrastructure issues, handling errors); - planning of staff training to cover all of the above areas; and - planning of staff training on escape prevention and counting technologies.	Procedure "Drift og vedlikehold av flytekrager, hamsterhjul, m.m." 13.07.2020 regarding equipment, inspection and documentation. Procedure "Bruk av kulerekke" 23.04.2020 regarding use of line with buoys. Procedure "Prosedyre for notvask, inspeksjon og reparasjon av nøter" 29.10.2020 regarding net inspection, cleaning and repair. Procedure "Oppfølging ekstrauststyr i tilknytting til merd" 12.11.2020" regarding use of extra equipment on farm. Procedures refers to "Brukerhåndbok" for specific measures per equipment. In Nova Sea only personnel with certificate of apprenticeship or escape prevention training can inspect farm.

3.4.4	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	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.	Open system
	Requirement: Yes		
	Applicability: All	d. Maintain records as specified in the plan.	Farm certificate "261.01" by DNV GL valid 05.05.2017 - 04.05.2022. In e.g. cage 1 / frame D: ring 5967 and net 9060 (Service card from Egersund Net 01.12.2020 valid for 12 months). Inspections of farm recorded in Havbruksloggen, no inspections listed as overdue. Outdated contingency plan "Beredskapsplan rømming" seen on barge (to be revised within 17.09.2020).
		e. Train staff on escape prevention planning as per the farm's plan.	Escape prevention training or certificate of apprenticeship needed for staff performing inspection of site. Seen examples of certificate of apprenticeship/escape prevention training.
		-	Verified during interview.
PRINCIPLE 4: USE RESOURCES IN AN ENVIRONMENTALLY EFFICIENT AND RESPONSIBLE MANNER			
Criterion 4.1 Traceability of raw materials in feed			
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):

Instruction to Clients for Indicators 4.1.1 through 4.4.2 - Sourcing of Responsibly Produced Salmon Feeds

Farms must show that all feeds used by the farm are produced in compliance with the requirements of Indicators 4.1.1 through 4.4.4. To do so, farms must obtain documentary evidence that the feed producers (see note 1) are audited at regular intervals by an independent auditing firm or a conformity assessment body against a recognized standard which substantially incorporate requirements for traceability. Acceptable certification schemes include GlobalGAP or other schemes that have been acknowledged by the ASC (see 4.1.1c below). Results from these audits shall demonstrate that feed producers have robust information systems and information handling processes to allow the feed producers to be able to bring forward accurate information about their production and supply chains. Declarations from the feed producer that are provided to the farm to demonstrate compliance with these indicators must be supported by the audits. Farms must also show that all of their feed producers are duly informed of the requirements of the ASC Salmon Standard relating to sourcing of responsibly produced salmon feed (see 4.1.1b below).

In addition to the above, farms must also show that their feed suppliers comply with the more detailed requirements for traceability and ingredient sourcing that are specified under indicators 4.1.1 through 4.4.2. The ASC Salmon Standard allows farms to use one of two different methods to demonstrate compliance of feed producers:

Method #1: Farms may choose to source feed from feed producers who used only those ingredients allowed under the ASC Salmon Standards during the production of a given batch of feed. For example, the farm may request its feed supplier to produce a batch of feed according to farm specifications. Audits of the feed producer will independently verify that manufacturing processes are in compliance with ASC requirements.

Method #2: Farms may choose to source feed from feed producers who demonstrate compliance using a "mass-balance" method. In this method, feed producers show that the balance of all ingredients (both amount and type) used during a given feed production period meets ASC requirements. However, mixing of ingredients into the general silos and production lines is allowed during manufacturing. Audits of the feed producer will independently verify that manufacturing processes are in compliance with ASC requirements. The mass balance method can be applied, for example, to integrated feed production companies that handle all steps of feed manufacturing (purchasing of raw materials, processing to finished feed, and sales) under the management of a single legal entity.

Note 1: The term "feed producer" is used here to identify the organization that produces the fish feed (i.e. it is the "feed manufacturer"). In most cases, the organization supplying feed to a farm (i.e. the feed supplier) will be the same organization that produced the feed, but there may be instances where feed suppliers are not directly responsible for feed production. Regardless of whether the farm sources feeds directly from a feed producer or indirectly through an intermediary organization, it remains the farm's obligation to show evidence that all feeds used are in compliance with requirements.

		a. Maintain detailed records of all feed suppliers and purchases including contact information and purchase and delivery records.	Last complete generation (19G): 6 063 500 (100% Havsbrun) Present generation (21G), not harvested: 100% EWOS Havsbrun: www.havsbrun.fo Cargill: www.cargill.com
		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.	Feed suppliers informed of relevant ASC requirements in mail to Skretting 09.11.2017. Feed suppliers informed of relevant ASC requirements in mail to Cargill 30.07.2018 and 08.01.2021. Feed suppliers informed of relevant ASC requirements in mail to Havsbrun 10.02.2020.
Indicator: Evidence of traceability, demonstrated by the feed producer, of feed ingredients that make up more			

4.1.1	than 1% of the feed [50].		
	Requirement: Yes		
	Applicability: All	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.	Cargill: GlobalG.A.P. certified, GGN 4050373825744, valid to 16.06.2021. Havsbrun: GlobalG.A.P. certified, GGN 4050373218515, valid to 03.04.2021.
		d. For each feed producer, determine whether the farm will use method #1 or method #2 (see Instructions above) to show compliance of feed producers. Inform the CAB in writing.	Method #2
		e. Obtain declaration from feed supplier(s) stating that the company can assure traceability of all feed ingredients that make up more than 1% of the feed to a level of detail required by the ASC Salmon Standard [50].	EWOS/Cargill: "ERKLÆRING Dokumentasjon og informasjon om fôr levert iht. ASC" 12.01.2021. Havsbrun: "Statement on compound fish feed 2020".
		-	Statement and certificate verified.
Footnote	[50] Traceability shall be at a level of detail that permits the feed producer to demonstrate compliance with the standards in this document (i.e., marine raw ingredients must be traced back to the fishery, soy to the region grown, etc.) third-party documentation of the ingredients covered under this standard.		
Criterion 4.2 Use of wild fish for feed [51]			
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):
Footnote	[51] See Appendix VI for transparency requirements for 4.2.1 and 4.2.2.		
		<div>Instruction to Clients for Indicator 4.2.1 - Calculation of FFDRm</div> <div>Farms must calculate the Fishmeal Forage Fish Dependency Ration (FFDRm) according to formula presented in Appendix IV-1 using data from the most recent complete production cycle. Farms must have maintained sufficient information in order to make an accurate calculation of FFDRm as outlined below. For first audits, farms may be exempted from compliance with Indicator 4.2.1 if the FFDRm of the most recent crop was > 1.2) if the farm can satisfactorily demonstrate to the auditor that:</div> <div><div>- the client understands how to accurately calculate FFDRm;</div><div>- the client maintains all information needed to accurately calculate FFDRm (i.e. all feed specs for > 6 months) for the current production cycle;</div><div>- the client can show how feed used for the current production cycle will ensure that the farm will meet requirements at harvest (i.e. the client can show the feed used for the current production cycle will ensure that the farm will meet requirements at harvest).</div></div>	

4.2.1	<p>Indicator: Fishmeal Forage Fish Dependency Ratio (FFDRm) for grow-out (calculated using formulas in Appendix IV- 1)</p> <p>Requirement: < 1.2</p> <p>Applicability: All</p>	<p>a. Maintain a detailed inventory of the feed used including:</p> <ul style="list-style-type: none"> - Quantities used of each formulation (kg); - Percentage of fishmeal in each formulation used; - Source (fishery) of fishmeal in each formulation used; - Percentage of fishmeal in each formulation derived from trimmings; and - Supporting documentation and signed declaration from feed supplier. 	<p>Last complete generation (19G): 6 063 500 (100% Havsbrun)</p> <p>Havsbrun: 19,34% weighted fishmeal inclusion (excl. trimmings) and 24% fishmeal yield</p> <p>Havsbrun: "Statement on compound fish feed 2020" and "FFDR Nova Sea 2019G Skonseng Kalvhylla Stokkasjøen".</p>
		<p>b. For FFDRm calculation, exclude fishmeal derived from rendering of seafood by-products (e.g. the "trimmings" from a human consumption fishery.</p>	<p>Havsbrun: 19,34% weighted fishmeal inclusion (excl. trimmings) and 24% fishmeal yield</p>
		<p>c. Calculate eFCR using formula in Appendix IV-1 (use this calculation also in 4.2.2 option #1).</p>	<p>Previous full cycle 2019G: eFCR 1,09</p>
		<p>d. Calculate FFDRm using formulas in Appendix IV-1.</p>	<p>Previous full cycle 2019G: FFDRm 0,93</p>
		<p>e. Submit FFDRm to ASC as per Appendix VI for each production cycle.</p>	<p>Submitted to ASC 29.01.2021</p>
4.2.2	<p>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 [52] (calculated according to Appendix IV-2)</p> <p>Requirement: FFDRo < 2.52 or (EPA + DHA) < 30 g/kg feed</p>	<p>Note: Under Indicator 4.2.2, farms can choose to calculate FFDRo (Option #1) or EPA & DHA (Option #2). Farms do not have to demonstrate that they meet both threshold values. Client shall inform the CAB which option they will use.</p>	
		<p>a. Maintain a detailed inventory of the feed used as specified in 4.2.1a.</p>	<p>Last complete generation (19G): 6 063 500 (100% Havsbrun)</p> <p>Havsbrun: 8,12% weighted fishoil inclusion (excl. trimmings) and 7% fishoil yield.</p>
		<p>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.</p>	<p>Havsbrun: 8,12% weighted fishoil inclusion (excl. trimmings) and 7% fishoil yield.</p>
		<p>c. Inform the CAB whether the farm chose option #1 or option #2 to demonstrate compliance with the requirements of the Standard.</p>	<p>Option 1</p>

	Applicability: All	d. For option #1, calculate FFDRo using formulas in Appendix IV-1 and using the eFCR calculated under 4.2.1c.	Previous full cycle 2019G: FFDRo 1,33
		e. For option #2, calculate amount of EPA + DHA using formulas in Appendix IV-2.	Option 1
		f. Submit FFDRo or EPA & DHA to ASC as per Appendix VI for each production cycle.	Submitted to ASC 29.01.2021
Footnote	[52] Calculation excludes DHA and EPA derived from fisheries by-products and trimmings. Trimmings are defined as by-products when fish are processed for human consumption or if whole fish is rejected for use of human consumption official regulations with regard to fish suitable for human consumption. Fishmeal and fish oil that are produced from trimmings can be excluded from the calculation as long as the origin of the trimmings is not any species that are classified as critically endangered, endangered or vulnerable in the IUCN Red		
Criterion 4.3 Source of marine raw materials			
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):
4.3.1	Indicator: Timeframe for all fishmeal and fish oil used in feed to come from fisheries [53] certified under a scheme that is an ISEAL member [54] and has guidelines that specifically promote responsible environmental management of small pelagic fisheries Requirement: Not required Applicability: N/A	-	
Footnote	[53] This standard and standard 4.3.2 applies to fishmeal and oil from forage fisheries, pelagic fisheries, or fisheries where the catch is directly reduced (including krill) and not to by-products or trim		
Footnote	[54] Meets ISEAL guidelines as demonstrated through full membership in the ISEAL Alliance, or equivalent as determined by the Technical Advisory Group of the ASC.		
		Instruction to Clients for Indicator 4.3.2 - FishSource Score of Fish Used in Feed To determine FishSource scores of the fish species used as feed ingredients, do the following: -go to http://www.fishsource.org/ - type the species into the search function box and choose the accurate fishery -confirm that the search identifies the correct fishery then scroll down or click on the link from the menu on the left reads "Scores" For first audits, farms must have scoring records that cover all feeds purchased during the previous 6-month period. Note: Indicator 4.3.2 applies to fishmeal and oil from forage fisheries, pelagic fisheries, or fisheries where the catch is directly reduced (including krill) and not to by-products or trimmings used in feed.	

4.3.2	<p>Indicator: Prior to achieving 4.3.1, the FishSource score [55] for the fishery(ies) from which all marine raw material in feed is derived</p> <p>Requirement: All individual scores ≥ 6, and biomass score ≥ 6</p> <p>Applicability: All</p>	a. Record FishSource score for each species from which fishmeal or fish oil was derived and used as a feed ingredient (all species listed in 4.2.1a).	Havsbrun: "Statement on compound fish feed 2020" and "Declaration regarding ingredients in fish feed for Havsbrun" 29.10.2019. Report "Marine raw material use fish source score 2017-2019" EWOS/Cargill: "ERKLÆRING Dokumentasjon og informasjon om fôr levert iht. ASC" 12.01.2021.
		b. Confirm that each individual score ≥ 6 and the biomass score is ≥ 6 .	Mass balance approach to demonstrate compliance through the species purchased and which comply with the ASC requirement. Havsbrun 2019: Fishmeal from Blue whiting (66,2%), Norway pout (0,2%), Herring (3,0%) and bi-products from fish (30,7%). Fish oil from Blue whiting (42,6%), Norway pout (0,5%), Herring (3,0%) and bi-products from fish (53,9%). Fish source scores from 7,9 to 10,0. Cargill (EWOS) 2020: 99,0% of fishmeal are ASC compliant and 92,5% of fishmeal are MSC certified, 70,9% of fishoil from whole fish are ASC compliant and 55,8% of fishoil are MSC certified. Fishmeal from e.g. Blue whiting (35,7%), Herring (3,4%), Krill (1,8%), Norway pout (2,5%), Sandeel (14,7%), Sprat (5,1%) and trimmings (35,8%). Fishoil from e.g. Blue whiting (4,1%), Herring (4,3%), Menhaden (17,8%), Norway pout (3,6%), Peruvian anchoveta (11,2%), Pilchard (29,7%), Sandeel (4,1%), Sprat (2,8%) and trimmings (22,0%).
		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.	Independent assessment for all species included in the feed to ASC certified farms
		-	In the feed to ASC certified farms all have scores
Footnote	[55] Or equivalent score using the same methodology. See Appendix IV-3 for explanation of FishSource scoring.		
		<p>Instruction to Clients for Indicator 4.3.3 - Third-Party Verification of Traceability</p> <p>Indicator 4.3.3 requires that farms show that their feed producers can demonstrate chain of custody and traceability as verified through third-party audits. Farms may submit reports from audits of feed producers (see 4.1.1c) as evidence that traceability systems are in compliance. Alternatively, farms may show that their feed producers comply with traceability requirements of Indicator 4.3.3 by submitting evidence that suppliers, and the batches of fishmeal and oil, are certified to the International Fishmeal and Fish Oil Organization's Global Standard for Responsible Supply or to the Marine Stewardship Council Chain of Custody Standard.</p> <p>For the first audit, a minimum of 6 months of data on feed is required and evidence shall relate to species used in said dataset.</p>	

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</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.	Cargill: GlobalG.A.P. certified, GGN 4050373825744, valid to 16.06.2021. Havsbrun: GlobalG.A.P. certified, GGN 4050373218515, valid to 03.04.2021.
		b. Ensure evidence covers all the species used (as consistent with 4.3.2a, 4.2.1a, and 4.2.2a).	Cargill: GlobalG.A.P. certified, GGN 4050373825744, valid to 16.06.2021. Havsbrun: GlobalG.A.P. certified, GGN 4050373218515, valid to 03.04.2021.
4.3.4	<p>Indicator: Feed containing fishmeal and/or fish oil originating from by-products [56] or trimmings from IUU [57] catch or from fish species that are categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species [58], whole fish and fish meal from the same species and family as the species being farmed</p> <p>Requirement: None [59]</p> <p>Applicability: All except as noted in [59]</p>	a. Compile and maintain, consistent with 4.2.1a and 4.2.2a, a list of the fishery of origin for all fishmeal and fish oil originating from by-products and trimmings.	Havsbrun: "Statement on compound fish feed 2020" and "Declaration regarding ingredients in fish feed for Havsbrun" 29.10.2019. Report "Marine raw material use fish source score 2017-2019" EWOS/Cargill: "ERKLÆRING Dokumentasjon og informasjon om fôr levert iht. ASC" 12.01.2021.
		b. Obtain a declaration from the feed supplier stating that no fishmeal or fish oil originating from IUU catch was used to produce the feed.	Havsbrun: "Statement on compound fish feed 2020" and "Declaration regarding ingredients in fish feed for Havsbrun" 29.10.2019. Report "Marine raw material use fish source score 2017-2019" EWOS/Cargill: "ERKLÆRING Dokumentasjon og informasjon om fôr levert iht. ASC" 12.01.2021.
		c. Obtain from the feed supplier declaration that the meal or oil did not originate from a species categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species [58] and explaining how they are able to demonstrate this (i.e. through other certification scheme or through their independent audit).	Havsbrun: "Statement on compound fish feed 2020" and "Declaration regarding ingredients in fish feed for Havsbrun" 29.10.2019. Report "Marine raw material use fish source score 2017-2019" EWOS/Cargill: "ERKLÆRING Dokumentasjon og informasjon om fôr levert iht. ASC" 12.01.2021.
		d. If meal or oil originated from a species listed as “vulnerable” by IUCN, obtain documentary evidence to support the exception as outlined in [59].	Not from vulnerable fisheries

4.3.5	Indicator: Presence and evidence of a responsible sourcing policy for the feed manufacturer for marine ingredients that includes a commitment to continuous improvement of source fisheries Requirement: Yes Applicability: All	a. Request a link to a public policy from the feed manufacturer stating the company's support of efforts to shift feed manufacturers purchases of fishmeal and fish oil to fisheries certified under a scheme that is an ISEAL member and has guidelines that specifically promote responsible environmental management of small pelagic fisheries and committing to continuous improvement of source fisheries.	www.havsbrun.fo "Quality and certifications" www.cargill.com "Cargill Supplier Code of Conduct"
		b. Prepare a letter stating the farm's intent to source feed containing fishmeal and fish oil originating from fisheries certified under the type of certification scheme noted in indicator 4.3.1.	Statement regarding feed raw material sources, 10.01.2020 approved by Tom Eirik Aasjord - Nova Sea AS.
		c. Compile a list of the origin of all fish products used as feed ingredients in all feed.	Havsbrun: "Statement on compound fish feed 2020" and "Declaration regarding ingredients in fish feed for Havsbrun" 29.10.2019. Report "Marine raw material use fish source score 2017-2019" EWOS/Cargill: "ERKLÆRING Dokumentasjon og informasjon om fôr levert iht. ASC" 12.01.2021.
Footnote	[56] Trimmings are defined as by-products when fish are processed for human consumption or if whole fish is rejected for use of human consumption because the quality at the time of landing does not meet official regulations w		
Footnote	[57] IUU: Illegal, Unregulated and Unreported.		
Footnote	[58] The International Union for the Conservation of Nature reference can be found at http://www.iucnredlist.org/.		
Footnote	[59] For species listed as “vulnerable” by IUCN, an exception is made if a regional population of the species has been assessed to be not vulnerable in a National Red List process that is managed explicitly in the same science-based way as isn’t managed in accordance with IUCN guidelines, an exception is allowed when an assessment is conducted using IUCN’s methodology and demonstrates that the population is not vuln		
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 [60] and local laws [61]	a. Compile and maintain a list of all feed suppliers with contact information. (See also 4.1.1a)	Havsbrun: www.havsbrun.fo Cargill: www.cargill.com
		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.	www.havsbrun.fo "Quality and certifications" www.cargill.com "Cargill Supplier Code of Conduct"

	Requirement: Yes Applicability: All	c. Confirm that third party audits of feed suppliers (4.1.1c) show evidence that supplier's responsible sourcing policies are implemented.	Cargill: GlobalG.A.P. certified, GGN 4050373825744, valid to 16.06.2021. Havsbrun: GlobalG.A.P. certified, GGN 4050373218515, valid to 03.04.2021.
Footnote	[60] Moratorium: A period of time in which there is a suspension of a specific activity until future events warrant a removal of the suspension or issues regarding the activity have been resolved. In this context, moratoriums may refer to defined geographical regions.		
Footnote	[61] Specifically, the policy shall include that vegetable ingredients, or products derived from vegetable ingredients, must not come from areas of the Amazon Biome that were deforested after July 24, 2006, as geographically defined by Moratorium be lifted, this specific requirement shall be reconsidered.		
4.4.2	Indicator: Percentage of soya or soya-derived ingredients in the feed that are certified by the Roundtable for Responsible Soy (RTRS) or equivalent [62] Requirement: 100% Applicability: All	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.	Statement regarding feed raw material sources, 10.01.2020 approved by Tom Eirik Aasjord - Nova Sea AS.
		b. Prepare a letter stating the farm's intent to source feed containing soya certified under the RTRS (or equivalent)	Statement regarding feed raw material sources, 10.01.2020 approved by Tom Eirik Aasjord - Nova Sea AS.
		c. Notify feed suppliers of the farm's intent (4.4.2b).	Feed suppliers informed of relevant ASC requirements in mail to Cargill 30.07.2018 and 08.01.2021. Feed suppliers informed of relevant ASC requirements in mail to Havsbrun 10.02.2020.
		d. Obtain and maintain declaration from feed supplier(s) detailing the origin of soya in the feed.	Havsbrun: "Statement on compound fish feed 2020" and "Declaration regarding ingredients in fish feed for Havsbrun" 29.10.2019. EWOS/Cargill: "ERKLÆRING Dokumentasjon og informasjon om fôr levert iht. ASC" 12.01.2021.
		e. Provide evidence that soya used in feed is certified by the Roundtable for Responsible Soy (RTRS) or equivalent [62]	Havsbrun: "Statement on compound fish feed 2020" and "Declaration regarding ingredients in fish feed for Havsbrun" 29.10.2019. EWOS/Cargill: "ERKLÆRING Dokumentasjon og informasjon om fôr levert iht. ASC" 12.01.2021.
Footnote	[62] Any alternate certification scheme would have to be approved as equivalent by the Technical Advisory Group of the ASC.		

4.4.3	Indicator: Evidence of disclosure to the buyer [63] of the salmon of inclusion of transgenic [64] plant raw material, or raw materials derived from transgenic plants, in the feed Requirement: Yes, for each individual raw material containing > 1% transgenic content [65] Applicability: All	a. Obtain from feed supplier(s) a declaration detailing the content of soya and other plant raw materials in feed and whether it is transgenic.	Havsbrun: "Statement on compound fish feed 2020" and "Declaration regarding ingredients in fish feed for Havsbrun" 29.10.2019. EWOS/Cargill: "ERKLÆRING Dokumentasjon og informasjon om fôr levert iht. ASC" 12.01.2021.
		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.	Havsbrun: "Statement on compound fish feed 2020" and "Declaration regarding ingredients in fish feed for Havsbrun" 29.10.2019. EWOS/Cargill: "ERKLÆRING Dokumentasjon og informasjon om fôr levert iht. ASC" 12.01.2021.
		c. Inform ASC whether feed contains transgenic ingredients (yes or no) as per Appendix VI for each production cycle.	Submitted to ASC 29.01.2021
Footnote	[63] The company or entity to which the farm or the producing company is directly selling its product. This standard requires disclosure by the feed company to the farm and by the farm to the buyer.		
Footnote	[64] Transgenic: Containing genes altered by insertion of DNA from an unrelated organism. Taking genes from one species and inserting them into another species to get that trait expressed in the organism.		
Footnote	[65] 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 [66] 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.	Statement Nova Sea signed Tom Eirik Aasjord 27.10.2020 states no dumping and waste disposal according to Norwegian law and delivered to recycling stations.
		b. Prepare a declaration that the farm does not dump non-biological waste into the ocean.	Statement Nova Sea signed Tom Eirik Aasjord 27.10.2020 states no dumping and waste disposal according to Norwegian law and delivered to recycling stations.
		c. Provide a description of the most common production waste materials and how the farm ensures these waste materials are properly disposed of.	Procedure "Avfallshåndtering sjø" 03.01.2020 states ensilage delivered to Hordafôr, cages delivered to Østbø/Retura/HAF (and further to Nofir), nets to Østbø/Egersund Net (and further to Nofir). If copper treated to SHMIL, feed bags delivered to Retura SHMIL, special waste delivered to Østbø/Retura/SHMIL, metal delivered to Østbø/Retura SHMIL, household waste delivered to Retura/Østbø, electronic waste delivered to Østbø/Retura/SHMIL, light bulbs delivered to Østbø/Retura SHMIL. Procedure also describes storage, delivery time and handling. Site has delivered waste to Børstad Transport, a subcontractor for SHMIL. Medicines/treatments should be delivered to Europharma.

		d. Provide a description of the types of waste materials that are recycled by the farm.	Skirts delivered to Vevelstad (and further to Botngaard for recycling). Cages/feed pipes delivered to Containerservice (and further to Nofir for recycling). Nets/ropes to Østbø/Egersund Net (and further to Nofir for recycling). Metals to Østbø/Retura/SHMIL
Footnote	[66] Proper and responsible disposal will vary based on facilities available in the region and remoteness of farm sites. Disposal of non-biological waste shall be done in a manner consistent with best practice in the area. Dumping of non-biological waste into the ocean does not represent “proper and responsible” disposal.		
4.5.2	<p>Indicator: Evidence that non-biological waste (including net pens) from grow-out site is either disposed of properly or recycled</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	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)	Procedure "Avfallshåndtering sjø" 03.01.2020 states ensilage delivered to Hordafôr, cages delivered to Østbø/Retura/HAF (and further to Nofir), nets to Østbø/Egersund Net (and further to Nofir). If copper treated to SHMIL, feed bags delivered to Retura SHMIL, special waste delivered to Østbø/Retura/SHMIL, metal delivered to Østbø/Retura SHMIL, household waste delivered to Retura/Østbø, electronic waste delivered to Østbø/Retura/SHMIL, light bulbs delivered to Østbø/Retura SHMIL. Procedure also describes storage, delivery time and handling. Site has delivered waste to Børstad Transport, a subcontractor for SHMIL. Medicines/treatments should be delivered to Europharma.
		b. Provide a description of the types of waste materials that are recycled by the farm. (See also 4.5.1d)	Skirts delivered to Vevelstad (and further to Botngaard for recycling). Cages/feed pipes delivered to Containerservice (and further to Nofir for recycling). Nets/ropes to Østbø/Egersund Net (and further to Nofir for recycling). Metals to Østbø/Retura/SHMIL
		c. Inform the CAB of any infractions or fines for improper waste disposal received during the previous 12 months and corrective actions taken..	No infractions identified.

	Applicability: All		
		d. Maintain records of disposal of waste materials including old nets and cage equipment.	<p>Seen NOFIR environment receipt 05.11.2020 for Nova Sea, delivery of 21 892 kg fish farm nets.</p> <p>Seen NOFIR environment receipt 24.11.2020 for Nova Sea, delivery of 23 124 kg fish farm nets.</p> <p>Seen receipt for delivery of 36 kg batteries to Børstad Transport 29.11.2019.</p>
Criterion 4.6 Energy consumption and greenhouse gas emissions on farms [67]			
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):
Footnote	[67] See Appendix VI for transparency requirements for 4.6.1, 4.6.2 and 4.6.3.		
4.6.1	<p>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</p> <p>Requirement: Yes, measured in kilojoule/mt fish produced/production cycle</p> <p>Applicability: All</p>	<p>Instruction to Clients for Indicator 4.6.1 - Energy Use Assessment</p> <p>Indicator 4.6.1 requires that farms must have an assessment to verify energy consumption. The scope of this requirement is restricted to operational energy use for the farm site(s) that is applying for certification. Boundaries for operational energy use should correspond to the sources of Scope 1 and Scope 2 emissions (see Appendix V-1). Energy use corresponding to Scope 3 emissions (i.e. the energy used to fabricate materials that are purchased by the farm) is not required. However the SAD Steering Committee encourages companies to integrate energy use assessments across the board in the company.</p> <p>For the purposes of calculating energy consumption, the duration of the production cycle is the entire life cycle "at sea" - it does not include freshwater smolt production stages. Farms that have integrated smolt rearing should break out the grow-out stage portion of energy consumption if possible. Quantities of energy (fuel and electricity) are converted to kilojoules. Verification is done by internal or external assessment following either the GHG Protocol Corporate Standard or ISO 14064-1 (see Appendix V-1 for more details).</p>	
		a. Maintain records for energy consumption by source (fuel, electricity) on the farm throughout each production cycle.	<p>Last production cycle (2019G):</p> <p>Fuel 1 474 000 kJ (Scope 1)</p> <p>Electricity 1 273 000 kJ (Scope 2)</p> <p>Total 2 747 000 000 kJ</p>
		b. Calculate the farm's total energy consumption in kilojoules (kJ) during the last production cycle.	<p>Last production cycle (2019G):</p> <p>Fuel 1 474 000 kJ (Scope 1)</p> <p>Electricity 1 273 000 kJ (Scope 2)</p> <p>Total 2 747 000 000 kJ</p>
		c. Calculate the total weight of fish in metric tons (t) produced during the last production cycle.	5562,8 ton biomass
		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.	Last production cycle (2019G): 493 812 kJ/ton biomass

		e. Submit results of energy use calculations (4.6.1d) to ASC as per Appendix VI for each production cycle.	Submitted to ASC 29.01.2021
		f. Ensure that the farm has undergone an energy use assessment that was done in compliance with requirements of Appendix V-1.	Scope 1 Diesel. Scope 2 Electricity. Assessed and compared between sites and production forms.
4.6.2	<p>Indicator: Records of greenhouse gas (GHG [68]) emissions [69] on farm and evidence of an annual GHG assessment, as outlined in Appendix V-1</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>Instruction to Clients for Indicator 4.6.2 - Annual GHG Assessment</p> <p>Indicator 4.6.2 requires that farms must have an annual Greenhouse Gas (GHG) assessment. Detailed instructions are presented in Appendix V-1 and references therein. The scope of this requirement is restricted to operational boundaries for the farm site(s) that is applying for certification. However the SAD Steering Committee encourages companies to integrate GHG accounting practices across the board in the company. Verification may be done by internal or external assessment following either the GHG Protocol Corporate Standard or ISO 14064-1 (see Appendix V-1 for more details).</p> <p>Note: For the purposes of this standard, GHGs are defined as the six gases listed in the Kyoto Protocol: carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF₆).</p>	
		a. Maintain records of greenhouse gas emissions on the farm.	Records verified.
		b. At least annually, calculate all scope 1 and scope 2 GHG emissions in compliance with Appendix V-1.	2019: Scope 1: 62 343 kg CO ₂ Scope 2: 77 172 kg CO ₂ Total: 139 515 kg CO 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.	Scope 1 diesel and scope 2 is purchased electricity.
		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.	CO ₂ used
		e. Submit results of GHG calculations (4.6.2d) to ASC as per Appendix VI at least once per year.	Submitted to ASC 29.01.2021
		f. Ensure that the farm undergoes a GHG assessment as outlined in Appendix V-1 at least annually.	Calculations and assessments provided.
Footnote	[68] 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)		
Footnote	[69] GHG emissions must be recorded using recognized methods, standards and records as outlined in Appendix V.		

4.6.3	Indicator: Documentation of GHG emissions of the feed [70] used during the previous production cycle, as outlined in Appendix V, subsection 2 Requirement: Yes Applicability: All	Instruction to Clients for Indicator 4.6.3 - GHG Emissions of Feed Indicator 4.6.3 requires that farms document the greenhouse gas emissions (GHG) associated with any feeds used during salmon production. Farms will need to obtain this information from their feed supplier(s) and thereafter maintain a continuous record of Feed GHG emissions throughout all production cycles. This requirement applies across the entire previous production cycle. Therefore farms should inform their feed supplier(s) and: - the farm provides its feed suppliers with detailed information about the requirements including a copy of the methodology outlined in Appendix V, subsection 2; - the farm explain what analyses must be done by feed suppliers; and - the farm explains to feed suppliers what documentary evidence will be required by the farm to demonstrate compliance. Note1: Farms may calculate GHG emissions of feed using the average raw material composition used to produce the salmon (by weight) rather than using feed composition on a lot-by-lot basis. Note2: Feed supplier's calculations must include Scope 1, Scope 2, and Scope 3 GHG emissions as specified in Appendix V, subsection 2.	
		a. Obtain from feed supplier(s) a declaration detailing the GHG emissions of the feed (per kg feed).	Havsbrun GHG emission factor 2,445.
		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.	Last complete generation (19G): 6 064 ton feed
		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.	Last production cycle (2019G): 14 825 ton CO2.
		d. Submit GHG emissions of feed to ASC as per Appendix VI for each production cycle.	Submitted to ASC 29.01.2021
Footnote	[70] GHG emissions from feed can be given based on the average raw material composition used to produce the salmon (by weight) and not as documentation linked to each single product used during the production cycle. Feed manufacturer then shall use that information to calculate GHG emissions for the volume of feed they used in the prior production cycle.		
Criterion 4.7 Non-therapeutic chemical inputs [71,72]			
	Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):
Footnote	[71] Closed production systems that do not use nets and do not use antifoulants shall be considered exempt from standards under Criterion 4.7.		
Footnote	[72] See Appendix VI for transparency requirements for 4.7.1, 4.7.3 and 4.7.4.		
	Indicator: For farms that use copper-treated nets [73], evidence that nets are not cleaned [74] or treated in situ in the marine environment	a. Prepare a farm procedure for net cleaning and treatment that describes techniques, technologies, use of off-site facilities, and record keeping.	Procedure "Prosedyre for notvask og inspeksjon av nøter/fortøyning" 29.10.2020 regarding washing at sea with FNC/Ronc/Rov or manually by washing boat. Includes all nets shall be inspected minimum every 6th week (for harvest nets every 3rd week). Procedure at off-site facility "Beskrivelse av rens og impregneringsprosesser" 05.12.2017.
		b. Maintain records of antifoulants and other chemical treatments used on nets.	Only coating on new nets, old nets only washed and disinfected

4.7.1	Requirement: Yes Applicability: All farms except as noted in [71]	c. Declare to the CAB whether copper-based treatments are used on nets.	Copper-based treatment are not in use.
		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.	Copper-based treatment are not in use.
		e. Inform ASC whether copper antifoulants are used on farm (yes or no) as per Appendix VI for each production cycle.	Submitted to ASC 29.01.2021
Footnote	[73] Under the SAD, “copper-treated net” is defined as a net that has been treated with any copper-containing substance (such as a copper-based antifoulant) during the previous 18 months, or has not undergone thorough cleaning at : use nets that have, at some point prior in their lifespan, been treated with copper may still consider nets as untreated so long as sufficient time and cleaning has elapsed as in this definition. This will allow farms to move away from use o nets.		
Footnote	[74] Light cleaning of nets is allowed. Intent of the standard is that, for example, the high-pressure underwater washers could not be used on copper treated nets under this standard because of the risk of copper flaking off durin		
4.7.2	Indicator: For any farm that cleans nets at on-land sites, evidence that net-cleaning sites have effluent treatment [75] Requirement: Yes Applicability: All farms except as noted in [71]	a. Declare to the CAB whether nets are cleaned on-land.	Egersund Net at Vevelstad cleans net on land.
		b. If nets are cleaned on-land, obtain documentary evidence from each net-cleaning facility that effluent treatment is in place.	Procedure at off-site facility "Beskrivelse av Egersund Net sin vaskeprosess" 05.12.2017. Procedure from Egersund net "Måling og registrering av inntaks- og avløpsvann fra renseanlegg" 20.05.2017 states the shall not discharge waste water containing more copper than intake water contains. Waste water cleaned and copper collected and delivered to Retura Shmil for recycling. Copper sedimented in own tank and stored for further disposal. Waste water is analyzed regularly for copper to ensure good cleaning process. Egersund Net is certified according to ISO 14001:2015.
		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.	Seen confirmation from Retura SHMIL regarding delivery from Egersund net (departement Vevelstad) in the period 01.01.2019 - 31.12.2019: 83 710 kg copper-mud organic, 12 190 kg copper-mud unorganic, waste to grading 12 700 kg, etc. Seen NOFIR environment receipt 05.11.2020 for Nova Sea, delivery of 21 892 kg fish farm nets. Seen NOFIR environment receipt 24.11.2020 for Nova Sea, delivery of 23 124 kg fish farm nets.
Footnote	[75] 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 [71]	Note: If the benthos throughout and immediately outside the full AZE is hard bottom, provide evidence to the CAB and request an exemption from Indicator 4.7.3 (see 2.1.1c).	
		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.	Copper-based treatment are not in use.
		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.	Copper-based treatment are not in use.
		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.	Copper-based treatment are not in use.
4.7.4	Indicator: Evidence that copper levels [76] 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 [71] 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.	Copper-based treatment are not in use.
		b. Provide evidence from measurements taken in 4.7.3b that copper levels are < 34 mg Cu/kg dry sediment weight.	Copper-based treatment are not in use.
		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).	Copper-based treatment are not in use.
		d. Analyze results from 4.7.4c to show the background copper concentrations as measured at three reference sites in the water body.	Copper-based treatment are not in use.
		e. Submit data on copper levels in sediments to ASC as per Appendix VI for each production cycle.	Submitted to ASC 29.01.2021
Footnote	[76] According to testing required under 4.7.3. The standards related to testing of copper are only applicable to farms that use copper-based nets or copper-treated nets.		
4.7.5	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 [71]	a. Identify all biocides used by the farm in net antifouling.	Nets not treated, e.g. net 9060.
		b. Compile documentary evidence to show that each chemical used in 4.7.5a is approved according to legislation in one or more of the following jurisdictions: the European Union, the United States, or Australia.	Nets not treated, e.g. net 9060.
PRINCIPLE 5: MANAGE DISEASE AND PARASITES IN AN ENVIRONMENTALLY RESPONSIBLE MANNER			
Criterion 5.1 Survival and health of farmed fish [77]			
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):
Footnote	[77] 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, parasites and environmental conditions relevant for good fish health, including implementing corrective action when required 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.	<p>VHP for Nova Sea includes diseases/parasites, treatments, health goals, cleaner fish, proactive measures, handling, veterinary visits, etc. signed KO - HaVet 01.03.2019 (valid to 31.03.2020).</p> <p>Preliminary VHP for Nova Sea for 2020 includes diseases/parasites, treatments, health goals, cleaner fish, proactive measures, handling, veterinary visits, etc. KO - HaVet March 2020. Preliminary VHP valid until 01.03.2021 according to K.O. - HaVet</p> <p>Site specific health plans for Kalvhylla V21 - signed designated veterinarian PN 15.12.2020. The local plan includes goals, visit log, etc.</p>
		b. Ensure that the farm's current fish health management plan was reviewed and approved by the farm's designated veterinarian [78].	<p>VHP for Nova Sea includes diseases/parasites, treatments, health goals, cleaner fish, proactive measures, handling, veterinary visits, etc. signed KO - HaVet 01.03.2019 (valid to 31.03.2020).</p> <p>Preliminary VHP for Nova Sea for 2020 includes diseases/parasites, treatments, health goals, cleaner fish, proactive measures, handling, veterinary visits, etc. KO - HaVet March 2020. Preliminary VHP valid until 01.03.2021 according to K.O. - HaVet</p> <p>Site specific health plans for Kalvhylla V21 - signed designated veterinarian PN 15.12.2020. The local plan includes goals, visit log, etc.</p>
5.1.2	Indicator: Site visits by a designated veterinarian [78] at least four times a year, and by a fish health manager [79] at least once a month Requirement: Yes Applicability: All	a. Maintain records of visits by the designated veterinarian [78] and fish health managers [82]. If schedule cannot be met, a risk assessment must be provided.	<p>Minimum 12 visits per year.</p> <p>Visit by designated veterinarian consist of e.g. inspection of fish and dead fish, diagnose, training, etc.</p> <p>Report from routine visit (journal) 18.01.2021 by PN - HaVet; diagnosis, environment, health history, cleaner fish, obduction of fish, observations, parasites, treatments, welfare, samples, screening, etc.</p>
		b. Maintain a current list of personnel who are employed as the farm's designated veterinarian(s) [78] and fish health manager(s) [79].	<p>KO, HPR 8338485, valid to 10.05.2048</p> <p>PN, HPR 10078659, valid to 11.08.2062</p>
		c. Maintain records of the qualifications of persons identified in 5.1.2b.	<p>KO, HPR 8338485, valid to 10.05.2048</p> <p>PN, HPR 10078659, valid to 11.08.2062</p>

Footnote	[78] A designated veterinarian is the professional responsible for health management on the farm who has the legal authority to diagnose disease and prescribe medication. In some countries such as Norway, a fish health biologist or other and is equivalent to a veterinarian for purposes of these standards. This definition applies to all references to a veterinarian throughout the standards document.		
Footnote	[79] A fish health manager is someone with professional expertise in managing fish health, who may work for a farming company or for a veterinarian, but who does not necessarily have the authority to		
5.1.3	Indicator: Percentage of dead fish removed and disposed of in a responsible manner Requirement: 100% [80] Applicability: All	a. Maintain records of mortality removals to show that dead fish are removed regularly and disposed of in a responsible manner.	Daily removal of dead fish (registration in FishTalk system) and processed to ensilage. Ensilage collected on tank and delivered to Hordafôr, e.g. 14.09.2020 to Hordafôr 24 ton ensilage. Missing days of removal of dead fish registered in Landax as NC.
		b. Collect documentation to show that disposal methods are in line with practices recommended by fish health managers and/or relevant legal authorities.	Daily removal of dead fish (registration in FishTalk system) and processed to ensilage. Ensilage collected on tank and delivered to Hordafôr, e.g. 14.09.2020 to Hordafôr 24 ton ensilage.
		c. For any exceptional mortality event where dead fish were not collected for post-mortem analysis, keep a written justification.	No exceptional mortalities on previous cycle (2019G) and present cycle (2021G) where dead fish were not collected for post-mortem analysis.
Footnote	[80] The SAD recognizes that not all mortality events will result in dead fish present for collection and removal. However, such situations are considered the exception rather than the rule		
		Note: Farms are required to maintain mortality records from the current and two previous production cycles. For first audit, records for the current and prior production cycle are required. It is recommended that farms maintain a compiled set of records to demonstrate compliance with 5.1.3 - 5.1.6.	
		a. Maintain detailed records for all mortalities and post-mortem analyses including: - date of mortality and date of post-mortem analysis; - total number of mortalities and number receiving post-mortem analysis; - name of the person or lab conducting the post-mortem analyses; - qualifications of the individual (e.g. veterinarian [78], fish health manager [79]); - cause of mortality (specify disease or pathogen) where known; and - classification as 'unexplained' when cause of mortality is unknown (see 5.1.6).	FishTalk record shows all mortalities and causes. Last complete cycle (2019G): Total mortality 12,1% (virus 2,7% + unexplained 0,0% = 2,7%). 0,0% unexplained mortality gives 0,0% unexplained mortality of total mortality 12,1%. Current cycle (2021G): Total mortality 0,4% (virus 0,0% + unexplained 0,0% = 0,02%). 0,02% unexplained mortality gives 4,6% unexplained mortality of total mortality 0,4%.

5.1.4	Indicator: Percentage of mortalities that are recorded, classified and receive a post-mortem analysis Requirement: 100% [81] Applicability: All	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.	All mortalities are diagnosed and post-mortem analysis are done on a statistically relevant number of fish (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).	Minimum 12 visits per year. Visit by designated veterinarian consist of e.g. inspection of fish and dead fish, diagnose, training, etc. Report from routine visit (journal) 18.01.2021 by PN - HaVet; diagnosis, environment, health history, cleaner fish, obduction of fish, observations, parasites, treatments, welfare, samples, screening, etc.
		d. Using results from 5.1.3a-c, classify each mortality event and keep a record of those classifications.	Record are available and documented in FishTalk, all mortalities are categorized.
		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).	Record are available and documented in FishTalk, all mortalities are categorized.
		f. Submit data on numbers and causes of mortalities to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle).	Submitted to ASC 29.01.2021
Footnote	[81] If on-site diagnosis is inconclusive, this standard requires off-site laboratory diagnosis. A qualified professional must conduct all diagnosis. One hundred percent of mortality events shall receive a post-mortem analysis, not necessarily the mortality event shall be analyzed.		
5.1.5	Indicator: Maximum viral disease-related mortality [82] on farm during the most recent production cycle Requirement: ≤ 10% Applicability: All	a. Calculate the total number of mortalities that were diagnosed (see 5.1.4) as being related to viral disease.	FishTalk record shows all mortalities and causes. Last complete cycle (2019G): Total mortality 12,1% (virus 2,7% + unexplained 0,0% = 2,7%). 0,0% unexplained mortality gives 0,0% unexplained mortality of total mortality 12,1%. Current cycle (2021G): Total mortality 0,4% (virus 0,0% + unexplained 0,0% = 0,02%). 0,02% unexplained mortality gives 4,6% unexplained mortality of total mortality 0,4%.
		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.	FishTalk record shows all mortalities and causes. Last complete cycle (2019G): Total mortality 12,1% (virus 2,7% + unexplained 0,0% = 2,7%). 0,0% unexplained mortality gives 0,0% unexplained mortality of total mortality 12,1%. Current cycle (2021G): Total mortality 0,4% (virus 0,0% + unexplained 0,0% = 0,02%). 0,02% unexplained mortality gives 4,6% unexplained mortality of total mortality 0,4%.

		c. Submit data on total mortality and viral disease-related mortality to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle).	Submitted to ASC 29.01.2021
Footnote	[82] 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.	<p>FishTalk record shows all mortalities and causes.</p> <p>Last complete cycle (2019G): Total mortality 12,1% (virus 2,7% + unexplained 0,0% = 2,7%). 0,0% unexplained mortality gives 0,0% unexplained mortality of total mortality 12,1%.</p> <p>Current cycle (2021G): Total mortality 0,4% (virus 0,0% + unexplained 0,0% = 0,02%). 0,02% unexplained mortality gives 4,6% unexplained mortality of total mortality 0,4%.</p>
		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.	<p>FishTalk record shows all mortalities and causes.</p> <p>Last complete cycle (2019G): Total mortality 12,1% (virus 2,7% + unexplained 0,0% = 2,7%). 0,0% unexplained mortality gives 0,0% unexplained mortality of total mortality 12,1%.</p> <p>Current cycle (2021G): Total mortality 0,4% (virus 0,0% + unexplained 0,0% = 0,02%). 0,02% unexplained mortality gives 4,6% unexplained mortality of total mortality 0,4%.</p>
		c. Submit data on maximum unexplained mortality to ASC as per Appendix VI for each production cycle.	Submitted to ASC 29.01.2021
5.1.7	<p>Indicator: A farm-specific mortalities reduction programme that includes defined annual targets for reductions in mortalities and reductions in unexplained mortalities</p>	Note: Farms have the option to integrate their farm-specific mortality reduction program into the farm's fish health management plan (5.1.1).	
		a. Use records in 5.1.4a to assemble a time-series dataset on farm-specific mortalities rates and unexplained mortality rates.	<p>VHP for Nova Sea includes diseases/parasites, treatments, health goals, cleaner fish, proactive measures, handling, veterinary visits, etc. signed KO - HaVet 01.03.2019 (valid to 31.03.2020).</p> <p>Preliminary VHP for Nova Sea for 2020 includes diseases/parasites, treatments, health goals, cleaner fish, proactive measures, handling, veterinary visits, etc. KO - HaVet March 2020. Preliminary VHP valid until 01.03.2021 according to K.O. - HaVet</p> <p>Site specific health plans for Kalvhylä V21 - signed designated veterinarian PN 15.12.2020. The local plan includes goals, visit log, etc.</p>

	<p>Requirement: Yes</p> <p>Applicability: All</p>	<p>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.</p>	<p>VHP for Nova Sea includes diseases/parasites, treatments, health goals, cleaner fish, proactive measures, handling, veterinary visits, etc. signed KO - HaVet 01.03.2019 (valid to 31.03.2020).</p> <p>Preliminary VHP for Nova Sea for 2020 includes diseases/parasites, treatments, health goals, cleaner fish, proactive measures, handling, veterinary visits, etc. KO - HaVet March 2020. Preliminary VHP valid until 01.03.2021 according to K.O. - HaVet</p> <p>Site specific health plans for Kalvhylla V21 - signed designated veterinarian PN 15.12.2020. The local plan includes goals, visit log, etc.</p>
		<p>c. Ensure that farm management communicates with the veterinarian, fish health manager, and staff about annual targets and planned actions to meet targets.</p>	<p>Confirmed during interviews.</p>
Criterion 5.2 Therapeutic treatments [83]			
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):
Footnote	[83] See Appendix VI for transparency requirements for 5.2.1, 5.2.5, 5.2.6 and 5.2.10.		
Instruction to Clients and CABs for Criterion 5.2 - Records Related to Therapeutic Treatments			
Indicator 5.2.1 requires that farms maintain detailed record of all chemical and therapeutant use. Those records maintained for compliance with 5.2.1, if all consolidated into a single place, can be used to demonstrate performance against subsequent Indicators (5.2.1 through 5.2.10) under Criterion 5.2.			
5.2.1	<p>Indicator: On-farm documentation that includes, at a minimum, detailed information on all chemicals [84] and therapeutants used during the most recent production cycle, the amounts used (including grams per ton of fish produced), the dates used, which group of fish were treated and against which diseases, proof of proper dosing, and all disease and pathogens detected on the site</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;- t of fish treated;- the WHO classification of antibiotics (also see note under 5.2.8); and- the supplier of the chemical or therapeutant.	<p>Cycle 19G: Treatments done are anaesthetics (Aqui-S, Finquel and Benzocaine), all under responsible veterinarian`s prescriptions. No Antibiotics used.</p> <p>Cycle 21G: Treatments done are anaesthetics (Finquel and Benzocaine), all under responsible veterinarian`s prescriptions. No Antibiotics used.</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>Prescriptions and FishTalk records available.</p> <p>E.g. Prescription 690014 for Kalvhylla, veterinarian - HaVet 15.07.2020, 2 liter Benzoak, 7 daydegrees withdrawal period.</p> <p>E.g. FishTalk record for cage 1; Benzoak treatment finished 25.01.2021 states 1 day withdrawal period.</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>Submitted to ASC 29.01.2021</p>
Footnote	[84] Chemicals used for the treatment of fish.		

5.2.2	Indicator: Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [85] in any of the primary salmon producing or importing countries [86] Requirement: None Applicability: All	a. Prepare a list of therapeutants, including antibiotics and chemicals, that are proactively banned for use in food fish for the primary salmon producing and importing countries listed in [86].	Procedure "Godkjente legemidler i Nova Sea AS" 10.03.2020, to be revised 01.03.2021 with indication, product, therapeutic, withdrawal, MRL, marketing holder, marketing authorization Seen list of antibiotics and treatments that are banned in any of the primary salmon producing or importing countries, "Forbudte legemidler og stoffer i animalske varer" 10.03.2020, includes Norway, EU, UK, Canada, Chile, Japan, USA.
		b. Maintain records of voluntary and/or mandatory chemical residue testing conducted or commissioned by the farm from the prior and current production cycles.	NFSA mandatory testing by NIFES on site and/or at harvest line. Results published in yearly NIFES report. Additional sampling performed by Nova Sea AS, e.g. "Nova Sea resultat fremmedstoff 2015-2020 EU_MRLS" updated 19.01.2021 includes result Nova Sea vs EU limits for cadmium, lead, mercury, ethoxyquin, benzo(a)pyrene, etc.
		-	
Footnote	[85] "Banned" means proactively prohibited by a government entity because of concerns around the substance. A substance banned in any of the primary salmon-producing or importing countries, as defined here, cannot be used in a country of production or destination of the product. The SAD recommends that ASC maintain a list of a banned therapeutants.		
Footnote	[86] For purposes of this standard, those countries are Norway, the UK, Canada, Chile, the United States, Japan and France.		
5.2.3	Indicator: Percentage of medication events that are prescribed by a veterinarian Requirement: 100% Applicability: All	a. Obtain prescription for all therapeutant use in advance of application from the farm veterinarian (or equivalent, see [78] for definition of veterinarian).	Prescriptions and FishTalk records available. E.g. Prescription 690014 for Kalvhylla, veterinarian - HaVet 15.07.2020, 2 liter Benzoak, 7 daydegrees withdrawal period. E.g. FishTalk record for cage 1; Benzoak treatment finished 25.01.2021 states 1 day withdrawal period.
		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.	100 % of treatments are prescribed by a veterinarian, prescriptions stored in system.
5.2.4	Indicator: Compliance with all withholding periods after treatments Requirement: Yes Applicability: All	a. Incorporate withholding periods into the farm's fish health management plan (see 5.1.1a).	100% of treatments are prescribed by a veterinarian. Prescriptions in system. Treatments registered in FishTalk with withholding periods as defined in prescription. Procedure "Bruk og kontroll av legemidler i Nova Sea" 10.03.2020 includes instruction for storage, control, withholding, CV and prescription.
		b. Compile and maintain documentation on legally-required withholding periods for all treatments used on-farm. Withholding period is the time interval after the withdrawal of a drug from the treatment of the salmon before the salmon can be harvested for use as food.	Documented in FishTalk. Treated fishgroups marked in FishTalk according to days/degree-days withholding period stated in prescription.

		c. Show compliance with all withholding periods by providing treatment records (see 5.2.1a) and harvest dates for the most recent production cycle.	Documented in FishTalk. Treated fishgroups marked in FishTalk according to days/degree-days withholding period stated in prescription.
5.2.5	Indicator: The farm shall publicly report (via Appendix VI) the: 1. Weighted Number of Medicinal Treatments (see Appendix VII) for each production cycle 2. The parasiticide load for each agent over the production cycle 3. The benthic parasiticide residue levels Requirement: Yes Applicability: All	a. Using farm data for therapeutants usage (5.2.1a) and the calculation presented in Appendix VII, calculate the Weighted Number of Medicinal Treatments (WNMT) 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.	2019G: 0 2021G: 0 (preliminary results, fish not harvested)
		b. Provide the auditor with access to records showing how the farm calculated the WMNT score.	Calculations verified
		c. Submit data on farm level WMNT score to ASC as per Appendix VI for each production cycle.	Submitted to ASC 29.01.2021
5.2.6	Indicator: The Weighted Number of Medicinal Treatments shall be at or below the country Entry Level (see Appendix VII) Requirement: Yes Applicability: All	a. Review WNMT scores from 5.2.5a to determine if the score is at or below the Country Entry Level (see Appendix VII)	WNMT below 5 (Entry level Norway)
		b. As applicable, submit data to ASC on WNMT score for the most recent production cycle (Appendix VI).	Submitted to ASC 29.01.2021
5.2.7	Indicator: The farm shall reduce the Weighted Number of Medicinal Treatments, after achieving indicator 5.2.6, with 25% per 2 years until the WNMT is at or below the Global Level (see Appendix VII). Requirement: Yes Applicability: All	a. Every 2 years after achieving 5.2.6, check the WNMT score calculated 2 years before as above (5.2.5a). Calculate the percent difference in WMNT score between current cycle and cycle of 2 years before.	WNMT below 3 (Global level)
		b. As applicable, submit data to ASC on WMNT score for the most recent production cycle and the two previous production cycles (Appendix VI).	Submitted to ASC 29.01.2021

5.2.8	<p>Indicator: The farm shall implement Integrated Pest Management (IPM) according to the guidance in Appendix VII.</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	a. Implement Integrated Pest Management (IPM) into farm management plans (see Appendix VII).	<p>IPM according to "Kontroll av lakselus og IPM i Nova Sea-konsernet" 2020, on public website (www.novasea.no).</p> <p>VHP for Nova Sea includes diseases/parasites, treatments, health goals, cleaner fish, proactive measures, handling, veterinary visits, etc. signed KO - HaVet 01.03.2019 (valid to 31.03.2020).</p> <p>Preliminary VHP for Nova Sea for 2020 includes diseases/parasites, treatments, health goals, cleaner fish, proactive measures, handling, veterinary visits, etc. KO - HaVet March 2020. Preliminary VHP valid until 01.03.2021 according to K.O. - HaVet</p> <p>Site specific health plans for Kalvhylla V21 - signed designated veterinarian PN 15.12.2020. The local plan includes goals, visit log, etc.</p>
		b. Review and update IPM on a production cycle basis to reflect the effectiveness of applied methods and to determine next approaches.	<p>IPM according to "Kontroll av lakselus og IPM i Nova Sea-konsernet" 2020, on public website (www.novasea.no).</p> <p>VHP for Nova Sea includes diseases/parasites, treatments, health goals, cleaner fish, proactive measures, handling, veterinary visits, etc. signed KO - HaVet 01.03.2019 (valid to 31.03.2020).</p> <p>Preliminary VHP for Nova Sea for 2020 includes diseases/parasites, treatments, health goals, cleaner fish, proactive measures, handling, veterinary visits, etc. KO - HaVet March 2020. Preliminary VHP valid until 01.03.2021 according to K.O. - HaVet</p> <p>Site specific health plans for Kalvhylla V21 - signed designated veterinarian PN 15.12.2020. The local plan includes goals, visit log, etc.</p>
		a. Ensure the latest version of the IPM is public on the company website	<p>IPM according to "Kontroll av lakselus og IPM i Nova Sea-konsernet" 2020, on public website (www.novasea.no).</p>

5.2.9	<p>Indicator: The farm shall public present (e.g. via company website) the IPM-measures that the company applies which need to be approved by a authorised veterinarian.</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	b. Ensure the IPM is signed-off by an authorized veterinarian.	<p>IPM according to "Kontroll av lakselus og IPM i Nova Sea-konsernet" 2020, on public website (www.novasea.no).</p> <p>VHP for Nova Sea includes diseases/parasites, treatments, health goals, cleaner fish, proactive measures, handling, veterinary visits, etc. signed KO - HaVet 01.03.2019 (valid to 31.03.2020).</p> <p>Preliminary VHP for Nova Sea for 2020 includes diseases/parasites, treatments, health goals, cleaner fish, proactive measures, handling, veterinary visits, etc. KO - HaVet March 2020. Preliminary VHP valid until 01.03.2021 according to K.O. - HaVet</p> <p>Site specific health plans for Kalvhylla V21 - signed designated veterinarian PN 15.12.2020. The local plan includes goals, visit log, etc.</p>
5.2.10	<p>Indicator: The farm shall monitor parasiticide residue levels annually in the benthic sediment directly outside the AZE.</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Prepare a map of the farm showing boundary of AZE (30 m) and GPS locations of all sediment collections stations. If the farm uses a site-specific AZE, provide justification [3] to the CAB.</p> <p>b. If benthos throughout the full AZE is hard bottom, provide evidence to the CAB and request an exemption from 5.2.10</p> <p>c. Submit test results to ASC as per Appendix VI at least once for each production cycle. If site has hard bottom and cannot complete tests, report this to ASC.</p> <p>d. Retain documentary evidence to show how scores were obtained. If samples were analysed an independent laboratory, obtain copies of results.</p>	<p>NA, pending further guidance from ASC</p> <p>NA, pending further guidance from ASC</p> <p>NA, pending further guidance from ASC</p> <p>NA, pending further guidance from ASC</p>
5.2.11	<p>Indicator: Allowance for prophylactic use of antimicrobial treatments</p> <p>Requirement: None</p> <p>Applicability: All</p>	<p>a. Maintain records for all purchases of antibiotics (invoices, prescriptions) for the current and prior production cycles.</p> <p>b. Maintain a detailed log of all medication-related events (see also 5.2.1a and 5.2.3)</p> <p>c. Calculate the total amount (g) and treatments (#) of antibiotics used during the current and prior production cycles (see also 5.2.13).</p>	<p>No antibiotics used prophylactic the recent cycles</p> <p>No antibiotics used prophylactic the recent cycles</p> <p>No antibiotics used prophylactic the recent cycles</p>

5.2.12	Indicator: Allowance for use of antibiotics listed as critically important for human medicine by the World Health Organization (WHO) Requirement: None Applicability: All	a. Maintain a current version of the WHO list of antimicrobials critically and highly important for human health [89].	WHO Critically important antimicrobials for human medicine 6th revision, 2018, updated 2019. List of treatments used is presented, no antibiotics used at site.
		b. If the farm has <u>not</u> used any antibiotics listed as critically important (5.2.12a) in the current production cycle, inform the CAB and proceed to schedule the audit.	WHO Critically important antimicrobials for human medicine 6th revision, 2018, updated 2019. List of treatments used is presented, no antibiotics used at site.
		c. If the farm <u>has</u> used antibiotics listed as critically important (5.2.12a) to treat any fish during the current production cycle, inform the CAB prior to scheduling audit.	WHO Critically important antimicrobials for human medicine 6th revision, 2018, updated 2019. List of treatments used is presented, no antibiotics used at site.
		d. If yes to 5.2.12c, request an exemption from the CAB to certify only a portion of the farm. Prior to the audit, provide the CAB with records sufficient to establish details of treatment, which pens were treated, and how the farm will ensure full traceability	WHO Critically important antimicrobials for human medicine 6th revision, 2018, updated 2019. List of treatments used is presented, no antibiotics used at site.
5.2.13	Indicator: Number of treatments of antibiotics over the most recent production cycle Requirement: ≤ 3 Applicability: All	a. Maintain records of all treatments of antibiotics (see 5.2.1a). For first audits, farm records must cover the current and immediately prior production cycles in a verifiable statement.	No antibiotics used
		b. Calculate the total number of treatments of antibiotics over the most recent production cycle and supply a verifiable statement of this calculation.	No antibiotics used
5.2.14	Indicator: If more than one antibiotic treatment is used in the most recent production cycle, demonstration that the antibiotic load is at least 15% less than that of the average of the two previous production cycles Requirement: Yes Applicability: All	a. Use results from 5.2.13b to show whether more than one antibiotic treatment was used in the most recent production cycle. If not, then the requirement of 5.2.14 does not apply. If yes, then proceed to 5.2.14b.	No antibiotics used
		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	No antibiotics used
		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.	No antibiotics used
		d. Submit data on antibiotic load to ASC as per Appendix VI (if applicable) for each production cycle.	Submitted to ASC 29.01.2021
	Indicator: Presence of documents demonstrating that the farm has provided buyers of its salmon a list of all therapeutants used in production	a. Prepare a procedure which outlines how the farm provides buyers [94] of its salmon with a list of all therapeutants used in production (see 4.4.3b).	Procedure "Fakturering i Visma" 08.09.2020 states that CV shall follow sales.

5.2.15	therapeutants used in production. Requirement: Yes Applicability: All	b. Maintain records showing the farm has informed all buyers of its salmon about all therapeutants used in production.	FishTalk records available, e.g. CV unit 2, 2021G: Benzocaine treatment ended 24.01.2021, quarantine until 26.01.2021.
<i>Criterion 5.3 Resistance of parasites, viruses and bacteria to medicinal treatments</i>			
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):
5.3.1	Indicator: Bio-assay analysis to determine resistance when two applications of a treatment have not produced the expected effect Requirement: Yes Applicability: All	Instruction to Clients for Indicator 5.3.1 - Identifying the 'Expected Effect' of Medicinal Treatment Indicator 5.3.1 requires that farms identify treatments that have not produced the expected effect. The SAD Steering Committee recognizes that the “expected effect” will vary with health condition and type of medicinal treatment. Therefore farms and auditors will need to review the pre- and post-treatment condition of fish in order to understand and evaluate the impact of treatment. <u>Example: sea lice treatment with emamectin benzoate</u> The SAD SC recommends that a typical baseline for effectiveness of emamectin benzoate is a minimum of 90 percent reduction in abundance of lice on the farmed fish. To determine whether treatment has produced the expected effect, farm and auditor must review pre- and post-treatment lice counts. If the calculated percent reduction in lice is < 90% then the treatment did not produce the expected effect and a bio-assay should be performed to determine whether sea lice have developed resistance. Note: If field-based bio-assays for determining resistance are ineffective or unavailable, the farm shall have samples analyzed by an independent laboratory to determine resistance formation. The auditor shall record in the audit report why field-based bio-assays were deemed ineffective and shall include results from the laboratory analyses of resistance formation.	
		a. In addition to recording all therapeutic treatments (5.2.1a), keep a record of all cases where the farm uses two successive medicinal treatments.	Risk assessment before each treatment and test of sensitivity (resistance) before treatment. Also environmental report for risk of use of therapeutants in area.
		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.	No consecutive treatments done in present cycle without desired effect.
		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.	No consecutive treatments done in present cycle without desired effect.
		d. Keep a record of all results arising from 5.3.1c.	No consecutive treatments done in present cycle without desired effect.
5.3.2	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 Requirement: Yes Applicability: All	a. Review results of bio-assay tests (5.3.1d) for evidence that resistance has formed. If yes, proceed to 5.3.2b. If no, then Indicator 5.3.2 is not applicable.	Risk assessment before each treatment and test of sensitivity (resistance) before treatment. Also environmental report for risk of use of therapeutants in area.
		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.	No consecutive treatments done in present cycle without desired effect.

5.3.3	Indicator: Specific rotation, providing that the farm has >1 effective medicinal treatment product available, every third treatment must belong to a different family of drugs. Requirement: Yes Applicability: All	a. Determine how many effective medicinal treatment products the farm uses.	Medicinal treatments: 2019G: No medicinal treatments 2021G: No medicinal treatments (preliminary results, fish not harvested)
		b. If farm uses >1 effective medicinal treatment product, ensure every third treatment belongs to a different family of drugs.	No treatment present generation (2021G) Effective medicinal treatment available for sealice treatment if needed
Criterion 5.4 Biosecurity management [95]			
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB
Footnote	[95] See Appendix VI for transparency requirements for 5.4.2 and 5.4.4.		
5.4.1	Indicator: Evidence that all salmon on the site are a single-year class [96] Requirement: 100% [97] Applicability: All farms except as noted in [97]	a. Keep records of the start and end dates of periods when the site is fully fallow after harvest.	Stocking 2019G from 22.12.2019 to 24.05.2019, last harvest date 16.08.2020. Stocking 2021G from 05.12.2020 (not finished with release during audit).
		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.	Stocking 2019G from 22.12.2019 to 24.05.2019, last harvest date 16.08.2020. Stocking 2021G from 05.12.2020 (not finished with release during audit).
		-	All salmon on the site are a single-year class (2019G). 2020G not finished stocking.
Footnote	[96] Gaps of up to six months between inputs of smolts derived from the same stripping are acceptable as long as there remains a period of time when the site is fully fallow after harv		
Footnote	[97] Exception is allowed for: 1) farm sites that have closed, contained production units where there is complete separation of water between units and no sharing of filtration systems or other systems that could spread 2) farm sites that have ≥95% water recirculation, a pre-entry disease screening protocol, dedicated quarantine capability and biosecurity measures for waste to ensure there is no discharge of live biological material to the natural enviro		
	Indicator: Evidence that if the farm suspects an unidentifiable transmissible agent, or if the farm	a. For mortality events logged in 5.1.4a, show evidence that the farm promptly evaluated each to determine whether it was a statistically significant increase over background mortality rate on a monthly basis [98]. The accepted level of significance (for example, p < 0.05) should be agreed between farm and CAB.	Continuos evaluation. No events of UIA category mortality categorized nor suspected for the most recent production cycle. No UIA detected nor suspected at farm. Ref to indicator 5.1.4 a for details of monitoring.
		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.	Continuos evaluation. No events of UIA category mortality categorized nor suspected for the most recent production cycle. No UIA detected nor suspected at farm. Ref to indicator 5.1.4 a for details of monitoring.

5.4.2	<p>experiences unexplained increased mortality, [98] 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 [99] on the farm and within the ABM 3. Promptly [100] made findings publicly available <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>c. Proceed to 5.4.2d if, during the most recent production cycle, either:</p> <ul style="list-style-type: none"> - results from 5.4.2a showed a statistically significant increase in unexplained mortalities; or - the answer to 5.4.2b was 'yes'. <p>Otherwise, Indicator 5.4.2 is not applicable.</p>	No UIA detected nor suspected at farm.
		<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 [99] on the farm and within the ABM; and 3) Promptly (within one month) make findings publicly available. 	No UIA detected nor suspected at farm.
		<p>e. As applicable, submit data to ASC as per Appendix VI about unidentified transmissible agents or unexplained increases in mortality. If applicable, then data are to be sent to ASC on an ongoing basis (i.e. at least once per year and for each production cycle).</p>	Submitted to ASC 29.01.2021
Footnote	[98] Increased mortality: A statistically significant increase over background rate on a monthly basis.		
Footnote	[99] Primary aim of monitoring and surveillance is to investigate whether a new or adapted disease is present in the area.		
Footnote	[100] Within one month.		
5.4.3	<p>Indicator: Evidence of compliance [101] with the OIE Aquatic Animal Health Code [102]</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 had been fully eradicated (area declared free of the pathogen)]. An aggressive response will involve, at a minimum, the following actions:</p> <ul style="list-style-type: none"> - 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 into the farm's fish health management plan.</p> <p>Note: The Steering Committee recognizes that establishment of quarantine zones will likely incorporate mandatory depopulation of sites close to the infected site and affect some, though not necessarily all, of the ABM.</p>	
		<p>a. Maintain a current version of the OIE Aquatic Animal Health Code on site or ensure staff have access to the most current version.</p>	<p>Link to OIE "Aquatic Animal Health Code 2019" (relevant diseases in list are Pancreas Disease and Infectious Salmon Anemia Virus).</p> <p>Link to "OIE listed diseases, infections and infestations in force in 2019".</p>

		<p>b. Develop policies and procedures as needed to ensure that farm practices remain consistent with the OIE Aquatic Animal Health Code (5.4.3a) and with actions required under indicator 5.4.4.</p>	<p>VHP for Nova Sea includes diseases/parasites, treatments, health goals, cleaner fish, proactive measures, handling, veterinary visits, etc. signed KO - HaVet 01.03.2019 (valid to 31.03.2020). Preliminary VHP for Nova Sea for 2020 includes diseases/parasites, treatments, health goals, cleaner fish, proactive measures, handling, veterinary visits, etc. KO - HaVet March 2020. Preliminary VHP valid until 01.03.2021 according to K.O. - HaVet Link to OIE "Aquatic Animal Health Code 2019" (relevant diseases in list are Pancreas Disease and Infectious Salmon Anemia Virus).</p>
		-	Verified during audit.
Footnote	[101] Compliance is defined as farm practices consistent with the intentions of the Code, to be further outlined in auditing guidance. For purposes of this standard, this includes an aggressive response to detection of an exotic OIE-notifiable 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 not previously found in the area or had been fully eradicated (area declared free of the pathogen).		
Footnote	[102] OIE 2011. Aquatic Animal Health Code. http://www.oie.int/index.php?id=171 .		
5.4.4	<p>Indicator: If an OIE-notifiable disease [103] is confirmed on the farm, evidence that:</p> <ol style="list-style-type: none"> 1. the farm, at a minimum, immediately culled the pen(s) in which the disease was detected 2. the farm immediately notified the other farms in the ABM [104] 3. the farm and the ABM enhanced monitoring and conducted rigorous testing for the disease 4. the farm promptly [105] made findings publicly available <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Ensure that farm policies and procedures in 5.4.3a describe the four actions required under Indicator 5.4.4 in response to an OIE-notifiable disease on the farm.</p> <p>b. Inform the CAB if an OIE-notifiable disease has been confirmed on the farm during the current production cycle or the two previous production cycles. If yes, proceed to 5.4.4c. If no, then 5.4.4c and 5.4.4d do not apply.</p> <p>c. If an OIE-notifiable disease was confirmed on the farm (see 5.4.4b), then retain documentary evidence to show that the farm:</p> <ol style="list-style-type: none"> 1) immediately culled the pen(s) in which the disease was detected; 2) immediately notified the other farms in the ABM [104] 3) enhanced monitoring and conducted rigorous testing for the disease; and 4) promptly (within one month) made findings publicly available. <p>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).</p>	<p>Site management and veterinarian has the responsibility to inform governments if notifiable diseases occur.</p> <p>No occurrence of OIE-notifiable diseases.</p> <p>No occurrence of OIE-notifiable diseases.</p> <p>Submitted to ASC 29.01.2021</p>

		-	No occurrence of OIE-notifiable diseases.
Footnote	[103] At the time of publication of the final draft standards, OIE-notifiable diseases relevant to salmon aquaculture were: Epizootic haematopoietic necrosis, Infectious haematopoietic necrosis (IHN), Infectious salmon anemia (ISA), Viral haemorrhagic septicaemia (VHS), Gyrodactylus salaris (Gyrodactylus salaris).		
Footnote	[104] This is in addition to any notifications to regulatory bodies required under law and the OIE Aquatic Animal Health Code.		
Footnote	[105] Within one month.		
Social requirements in the standards shall be audited by an individual who is a lead auditor in conformity with SAAS Procedure 200 section 3.1.			
PRINCIPLE 6: DEVELOP AND OPERATE FARMS IN A SOCIALLY RESPONSIBLE MANNER			
6.1 Freedom of association and collective bargaining [106]			
		Compliance Criteria	
Footnote	[106] Bargain collectively: A voluntary negotiation between employers and organizations of workers in order to establish the terms and conditions of employment by means of collective (written		
		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.	Majority of workers are organised. The information on Freedom of association is presented in Self declaration of Social Practice. Workers aware of their right.
		b. Union representatives (or worker representatives) are chosen by workers without managerial interference. ILO specifically prohibits “acts which are designated to promote the establishment of worker organizations or to support worker organizations under the control or employers or employers’ organizations.”	TU worker representative: JAN for the area. The worker representative works with organised employees. Safety representative for area is elected DH.

6.1.1	Indicator: Evidence that workers have access to trade unions (if they exist) and union representative(s) chosen by themselves without managerial interference Requirement: Yes Applicability: All	c. Trade union representatives (or worker representatives) have access to their members in the workplace at reasonable times on the premises.	The worker representative communicate with employees by phone, e-mail and social network group. NC evidence: Information from interview with TU representative and documented evidences provided by him about the need of participation and time allocated.
		d. Be advised that workers and union representatives (if they exist) will be interviewed to confirm the above.	Interview with TU representative and safety representatives confirms information above
6.1.2	Indicator: Evidence that workers are free to form organizations, including unions, to advocate for and protect their rights Requirement: Yes Applicability: All	a. Employment contract explicitly states the worker's right of freedom of association.	The Job contracts has link to Self declaration of Social Practice of the Company.
		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).	The right is communicated via training of quality system which has Self declaration of Social practice. Site managers are responsible to communicate the Self declaration of Social practice to all employees.
		c. Be advised that workers will be interviewed to confirm the above.	Interview confirms information above.
	Indicator: Evidence that workers are free and able to bargain collectively for their rights	a. Local trade union, or where none exists a reputable civil-society organization, confirms no outstanding cases against the farm site management for violations of employees' freedom of association and collective bargaining rights.	No outstanding cases what are in conflict with standard requirements.

6.1.3	Requirement: Yes	b. Employer has explicitly communicated a commitment to ensure the collective bargaining rights of all workers.	Collective bargaining agreement in place as Tariff agreement.
	Applicability: All	c. There is documentary evidence that workers are free and able to bargain collectively (e.g. collective bargaining agreements, meeting minutes, or complaint resolutions).	Collective bargaining agreement in place as Tariff agreement.
Criterion 6.2 Child labor			
		Compliance Criteria	
6.2.1	Indicator: Number of incidences of child [107] labor [108] Requirement: None Applicability: All except as noted in [107]	a. In most countries, the law states that minimum age for employment is 15 years. There are two possible exceptions: - in developing countries where the legal minimum age may be set to 14 years (see footnote 108); or - in countries where the legal minimum age is set higher than 15 years, in which case the legal minimum age of the country is followed. If the farm operates in a country where the legal minimum ages is not 15, then the employer shall maintain documentation attesting to this fact.	Standard requirements apply.
		b. Minimum age of permanent workers is 15 or older (except in countries as noted above).	The youngest employee on the date of recertification -16 years old
		c. Employer maintains age records for employees that are sufficient to demonstrate compliance.	Records are kept in HR system.
Footnote	[107] Child: Any person under 15 years of age. A higher age would apply if the minimum age law of an area stipulates a higher age for work or mandatory schooling. Minimum age may be 14 if the country allows it under the deve		
Footnote	[108] 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 [109] that are protected [110] 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.	Most of the relevant training young workers receives as all other employees. The job conditions and limitations are defined in job contract attachment for young workers. NC1 evidence: Interview with managers. Training records.
		b. All young workers (from age 15 to less than 18) are identified and their ages are confirmed with copies of IDs.	The young workers are identified by IDs.
		c. Daily records of working hours (i.e. timesheets) are available for all young workers.	Timesheets are available

		<p>d. For young workers, the combined daily transportation time and school time and work time does not exceed 10 hours.</p>	<p>Work is organised in normal 5 days weeks or on 7/7 shifts. Timesheets are available, what was agreed with training institution and the parents of young employee.</p> <p>NC2 evidence: Interview with site manager, time sheets, training records.</p>
		<p>e. Young workers are not exposed to hazards [111] and do not perform hazardous work [112]. Work on floating cages in poor weather conditions shall be considered hazardous.</p>	<p>The general hazards that should be avoided are discussed with young workers prior to each work and during the work always supervised by other team member.</p>
		<p>f. Be advised that the site will be inspected and young workers will be interviewed to confirm compliance.</p>	<p>No young workers were present on the date of the audit.</p>
Footnote	[109] Young Worker: Any worker between the age of a child, as defined above, and under the age of 18.		
Footnote	[110] Protected: Workers between 15 and 18 years of age will not be exposed to hazardous health and safety conditions; working hours shall not interfere with their education and the combined daily transportation time and school time shall not exceed 10 hours.		
Footnote	[111] Hazard: The inherent potential to cause injury or damage to a person’s health (e.g., unequipped to handle heavy machinery safely, and unprotected exposure to harmful chemicals).		
Footnote	[112] Hazardous work: Work that, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of workers (e.g., heavy lifting disproportionate to a person’s body size, operating heavy machinery without proper training, or working in unsafe conditions).		
Criterion 6.3 Forced, bonded or compulsory labor			
		Compliance Criteria	
6.3.1	<p>Indicator: Number of incidences of forced, [113] bonded [114] or compulsory labor</p> <p>Requirement: None</p> <p>Applicability: All</p>	<p>a. Contracts are clearly stated and understood by employees. Contracts do not lead to workers being indebted (i.e. no ‘pay to work’ schemes through labour contractors or training credit programs).</p>	<p>Contracts do not lead to workers being indebted. Separate contracts for crediting of higher education could be signed with specific conditions for working in company after the education.</p>
		<p>b. Employees are free to leave workplace and manage their own time.</p>	<p>Confirmed by interview.</p>
		<p>c. Employer does not withhold employee’s original identity documents.</p>	<p>No cases identified</p>
		<p>d. Employer does not withhold any part of workers’ salaries, benefits, property or documents in order to oblige them to continue working for employer.</p>	<p>No cases identified</p>
		<p>e. Employees are not to be obligated to stay in job to repay debt.</p>	<p>No cases identified.</p>
		<p>f. Maintain payroll records and be advised that workers will be interviewed to confirm the above.</p>	<p>Payroll records are available. The interviews has confirmed above information.</p>
Footnote	[113] Forced (Compulsory) labor: All work or service that is extracted from any person under the menace of any penalty for which a person has not offered himself/herself voluntarily or for which such work or service is demanded as a condition of employment, or as a sanction, physical punishment, or the loss of rights and privileges or restriction of movement (e.g., withholding of identity documents).		
Footnote	[114] Bonded labor: When a person is forced by the employer or creditor to work to repay a financial debt to the crediting agency.		
Criterion 6.4 Discrimination [118]			
		Compliance Criteria	
Footnote	[115] Discrimination: Any distinction, exclusion or preference that has the effect of nullifying or impairing equality of opportunity or treatment. Not every distinction, exclusion or preference constitutes discrimination. For instance, a measure that appears to discriminate but is justified by legitimate aims and is proportionate to those aims is not discriminatory. Positive discrimination in favour of people from certain underrepresented groups may be legal in some countries.		

6.4.1	Indicator: Evidence of comprehensive [116] and proactive anti-discrimination policies, procedures and practices Requirement: Yes Applicability: All	a. Employer has written anti-discrimination policy in place, stating that the company does not engage in or support discrimination in hiring, remuneration, access to training, promotion, termination or retirement based on race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation, age or any other condition that may give rise to discrimination.	The anti-discrimination policy is presented in Self declaration of Social practice.
		b. Employer has clear and transparent company procedures that outline how to raise, file, and respond to discrimination complaints.	Whistle blowing procedure in place (ID13447 revision 2018).
		c. Employer respects the principle of equal pay for equal work and equal access to job opportunities, promotions and raises.	The tariff agreement is the base of equal pay, it is applied to all employees.
		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.	Site Manager and employees were trained on non-discrimination. NC evidence: Interview with management. Training documents and missing evidences of non-discrimination training for trainee.
Footnote	[116] Employers shall have written anti-discrimination policies stating that the company does not engage in or support discrimination in hiring, remuneration, access to training, promotion, termination or retirement based on race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation, age or any other condition that may give rise to discrimination.		
6.4.2	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.	No cases identified.
		b. Be advised that worker testimonies will be used to confirm that the company does not interfere with the rights of personnel to observe tenets or practices, or to meet needs related to race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation or any other condition that may give rise to discrimination.	Interview has confirmed absence of discrimination cases.
Criterion 6.5 Work environment health and safety			
		Compliance Criteria	

6.5.1	Indicator: Percentage of workers trained in health and safety practices, procedures [117] and policies on a yearly basis Requirement: 100% Applicability: All	a. Employer has documented practices, procedures (including emergency response procedures) and policies to protect employees from workplace hazards and to minimize risk of accident or injury. The information shall be available to employees.	The H&S procedures are in place. The site level Safety Job Analysis is applied prior to hazardous works to assess and discuss related risks.
		b. Employees know and understand emergency response procedures.	Emergency procedures are maintained. Workers know the 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.	Regular external and internal trainings are conducted. NC evidence: Interview with management. Training documents. Missing evidences of annual refresher training records on general safety rules. Safety drill on feedbarge took place more than a year ago.
Footnote	[117] Health and safety training shall include emergency response procedures and practices.		
		a. Employer maintains a list of all health and safety hazards (e.g. chemicals).	The list of H&S hazards is maintained together with list of H&S risks.
		b. Employer provides workers with PPE that is appropriate to known health and safety hazards.	All needed PPE is provided.

6.5.2	Indicator: Evidence that workers use Personal Protective Equipment (PPE) effectively Requirement: Yes Applicability: All	c. Employees receive annual training in the proper use of PPE (see 6.5.1c). For workers who participated in the initial training(s) previously an annual refreshment training may suffice, unless new PPE has been put to use.	The procedure and forms for PPE use are in place. H&S Training is conducted annually.
		d. Be advised that workers will be interviewed to confirm the above.	The interviews has confirmed above information.
	Indicator: Presence of a health and safety risk assessment and evidence of preventive actions taken	a. Employer makes regular assessments of hazards and risks in the workplace. Risk assessments are reviewed and updated at least annually (see also 6.5.1a).	The risk assessment is conducted in register of H&S hazards. As well risks are discussed during SJA (safe job analysis) discussions prior to any hazardous activities event like splitting, de-licing, harvesting etc. NC evidence: The risk records in Landax system. Missing other documents/records of risk evaluation. Site visit.

6.5.3	Requirement: Yes Applicability: All	b. Employees are trained in how to identify and prevent known hazards and risks (see also 6.5.1c).	Annual general training is applied for all employees by site managers. The Safety Job Analysis is applied prior to each hazardous work.
		c. Health and safety procedures are adapted based on results from risk assessments (above) and changes are implemented to help prevent accidents.	The procedures are adapted in relation to risk assessment and H&S accidents investigation results.
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.	H&S accidents are reported in system database.
		b. Employer maintains complete documentation for all occupational health and safety violations and investigations.	H&S violations and investigations are reported in system database.
		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.	Corrective action plan for accidents are developed and implemented, Root cause analysis is applied.
		d. Employees working in departments where accidents have occurred can explain what analysis has been done and what steps were taken or improvements made.	No accidents took place at this site. Information from other sites provided via e-mail and monthly summary.

6.5.5	<p>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</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	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.	Sufficient insurance is provided for all employees who has the contract with the company.
6.5.6	<p>Indicator: Evidence that all diving operations are conducted by divers who are certified</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	Note: If the farm outsources its diving operations to an independent company, the farm shall ensure that auditors have access to specified information sufficient to demonstrate compliance with Indicator 6.5.6. It is the farm's responsibility to obtain copies of relevant documentation (e.g. certificates) from the dive company.	
		a. Employer keeps records of farm diving operations and a list of all personnel involved. In case an external service provider was hired, a statement that provider conformed to all relevant criteria must be made available to the auditor by this provider.	The records of diving activities with the lists of personnel involved are maintained. Procedure Use of diving services (last revision 2020-04-02). Diving company J.R Dykkerservice is checked during second party audits by requirements of Global GRASP and ASC standard principle 6.
		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.	The information about divers' certificates is sent by diving company on request.
Criterion 6.6 Wages			
		Compliance Criteria	

6.6.1	Indicator: The percentage of workers whose basic wage [118] (before overtime and bonuses) is below the minimum wage [119] 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.	Salaries are defined in protocols of collective bargaining agreements' with TU, valid from 2020
		b. Employer's records (e.g. payroll) confirm that worker's wages for a standard work week (\leq 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.	Employer records confirm that salaries are paid in line with Tarif agreement for fishery sector.
		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.	Interview confirms fair salaries
Footnote	[118] Basic wage: The wages paid for a standard working week (no more than 48 hours).		
Footnote	[119] 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 [120] 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.	No evidences of employer and worker representatives cooperation to assess basic needs wages.
		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.	NC evidence: Basic needs wage calculation was not updated for 2020.
		c. Employer demonstrates how they have taken steps toward paying a basic needs wage to their workers.	Interview confirms fair salaries I line with Tariff agreement.
Footnote	[120] Basic needs wage: A wage that covers the basic needs of an individual or family, including housing, food and transport. This concept differs from a minimum wage, which is set by law and may or may not co		
6.6.3	Indicator: Evidence of transparency in wage-setting and rendering [121] Requirement: Yes	a. Wages and benefits are clearly articulated to workers and documented in contracts.	The contracts refer to tariff agreement for the wage. The benefits are defined in job contracts for employees.
		b. The method for setting wages is clearly stated and understood by workers.	Interview confirms that method for setting wages is understood by workers.

	Applicability: All	c. Employer renders wages and benefits in a way that is convenient for the worker (e.g. cash, check, or electronic payment methods). Workers do not have to travel to collect benefits nor do they receive promissory notes, coupons or merchandise in lieu of payment.	Payments are made into personal bank accounts.
		d. Be advised that workers will be interviewed to confirm the above.	The interviews has confirmed above information.
Footnote	[121] 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 [122]	a. Employer maintains a record of all employment contracts.	Contracts are maintained.
	Requirement: 100%	b. There is no evidence for labour-only contracting relationships or false apprenticeship schemes.	No evidences of labour-only contracting.
	Applicability: All	c. Be advised that workers will be interviewed to confirm the above.	The interviews has confirmed above information.
Footnote	[122] Labor-only contracting relationships or false apprenticeship schemes are not acceptable. This includes revolving/consecutive labor contracts to deny benefit accrual or equitable remuneration. False Apprenticeship Scheme: The 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 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.	The subcontractors evaluation procedure and related documents are monitoring application of socially responsible practices and policies.
		b. Producing company has criteria for evaluating its suppliers and contractors. The company keeps a list of approved suppliers and contractors.	Company has list of approved subcontractors and critical suppliers. The evaluating criteria have been included inti self-declaration forms and second party audits at subcontractors
		c. Producing company keeps records of communications with suppliers and subcontractors that relate to compliance with 6.7.2.	The records of communications with suppliers and subcontractors are maintained.
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 labour conflict resolution policy for the presentation, treatment, and resolution of worker grievances in a confidential manner.	Chapter of personal handbook "Notification of critical conditions. Rev. 2020-August. Whistle blowing procedure is implemented.
		b. Workers are familiar with the company's labour conflict policies and procedures. There is evidence that workers have fair access.	Workers demonstrate understanding of conflict resolution.
		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.	No conflict cases identified.
6.8.2	Indicator: Percentage of grievances handled that are addressed [123] within a 90-day timeframe Requirement: 100% Applicability: All	a. Employer maintains a record of all grievances, complaints and labour conflicts that are raised.	No records, as were no cases.
		b. Employer keeps a record of follow-up (i.e. corrective actions) and timeframe in which grievances are addressed.	No records, as were no cases.
		c. Maintain documentary evidence and be advised that workers will be interviewed to confirm that grievances are addressed within a 90-day timeframe.	No records, as were no cases. Interview confirms no cases fact.
Footnote	[123] Addressed: Acknowledged and received, moving through the company's process for grievances, corrective action taken when necessary.		
Criterion 6.9 Disciplinary practices			
		Compliance criteria	
6.9.1	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.	No evidences of incorrect behaviour.
		b. Allegations of corporeal punishment, mental abuse [124], physical coercion, or verbal abuse will be investigated by auditors.	No cases identified.
		c. Be advised that workers will be interviewed to confirm there is no evidence for excessive or abusive disciplinary actions.	The interviews has confirmed above information.
Footnote	[124] Mental Abuse: Characterized by the intentional use of power, including verbal abuse, isolation, sexual or racial harassment, intimidation or threat of physical force.		
6.9.2	Indicator: Evidence of a functioning disciplinary action policy whose aim is to improve the worker [125] Requirement: Yes Applicability: All	a. Employer has written policy for disciplinary action which explicitly states that its aim is to improve the worker [125].	The disciplinary actions are defined in Working rules of the company.
		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.	The interviews has confirmed fair and effective disciplinary policy.
Footnote	[125] If disciplinary action is required, progressive verbal and written warnings shall be engaged. The aim shall always be to improve the worker; dismissal shall be the last resort. Policies for bonuses, incentives, access to training and pro arbitrarily. Fines or basic wage deductions shall not be acceptable disciplinary practices.		
Criterion 6.10 Working hours and overtime			
		Compliance criteria	
		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).	

6.10.1	Indicator: Incidences, violations or abuse of working hours and overtime laws [126] Requirement: None Applicability: All	a. Employer has documentation showing the legal requirements for working hours and overtime in the region where the farm operates. If local legislation allows workers to exceed internationally accepted recommendations (48 regular hours, 12 hours overtime) then requirements of the international standards apply.	The working time schemes are approved in Tariff agreement with Trade unions. The scheme of 7 /7 used with 10 hours of working day.
		b. Records (e.g. time sheets and payroll) show that farm workers do not exceed the number of working hours allowed under the law.	The working time is managed within legal requirements with some deviations. NC evidence: Interview with managers. Time sheets.
		c. If an employer requires employees to work shifts at the farm (e.g. 10 days on and six days off), the employer compensates workers with an equivalent time off in the calendar month and there is evidence that employees have agreed to this schedule (e.g. in the hiring contract).	The scheme 7 by 7 is used with 10 hours of working day. The working time and off-time are balanced. The work in shifts is defined in job contracts.
		d. Be advised that workers will be interviewed to confirm there is no abuse of working hours and overtime laws.	The interviews has confirmed above information.
Footnote	[126] In cases where local legislation on working hours and overtime exceed internationally accepted recommendations (48 regular hours, 12 hours overtime), the international standards v		
6.10.2	Indicator: Overtime is limited, voluntary [127], paid at a premium rate [128] and restricted to exceptional circumstances Requirement: Yes Applicability: All except as noted in [130]	a. Payment records (e.g. payslips) show that workers are paid a premium rate for overtime hours.	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).	Overtime is managed within labour law with some deviations See 6.10.1
		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.	The interviews has confirmed voluntary overtime, the special cases agreed in collective bargaining agreement.
Footnote	[127] Compulsory overtime is permitted if previously agreed to under a collective bargaining agreement.		
Footnote	[128] Premium rate: A rate of pay higher than the regular work week rate. Must comply with national laws/regulations and/or industry standards.		
Criterion 6.11 Education and training			
		Compliance criteria	
6.11.1	Indicator: Evidence that the company regularly performs training of staff in fish husbandry, general farm and fish escape management and health and safety procedures Requirement: Yes Applicability: All	a. Company has written policies related to continuing education of workers. Company provides incentives (e.g. subsidies for tuition or textbooks, time off prior to exams, flexibility in work schedule) that encourage workers to participate in educational initiatives. Note that such offers may be contingent on workers committing to stay with the company for a pre-arranged time.	Policy of supporting education is presented in job offer, what is part of the contract. The financial support for training is provided.
		b. Employer maintains records of worker participation in educational opportunities as evidenced by course documentation (e.g. list of courses, curricula, certificates, degrees).	Records available in HR IT system. NC evidence: Training records. Interview with management.

		c. Be advised that workers will be interviewed to confirm that educational initiatives are encouraged and supported by the company.	The interviews has confirmed education encouraging by managers.
Criterion 6.12 Corporate policies for social responsibility			
	Compliance criteria		
6.12.1	Indicator: Demonstration of company-level [129] policies in line with the standards under 6.1 to 6.11 above Requirement: Yes Applicability: All	a. Company-level policies are in line with all social and labour requirements presented in 6.1 through 6.11.	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.	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).	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).	Access is provided, policies verified.
Footnote	[129] Applies to the headquarters of the company in a region or country where the site applying for certification is located. The policy shall relate to all of the company’s operations in the region or country, including grow-out.		
Social requirements in the standards shall be audited by an individual who is a lead auditor in conformity with SAAS Procedure 200 section 3.1.			
PRINCIPLE 7: BE A GOOD NEIGHBOR AND CONSCIENTIOUS CITIZEN			
Criterion 7.1 Community engagement			
	Compliance Criteria		
	Indicator: Evidence of regular and meaningful [130] consultation and engagement with community representatives and organizations	a. The farm pro-actively arranges for consultations with the local community at least twice every year (bi-annually).	Remote meetings 2020-09 were organised, no respond to invitations.
		b. Consultations are meaningful. OPTIONAL: the farm may choose to use participatory Social Impact Assessment (pSIA) or an equivalent method for consultations.	No information was received from interested parties.
		c. Consultations include participation by representatives from the local community who were asked to contribute to the agenda.	Invitation is asking for contribution to agenda.

7.1.1	Requirement: Yes Applicability: All	d. Consultations include communication about, or discussion of, the potential health risks of therapeutic treatments (see Indicator 7.1.3).	Information about the potential health risks of therapeutic treatments is included in presentation.
		e. Maintain records and documentary evidence (e.g. meeting agenda, minutes, report) to demonstrate that consultations comply with the above.	Meeting agenda is available.
		f. Be advised that representatives from the local community and organizations may be interviewed to confirm the above.	No additional interviews were organised with stakeholders as communication was initiated prior to the audit.
Footnote	[130] Regular and meaningful: Meetings shall be held at least bi-annually with elected representatives of affected communities. The agenda for the meetings should in part be set by the community representatives. Participatory Soci consider here.		
7.1.2	Indicator: Presence and evidence of an effective [131] 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.	Complaint handling procedure is developed for internal issues. ID 14752 "Resolution of stake holder complaints rev. 2020-03-12.
		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).	No complains received.
		c. The farm's mechanism for handling complaints is effective based on resolution of stakeholder complaints (e.g. follow-up correspondence from stakeholders).	No complains received.
		d. Be advised that representatives from the local community, including complainants where applicable, may be interviewed to confirm the above.	No interview were used with stakeholders
Footnote	[131] 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 [132] at the farm during times of therapeutic treatments and has, as part of consultation with communities under 7.1.1, communicated about potential health risks from treatments Requirement: Yes Applicability: All	a. Farm has a system for posting notifications at the farm during periods of therapeutic treatment. (use of aneastatic baths is not regarded a therapeutant)	Company has system for posting the notifications at the sites during the therapeutic treatments.
		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).	The sings will be posted on the site during the treatments.
		c. Farm communicates about the potential health risks from treatments during community consultations (see 7.1.1)	Information about the potential health risks of therapeutic treatments is included in presentation.

		d. Be advised that members of the local community may be interviewed to confirm the above.	No interview were used with stakeholders
Footnote	[132] Signage shall be visible to mariners and, for example, to fishermen passing by the farm.		
Criterion 7.2 Respect for indigenous and aboriginal cultures and traditional territories			
	Compliance Criteria		
<p style="text-align: center;">Instruction to Clients and CABs on Criterion 7.2 - Traditional Territories of Indigenous Groups</p> <p>The ASC Salmon Standard requires that farms must be respectful of the traditional territories of indigenous groups. The Indicators listed under Criterion 7.2 were designed to fulfil this purpose in a manner consistent with the United Nations Declaration on the Rights of Indigenous Peoples. Where the territorial boundaries of indigenous groups have a defined legal status according to local or national law. In such cases, it is straightforward to know whether a farm is operating in close proximity to indigenous people. However, when boundaries of indigenous groups are not clearly defined, there is no simple way to establish whether the farm is operating in close proximity to indigenous groups. Here ASC provides the following guidance.</p> <p>The intent behind the ASC Salmon Standard is that the farm will identify all neighbouring groups who are potentially negatively impacted by the farm's activities. The actual physical distance between the farm and an indigenous group is less important than the potential for a detrimental impact upon its neighbours. Effective community consultations are one of the best ways to identify such impacts to neighbour groups. Through a transparent process of consultation, indigenous groups who are put under “stress” by the farm's activities, and the nature of the farm's impacts. Continued consultations between farm and neighbours should create a forum where any key issue can be discussed and resolved.</p>			
7.2.1	Indicator: Evidence that indigenous groups were consulted as required by relevant local and/or national laws and regulations Requirement: Yes Applicability: All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [133]	a. Documentary evidence establishes that the farm does or does not operate in an indigenous territory (to include farms that operate in proximity to indigenous or aboriginal people [133]). If not then the requirements of 7.2.1 do not apply.	Company communicated with Sami representative during the application for licence to operate sea farm, what covered hearing process.
		b. Farm management demonstrates an understanding of relevant local and/or national laws and regulations that pertain to consultations with indigenous groups.	The national/local laws and regulations are known.
		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.	Company contacted Sami representatives. E-mail communication records available
		d. Be advised that representatives from indigenous groups may be interviewed to confirm the above.	No traditional and indigenous groups were interviewed, as certification related hearing process include local Sami groups.
7.2.2	Indicator: Evidence that the farm has undertaken proactive consultation with indigenous communities Requirement: Yes [133] Applicability: All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [133]	a. See results of 7.2.1a (above) to determine whether the requirements of 7.2.2 apply to the farm.	Company contacted Sami representatives. No interest to continue consultations was presented by Indigenous group.
		b. Be advised that representatives from indigenous communities may be interviewed to confirm that the farm has undertaken proactive consultations.	No traditional and indigenous groups were interviewed, as certification related hearing process include local Sami groups.
Footnote	[133] All standards related to indigenous rights only apply where relevant, based on proximity of indigenous territories.		
	Indicator: Evidence of a protocol agreement, or an active process [134] to establish a protocol agreement with indigenous groups.	a. See results of 7.2.1a (above) to determine whether the requirements of 7.2.3 apply to the farm.	No specific protocol agreement is developed, as no interest from indigenous community expressed.

8.1	Indicator: Compliance with local and national regulations on water use and discharge, specifically providing permits related to water quality Requirement: Yes Applicability: All Smolt Producers	a. Identify all of the farm's smolt suppliers. For each supplier, identify the type of smolt production system used (e.g. open, semi or closed systems) and submit this information to ASC (Appendix VI).	Submitted to ASC 29.01.2021
		b. Where legal authorisation related to water quality are required, obtain copies of smolt suppliers' permits.	License from Nordland Fylkeskommune 03.02.2020, NR47, for 12 million smolt, site 34097. Discharge license from Fylkesmannen i Nordland 14.01.2020 for 12 million smolt/4000 ton feed (temporary until 31.12.2023. Requires MOM-B survey every year, MOM-C (in 2020, 2021 and every third year) and cleansing of discharge water (50 % reduction of suspended solids and 20% reduction of organic matter).
		c. Obtain records from smolt suppliers showing monitoring and compliance with discharge laws, regulations, and permit requirements as required.	Inspection report from Directorate of Fisheries 10.05.2016 states no non-conformances. Inspection by NFSA 26.03.2019 states no non-conformances. No inspections by Fylkesmannen i Nordland.
		-	Samples in 2018 shows > 85% (exception one sample 22%) cleansing of KOF (shall be at least 20%) and > 90% cleansing of suspended solids (shall be at least 50%). Samples in 2019 shows average 83% cleansing of KOF (4 samples) and average 81% cleansing of suspended solids (5 samples). Sample 28.01.2020 shows 73-75% cleansing of suspended solids og 75% cleaning of KOF (sample analyzed by Eurofins/Labora). Samples (monthly) in 2020 shows average 75% cleansing of TOC and average 72% cleansing of suspended solids. Seen result from Eurofins dated 20.08.2020.
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.	The statement of compliance to requirements of ASC standard principle 6.1 - 6.11 and labour laws is available (signed 16.07.2020)
		b. Keep records of supplier inspections for compliance with national labor laws and codes (only if such inspections are legally required in the country of operation; see 1.1.3a)	Labour law inspection 2017-05-17 with no deviations found.
Standards related to Principle 2			
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):
		Note: If the smolt facility has previously undertaken an independent assessment of biodiversity impact (e.g. as part of the regulatory permitting process), the farm may obtain and use such documents as evidence to demonstrate compliance with Indicator 8.3 as long as all components are covered.	

8.3	<p>Indicator: Evidence of an assessment of the farm's potential impacts on biodiversity and nearby ecosystems that contains the same components as the assessment for grow-out facilities under 2.4.1</p> <p>Requirement: Yes</p> <p>Applicability: All Smolt Producers</p>	<p>a. Obtain from the smolt supplier(s) a documented assessment of the smolt site's potential impact on biodiversity and nearby ecosystems. The assessment must address all components outlined in Appendix I-3.</p> <p>b. Obtain from the smolt supplier(s) a declaration confirming they have developed and are implementing a plan to address potential impacts identified in the assessment.</p>	<p>Risk assessment for environment, updated 11.11.2020, includes escape, chemicals, waste, infection, biodiversity, etc. Risk assessment for escape updated 25.06.2020. MOM-B by Argus Miljø 30.04.2018, status 1. Sediment survey by Argus Miljø 30.12.2019 on 5 sampling points shows status 1 (very good). MOM-B by Argus Miljø 01.08.2020, status 1. MOM-C by Argus Miljø (AquaKompetanse) 01.08.2020.</p> <p>Waste plan "Avfallsplan" 19.01.2021 includes rest waste, paper, special waste, metal, plastic (delivers waste to Retura HAF/Østbø). Mud delivered to "Kystmiljø" from Helgeland Smolt (avd. Reppen) and to "Kystmiljø" from Helgeland Smolt (avd. Sundsfjord). Procedure for biodiversity "Bevaringsplan for dyreliv og mangfold" 19.01.2021 includes birds, wild fish, waste, organic waste, escape, etc. Plan for resipient surveys "Plan for overvåking av resipient Reppen" 14.01.2021 Argus Miljø.</p>
8.4	<p>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)</p> <p>Requirement: 4 kg/t of fish produced over a 12-month period</p> <p>Applicability: All Smolt Producers</p>	<p>Instruction to Clients for Indicator 8.4 - Calculating Total Phosphorus Released per Ton of Fish Produced Farms must confirm that each of their smolt suppliers complies with the requirement of indicator 8.4. This specifies the maximum amount of phosphorus that a smolt production facility can release into the environment per metric ton (mt) of fish produced over a 12-month period. The requirement is set at 4 kg/mt. The calculation of total phosphorus released is made using a "mass balance" approach. Detailed instructions and formulas are given in Appendix VIII-1.</p> <p>If applicable, farms may take account of any physical removals of phosphorus in the form of sludge provided there is evidence to show:</p> <ul style="list-style-type: none"> - the smolt supplier has records showing the total quantity of sludge removed from site over the relevant time period; - the supplier determined phosphorus concentration (% P) in removed sludge by sampling and analysing representative batches; and - the sludge was properly disposed off site and in accordance with the farm's biosolid management plan. 	
		a. Obtain records from smolt suppliers showing amount and type of feeds used for smolt production during the past 12 months.	2020: 1 927 086 kg feed used
		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).	Calculated average approx. 1,4 %.
		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.	26 979 kg phosphor from feed
		d. Obtain from smolt suppliers records for stocking, harvest and mortality which are sufficient to calculate the amount of biomass produced (formula in Appendix VIII-1) during the past 12 months.	2 171 695 kg biomass produced

		e. Calculate the amount of phosphorus in fish biomass produced (result from 8.4d) using the formula in Appendix VIII-1.	9 338 kg phosphor in fish biomass
		f. If applicable, obtain records from smolt suppliers showing the total amount of P removed as sludge (formula in Appendix VIII-1) during the past 12 months.	193 532 kg mud delivered. 4 646 kg phosphor in mud
		g. Using the formula in Appendix VIII-1 and results from 8.4a-f (above), calculate total phosphorus released per ton of smolt produced and verify that the smolt supplier is in compliance with requirements.	5,98 kg phosphor in discharge water per ton biomass produced VR accepted by ASC 05.09.2014
<i>Standards related to Principle 3</i>			
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):
8.5	Indicator: If a non-native species is being produced, the species shall have been widely commercially produced in the area prior to the publication of the ASC Salmon Standard Requirement: Yes [137] Applicability: All Smolt Producers except as noted in [137]	a. Obtain written evidence showing whether the smolt supplier produces a non-native species or not. If not, then Indicator 8.5 does not apply.	Salmo salar is native to region.
		b. Provide the farm with documentary evidence that the non-native species was widely commercially produced in the area before publication of the ASC Salmon Standard. (See definition of area under 3.2.1).	Salmo salar is 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.	Salmo salar is 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.	Salmo salar is native to region.
		e. Retain evidence as described in 8.5a-d necessary to show compliance of each facility supplying smolt to the farm.	Salmo salar is native to region.
Footnote	[137] Exceptions shall be made for production systems that use 100 percent sterile fish or systems that demonstrate separation from the wild by effective physical barriers that are in place and well-maintained to ensure no escapes of re and subsequently reproduce.		
		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.	No incident reported in the most recent production cycle. Verified by Directorate of Fisheries escape incidents overview (www.fidir.no)

8.6	Indicator: Maximum number of escapees [138] in the most recent production cycle	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.	No incident reported in the most recent production cycle.
	Requirement: 300 fish [139]	c. Inform smolt suppliers in writing that monitoring records described in 8.6a must be maintained for at least 10 years beginning with the production cycle for which the farm is first applying for certification (necessary for farms to be eligible to apply for the exception noted in [139]).	ASC statement for Helgeland Smolt (Reppen and Sundsfjord signed TAG 16.07.2020 regarding compliance to criteria 6.1 - 6.11, 8.2 a, 8.5 a, 8.6 c, 8.12 c, 8.13 b, 8.14 a, 8.15 c, 8.16/8.17 b, 8.18 c, 8.19 a and 8.21 a.
	Applicability: All Smolt Producers except as noted in [139]	d. If an escape episode occurs at the smolt production facility (i.e. an incident where > 300 fish escaped), the farm may request a rare exception to the Standard [139]. Requests must provide a full account of the episode and must document how the smolt producer could not have predicted the events that caused the escape episode.	No incident reported. Verified by Directorate of Fisheries escape incidents overview (www.fidir.no)
Footnote	[138] Farms shall report all escapes; the total aggregated number of escapees per production cycle must be less than 300 fish.		
Footnote	[139] A rare exception to this standard may be made for an escape event that is clearly documented as being outside of the farm’s control. Only one such exceptional episode is allowed in a 10-year period for the purposes of this standard per production cycle for which the farm is applying for certification. The farmer must demonstrate that there was no reasonable way to predict the events that caused the episode. Extreme weather (e.g., 100-year storms) or accidents caused by natural events not intended to be covered under this exception.		
8.7	Indicator: Accuracy [140] 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.	Seen test Maskon vaccination machine 07.02.2019, 3224 fish counted in 4 batches, accuracy of 99,7 - 100%, signed Line Holm. If grading are performed after vaccination, VAKI counter is used, statement showing 98-100% accuracy. Seen report from Wingvax for week 35-2019 with accuracy of 99,8%. Seen report from Wingvax for week 5/6-2020 with accuracy of 100%. Seen report from Wingvax for week 33-2020 with accuracy of 100%.
		B. Review records to verify that accuracy of the smolt supplier's counting technology or counting method is ≥ 98%.	Seen generation reports from delivery to harvest with acceptable deviances (< 2%).
Footnote	[140] Accuracy shall be determined by the spec sheet for counting machines and through common estimates of error for any hand counts.		
Standards related to Principle 4			
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):
8.8	Indicator: Evidence of a functioning policy for proper and responsible treatment of non-biological waste from production (e.g., disposal and recycling) Requirement: Yes Applicability: All Smolt Producers	a. From each smolt supplier obtain a policy which states the supplier's commitment to proper and responsible treatment of non-biological waste from production. It must explain how the supplier's policy is consistent with best practice in the area of operation.	Delivery of 18658 kg waste to material recycling and 8 097 kg to energy recycling to Retura HAF in the period 01.01. - 31.12.2020 (report from Retura HAF. Receipt for delivery of 14 tons mud to Kystmiljø 16.09.2020.
		Note: see instructions for Indicator 4.6.1.	

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>	a. Obtain records from the smolt supplier for energy consumption by source (fuel, electricity) at the supplier's facility throughout each year.	Records for 2019 verified
		b. Confirm that the smolt supplier calculates total energy consumption in kilojoules (kj) during the last year.	Energy scope 1: 171 732 800 kJ (diesel) Energy scope 2: 58 534 444 800 kJ (electricity) SUM 58 706 177 600 kJ
		c. Obtain records to show the smolt supplier calculated the total weight of fish in metric tons (mt) produced during the last year.	Produced biomass: 2 242 871 kg
		d. Confirm that the smolt supplier used results from 8.9b and 8.9c to calculate energy consumption on the supplier's facility as required and that the units are reported as kilojoule/mt fish/production cycle.	Energy efficiency: 26 174 567 kJ/ton biomass
		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.	Records OK
8.10	<p>Indicator: Records of greenhouse gas (GHG [141]) emissions [142] at the smolt production facility and evidence of an annual GHG assessment (See Appendix V, subsection 1)</p> <p>Requirement: Yes</p> <p>Applicability: All Smolt Producers</p>	Note: see instructions for Indicator 4.6.2.	
		a. Obtain records of greenhouse gas emissions from the smolt supplier's facility.	Records for 2019 verified
		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.	Total 2019 Produced biomass: 2 242 871 kg CO2 scope 1: 12 632 kg (from diesel) CO2 scope 2: 8 617 571 kg (from electricity) CO2 total: 8 630 203 kg
		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.	Total 2019 Produced biomass: 2 242 871 kg CO2 scope 1: 12 632 kg (from diesel) CO2 scope 2: 8 617 571 kg (from electricity) CO2 total: 8 630 203 kg
		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.	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.	Conversion factors Scope 1: 3,17 kg Co2 per kg diesel (The Norwegian emission inventory 2009 SSB, tetthet 0,84 kg/liter (SSB 2008), 36,2 MJ/liter SSB 2008 Scope 2: 0,53 kg Co2 per kWh (Norsk varedokumentasjon 2018), 1kWh equals 3,6 MJ SSB 2008.

Footnote	[141] 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)		
Footnote	[142] GHG emissions must be recorded using recognized methods, standards and records as outlined in Appendix V.		
Standards related to Principle 5			
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):
8.11	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.	Health plan for Helgeland Smolt (Reppen and Sundsfjord) signed Janette Festvåg 2020-06-14. Includes health control, veterinary visits (12 per year), diseases, preventive measures, disease measures, vaccine, parasites, screening, water quality, destruction, welfare, density, starvation, training, medicines, sedations, notification, etc. Appendix: list of diagnosis, list of treatments, notifiable diseases (list 1, 2 and 3).
		b. Keep documentary evidence to show that the smolt supplier's health plans were approved by the supplier's designated veterinarian.	Health plan for Helgeland Smolt (Reppen and Sundsfjord) signed Janette Festvåg 2020-06-14.
		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.	Health plan for Helgeland Smolt (Reppen and Sundsfjord) signed Janette Festvåg 2020-06-14. Includes health control, veterinary visits (12 per year), diseases, preventive measures, disease measures, vaccine, parasites, screening, water quality, destruction, welfare, density, starvation, training, medicines, sedations, notification, etc. Appendix: list of diagnosis, list of treatments, notifiable diseases (list 1, 2 and 3).
		b. Maintain a list of diseases for which effective vaccines exist for the region, developed by the farm veterinarian and supported by scientific evidence.	Health plan for Helgeland Smolt (Reppen and Sundsfjord) signed Janette Festvåg 2020-06-14. Includes health control, veterinary visits (12 per year), diseases, preventive measures, disease measures, vaccine, parasites, screening, water quality, destruction, welfare, density, starvation, training, medicines, sedations, notification, etc. Appendix: list of diagnosis, list of treatments, notifiable diseases (list 1, 2 and 3).

8.12	<p>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 [143]</p> <p>Requirement: 100%</p> <p>Applicability: All Smolt Producers</p>	c. Obtain from the smolt supplier(s) a declaration detailing the vaccines the fish received.	Seen Health declarations; Helgeland Smolt tank F1-7 (to Stokkasjøen cage 1), vaccine AlphaJect Micro 6, Aquagen broodstock, 18.12.2018, signed veterinarian JF. No confirmed/suspected diseases and no restrictions. Helgeland Smolt tank F2-2 (to Kalvhylla/Stokkasjøen), vaccine AlphaJect Micro 6, Aquagen broodstock, 03.05.2019, signed veterinarian JF. No confirmed/suspected diseases and no restrictions. Helgeland Smolt tank D1-1 (to Renga/Bukkøya), vaccine Pentium Forte +, Aquagen broodstock, 23.07.2019, signed veterinarian JF. No confirmed/suspected diseases and no restrictions. Helgeland Smolt tank D2-5 (to Bukkøya), vaccine Pentium Forte +, MOWI broodstock, 04.10.2019, signed veterinarian JF. No confirmed/suspected diseases and no restrictions. Helgeland Smolt tank D2-6 (to Bukkøya), vaccine Pentium Forte +, MOWI broodstock, 04.10.2019, signed veterinarian JF. No confirmed/suspected diseases and no restrictions. Helgeland Smolt tank D1-3 (to Renga), vaccine Pentium Forte +, Aquagen broodstock, 23.07.2019, signed veterinarian JF. No confirmed/suspected diseases and no restrictions. Helgeland Smolt tank D1-6 (to Renga), vaccine Pentium Forte +, Aquagen broodstock, 23.07.2019, signed veterinarian JF. No confirmed/suspected diseases and no restrictions. Helgeland Smolt tank F1-8 (to Rensøy), vaccine AlphaJect Micro 6, Aquagen broodstock, 31.08.2020, signed veterinarian JF. No confirmed/suspected diseases and no restrictions. Helgeland Smolt tank D2-5 (to Rensøy), vaccine AlphaJect Micro 6, Aquagen broodstock, 07.07.2020, signed veterinarian TK. No confirmed/suspected diseases and no restrictions. Helgeland Smolt tank F1-6 (to Kalvhylla), vaccine AlphaJect 6-2, Aquagen
		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.	100% vaccinated according to national legislation.
Footnote	[143] The farm’s designated veterinarian is responsible for undertaking and providing written documentation of the analysis of the diseases that pose a risk in the region and the vaccines that are effective. The veterinarian shall determine whether 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 whether this decision is consistent with the analysis.		
		<p style="text-align: center;">Instruction to Clients for Indicator 8.13-- Testing of Smolt for Select Diseases</p> <p>The farm is responsible for developing and maintaining a list of diseases of regional concern for which each smolt group should be tested. The list of diseases shall include diseases suspected to occur in seawater (and for which seawater fish-to-fish transmission is a concern).</p> <p>The designated veterinarian <u>to the smolt supplier</u> is required to evaluate, based on scientific criteria and publicly available information, which diseases should be tested for. This evaluation shall be based on whether a disease or a pathogen carrier state in fresh water is deemed to have a negative impact on the grow-out phase, thereby disqualifying a smolt group from being transferred. The evaluation shall be based on whether a disease or a pathogen carrier state in fresh water is deemed to have a negative impact on the grow-out phase, thereby disqualifying a smolt group from being transferred. The evaluation shall be based on whether a disease or a pathogen carrier state in fresh water is deemed to have a negative impact on the grow-out phase, thereby disqualifying a smolt group from being transferred.</p> <p style="text-align: center;">Note: A "smolt group" is defined as a population that shares disease risk, including environment, husbandry, and host factors that might contribute to share disease risk.</p>	

8.13	<p>Indicator: Percentage of smolt groups [144] 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>a. Obtain from the smolt supplier a list of diseases of regional concern for which smolt should be tested. List shall be supported by scientific analysis as described in the Instruction above.</p>	<p>Health plan for Helgeland Smolt (Reppen and Sundsfjord) signed Janette Festvåg 2020-06-14. Includes health control, veterinary visits (12 per year), diseases, preventive measures, disease measures, vaccine, parasites, screening, water quality, destruction, welfare, density, starvation, training, medicines, sedations, notification, etc. Appendix: list of diagnosis, list of treatments, notifiable diseases (list 1, 2 and 3).</p>
		<p>b. Obtain from the smolt supplier(s) a declaration and records confirming that each smolt group received by the farm has been tested for the diseases in the list (8.13a).</p>	<p>Seen Health declarations; Helgeland Smolt tank F1-7 (to Stokkasjøen cage 1), vaccine AlphaJect Micro 6, Aquagen broodstock, 18.12.2018, signed veterinarian JF. No confirmed/suspected diseases and no restrictions. Helgeland Smolt tank F2-2 (to Kalvhylla/Stokkasjøen), vaccine AlphaJect Micro 6, Aquagen broodstock, 03.05.2019, signed veterinarian JF. No confirmed/suspected diseases and no restrictions. Helgeland Smolt tank D1-1 (to Renga/Bukkøya), vaccine Pentium Forte +, Aquagen broodstock, 23.07.2019, signed veterinarian JF. No confirmed/suspected diseases and no restrictions. Helgeland Smolt tank D2-5 (to Bukkøya), vaccine Pentium Forte +, MOWI broodstock, 04.10.2019, signed veterinarian JF. No confirmed/suspected diseases and no restrictions. Helgeland Smolt tank D2-6 (to Bukkøya), vaccine Pentium Forte +, MOWI broodstock, 04.10.2019, signed veterinarian JF. No confirmed/suspected</p>
Footnote	<p>[144] A smolt group is any population that shares disease risk, including environment, husbandry and host factors that might contribute to sharing disease agents for each group. Only diseases that are proven, or suspected, as occur transmission is a concern) but originating in freshwater should be on the list of diseases tested. The designated veterinarian to the smolt farm is required to evaluate, based on scientific criteria and publicly available information, which diseases are of concern. The evaluation of whether clinical disease or a pathogen carrier state in fresh water is deemed to have a negative impact on the grow-out phase, thereby disqualifying a smolt group from being transferred. A written analysis must be provided.</p>		

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>Seen Smoltdocumentation/Health report, e.g. From Helgeland Smolt tank F1-7, to Stokkasjøen cage 1, 100 000 fish, vaccine AlphaJect Micro 6, Aquagen broodstock, 28.12.2018. FishTalk record show use of sedation Finquel. From Helgeland Smolt tank F1-8, to Kalvhylle cage 1, 99 000 fish, vaccine AlphaJect Micro 6, Aquagen broodstock, 31.12.2018. FishTalk record show use of sedation Finquel. Vaccination and sedation report, e.g. Fish from Helgeland Smolt delivered to Bukkøya Ø in 2019: Pentium Forte Plus, Aqui-S and Finquel Fish from Helgeland Smolt delivered to Renga S in 2019: Pentium Forte Plus, Aqui-S and Finquel Fish from Helgeland Smolt F1-8 29.08.2020: AlphaJect Micro 6, Aqui-S and Finquel Fish from Helgeland Smolt D2-5 24.07.2020: AlphaJect Micro 6, Aqui-S and Finquel Fish from Helgeland Smolt F1-6 05.12.2020: AlphaJect 6-2, Aqui-S and Finquel Fish from Helgeland Smolt F2-5 18.12.2020: AlphaJect 6-2, Aqui-S and Finquel</p>
8.15	<p>Indicator: Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [145] in any of the primary salmon producing or importing countries [146]</p> <p>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 the primary salmon producing and importing countries listed in [146].</p> <p>b. Inform smolt supplier that the treatments on the list cannot be used on fish sold to a farm with ASC certification.</p> <p>c. Compare therapeutant records from smolt supplier (8.14) to the list (8.15a) and confirm that no therapeutants appearing on the list (8.15a) were used on the smolt purchased by the farm.</p>	<p>Seen list of antibiotics and treatments that are banned in any of the primary salmon producing or importing countries, "Forbudte legemidler og stoffer i animalske varer" 10.03.2020, includes Norway, EU, UK, Canada, Chile, Japan, USA.</p> <p>ASC statement for Helgeland Smolt (Reppen and Sundsfjord signed TAG 16.07.2020 regarding compliance to criteria 6.1 - 6.11, 8.2 a, 8.5 a, 8.6 c, 8.12 c, 8.13 b, 8.14 a, 8.15 c, 8.16/8.17 b, 8.18 c, 8.19 a and 8.21 a.</p> <p>No banned treatments used.</p>
Footnote	[145] "Banned" means proactively prohibited by a government entity because of concerns around the substance.		
Footnote	[146] For purposes of this standard, those countries are Norway, the UK, Canada, Chile, the United States, Japan and France.		
8.16	<p>Indicator: Number of treatments of antibiotics over the most recent production cycle</p>	<p>a. Obtain from the smolt supplier records of all treatments of antibiotics (see 8.14a).</p>	<p>No antibiotics used. Seen Smoltdocument/CV with treatments identified.</p>

8.16	Requirement: ≤ 3 Applicability: All Smolt Producers	b. Calculate the total number of treatments of antibiotics from their most recent production cycle.	No antibiotics used. Seen Smoltdocument/CV with treatments identified.
8.17	Indicator: Allowance for use of antibiotics listed as critically important for human medicine by the WHO [147] Requirement: None [148] Applicability: All Smolt Producers	a. Provide to smolt supplier(s) a current version of the WHO list of antimicrobials critically and highly important for human health [147].	WHO Critically important antimicrobials for human medicine 6th revision, 2018, updated 2019.
		b. Inform smolt supplier that the antibiotics on the WHO list (8.17a) cannot be used on fish sold to a farm with ASC certification.	ASC statement for Helgeland Smolt (Reppen and Sundsfjord signed TAG 16.07.2020 regarding compliance to criteria 6.1 - 6.11, 8.2 a, 8.5 a, 8.6 c, 8.12 c, 8.13 b, 8.14 a, 8.15 c, 8.16/8.17 b, 8.18 c, 8.19 a and 8.21 a.
		c. Compare smolt supplier's records for antibiotic usage (8.14, 8.15a) with the WHO list (8.17a) to confirm that no antibiotics listed as critically important for human medicine by the WHO were used on fish purchased by the farm.	No antibiotics used. Seen Smoltdocument/CV with treatments identified.
Footnote	[147] The 3rd edition of the WHO list of critically and highly important antimicrobials was released in 2009 and is available at: http://www.who.int/foodborne_disease/resistance/CIA_3		
Footnote	[148] If the antibiotic treatment is applied to only a portion of the pens on a farm site, fish from pens that did not receive treatment are still eligible for certification.		
8.18	Indicator: Evidence of compliance [149] with the OIE Aquatic Animal Health Code [150] Requirement: Yes Applicability: All Smolt Producers	Note: see instructions for Indicator 5.4.3 regarding evidence of compliance with the OIE Aquatic Animal Health Code.	
		a. Provide the smolt supplier with a current version of the OIE Aquatic Animal Health Code (or inform the supplier how to access it from the internet).	Seen OIE Aquatic Animal Health Code on internet.
		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.	ASC statement for Helgeland Smolt (Reppen and Sundsfjord signed TAG 16.07.2020 regarding compliance to criteria 6.1 - 6.11, 8.2 a, 8.5 a, 8.6 c, 8.12 c, 8.13 b, 8.14 a, 8.15 c, 8.16/8.17 b, 8.18 c, 8.19 a and 8.21 a.
		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.	ASC statement for Helgeland Smolt (Reppen and Sundsfjord signed TAG 16.07.2020 regarding compliance to criteria 6.1 - 6.11, 8.2 a, 8.5 a, 8.6 c, 8.12 c, 8.13 b, 8.14 a, 8.15 c, 8.16/8.17 b, 8.18 c, 8.19 a and 8.21 a.
Footnote	[149] Compliance is defined as farm practices consistent with the intentions of the Code, to be further outlined in auditing guidance. For purposes of this standard, this includes an aggressive response to detection of an exotic OIE-notified 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 dec		
Footnote	[150] 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):
	Indicator: Evidence of company-level policies and procedures in line with the labor standards under 6.1 to 6.11	a. Obtain copies of smolt supplier's company-level policies and procedures and a declaration of compliance with the labor standards under 6.1 to 6.11.	The access to electronic document system of the smolt supplier. The procedures address main requirements of the principle 6.

8.19	Requirement: Yes Applicability: All Smolt Producers	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.	The statement of compliance to requirements of ASC standard principle 6.1 - 6.11 and labour laws is available (signed 16.07.2020)
<i>Standards related to Principle 7</i>			
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):
8.20	Indicator: Evidence of regular consultation and engagement with community representatives and organizations Requirement: Yes Applicability: All Smolt Producers	Instruction to Clients for Indicator 8.20 - Consultation and Engagement with Community Representatives Farms must comply with Indicator 7.1.1 which requires that farms engage in regular consultation and engagement with community representatives and organizations. Under the current standard, the smolt supplier complies with an equivalent requirement. Farms are obligated to maintain evidence that is sufficient to show their suppliers remain in full compliance. Evidence shall be maintained and will substantiate the following: <ul style="list-style-type: none"> - the smolt supplier engaged in "regular" consultations with the local community at least twice every year (bi-annually); - the supplier's consultations were effective (e.g. using participatory Social Impact Assessment (pSIA) or similar methods); and - the supplier's consultations included participation by elected representatives from the local community who were asked to contribute to the consultation process. 	
		a. From each smolt supplier obtain documentary evidence of consultations and engagement with the community.	Information about smolt farm was sent to interested parties and communities on 2020-Jun. The feedback was asked to be communicated to e-mail, phone and Facebook.
		b. Review documentation from 8.20a to verify that the smolt supplier's consultations and community engagement complied with requirements.	Information and related documents were verified.
8.21	Indicator: Evidence of a policy for the presentation, treatment and resolution of complaints by community stakeholders and organizations Requirement: Yes Applicability: All Smolt Producers	a. Obtain a copy of the smolt supplier's policy for presentation, treatment and resolution of complaints by community stakeholders and organizations.	The procedure of handling of non-conformances is applied for handling complaints. NC evidence: Interview with responsible employee. Procedure for presentation, treatment and resolution of complaints by community stakeholders and organizations

8.22	Indicator: Where relevant, evidence that indigenous groups were consulted as required by relevant local and/or national laws and regulations	a. Obtain documentary evidence showing that the smolt supplier does or does not operate in an indigenous territory (to include farms that operate in proximity to indigenous or aboriginal people (see Indicator 7.2.1). If not then the requirements of 8.22 do not apply.	Smolt site is operating in are of rain deer feeding areas. All communications, agreements and limitations were solved in the period for obtaining operation licence. No respond during communication to interested parties.
	Requirement: Yes Applicability: All Smolt Producers	b. Obtain documentation to demonstrate that, as required by law in the jurisdiction: smolt supplier consulted with indigenous groups and retains documentary evidence (e.g. meeting minutes, summaries) to show how the process complies with 7.2.1b; OR smolt supplier confirms that government-to-government consultation occurred and obtains documentary evidence.	Smolt site is operating in are of rain deer feeding areas. All communications, agreements and limitations were solved in the period for obtaining operation licence.
8.23	Indicator: Where relevant, evidence that the farm has undertaken proactive consultation with indigenous communities	a. See results of 8.22a (above) to determine whether the requirements of 8.23 apply to the smolt supplier.	Smolt site is operating in are of rain deer feeding areas. All communications, agreements and limitations were solved in the period for obtaining operation licence.
	Requirement: Yes Applicability: All Smolt Producers	b. Where relevant, obtain documentary evidence that smolt suppliers undertake proactive consultations with indigenous communities.	The invitation was sent to Sami representatives.
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:			
8.24	Indicator: Allowance for stocking smolts produced in cage-culture	a. Obtain documentary evidence that the smolt suppliers operates in a region where indigenous salmonids are present of the same species being cultivated.	No net-pens, tanks only.
	Requirement: Permitted only if supplying farms are 1) operated in a region where indigenous salmonids are present of the same species being cultivated and 2) the farm is certified to the ASC Freshwater trout Standard Applicability: open (net-pen) production of smolt	b. Obtain documentary evidence that the smolt supplier is certified to the ASC Freshwater trout Standard	No net-pens, tanks only.
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 [157]			
8.25	Indicator: Water quality monitoring matrix completed and submitted to ASC (see Appendix VIII-2)	a. Obtain records from smolt suppliers showing that water quality monitoring was conducted at least quarterly (i.e. once every 3 months) over the last 12 months.	No discharge to freshwater
	Requirement: Yes [155]	b. Obtain water quality monitoring matrix from smolt suppliers and review for completeness.	No discharge to freshwater

	Applicability: All Smolt Producers Using Semi-Closed or Closed Production Systems	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.	No discharge to freshwater
Footnote	[155] See Appendix VI for transparency requirements for 8.25.		
8.26	Indicator: Minimum oxygen saturation in the outflow (methodology in Appendix VIII-2) Requirement: 60% [156,157] Applicability: All Smolt Producers Using Semi-Closed or Closed Production Systems	a. Obtain the water quality monitoring matrix from each smolt supplier (see 8.32b).	No discharge to freshwater
		b. Review the results (8.33a) for percentage dissolved oxygen saturation in the effluent to confirm that no measurements fell below 60% saturation.	No discharge to freshwater
		c. If a single DO reading (as reported in 8.33a) fell below 60%, obtain evidence that the smolt supplier performed daily continuous monitoring with an electronic probe and recorder for a least a week demonstrating a minimum 60% saturation at all times (Appendix VIII-2).	No discharge to freshwater
Footnote	[156] A single oxygen reading below 60 percent would require daily continuous monitoring with an electronic probe and recorder for at least a week demonstrating a minimum 60 percent saturation.		
Footnote	[157] See Appendix VI for transparency requirements for 8.33.		
8.27	Indicator: Macro-invertebrate surveys downstream from the farm's effluent discharge demonstrate benthic health that is similar or better than surveys upstream from the discharge (methodology in Appendix VIII-3) Requirement: Yes Applicability: All Smolt Producers Using Semi-Closed or Closed Production Systems	a. Obtain documentation from smolt supplier(s) showing the results of macro-invertebrate surveys.	No discharge to freshwater
		b. Review supplier documents (8.34a) to confirm that the surveys followed the prescribed methodology (Appendix VIII-3).	No discharge to freshwater
		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.	No discharge to freshwater
8.28	Indicator: Evidence of implementation of biosolids (sludge) Best Management Practices (BMPs) (Appendix VIII-4) Requirement: Yes Applicability: All Smolt Producers Using Semi-Closed or Closed Production Systems	a. Maintain a copy of smolt supplier's biosolids (sludge) management plan and confirm that the plan addresses all requirements in Appendix VIII-2.	No discharge to freshwater
		b. Obtain from smolt suppliers a process flow diagram (detailed in Appendix VIII-2) showing how the farm is dealing with biosolids responsibly.	No discharge to freshwater
		c. Obtain a declaration from smolt supplier stating that no biosolids were discharged into natural water bodies in the past 12 months.	No discharge to freshwater
		d. Obtain records from smolt suppliers showing monitoring of biosolid (sludge) cleaning maintenance, and disposal as described in Appendix VIII-2.	No discharge to freshwater

11 Findings

- 11.1 DO NOT DELETE ANY COLUMN
11.2 Columns B/C/D/E (in black) are automatically populated from the species checklist/audit manual
11.3 Each NC is raised against a standard indicator or a CAR requirement
11.4 Use the "sort" function for presenting the list to your liking (e.g. grading, status, closure deadline, etc.)

- 11.5 Add new rows as needed
11.6 Adjust the column wide as needed - to show the whole text

NC reference	Indicator	Grade of NC	Description of NC	Evidence	Date of detection	Status	Related VR (#)	Root cause (by client)	Corrective/ preventive actions proposed by UoC and accepted by CAB	Deadline for NC close-out	Evaluation by CAB (including evidence)	Actual date of close-out	Date request for delay received	Justification for delay	Next deadline	Request evaluation by CAB	Date request approved
RC-21-1	1.1.4	Minor	Biomass (3183 ton 26.04.2020) above Maximum Allowed Biomass (3120 ton before 08.06.2020)	Interview and licenses	29-01-2021	Closed		Avvik 8923 On Friday 24.04.20, wellboat Steinar Olaisen is at the site and loads 190 764kg from net 4. The biomass is moved out of the site and caged outside the slaughterhouse at Lovund, and will thus be extracted from standing biomass, cf. Aquakulturforskriften. Standing biomass on Kalvhylla is thus not 3184 tonnes, but 3184-190 = 2994 tonnes. The 190 tonnes are harvested the following week and enter the mercatus as slaughter the following week, even though the fish was moved out prior to the actual slaughter.	Take fish out earlier before we get so close to the limit for MTB on the site.	15.04.2021	Jan Petter Kosmo 18.02.2021, CLOSED: Nova Sea NC 8923, closed 15.02.2021 and freight letter 24.04.2020.	16.02.2021					
RC-21-2	3.4.4	Minor	Procedure "Forebyggge og avdekke rømming" 17.10.2018 regarding escape prevention and to discover escape. Not reviewed within 17.09.2020 (internal limit for review). Outdated contingency plan "Beredskapsplan rømming" seen on barge (to be revised within 17.09.2020).	Procedure "Forebyggge og avdekke rømming" 17.10.2018. Inspection at barge.	29-01-2021	Closed		Avvik 8934 Failure to update documents in emergency preparedness folder on fleet	Updated document "Contingency plan in case of escape" inserted in contingency folder on fleet. Have control of updated and last revised contingency plans and update documents in the contingency folder on the fleet	15.04.2021	Jan Petter Kosmo 18.02.2021, CLOSED: Nova Sea NC 8931, closed 11.02.2021 and revised procedure "Forebyggge og avdekke rømming". Nova Sea NC 8934, closed 10.02.2021 and revised contingency plan	16.02.2021					
RC-21-3	6.1.1	Minor	TU representative is not provided sufficient time to access to TU members in the workplace at reasonable times on the premises and do representation related paperwork. The TU representative is not allocated time to participate in preparation of work schedules for operations what takes place in different times of the day (as required by AML).	Information from interview with TU representative and documented evidences provided by him about the need of participation and time allocated.	29-01-2021	Closed		Avvik 8938 TU representative has a somewhat expanded interpretation of his role in some areas. An example of this is the establishment of the LO committee and the purpose of the committee. This is beyond what is stated in the main agreement (Hovedavtalen). In addition to 15 working hours in the agreement TU representative has the possibility to use some of working time in the second half of the working day during the week. This is not planned good. The TU representative has the possibility to plan visits on other locations in periods with less workload. This was not done last period. Not good enough role clarity between TU representative and safety representative. TU representative wants to take part i production planning in a greater extent than the AML says. The operations managers and the area managers do discuss changes in time schedules with TU representative. In addition to 15 working hours in the agreement TU representative has the possibility to use some of working time in the second half of the working day during the week. This is not planned good. The TU representative has the possibility to plan visits on other locations in periods with less workload. This was not done last period. Not good enough role clarity between TU representative and safety representative. TU representative wants to take part i production planning in a greater extent than the AML says. The operations managers and the area managers do discuss changes in time schedules with TU representative.	Plan the work better. Agree on when TU representative should be involved. Training and information to managers regarding the union agreement generally (HR). Training of managers in special areas regarding production planning (HR). Two reports regarding rest time is ready to use. HR will use the reports in follow-up with managers and resource planning going forward. Implement the new and expanded agreement given to TU representative.	15.04.2021	2021-02-28 LTDARPAM The corrective actions are accepted. 2021-04-19 LTDARPAM. Based on provided evidence the NC is closed.	12.03.2021					
RC-21-4	6.2.2.	Minor	The mandatory trainings and related evidences are not systematically managed.	Interview with managers. Training records.	29-01-2021	Closed		Avvik 8943 Lack of training of newly hired operations manager	Training of new operations manager current implementation and documentation of training completed. Documentation of training as a routine for training new operations managers.	15.04.2021	2021-02-28 LTDARPAM The corrective actions are accepted. 2021-04-19 LTDARPAM. Based on provided evidence the NC is closed.	09.03.2021					
RC-21-5	6.2.2	Minor	The off-duty periods for young worker is not well controlled.	Interview with site manager, time sheets, training records.	29-01-2021	Closed		Avvik 8942 The reason is the YSK student's own desire to compress practice to every other week to reduce travel load and also get more continuity during the practice periods. The working time scheme was clarified with the educational institution and the operations manager at Forvik was not aware that this scheme was a violation of the working time regulations for young employees - that teaching hours completed at the educational institution were also counted as working hours.	Change the work plan of the YSK student so that it is in line with current regulations if any dispensations are not possible. Follow current guidelines regarding working hours for young workers under 18 years of age.	15.04.2021	2021-02-28 LTDARPAM The corrective actions are accepted. 2021-04-19 LTDARPAM. Based on provided evidence the NC is closed.	15.02.2021					
RC-21-6	6.4.1	Minor	No dedicated diversity training was provided for managers The non-discrimination training was not provided for trainee.	Interview with management. Training documents and missing evidences of non-discrimination training for trainee.	29-01-2021	Closed		Avvik 8944 There has been no focus on regularity and a system that catches employees who do not have this course.	Courses are now run once a month for employees HSE courses are run for employees on Rensgrya, Renga and Bukkøya, as well as apprentices on Kalvhylla in week 8. A separate HSE course for managers with a focus on the topics of integration and diversity, anti-discrimination and harassment is conducted together with Avonova	15.04.2021	2021-02-28 LTDARPAM The corrective actions are accepted. 2021-04-19 LTDARPAM. Based on provided evidence the NC is closed.	12.03.2021					
RC-21-7	6.5.1	Minor	Safety rules for Nova sea AS are not signed annually by some of employees. Safety drills at feed barge and landbase are incomplete. Safety risks related training on boat involve only few of employees and done only as desktop trainings.	Interview with management. Training documents. Missing evidences of annual refresher training records on general safety rules. Safety drill on feedbarge took place more than a year ago.	29-01-2021	Closed		Avvik 8945 Lack of training of operations manager.	Obtain instructions and training. Implement and document annual safety training / reviews with employees as well as fire and rescue exercises	15.04.2021	2021-02-28 LTDARPAM The corrective actions are accepted. The evidence of safety rules training was provided. 2021-04-19 LTDARPAM. Based on provided evidence the NC is closed.	15.02.2021					

[illegible]