

## 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

Bureau Veritas Certification Denmark  
A/S

PDF 1.2 Date of Submission

19-02-2020/17-03-2020

### PDF 1.3 CAB Contact Person

PDF 1.3.1 Name of Contact Person

Lars Erik Flatøy

PDF 1.3.2 Position in the CAB's  
organisation

Lead auditor

PDF 1.3.3 Mailing address

Oldenborggade 25-31, 7000 Fredericia,  
Denmark

PDF 1.3.4 Email address

[asc.farm@dk.bureauveritas.com](mailto:asc.farm@dk.bureauveritas.com)

PDF 1.3.5 Phone number

0045 7731 1100

PDF 1.3.6 Other

[www.bureauveritas.dk](http://www.bureauveritas.dk)

#### PDF 1.4 ASC Name of Client

PDF 1.4.1 Name of the Client	Cermaq Norway AS
PDF 1.4.1.a Name of the unit of certification	Kråkevik 10614
PDF 1.4.2 Name of Contact Person	Silje Ramsvatn
PDF 1.4.3 Position in the client's organisation	Sustainability manager
PDF 1.4.4 Mailing address	Nordfoldveien 165, 8286 Nordfold, Norway
PDF 1.4.5 Email address	<a href="mailto:silje.ramsvatn@cermaq.com">silje.ramsvatn@cermaq.com</a>
PDF 1.4.6 Phone number	0047 41148216
PDF 1.4.7 Other	<a href="http://www.cermaq.com">www.cermaq.com</a>

#### PDF 1.5 Unit of Certification

PDF 1.5.1 Single Site	x
PDF 1.5.2 Multi-site	
PDF 1.5.2.a Ownership status	
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/ following /in harvest)
Kråkevik 10614	N: 70.229406 E: 23.320322	Salmon (Salmo Salar) In scope	Owned	31-03-2020 - 04-04-2020 Initial	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
Abalone 1.1				
Bivalve 1.1				
Freshwater Trout 1.0				
Pangasius 1.1				
Salmon 1.3	Salmon (Salmo Salar)	Yes	ASC Salmon Standard	Version 1.3 - July 2019
Shrimp 1.1				
Tilapia 1.2				
Seriola/Cobia 1.1				
Seabass/ bream and meagre v. 1.1				

## 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
WWF-Norge	NGO	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Norske Lakseelver	NGO	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit

Fellesforbundet	Workers union	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Naturvernforbundet	NGO	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Norges Kystfiskarlag	NGO	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Mattilsynet	Authorities	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Norsk Ornitologisk Forening	NGO	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Fiskeridirektoratet	Authorities	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Norges Jeger- og Fiskerforbund	NGO	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Norges Miljøvernforbund	NGO	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit

Norges Fiskarlag	NGO	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Miljødirektoratet	Authorities	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Finnmark Fylkeskommune	Regional authority	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Alta Kommune	Local Municipality	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Fylkesmannen i Finnmark	Regional authority	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Fiskarlaget Nord	Local Fishermens' Association	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Vest-Finnmark Kystfiskarlag	Local Fishermens' Association	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Alta Fiskarlag	Local Fishermens' Association	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit

Storekorsnes Fiskarlag	Local Fishermens` Association	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Lokale fiskere v/Rita og Trond	Local Fishermens` Association	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Reindriftsforvaltningen Vest-Finnmark	Local interest organisation	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Reinbeitedistrikt 23 B	Local interest organisation	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Lille Lerresfjord Fritidsforening	Local interest organisation	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit

### PDF 1.9 Proposed Timeline

PDF 1.9.1	Contract Signed:	29/11/2018
PDF 1.9.2	Start of audit:	31/03/2020
PDF 1.9.3	Onsite Audit(s):	31-03-2020 - 04-04-2020 - Remotely
PDF 1.9.4	Determination/Decision:	A certificate has been issued, based on the outcome of the initial audit. Bureau Veritas has performed the certification decision based on the audit report and the review. No information was submitted by stakeholders during the public consultation period. The initial audit showed that the site is in compliance with only 3 minor nonconformities being raised. The unit of certification has the capability to meet the objectives of the relevant ASC salmon standard - version 1.3. Auditor recommends certification based on the result of the initial audit.

### PDF 1.10 Audit Team

	Column1	Name	ASC Registration
PDF 1.10.1	Lead Auditor	Lars Erik Flatøy	
PDF 1.10.2	Team member	Megan Konstantinidou	
PDF 1.10.3	Social Auditor	Lars Erik Flatøy	

## **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	Cermaq Norway AS
1.2 Report Title [e.g. Public Draft Certification Report/ Final certification report/Surveillance report]	ASC Salmon Audit Report Cermaq Kråkevik Initial Audit FINAL Report 10.05.2020
1.3 CAB name	Bureau Veritas Certification Denmark A/S
1.4 Name of Lead Auditor	Lars Erik Flatøy
1.5 Names and positions of report authors and reviewers	Report Author: Lars Erik Flatøy, ASC Lead Auditor, Megan Konstantinidou, Auditor. Reviewer: Shahram Zadeh, technical reviewer.
1.6 Client's Contact person: Name and Title	Silje Ramsvatn, Sustainability manager
1.7 Date	Date of audit 30.03 - 01.04.2020. Date of report writing: 06.04.2020

## 2 Table of Contents

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### 3 Glossary

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

B - survey and C - surveys: Surveys of benthic environment at or near farm, according to NS 9410:2016 (Norwegian Standard 9410).  
 NFSA: Norwegian Food Safety Authority.  
 "Nytek" NS9415 (Norwegian Standard 9415): Technical certifications of Marine fish farms with Requirements for design, dimensioning, production, installation and operation.  
 MTB: Maximum Allowed Biomass.  
 FHP: is Fish Health Plan.  
 ISA: Infectious Salmon Anemia  
 PD: Pancreas Disease  
 GG: GLOBALG.A.P. IFA (Integrated Farm Assurance).  
 GGN: GLOBALG.A.P. unique registration number.  
 NINA: Norwegian institute for Nature Research.  
 IMR: Institute of Marine Research.  
 NLA: Norwegian Labor Association

### 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 (*including activities of the UoC being audited*)

The UoC is a fish farm farming Atlantic salmon, *Salmo salar*. It consists of 10 x 120 m cages and a feed barge containing the feeding system, feed storage and employees living quarters when on shift. Feeding is operated from a feed control center onboard the barge. The UoC was audited against all the principles and criteria in ASC Salmon Standard – version 1.3 - July 2019. The audit was performed as a Remote audit, through web-based video communication system Teams. The audit included interview of the farm workers and review of documentation. Harvest was not observed at this initial audit.

4.2	A brief description of the operations of the unit of certification	The unit of certification is the entire Kråkevik seafarm, site number 10614. Kråkevik is an ongrowing farm for Atlantic Salmon from smolt and until the salmon is ready for slaughtering. The production system is based on 10 cages 120 m. The MTB is 3480 tons.											
4.3	Type of unit of certification ( <i>select only one type of unit of certification in the list</i> )	Single farm											
4.4	Type of audit ( <i>select all the types of audit that apply in the list</i> )	Initial - Performed as remote audit according to ASC POLICY FOR AUDITS DURING THE COVID-19 OUTBREAK VERSION 18 MARCH 2020											
4.4.1	Number of sites included in the unit of certification	<table border="1"> <thead> <tr> <th>Owned by client</th> <th>Subcontracted by client</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>		Owned by client	Subcontracted by client	1							
Owned by client	Subcontracted by client												
1													
	Initial audit - mm/yyyy												
	Surveillance audit 1 - mm/ yyyy												
	Surveillance audit 2 - mm/ yyyy												
	Recertification audit - mm/ yyyy												
4.5	A summary of the major findings	0 major findings. 3 minor findings against indicators 1.1.1, 2.1.3 and 8.20											
4.6	The Audit determination	Auditor recommends a certification based on the result of the initial audit.											

## 5 CAB Contact Information

5.1	CAB Name	Bureau Veritas Certification Denmark AS
5.2	CAB Mailing Address	Oldenborggade 25-31, 7000 Fredericia, Denmark
5.3	Email Address	<a href="mailto:asc.farm@bureauveritas.com">asc.farm@bureauveritas.com</a>
5.4	Other Contact Information	<a href="http://www.bureauveritas.dk">www.bureauveritas.dk</a>

## 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.	All information is updated according to Public disclosure Form 3.
6.2	A description of the unit of certification <i>(for initial audit) / changes, if any (for surveillance and recertification audits)</i>	Kråkevik is a conventional floating cage salmon farm. The 10 production cages are circular floating plastic rings with the dimension 120 m circumference, with pointed nets. Farm has a 285 ton concrete feed barge, with feeding system, feed storage and employee living quarters. Feeding is operated from the barge, and operated by camera control of feeding. All installations are certified after "NS-9415 NYTEK" regulations standard. Register, details and maps of location for the site available at: <a href="http://www.fiskeridir.no/register/akvareg/">http://www.fiskeridir.no/register/akvareg/</a>
6.3	Other certifications currently held by the unit of certification	

<b>6.4</b>	Other certification(s) obtained by the UoC before this audit	Global GAP GGN 4052852632539
<b>6.5</b>	Estimated annual production volumes of the unit of certification of the <u>current</u> year	Biomass at time of audit: 1259382 kg (average weight 1,27 kg). Total MTB 3480 Mt
<b>6.6</b>	<u>Actual</u> annual production volumes of the unit of certification of the <u>previous</u> year ( mandatory for surveillance and recertification audits )	2017G harvested biomass: 4082 tons
<b>6.7</b>	Production system(s) employed within the unit of certification (select one or more in the list)	Floating net-pens/cages
<b>6.8</b>	Number of employees working at the unit of certification (see notes in comment to this cell)	8 employees including site manager and apprentice
<b>6.9</b>	Size, and/or number of ponds, pens (if multi site, per site)	10 cages with dimension 120 meter circumference. 8 in use at time of audit

## 7 Scope

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

<p><b>7.3</b> A description of the scope of the audit including a description of whether the unit of certification covers all production or harvest areas (i.e. ponds) managed by the operation or located at the included sites, or whether only a sub-set of these are included in the unit of certification. If only a sub-set of production or harvest areas are included in the unit of certification these shall be clearly named.</p>	<p>Scope of audit is to verify the salmon farm site Kråkevik compliance against the ASC Salmon Standard – version 1.3 - July 2019. The UoC audited includes the complete production system of Kråkevik farm, consisting of 10 x 120 m cages and a feed barge. No sub-sites are operated by the farm.</p> <p><i>Please note: The audit is conducted as a "Remote Audit" in accordance with ASC POLICY FOR AUDITS DURING THE COVID-19 OUTBREAK VERSION 18 MARCH 2020. Audit interviews and document reviews are conducted via Microsoft Teams software communication system (Video, voice and document sharing). In addition documents and pictures are sent to auditors by email for review</i></p> <p><i>The following standard and procedure is followed: ISO / IEC 17021-1: 2015, IAF MD 4: 2018, Bureau Veritas Remote audit procedure. The reason for this is travel restrictions and quarantine regulations imposed by the Norwegian and international authorities, Bureau Veritas and Cermaq related to the ongoing pandemic Corona Covid-19. Bureau Veritas has conducted a risk analysis for conducting remote audits, and measures have been implemented in conducting audits.</i></p>
<p><b>7.4</b> The names and addresses of any storage, processing, or distribution sites included in the operation (including subcontracted operations) that will potentially be handling certified products, up until the point where product enters further chain of custody.</p>	<p>Non</p>

**7.5** Description of the receiving water body(ies).

The farm is located in municipality of Alta in Troms & Finnmark county. GIS position: 23.30610335124246,70.26270878308861  
 Sites receiving water-body is Vargsundet. Regional water-body authority is Troms & Finnmark Fylkeskommune. This is a coastal water area. Categorised as a coastal fjord, of Euhaline nature (>30).  
 Ecological quality is defined as good. Chemical condition is defined good.  
 Details @ [www.vannportalen.no](http://www.vannportalen.no)  
 Overview of salmon watercourses in the area are available in map tools from the Environment Agency / Salmon Registry: <http://lakseregister.fylkesmenn.no/lakseregister/public/default.aspx>

**8 Audit Plan**

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

Lead auditor: Lars Erik Flatøy  
 Auditor: Megan Konstantinidou  
 Audit: 30.03 - 01.04.2020  
 Reporting last submit date after technical review: 19.05.2020.  
 Report review: Shahram Zadeh - 07-05-2020 - 10-05-2020  
 Certificate desicion: Shahram Zadeh - 30-06-2020

**8.2** Previous Audits (if applicable):

NC reference number      Standard clause reference      Closing deadline - status - closing date of each NC

8.2.1 Initial audit - mm/yyyy  
 Surveillance audit 1 - mm/ yyyy  
 Surveillance audit 2 - mm/ yyyy  
  
 Recertification audit - mm/ yyyy  
  
 Unannounced audit - mm/ yyyy


NC close-out audit - mm/ yyyy

Scope extension audit mm/ yyyy


### 8.3 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
	Bureau Veritas Certification Denmark A/S
30.03 - 01.04.2020	Remote audit via Microsoft Teams - Site Kråkevik, Alta Norway
30.03 - 01.04.2020	No stakeholders attended audit
19/05/2020	Bureau Veritas Certification Denmark A/S
19/05/2020	Bureau Veritas Certification Denmark A/S
30/06/2020	Bureau Veritas Certification Denmark A/S

### 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.

Silje Ramsvatn, Sustainability manager  
 Ingunn S. Johnsen, Sustainability coordinator  
 Elisabeth Myklebust, Fish Health Area manager Finnmark  
 Liv Andrea Myklevoll, HR manager Finnmark  
 Solfrid Henriksen, Smolt coordinator  
 1 Site manager and 7 employees



**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

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

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

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

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

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

**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.	Evaluation (Per indicator, select one category in the drop-down menu)	Description of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability	Value/ Metric Provide values - if applicable for the respective indicator
1.1.1	<b>Indicator:</b> Presence of documents demonstrating compliance with local and national regulations and requirements on land and water use  <b>Requirement:</b> Yes  <b>Applicability:</b> All	a. Maintain digital or hard copies of applicable land and water use laws.	A) Cermaq Norway has electronic copies of laws, regulations and requirements with references to Lovdata with updates and electronic links in Intalex system. Covered by internal procedures in QMS. Strict monitored by relevant authorities on these issues.  B) Following approval licenses and approval held by site - Reviewed during audit: Aquaculture license site 10614 Kråkevik in Alta kommune, Finnmark issued by Finnmark Fylkeskommune by approval of change of area for the site. Issued 06.04.2017, reference 201602384-23. MTB allowed 3480 tons. Approval includes sub approvals form Mattilsynet, Kystverket, Fylkesmannen, Alta Kommune, Fiskeridirektoratet and Sametinget for the change of area. Permits included in site (ref www.barentswatch.com and Aquaculture register https://register.fiskeridir.no/akvareg): F-A-34/41/42/54/61 and F-M-21	Minor	Lack of this sign is a breach on provisions in the animal by-product regulation https://lovdata.no/dokumente/SF/forskrift/2016-09-14-1064 and therefore not in compliance with all applicable local and national legal requirements and regulations regarding aquaculture land and water use. Failure does not meet the definition of a major Non-conformity and is not likely to result in the breakdown of a system to meet an ASC requirement.  Evidence seen as photo of sign attached to ensilage tank on barge. Corrective action accepted. NC closed. Lead auditor Lars Erik Flatøy, 06.05.2020	
		b. Maintain original (or legalized copies of) lease agreements, land titles, or concession permit on file as applicable.	Approved Production plan 2020 Cermaq sites Finnmark including 10614 Kråkevik by Fiskeridirektoratet, ref 19/14131, dated 20.11.2019  Discharge permit for site 10614 Kråkevik, issued by Fylkesmannen in Finnmark 16.01.2012. Approved production volume is 3480 tons MTB			
		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).	Site Technical certificate: Certificate APN-294 site 10614 Kråkevik issued 22.09.2016, 5 years validity. Issued by Akvaplan Niva according to NYTEK-regulation  C) Following inspection from officials - Reviewed during audit: Mattilsynet inspection report site Kråkevik doc ref 2019/273800, dated 20.12.2019. Inspection of site Kråkevik 18.12.2019. Mattilsynet stated site to be in compliance with regulations. No NC's issued. Mattilsynet inspection report site Kråkevik doc ref 2019/087038, dated 10.04.2019. Inspection of site Kråkevik 10.04.2019. 2 NC's issued, related to sorting of cleaner fish prior to harvest and to compliance reviews related to aquaculture regulations. Both NC's confirmed closed 15.11.2019 (within time frame) in letter from Mattilsynet 12.02.2020.  D) Site does not conflict with national preservation areas - Verified through licenses (ref point A) and Norwegian government registers:			
		d. Obtain permits and maps showing that the farm does not conflict with national preservation areas.	Site Kråkevik status on Government maps and web pages: Miljødirektoratet: www.naturbase.no: No conflict with protected areas or preservation areas. ASC GIS Online farm Mapping Tool - Kråkevik GIS 23.30610335124246,70.26270878308861. No conflict with preservation areas  NC: Interview with employees verified: Lack of sign" KAT 2 Dødfisk ensilasje on dead fish ensilage tank onboard barge"			
1.1.2	<b>Indicator:</b> Presence of documents demonstrating compliance with all tax laws  <b>Requirement:</b> Yes  <b>Applicability:</b> All	a. Maintain records of tax payments to appropriate authorities (e.g. land use tax, water use tax, revenue tax). Note that CABs will not disclose confidential tax information unless client is required to or chooses to make it public.	A) Reviewed records during audit - Audit report issued by Deloitte 31.03.2019. Tax payment for 2020 to Skatteoppkreveren i Steigen registered 18.03.2020  B) Official web portal Lovdata with access to updated versions in Cermaq quality system Intalex. Automatic notification to organization if changes in regulations that affect organization	Compliant		
		b. Maintain copies of tax laws for jurisdiction(s) where company operates.	C) Aquaculture license site 10614 Kråkevik in Alta kommune, Finnmark issued by Finnmark Fylkeskommune by approval of change of area for the site. Issued 06.04.2017, reference 201602384-23. MTB allowed 3480 tons. Approval includes sub approvals form Mattilsynet, Kystverket, Fylkesmannen, Alta Kommune, Fiskeridirektoratet and Sametinget for the change of area. Permits included in site (ref www.barentswatch.com and Aquaculture register https://register.fiskeridir.no/akvareg): F-A-34/41/42/54/61 and F-M-21			
		c. Register with national or local authorities as an "aquaculture activity".				

1.1.3	<p><b>Indicator:</b> Presence of documents demonstrating compliance with all relevant national and local labor laws and regulations</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Maintain copies of national labor codes and laws applicable to farm (scope is restricted to the farm sites within the unit certification.)</p> <p>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).</p>	<p>A) Official web portal Lovdata with access to updated versions in Cermaq quality system Intellex. Automatic notification to organization if changes in regulations that affect organization</p> <p>B) No inspections performed by Arbeidstilsynet or other official parties regulation labor laws and codes.</p>	Compliant		
1.1.4	<p><b>Indicator:</b> Presence of documents demonstrating compliance with regulations and permits concerning water quality impacts</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Obtain permits for water quality impacts where applicable.</p> <p>b. Compile list of and comply with all discharge laws or regulations.</p> <p>c. Maintain records of monitoring and compliance with discharge laws and regulations as required.</p>	<p>A) Discharge permit for site 10614 Kråkevik, issued by Fylkesmannen i Finnmark 16.01.2012. Approved production volume is 3480 tons MTB</p> <p>B) As described in above permits. B-Survey and C-survey according to Norwegian legislation and NS9410:2016 performed by Akvaplan Niva, an accredited company</p> <p>C) Cermaq report Biodiversity - focused Risk review Sites in waterbody Vargsundet (Kråkevik) and Korsfjorden. July 2019. Includes compliance review with discharge law and regulations.</p>	Compliant		
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 on transparency for 2.1.1, 2.1.2 and 2.1.3.					
<p><b>Instruction to Clients and CABs on Criterion 2.1 - Modification of the Benthic Sampling Methodology</b></p> <p>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.</p> <p>CABs shall evaluate client requests to modify benthic methodology based on whether there is a risk that such changes would jeopardize the intent and rigor of the ASC Salmon Standard. If the CAB determines that proposed modifications are low risk, the CAB shall ensure that details of the modified benthic sampling methodology are fully described and justified in the audit report.</p>						
2.1.1	<p><b>Indicator:</b> Redox potential or [2] sulphide levels in sediment outside of the Allowable Zone of Effect (AZE) [3], following the sampling methodology outlined in Appendix I-1</p> <p><b>Requirement:</b> Redox potential &gt; 0 mV or Sulphide ≤ 1,500 µmol/L</p> <p><b>Applicability:</b> All farms except as noted in [1]</p>	<p>Note: Under Indicator 2.1.1, farms can choose to measure redox potential (Option #1) or sulphide concentration (Option #2). Farms do not have to demonstrate that they meet both threshold values.</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>A) Site location: GIS data: 23.30610335124246; 70.26270878308861 (ref indicator Akvaplan Niva has performed a C-survey on site Kråkevik according to ASC standard, and ISO9410:2016, ISO 16665:2014 and ISO 5667-19:2004 requirements. Report 60720.02, dated 05.04.2019. Field date 22.11.2018. Site specific AZE and ASC sampling stations defined and established. Report contains Olex map, GPS coordinates, water current, procedure and description of AZE and each sampling station. Sampling stations: C1 and C5 within AZE, C2, C3 and C4 outside AZE. C6 ASC reference station.</p> <p>B) Benthos is sand, shell sand and clay. Sediment samples collected with 0,1m3 Van-Veen grab, 2 grabs for each sampling station. Ref Akvaplan Niva Report 60720.02, dated 05.04.2019.</p> <p>C) Option #1</p> <p>D) C-survey performed for sample stations C1-C6 in harvest period for 18G. Stations defined and selected according to ASC and NS9410 requirements. Survey performed at peak biomass (75-90%): Feed input 3647 tons, harvested at survey date: 2123 tons, remaining biomass at survey date 1119 tons. Ref Akvaplan Niva Report 60720.02, dated 05.04.2019. Sediment samples collected with 0,1m3 Van-Veen grab, 2 grabs for each sampling station.</p> <p>E) Redox potential in sample station outside AZE (C2, C3, C4): 235-280 V/mV. Akvaplan Niva Report 60720.02, dated 05.04.2019.</p> <p>F) Option #1 used</p> <p>G) Data submitted to ASC in email 13.03.2020. Auditor was copied on email</p>	Compliant		235-280 V/mV
Footnote	[2] Farm sites can choose whether to use redox or sulphide. Farms do not have to demonstrate that they meet both.					
Footnote	[3] Allowable Zone of Effect (AZE) is defined under this standard as 30 meters. For farm sites where a site-specific AZE has been defined using a robust and credible modeling system such as the SEPA AUTODEPOMOD and verified through monitoring, the site-specific AZE shall be used.					

2.1.2	<p><b>Indicator:</b> Faunal index score indicating good [4] to high ecological quality in sediment outside the AZE, following the sampling methodology outlined in Appendix I-1</p> <p><b>Requirement:</b> AZTI Marine Biotic Index (AMBI [5]) score ≤ 3.3, or Shannon-Wiener Index score &gt; 3, or Benthic Quality Index (BQI) score ≥ 15, or Infaunal Trophic Index (ITI) score ≥ 25</p> <p><b>Applicability:</b> All farms except as noted in [1]</p>	Notes: - Under Indicator 2.1.2, farms can choose one of four measurements to show compliance with the faunal index Requirement: AMBI (Option #1); Shannon-Wiener Index (Option #2); BQI (Option #3); or ITI (Option #4). Farms do not have to demonstrate that they meet all four threshold values. - If a farm is exempt due to hard bottom benthos (see 2.1.1b), then 2.1.2 does not apply and this shall be noted in the audit report.			
		a. Prepare a map showing the AZE (30 m or site specific) and sediment collections stations (see 2.1.1).	A) Ref 2.1.1 A)  B) Option #2 Shannon-Wiener chosen  C) Ref 2.1.1 D)  D) Option #2 Shannon-Wiener chosen  E) Shannon-Wiener in sampling stations C2, C3 and C4 outside AZE: 4.7, 5.07 and 3.64 for past production cycle  F-G) Option #2 Shannon-Wiener chosen  H) See C-survey report Akvaplan Niva Report 60720.02, dated 05.04.2019, part 7. Sediment analysis for Korn, TOM, TOC, TN, performed by accredited laboratory Akvaplan Niva, accreditation Test-079 by Norsk Akkreditering. Cu and Cd analysis by ALS Laboratory Group, accredited by Czech Accreditation Institute (Lab nr 1163)  I) Data submitted to ASC by email 13.03.2020. Auditor was copied on email	Compliant	3.64, 4.7 & 5.07
		b. Inform the CAB whether the farm chose option #1, #2, #3, or #4 to demonstrate compliance with the requirement.			
		c. Collect sediment samples in accordance with Appendix I-1 (see 2.1.1).			
		d. For option #1, measure, calculate and record AZTI Marine Biotic Index [5] score of sediment samples using the required method.			
		e. For option #2, measure, calculate and record Shannon-Wiener Index score of sediment samples using the required method.			
		f. For option #3, measure, calculate and record Benthic Quality Index (BQI) score of sediment samples using the required method.			
		g. For option #4, measure, calculate and record Infaunal Trophic Index (ITI) score of sediment samples using the required method.			
		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.			
		i. Submit faunal index scores to ASC (Appendix VI) at least once for each production cycle.			
Footnote	[4] "Good" Ecological Quality Classification: The level of diversity and abundance of invertebrate taxa is slightly outside the range associated with the type-specific conditions. Most of the sensitive taxa of the type-specific communities are present.				
Footnote	[5] <a href="http://www.azti.es/en/amb-i-azti-marine-biotic-index.html">http://www.azti.es/en/amb-i-azti-marine-biotic-index.html</a> .				

2.1.3		a. Document appropriate sediment sample collection as for 2.1.1a and 2.1.1c, or exemption as per 2.1.1b.	A) Ref 2.1.1 A) and D). No exemptions  B) Ref 2.1 H) and C-survey report Akvaplan Niva Report 60720.02, dated 05.04.2019, part 7 attachment 1, 3 and 4 includes detailed description of sampling, methods, classification and analysis.  C) <2 Highly abundant taxa on both sampling stations (C1 and C5) within AZE  D) Ref C-survey report Akvaplan Niva Report 60720.02, dated 05.04.2019, and 2.1.2 H)  E) Data submitted to ASC by email 13.03.2020. Auditor was copied on email	Minor	<2 Highly abundant taxa on both sampling stations (C1 and C5) within AZE. Ref: C-survey report Akvaplan Niva Report 60720.02, dated 05.04.2019. NC raised is Minor, as site is classified as class II Good, overall  Corrective action as described in reply from organisation is accepted as sufficient to close NC. Result from new C-survey to be reviewed at next audit. NC closed. Lead auditor Lars Erik Flatøy 06.05.2020	<2
		b. For sediment samples taken within the AZE, determine abundance and taxonomic composition of macrofauna using an appropriate testing method.				
		c. Identify all highly abundant taxa [6] and specify which ones (if any) are pollution indicator species.				
		d. Retain documentary evidence to show how taxa were identified and how counts were obtained. If samples were analyzed by an independent lab, obtain copies of results.				
		e. Submit counts of macrofaunal taxa to ASC (Appendix VI) at least once for each production cycle.				
		<b>Indicator:</b> Number of macrofaunal taxa in the sediment within the AZE, following the sampling methodology outlined in Appendix I-1 <b>Requirement:</b> ≥ 2 highly abundant [6] taxa that are not pollution indicator species <b>Applicability:</b> All farms except as noted in [1]				
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		a. Undertake an analysis to determine the site-specific AZE and depositional pattern.	A) Ref 2.1.1 A) See ASC- and C-Survey report 60720.02 by Akvaplan Niva for site 10614 Kråkevik, performed 22.11.2018, issued 05.04.2019. Survey performed according to standard NS 9410:2016 and ASC standard requirements. Attachment 2 includes procedure for calculation of AZE. Survey performed at 75-90% of peak biomass.  B) See ASC- and C-Survey report 60720.02 by Akvaplan Niva for site 10614 Kråkevik, performed 22.11.2018, issued 05.04.2019.. References in report: Bye, B., E., 2013. Strømmålinger Kråkevik. 5m, 15m, spredning, bunn. APN-6240.02.  C) B-surveys performed at site Kråkevik including site specific AZE monitoring: 12/2012, 12/2014, 09/2016 and 11/2018. All by Akvaplan Niva. Ref ASC- and C-Survey report 60720.02 by Akvaplan Niva	Compliant		
		b. Maintain records to show how the analysis (in 2.1.4a) is robust and credible based on modeling using a multi-parameter approach [7].				
		c. Maintain records to show that modeling results for the site-specific AZE have been verified with > 6 months of monitoring data.				
	<b>Indicator:</b> Definition of a site-specific AZE based on a robust and credible modelling system <b>Requirement:</b> Yes <b>Applicability:</b> All farms except as noted in [1]					
Footnote	[7] Robust and credible: The SEPA AUTODEPOMOD modeling system is considered to be an example of a credible and robust system. The model must include a multi-parameter approach. Monitoring must be used to ground-truth the AZE proposed through the model.					

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><b>Indicator:</b> Weekly average percent saturation [9] of dissolved oxygen (DO) [10] on farm, calculated following methodology in Appendix I-4</p> <p><b>Requirement:</b> ≥ 70% [11]</p> <p><b>Applicability:</b> All farms except as noted in [11]</p>	<p><b>Instruction to Clients for Indicator 2.2.1 - Monitoring Average Weekly Percent Saturation of Dissolved Oxygen</b></p> <p>Appendix I-4 presents the required methodology that farms must follow for sampling the average weekly percent saturation of dissolved oxygen (DO). Key points of the method are as follows:</p> <ul style="list-style-type: none"><li>- measurements may be taken with a handheld oxygen meter or equivalent chemical method;</li><li>- equipment is calibrated according to manufacturer's recommendations;</li><li>- measurements are taken at least twice daily: once in the morning (6 -9 am) and once in the afternoon (3-6 pm ) as appropriate for the location and season;</li><li>- salinity and temperature must also be measured when DO is sampled;</li><li>- sampling should be done at 5 meters depth in water conditions that would be experienced by fish (e.g. at the downstream edge of a net pen array);</li><li>- each week, all DO measurements are used in the calculation of a weekly average percent saturation.</li></ul> <p>If monitoring deviates from prescribed sampling methodology, the farm shall provide the auditor with a written justification (e.g. when samples are missed due to bad weather). In limited and well-justified situations, farms may request that the CAB approve reduction of DO monitoring frequency to one sample per day.</p> <p><b>Exception [see footnote 12]</b> 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><b>Note 1:</b> <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.	<p>A) Site has a TIAI environmental station for measurement of O2, temperature and salinity. Calibration between generations. As reference stations neighbor sites Nordens and Store Lerresfjord are used. DO records available for past generation (week 34/2018 to week 17/2019) and current generation (week 31/2019 to week 14/2020). ref ASC report 17G and 19G issued to ASC 13.03.2020.</p> <p>B) No missed data for past and current production cycle</p> <p>C) Weekly DO average for past and current production cycle above 70%, ref O2 records for site Kråkevik</p> <p>D) No values monitored is below 70% (week 34/2018 to week 17/2019 and week 31/2019 to week 14/2020).</p> <p>E) During remote audit on Teams screen sharing the following measurements were monitored by auditor: O2: 95,04%, 1,92 degree Celsius, 32,73 Salinity</p> <p>F) Data submitted to ASC by email 13.03.2020. Auditor was copied on email</p>	Compliant	> 70%	
		b. Provide a written justification for any missed samples or deviations in sampling time.				
		c. Calculate weekly average percent saturation based on data.				
		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).				
		e. Arrange for auditor to witness DO monitoring and calibration while on site.				
		f. Submit results from monitoring of average weekly DO as per Appendix VI to ASC at least once per year.				
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 salinity.					
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	<p><b>Indicator:</b> Maximum percentage of weekly samples from 2.2.1 that fall under 2 mg/L DO</p> <p><b>Requirement:</b> 5%</p> <p><b>Applicability:</b> All</p>	<p>a. Calculate the percentage of on-farm samples taken for 2.2.1a that fall under 2 mg/L DO.</p> <p>b. Submit results from 2.2.2a as per Appendix VI to ASC at least once per year.</p>	<p>A) All records above limits</p> <p>B) Data submitted to ASC by email 13.03.2020. Auditor was copied on email</p>	Compliant		Above 5%
2.2.3	<p><b>Indicator:</b> For jurisdictions that have national or regional coastal water quality targets [12], demonstration through third-party analysis that the farm is in an area recently [13] classified as having “good” or “very good” water quality [14]</p> <p><b>Requirement:</b> Yes [15]</p> <p><b>Applicability:</b> All farms except as noted in [15]</p>	<p>a. Inform the CAB whether relevant targets and classification systems are applicable in the jurisdiction. If applicable, proceed to “2.2.3.b”. If not applicable, take action as required under 2.2.4</p> <p>b. Compile a summary of relevant national or regional water quality targets and classifications, identifying the third-party responsible for the analysis and classification.</p> <p>c. Identify the most recent classification of water quality for the area in which the farm operates.</p>	<p>A) Systems are applicable according to EU Water Directive 2000 which includes water quality objectives for area Vargsundet.</p> <p>B) Norges vassdrag og energidirektorat (NVE) <a href="http://www.vann-nett.no/portal">www.vann-nett.no/portal</a>: Site Kråkevik is located in waterbody Vargsundet (ID:0420031400-C). Status: Ecological and chemical situation: Good. Quality targets met. C-survey report Akvaplan Niva Report 60720.02, dated 05.04.2019, performed 22.11.2018.</p> <p>C) Last registration ref B) for waterbody Vargsundet, ref Norges vassdrag og energidirektorat (NVE) <a href="http://www.vann-nett.no/portal">www.vann-nett.no/portal</a>: 23. April 2019 and 7. February 2020</p>	Compliant		
Footnote	[12] Related to nutrients (e.g., N, P, chlorophyll A).					
Footnote	[13] Within the two years prior to the audit.					
Footnote	[14] Classifications of “good” and “very good” are used in the EU Water Framework Directive. Equivalent classification from other water quality monitoring systems in other jurisdictions are acceptable.					
Footnote	[15] Closed production systems that can demonstrate the collection and responsible disposal of > 75% of solid nutrients as well as > 50% of dissolved nutrients (through biofiltration, settling and/or other technologies) are exempt from standards 2.2.3 and 2.2.4.					
2.2.4	<p><b>Indicator:</b> For jurisdictions without national or regional coastal water quality targets, evidence of monitoring of nitrogen and phosphorous [16] levels on farm and at a reference site, following methodology in Appendix I-5</p> <p><b>Requirement:</b> Consistency with reference site</p> <p><b>Applicability:</b> All farms except as noted in [16]</p>	<p>a. Develop, implement, and document a weekly monitoring plan for N, NH4, NO3, total P, and ortho-P in compliance with Appendix I-5. For first audits, farm records must cover ≥ 6 months.</p> <p>b. Calibrate all equipment according to the manufacturer's recommendations.</p> <p>c. Submit data on N and P to ASC as per Appendix VI at least once per year.</p>	A-C) N/A	N/A		
Footnote	[16] Farms shall monitor total N, NH4, NO3, total P and Ortho-P in the water column. Results shall be submitted to the ASC database. Methods such as a Hach kit are acceptable.					

2.2.5	<p><b>Indicator:</b> Demonstration of calculation of biochemical oxygen demand (BOD [17]) of the farm on a production cycle basis</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p><b>Instruction to Clients for Indicator 2.2.5 - Calculating Biochemical Oxygen Demand</b></p> <p>Biochemical Oxygen Demand (BOD) can be calculated based on cumulative inputs of N and C to the environment over the course of the production cycle. <math>BOD = ((\text{total N in feed} - \text{total N in fish}) * 4.57) + ((\text{total C in feed} - \text{total C in fish}) * 2.67)</math>.</p> <ul style="list-style-type: none"><li>• A farm may deduct N or C that is captured, filtered or absorbed through approaches such as IMTA or through direct collection of nutrient wasted. In this equation, “fish” refers to harvested fish. In this case, farm must submit breakdown of N &amp; C captured/filtered/absorbed to ASC along with method used to estimate nutrient reduction.</li><li>• Reference for calculation methodology: Boyd C. 2009. Estimating mechanical aeration requirement in shrimp ponds from the oxygen demand of feed. In: Proceedings of the World Aquaculture Society Meeting; Sept 25-29, 2009; VeraCruz, Mexico. And: Global Aquaculture Performance Index BOD calculation methodology available at <a href="http://web.uvic.ca/~gapi/explore-gapi/bod.html">http://web.uvic.ca/~gapi/explore-gapi/bod.html</a>.</li></ul> <p>Note 1: Calculation requires a full production cycle of data and is required beginning with the production cycle first undergoing certification. If it is the first audit for the farm, the client is required to demonstrate to the CAB that data is being collected and an understanding of the calculations.</p> <p>Note 2: Farms may seek an exemption to Indicator 2.2.5 if: the farm collects BOD samples at least once every two weeks, samples are independently analyzed by an accredited laboratory, and the farm can show that BOD monitoring results do not deviate significantly from calculated annual BOD load.</p>			
		<p>a. Collect data throughout the course of the production cycle and calculate BOD according to formula in the instruction box.</p>	<p>A) BOD calculation 2017G: <math>((\text{total N in feed } 283.77 - \text{total N in fish } 122.46) * 4.57) + ((\text{total C in feed } 2507.43 - \text{total C in fish } 2041.0) * 2.67) = 1982,56</math></p> <p>BOD calculation 2019G= 30,252 (current production)</p>	Compliant	1982.56
		<p>b. Submit calculated BOD as per Appendix VI to ASC for each production cycle.</p>	<p>B) Data submitted to ASC by email 13.03.2020. Auditor was copied on email</p>		
Footnote	[17] BOD calculated as: $((\text{total N in feed} - \text{total N in fish}) * 4.57) + ((\text{total C in feed} - \text{total C in fish}) * 2.67)$ . A farm may deduct N or C that is captured, filtered or absorbed through approaches such as IMTA or through direct collection of nutrient wasted. In this equation, “fish” refers to harvested fish. Reference for calculation methodology: Boyd C. 2009. Estimating mechanical aeration requirement in shrimp ponds from the oxygen demand of feed. In: Proceedings of the World Aquaculture Society Meeting; Sept 25-29, 2009; VeraCruz, Mexico. And: Global Aquaculture Performance Index BOD calculation methodology available at <a href="http://web.uvic.ca/~gapi/explore-gapi/bod.html">http://web.uvic.ca/~gapi/explore-gapi/bod.html</a> .				
2.2.6	<p><b>Indicator:</b> Appropriate controls are in place that maintain good culture and hygienic conditions on the farm which extends to all chemicals, including veterinary drugs, thereby ensuring that adverse impacts on environmental quality are minimised.</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Document control systems in good culture and hygiene that includes all appropriate elements.</p> <p>b. Apply the systems ensuring that staff are aware, qualified and trained to properly implement them.</p> <p>-</p>	<p>A) Distributed in Intelx: Procedure "Hygienereglement - Matfisk" ID 127, dt. 3/10-2019 doc 127 rev 6 includes subjects such as clothing, PPE, personal hygiene, hand hygiene, disease control, competence requirements. Introduction and training of personnel are performed by checklist "Skjema for opplæring hygiene matfisk og settefisk" Dok 130, 15/1-2020 rev 3 which is signed by employer and employee. Procedure "Prosedyre for oppbevaring håndtering av kjemikalier og gasser", ID 473. covers handling of chemicals.</p> <p>B) Verification through remote interviews with site manager and employees. Training data and logs was presented, including introduction and training related to hygiene, handling of chemicals and environmental quality. All aspects covered.</p> <p>"Hygienereglement" is displayed on wall in barge. Cleaning plan for barge, vessels and farm is distributed in web based system. Work orders are generated by the system, with description of task, responsibility, intervals and time frames. Digital checklists are filled directly into system. Seen current status by screen sharing.</p>	Compliant	



Criterion 2.3 Nutrient release from production						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
2.3.1	<b>Indicator:</b> Percentage of fines [18] in the feed at point of entry to the farm [20] (calculated following methodology in Appendix I-2)  <b>Requirement:</b> < 1% by weight of the feed  <b>Applicability:</b> All farms except as noted in [19]	Note: The methodology given in Appendix I-2 is used to determine the fines (dust and small fragments) in finished product of fish feed which has a diameter of 3 mm or more.				
		a. Determine and document a schedule and location for quarterly testing of feed. If testing prior to delivery to farm site, document rationale behind not testing on site.	A) Testing is performed on fleet according to Procedyre for formottak, lagring og kontroll av for Dok 260, date 25/3 2020, rev 10, in accordance with Appendix I-2  B) Site uses sieve, but do not have a sieving machine. They have a new weight which was calibrated by supplier.  C) Auditor have reviewed testing records for period from November 2019 to March 2020, 11 tests in total. No results above 1% dust.	Compliant		< 1%
		b. If using a sieving machine, calibrate equipment according to manufacturer's recommendations.				
		c. Conduct test according to detailed methodology in Appendix I-2 and record results for the pooled sample for each quarter. For first audits, farms must have test results from the last 3 months.				
Footnote	[18] Fines: Dust and fragments in the feed. Particles that separate from feed with a diameter of 5 mm or less when sieved through a 1 mm sieve, or particles that separate from feed with a diameter greater than 5 mm when sieved through a 2.36 mm sieve. To be measured at farm gate (e.g., from feed bags after they are delivered to farm).					
Footnote	[19] To be measured every quarter or every three months. Samples that are measured shall be chosen randomly. Feed may be sampled immediately prior to delivery to farm for sites with no feed storage where it is not possible to sample on farm. Closed production systems that can demonstrate the collection and responsible disposal of > 75% of solid nutrients and > 50% of dissolved nutrients (through biofiltration, settling and/or other technologies) are exempt.					
Criterion 2.4 Interaction with critical or sensitive habitats and species						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
2.4.1	<b>Indicator:</b> Evidence of an assessment of the farm's potential impacts on biodiversity and nearby ecosystems that contains at a minimum the components outlined in Appendix I-3  <b>Requirement:</b> Yes  <b>Applicability:</b> 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 as evidence to demonstrate compliance with Indicator 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.	A) Assessment of the farms impact on biodiversity and nearby ecosystems performed by Cermaq and private subcontractors: Cermaq report Biodiversity - focused Risk review Sites in waterbody Vargsundet (Kråkevik) and Korsfjorden. July 2019. Report covers requirements related to Appendix I-3.  B) Cermaq report Biodiversity - focused Risk review Sites in waterbody Vargsundet (Kråkevik) and Korsfjorden. July 2019 identifies marginal impacts. Action plan to minimize impacts are included in report as part of risk review, table 4 and 5.  C) Site specific risk assessment and action plans are implemented. Last update on Kråkevik was 25.03.2020. by site manager and employees. Assessment an plan covers environment such as impact on nearby ecosystems in waterbody, wildlife, bottom, and land. Action plan closings within time frame. Reviewed by auditor during audit  Monitoring of results for water quality and benthic conditions as part of See ASC- and C-Survey report 60720.02 by Akvaplan Niva for site 10614 Kråkevik, performed 22.11.2018, issued 05.04.2019. Survey performed according to standard NS 9410:2016 and ASC standard requirements.	Compliant		
		b. If the assessment (2.4.1a) identifies potential impact(s) of the farm on biodiversity or nearby critical, sensitive or protected habitats or species, prepare plan to address those potential impacts.				
		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.				

2.4.2	<p><b>Indicator:</b> Allowance for the farm to be sited in a protected area [20] or High Conservation Value Areas [21] (HCVAs)</p> <p><b>Requirement:</b> None [22]</p> <p><b>Applicability:</b> All farms except as noted in [22]</p>	<p><b>Instruction to Clients for Indicator 2.4.2 - Exceptions to Requirements that Farms are not sited within Protected Areas or HCVAs</b></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><b>Definitions</b></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>A) GIS data provided by farm on Map and .json file according to requirement in standard. GIS position Kråkevik, 23.30610335124246,70.26270878308861 was plotted in to gis.asc-aqua.org/arcgis_app/. Position were in compliance with position as described in report 60720.02 by Akvaplan Niva for site 10614 Kråkevik, issued 05.04.2019, and www.barentswatch.com for site Kråkevik. Site is not in or close to a HCVA according to ASC database. This was cross checked against government maps and web pages Fiskeridirektoratet www.kart.fiskeridir.no map and Miljødirektoratet www.naturbase.no map with all known protected areas defined. - site is not in conflict with protected areas - HCVAs or CAs. Also considered in Cermaq report Biodiversity - focused Risk review Sites in waterbody Vargsundet (Kråkevik) and Korsfjorden. July 2019 performed according to Appendix I-3.</p> <p>B) Farm is not sited in a HCVA area ref A) above - ref document Biodiversitets-fokusert risikovurdering Kråkevik, Nordnes, Store Lerresfjord, Storholmen, Olderfjord, Jernelva, Komagnes issued by Cermaq July 2019. Cermaq Group AS annual corporate level environmental and sustainability report 2017 also refers to policy and approach for HCVA.</p> <p>C) N/A</p> <p>D) N/A</p>	Compliant	
		<p>b. If the farm is <u>not</u> sited in a protected area or High Conservation Value Area as defined above, prepare a declaration attesting to this fact. In this case, the requirements of 2.4.2c-d do not apply.</p>			
		<p>c. If the farm <u>is</u> sited in a protected area or HCVA, review the scope of applicability of Indicator 2.4.2 (see Instructions above) to determine if your farm is allowed an exception to the requirements. If yes, inform the CAB which exception (#1, #2, or #3) is allowed and provide supporting evidence.</p>			
		<p>d. If the farm is sited in a protected area or HCVA and the exceptions provided for Indicator 2.4.2 <u>do not apply</u>, then the farm does not comply with the requirement and is ineligible for ASC certification.</p>			
Footnote	[20] Protected area: "A clearly defined geographical space, recognized, dedicated and managed through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values." Source: Dudley, N. (Editor) (2008), Guidelines for Applying Protected Area Management Categories, Gland, Switzerland: IUCN. x + 86pp.				
Footnote	[21] High Conservation Value Areas (HCVA): Natural habitats where conservation values are considered to be of outstanding significance or critical importance. HCVA are designated through a multi-stakeholder approach that provides a systematic basis for identifying critical conservation values—both social and environmental—and for planning ecosystem management in order to ensure that these high conservation values are maintained or enhanced ( <a href="http://www.hcvnetwork.org/">http://www.hcvnetwork.org/</a> ).				
Footnote	<p>[22] The following exceptions shall be made for Standard 2.4.2:</p> <ul style="list-style-type: none"><li>• 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).</li><li>• 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.</li><li>• 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.</li></ul>				

Criterion 2.5 Interaction with wildlife, including predators [23]						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
Footnote	[23] See Appendix VI for transparency requirements for 2.5.2, 2.5.5 and 2.5.6.					
2.5.1	<p><b>Indicator:</b> Number of days in the production cycle when acoustic deterrent devices (ADDs) or acoustic harassment devices (AHDs) were used</p> <p><b>Requirement:</b> 0</p> <p><b>Applicability:</b> All</p>	<p>a. Compile documentary evidence to show that no ADDs or AHDs have been used by the farm.</p> <p>-</p>	<p>A) No ADD or AHD's used. Verified in interviews with employees and review of risk assessment - Site is a Green concession, and ADD/AHD's are not allowed.</p>	Compliant		0
2.5.2	<p><b>Indicator:</b> Number of mortalities [25] of endangered or red-listed [26] marine mammals or birds on the farm</p> <p><b>Requirement:</b> 0 (zero)</p> <p><b>Applicability:</b> All</p>	<p>a. Prepare a list of all predator control devices and their locations.</p> <p>b. Maintain a record of all predator incidents.</p> <p>c. Maintain a record of all mortalities of marine mammals and birds on the farm identifying the species, date, and apparent cause of death.</p> <p>d. Maintain an up-to-date list of endangered or red-listed marine mammals and birds in the area (see 2.4.1)</p> <p>-</p>	<p>A) Bird nets located above the net cages are only predator control devices used. Verification through employee interviews 31.03.2020.</p> <p>B) Verified during interviews with site employees 31.03.2020: No predator incidents occurred. Cross checked against Farm record for mortality 17G and 19G issued to ASC 13.03.2020, and Cermaq official communication on <a href="https://www.cermaq.com/wps/wcm/connect/cermaq-no/cermaq-norway/baerekraft/asc-rapportering">https://www.cermaq.com/wps/wcm/connect/cermaq-no/cermaq-norway/baerekraft/asc-rapportering</a></p> <p>C) Farm record of mortality 17G and 19G issued to ASC 13.03.2020 includes 2 dead seagulls found inside net in 2018 and 1 dead seagull found inside net in 2019. Not red listed species. The record includes following data: date of incident, specie, number, cause of death and red list status. Verification through employee interviews.</p> <p>D) List is included in Cermaq report Biodiversity - focused Risk review Sites in waterbody Vargsundet (Kråkevik) and Korsfjorden. July 2019.</p>	Compliant		0
Footnote	[25] Mortalities: Includes animals intentionally killed through lethal action as well as accidental deaths through entanglement or other means.					
Footnote	[26] Species listed as endangered or critically endangered by the IUCN or on a national endangered species list.					
2.5.3	<p><b>Indicator:</b> Evidence that the following steps were taken prior to lethal action [27] against a predator:</p> <p>1. All other avenues were pursued prior to using lethal action</p> <p>2. Approval was given from a senior manager above the farm manager</p> <p>3. Explicit permission was granted to take lethal action against the specific animal from the relevant regulatory authority</p> <p><b>Requirement:</b> Yes [28]</p> <p><b>Applicability:</b> All except cases where human safety is endangered as noted in [28]</p>	<p>a. Provide a list of all lethal actions that the farm took against predators during the previous 12-month period. Note: "lethal action" is an action taken to deliberately kill an animal, including marine mammals and birds.</p> <p>b. For each lethal action identified in 2.5.4a, keep record of the following:</p> <p>1) a rationale showing how the farm pursued all other reasonable avenues prior to using lethal action;</p> <p>2) approval from a senior manager above the farm manager of the lethal action;</p> <p>3) where applicable, explicit permission was granted by the relevant regulatory authority to take lethal action against the animal.</p> <p>c. Provide documentary evidence that steps 1-3 above (in 2.5.4b) were taken prior to killing the animal. If human safety was endangered and urgent action necessary, provide documentary evidence as outlined in [28].</p>	<p>A-C) No lethal actions taken at farm. Verified in employee interviews and mortality records for farm. Cermaq Procedure "Prosedyre for samspill med dyr og fugler, doc 395, dated 30.10.2019 is in compliance with principle requirements.</p>	Compliant		
Footnote	[27] Lethal action: Action taken to deliberately kill an animal, including marine mammals and birds.					
Footnote	[28] Exception to these conditions may be made for a rare situation where human safety is endangered. Should this be required, post-incident approval from a senior manager should be made and relevant authorities must be informed.					

<p align="center"><b>Instruction to Clients and CABs on Indicators 2.5.4, 2.5.5, and 2.5.6 - Clarification about the ASC Definition of "Lethal Incident"</b></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 evaluate compliance with Indicators 2.5.4, 2.5.5, and 2.5.6, ASC has clarified this definition further:</p> <p 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 three (3) birds, it is considered three (3) lethal incidents within a two year period.</p> <p 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	<p><b>Indicator:</b> Evidence that information about any lethal incidents [30] on the farm has been made easily publicly available [29]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. For all lethal actions (see 2.5.3), keep records showing that the farm made the information available within 30 days of occurrence.</p> <p>a. For all lethal actions (see 2.5.3), keep records showing that the farm made the information available within 30 days of occurrence.</p> <p>b. Ensure that information about all lethal actions listed in 2.5.4a are made easily publicly available (e.g. on a website).</p>	A-B) Cermaq official communication on <a href="https://www.cermaq.com/wps/wcm/connect/cermaq-no/cermaq-norway/baerekraft/asc-rapporting">https://www.cermaq.com/wps/wcm/connect/cermaq-no/cermaq-norway/baerekraft/asc-rapporting</a> show 3 lethal incidents with birds last 3 years. Also communicated to ASC.	Compliant		
Footnote	[29] Posting results on a public website is an example of "easily publicly available." Shall be made available within 30 days of the incident and see Appendix VI for transparency requirements.					
2.5.5	<p><b>Indicator:</b> Maximum number of lethal incidents [30] on the farm over the prior two years</p> <p><b>Requirement:</b> &lt; 9 lethal incidents [31], with no more than two of the incidents being marine mammals</p> <p><b>Applicability:</b> All</p>	<p>a. Maintain log of lethal incidents (see 2.5.3a) for a minimum of two years. For first audit, &gt; 6 months of data are required.</p> <p>b. Calculate the total number of lethal incidents and the number of incidents involving marine mammals during the previous two year period.</p> <p>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).</p>	<p>A) Ref 2.5.2 - 3 lethal incidents last 3 years. No lethal actions</p> <p>B) 3 lethal incidents - not red listed seagulls dead inside net. 0 marine mammals</p> <p>C) Data submitted to ASC by email 13.03.2020. Auditor was copied on email</p>	Compliant		3 birds, 0 marine mammals
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	<p><b>Indicator:</b> In the event of a lethal incident, evidence that an assessment of the risk of lethal incident(s) has been undertaken and demonstration of concrete steps taken by the farm to reduce the risk of future incidences</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Keep records showing that the farm undertakes an assessment of risk following each lethal incident and how those risk assessments are used to identify concrete steps the farm takes to reduce the risk of future incidents.</p> <p>b. Provide documentary evidence that the farm implements those steps identified in 2.5.6a to reduce the risk of future lethal incidents.</p>	<p>A) Site specific risk assessment and action plans are implemented which includes lethal incidents. Last update on Kråkevik was 25.03.2020. by site manager and employees. Cermaq report Biodiversitets-fokusert risikovurdering Kråkevik, Nordnes, Store Lerresfjord, Storholmen, Olderfjord, Jernelva, Komagnes issued by Cermaq July 2019 includes risk assessment plan for lethal incidents, including targets and action plan.</p> <p>B) Action plan in site risk assessment includes lethal incidents. Plan reviewed during audit.</p>	Compliant		

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 3.1.					
Footnote	[33] See Appendix VI for transparency requirements for 3.1.1, 3.1.3, 3.1.4, 3.1.6 and 3.1.7.					
<b>Instruction to Clients and CABs on Exemptions to Criterion 3.1</b> According to footnote [32], farm sites for which there is no release of water that may contain pathogens into the natural (freshwater or marine) environment are exempt from the requirements under Criterion 3.1. More specifically, farms are only eligible for exemption from Criterion 3.1 if it can be shown that either of the following holds: 1) the farm does not release any water to the natural environment; or 2) any effluent released by the farm to the natural environment has been effectively treated to kill pathogens (e.g. UV and/or chemical treatment of water with testing demonstrating efficacy).  Auditors shall fully document the rationale for any such exemptions in the audit report.						
3.1.1	<b>Indicator:</b> Participation in an Area-Based Management (ABM) scheme for managing disease and resistance to treatments that includes coordination of stocking, fallowing, therapeutic treatments and information-sharing. Detailed requirements are in Appendix II-1.  <b>Requirement:</b> Yes  <b>Applicability:</b> All except farms that release no water as noted in [32]	a. Keep record of farm's participation in an ABM scheme.  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.  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.  d. Submit dates of fallowing period(s) as per Appendix VI to ASC at least once per year.	Kråkevika is part of regional and localised area based management schemes which operate in accordance to ASC requirements. Regionally, in Finnmark, a collaboration between aquaculture companies coordinate lice treatments. This is coordinated by Åkerblå AS. "Samordnet Plan for kontroll og bekjempelse av lakselus" dated 30-09-2019 describes the relationship between sites in the area. Lice numbers and treatment information is shared between sites weekly (Report for week 12 2020 reviewed) as are other issues regarding fish health and welfare. Further to this, sites are separated into a smaller grouping with a 5km distance between each group. Each of these individual groups synchronises their fallow period after every cycle. Data submitted to the ASC 13-03-2020.	Compliant		
3.1.2	<b>Indicator:</b> A demonstrated commitment [34] to collaborate with NGOs, academics and governments on areas of mutually agreed research to measure possible impacts on wild stocks  <b>Requirement:</b> Yes  <b>Applicability:</b> All except farms that release no water as noted in [32]	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.  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.  b. Provide non-financial support to research activities in 3.1.2a by either: - providing researchers with access to farm-level data; - granting researchers direct access to farm sites; or - facilitating research activities in some equivalent way.  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.  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.	Cermaq is a stakeholder in ClimeFish. ClimeFish is an EU project focusing on seafood production in areas and with species that have the potential for sustainable growth, taking into consideration predicted climate changes (https://climefish.eu/cermaq/). Additionally, Cermaq farms in Finnmark participate in other research projects through Kompetansekyllinge Finnmark (https://kompetansekyllingelaks.no/om-oss/).	Compliant		
Footnote	[34] Commitment: At a minimum, a farm and/or its operating company must demonstrate this commitment through providing farm-level data to researchers, granting researchers access to sites, or other similar non-financial support for research activities.					

3.1.3	<p><b>Indicator:</b> Establishment and annual review of a maximum sea lice load for the entire ABM and for the individual farm as outlined in Appendix II-2</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All except farms that release no water as noted in [32]</p>	<p>a. Keep records to show that a maximum sea lice load has been set for:</p> <ul style="list-style-type: none"> <li>- the entire ABM; and</li> <li>- the individual farm.</li> </ul> <p>b. Maintain evidence that the established maximum sea lice load (3.1.3a) is reviewed annually as outlined in Appendix II-2, incorporating feedback from the monitoring of wild salmon where applicable (See 3.1.6).</p> <p>c. Provide the CAB access to documentation which is sufficient for the auditor to evaluate whether the ABM has set (3.1.3a) and annually reviewed (3.1.3.b) maximum sea lice load in compliance with requirements in Appendix II-2.</p> <p>d. Submit the maximum sea lice load for the ABM to ASC as per Appendix VI at least once per year.</p>	<p>ABM coordinated by Åkerblå AS. "Samordnet Plan for kontroll og bekjempelse av lakselus" dated 30.09.2019 describes the relationship between sites in the area. Lice numbers and treatment information is shared between sites weekly (Report for week 12 2020 reviewed). Information documented in weekly reports covers sea lice data from 2018 to date. Additionally, annual reviews of sealice levels and treatments are reviewed by the sites. Last meeting occurred 27-02-2020, email correspondence reviewed as well as attached "Stoppluss" document. Covers both <i>Lepeophtheirus salmonis</i> and <i>Calligus elongatus</i>. Data submitted to the ASC 13-03-2020.</p>	Compliant		
3.1.4	<p><b>Indicator:</b> Frequent [35] on-farm testing for sea lice, with test results made easily publicly available [36] within seven days of testing</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All except farms that release no water as noted in [32]</p>	<p>a. Prepare an annual schedule for testing sea lice that identifies timeframes of routine testing frequency (at a minimum, monthly) and for high-frequency testing (weekly) due to sensitive periods for wild salmonids (e.g. during and immediately prior to outmigration of juveniles).</p> <p>b. Maintain records of results of on-farm testing for sea lice. If farm deviates from schedule due to weather [35] maintain documentation of event and rationale.</p> <p>c. Document the methodology used for testing sea lice ('testing' includes both counting and identifying sea lice). The method must follow national or international norms, follows accepted minimum sample size, use random sampling, and record the species and life-stage of the sea lice. If farm uses a closed production system and would like to use an alternate method (i.e. video), farm shall provide the CAB with details on the method and efficacy of the method.</p> <p>d. Make the testing results from 3.1.4b easily publicly available (e.g. posted to the company's website) within seven days of testing. If requested, provide stakeholders access to hardcopies of test results.</p> <p>e. Keep records of when and where test results were made public.</p> <p>f. Submit test results to ASC (Appendix VI) at least once per year.</p>	<p>Sea lice counting is done in accordance with national Regulations on Combating Salmon Lice in Aquaculture Facilities (Forskrift om bekjempelse av lakselus i akvakulturanlegg) §4 Coordinated plan for control and combating salmon lice: Salmon lice are counted at least every 7 days when the sea temperature is over or equal to 4 °C, and at least every 14 days when temperatures are below 4 °C. All results are made publicly available the same week via Barentswatch (<a href="https://www.barentswatch.no/fiskehelse/locality/10614/2020/14">https://www.barentswatch.no/fiskehelse/locality/10614/2020/14</a>). The farm has adhered to these requirements. Staff receive training in lice counting when they start, which they repeat every five years. Certificate of completion of sea lice counting course ("Lusetelling kurs") from site technician, date: 12-04-2016, seen. Data submitted to the ASC 13-03-2020.</p>	Compliant		
Footnote	[35] Testing must be weekly during and immediately prior to sensitive periods for wild salmonids, such as outmigration of wild juvenile salmon. Testing must be at least monthly during the rest of the year, unless water temperature is so cold that it would jeopardize farmed fish health to test for lice (below 4 degrees C). Within closed production systems, alternative methods for monitoring sea lice, such as video monitoring, may be used.					
Footnote	[36] Posting results on a public website is an example of "easily publicly available."					

3.1.5	<p><b>Indicator:</b> In areas with wild salmonids [37], evidence of data [38] and the farm's understanding of that data, around salmonid migration routes, migration timing and stock productivity in major waterways within 50 kilometers of the farm</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms operating in areas with wild salmonids except farms that release no water as noted in [32]</p>	<p><b>Instruction to Clients for Indicator 3.1.5 - Evidence for Wild Salmonid Health and Migration</b></p> <p>In writing this indicator, the 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>								
		<table><tr><td>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.</td><td rowspan="4"><i>Salmo salar</i>, <i>Salmo trutta</i> and <i>Salvelinus alpinus</i>. Kråkevika is 12.5km to the nearest salmon river, Store Lerredselva (<a href="http://www.laksekart.fylkesmannen.no">www.laksekart.fylkesmannen.no</a>). Cermaq has produced a Biodiversity focused Risk Assessment (Biodiversitets-fokusert Risikovurdering, July 2019) demonstrating knowledge and understanding of migration routes and timing. The farm follows National Regulations on Combating Salmon Lice in Aquaculture Facilities (Forskrift om bekjempelse av lakselus i akvakulturanlegg) and defines the sensitive period for wild salmonids in this area as weeks 21 to 26.</td></tr><tr><td>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.</td></tr><tr><td>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.</td></tr><tr><td>-</td></tr></table>	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.	<i>Salmo salar</i> , <i>Salmo trutta</i> and <i>Salvelinus alpinus</i> . Kråkevika is 12.5km to the nearest salmon river, Store Lerredselva ( <a href="http://www.laksekart.fylkesmannen.no">www.laksekart.fylkesmannen.no</a> ). Cermaq has produced a Biodiversity focused Risk Assessment (Biodiversitets-fokusert Risikovurdering, July 2019) demonstrating knowledge and understanding of migration routes and timing. The farm follows National Regulations on Combating Salmon Lice in Aquaculture Facilities (Forskrift om bekjempelse av lakselus i akvakulturanlegg) and defines the sensitive period for wild salmonids in this area as weeks 21 to 26.	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.	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.	-	Compliant		
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.	<i>Salmo salar</i> , <i>Salmo trutta</i> and <i>Salvelinus alpinus</i> . Kråkevika is 12.5km to the nearest salmon river, Store Lerredselva ( <a href="http://www.laksekart.fylkesmannen.no">www.laksekart.fylkesmannen.no</a> ). Cermaq has produced a Biodiversity focused Risk Assessment (Biodiversitets-fokusert Risikovurdering, July 2019) demonstrating knowledge and understanding of migration routes and timing. The farm follows National Regulations on Combating Salmon Lice in Aquaculture Facilities (Forskrift om bekjempelse av lakselus i akvakulturanlegg) and defines the sensitive period for wild salmonids in this area as weeks 21 to 26.									
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-										
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Footnote	[38] Farms do not need to conduct research on migration routes, timing and the health of wild stocks under this standard if general information is already available. Farms must demonstrate an understanding of this information at the general level for salmonid populations in their region, as such information is needed to make management decisions related to minimizing potential impact on those stocks.									
3.1.6	<p><b>Indicator:</b> In areas of wild salmonids, monitoring of sea lice levels on wild out-migrating salmon juveniles or on coastal sea trout or Arctic char, with results made publicly available. See requirements in Appendix III-1.</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms operating in areas with wild salmonids except farms that release no water as noted in [32]</p>	<p>a. Inform the CAB if the farm operates in an area of wild salmonids. If not, then Indicator 3.1.6 does not apply.</p> <p>b. Keep records to show the farm participates in monitoring of sea lice on wild salmonids.</p> <p>c. Provide the CAB access to documentation which is sufficient for the auditor to evaluate whether the methodology used for monitoring of sea lice on wild salmonids is in compliance with the requirements in Appendix III-1.</p> <p>d. Make the results from 3.1.6b easily publicly available (e.g. posted to the company's website) within eight weeks of completion of monitoring.</p> <p>e. Submit to ASC the results from monitoring of sea lice levels on wild salmonids as per Appendix VI.</p>	<p>Due to Norwegian legislation, only approved bodies are able to conduct monitoring of sea lice numbers on wild salmon. This has been understood and approved by the ASC in VR136.</p> <p>The Institute for Marine Research (Havforskningsinstituttet) publishes annual reports related to this. See website: <a href="https://www.hi.no/hi/nettrapporter/rapport-fra-havforskningen-2019-35#sec-finnmark-vest-po-12-vest">https://www.hi.no/hi/nettrapporter/rapport-fra-havforskningen-2019-35#sec-finnmark-vest-po-12-vest</a></p>	Compliant						

3.1.7	<p><b>Indicator:</b> In areas of wild salmonids, maximum on-farm lice levels during sensitive periods for wild fish [39]. See detailed requirements in Appendix II, subsection 2.</p> <p><b>Requirement:</b> 0.1 mature female lice per farmed fish</p> <p><b>Applicability:</b> All farms operating in areas with wild salmonids except farms that release no water as noted in [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.	<p>National Regulations on Combating Salmon Lice in Aquaculture Facilities (Forskrift om bekjempelse av lakselus i akvakulturanlegg) §8 defines the sensitive period for wild salmonids in this area as weeks 21 to 26. ABM group works together to ensure minimal lice during this period, as discussed with Cermaq's Regional Fish Health Area Manager. During this period, the average of adult female lice per salmon must be less than 0.2. The sensitive period as defined by Norwegian regulations has been accepted by VR 227.</p> <p>Further to this, Cermaq cooperates with the regional ABM to ensure low lice numbers across Finnmark during this period as shown by annual meeting information ("Stopplus" documentation from meeting 27-02-2020) and confirmed by interview with Fish Health Area Manager. The document showed the ABM takes into consideration annual trends. Conversation with the Fish Health Area Manager confirmed this information was then used to plan treatments to ensure low levels of lice, particularly during the sensitive periods.</p>	Compliant		<0,1
		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.				
		c. Maintain detailed records of monitoring on-farm lice levels (see 3.1.4) during sensitive periods as per Appendix II-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).				
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><b>Indicator:</b> If a non-native species is being produced, demonstration that the species was widely commercially produced in the area by the date of publication of the ASC Salmon standard</p> <p><b>Requirement:</b> Yes [40]</p> <p><b>Applicability:</b> All farms except as noted in [40]</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.				
		a. Inform the CAB if the farm produces a non-native species. If not, then Indicator 3.2.1 does not apply.	N/A	Kråkevik farm is in a region where salmonids are known to be native. Cermaq has produced a Biodiversity focused Risk Assessment (Biodiversitets-fokusert Risikovurdering, July 2019) demonstrating evidence of the presence of salmonids in the area.	N/A	ative species are being farm
		b. Provide documentary evidence that the non-native species was widely commercially produced in the area before June 13, 2012.				
		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.				
		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).				
		-				
Footnote	[40] Exceptions shall be made for production systems that use 100 percent sterile fish or systems that demonstrate separation from the wild by effective physical barriers that are in place and well-maintained to ensure no escapes of reared specimens or biological material that might survive and subsequently reproduce.					



3.2.2	<p><b>Indicator:</b> If a non-native species is being produced, evidence of scientific research [41] completed within the past five years that investigates the risk of establishment of the species within the farm's jurisdiction and these results submitted to ASC for review [42]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All [43]</p>	<p><b>Instruction to Clients for Indicator 3.2.2 - Exceptions to Allow Production of Non-Native Species</b></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>					
		a. Inform the ASC of the species in production (Appendix VI).	N/A		N/A	ative species are being farmed	
		b. Inform the CAB if the farm produces a non-native species. If not, then Indicator 3.2.2 does not apply.					
		c. If yes to 3.2.2b, provide evidence of scientific research completed within the past five years that investigates the risk of establishment of the species within the farm's jurisdiction. Alternatively, the farm may request an exemption to 3.2.2c (see below).					
		d. If applicable, submit to the CAB a request for exemption that shows how the farm meets all three conditions specified in instruction box above.					
		e. Submit evidence from 3.2.2c to ASC for review.					
Footnote	[41] The research must at a minimum include multi-year monitoring for non-native farmed species, use credible methodologies and analysis, and undergo peer review.						
Footnote	[42] If the review demonstrates there is increased risk, the ASC will consider prohibiting the certification of farming of non-native salmon in that jurisdiction under this standard. In the event that the risk tools demonstrate "high" risks, the SAD expects that the ASC will prohibit the certification of farming of non-native salmon in that jurisdiction. The ASC intends to bring this evidence into future revision of the standard and those results taken forward into the revision process.						
Footnote	[43] Farms are exempt from this standard if they are in a jurisdiction where the non-native species became established prior to farming activities in the area and the following three conditions are met: eradication would be impossible or have detrimental environmental effects; the introduction took place prior to 1993 (when the Convention on Biological Diversity (CBD) was ratified); the species is fully self-sustaining.						
3.2.3	<p><b>Indicator:</b> Use of non-native species for sea lice control for on-farm management purposes</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All</p>	a. Inform the CAB if the farm uses fish (e.g. cleaner fish or wrasse) for the control of sea lice.	Lumpfish, Cyclopterus lumpus, are not currently used at Kråkevik. However there are plans for input June/July 2020.		N/A	Cleanerfish are not currently being used.	
		b. Maintain records (e.g. invoices) to show the species name and origin of all fish used by the farm for purposes of sea lice control.					
		c. Collect documentary evidence or first hand accounts as evidence that the species used is not non-native to the region.					

Criterion 3.3 Introduction of transgenic species						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
3.3.1	<b>Indicator:</b> Use of transgenic [44] salmon by the farm <b>Requirement:</b> None <b>Applicability:</b> All	a. Prepare a declaration stating that the farm does not use transgenic salmon.  b. Maintain records for the origin of all cultured stocks including the supplier name, address and contact person(s) for stock purchases.  c. Ensure purchase documents confirm that the culture stock is not transgenic.	All stock are documented via a Fish CV, tracking the fish from egg to harvest. Salmon farmed at Kråkevika are from AquaGen broodstock, as demonstrated through Product and Quality Control documentation (Product and Quality Control. Fish Group: 17.1703. Cage 10. Fish Input 26.08-2017.). AquaGen Statement (Document number: 468, Date:23.03.2017) confirms eggs are not from genetically modified sources. AquaGen is certified Global G.A.P (GGN: 4049929687783) and Freedom Food (No.:2943.0001).	Compliant		
Footnote	[44] Transgenic: Containing genes altered by insertion of DNA from an unrelated organism. Taking genes from one species and inserting them into another species to get that trait expressed in the offspring (reference USDA).					
Criterion 3.4 Escapes [47]						
		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	<b>Indicator:</b> Maximum number of escapees [46] in the most recent production cycle <b>Requirement:</b> 300 [47] <b>Applicability:</b> All farms except as noted in [47]	a. Maintain monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapees.  b. Aggregate cumulative 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]).  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.  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).	No Escapes during current or previous generation. Data checked with Fisheries Directorate to confirm. All data is maintained for 10years+. For example, records from 2008 can be accessed.	Compliant		
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 be reported as outlined in Appendix VI.					
Footnote	[47] A rare exception to this standard may be made for an escape event that is clearly documented as being outside the farm's control. Only one such exceptional episode is allowed in a 10-year period for the purposes of this standard. The 10-year period starts at the beginning of the production cycle for which the farm is applying for certification. The farmer must demonstrate that there was no reasonable way to predict the events that caused the episode. See auditing guidance for additional details.					

3.4.2	<p><b>Indicator:</b> Accuracy [48] of the counting technology or counting method used for calculating stocking and harvest numbers</p> <p><b>Requirement:</b> ≥ 98%</p> <p><b>Applicability:</b> All</p>	<p>a. Maintain records of accuracy of the counting technology used by the farm at times of stocking and harvest. Records include copies of spec sheets for counting machines and common estimates of error for hand-counts.</p> <p>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).</p> <p>c. During audits, arrange for the auditor to witness calibration of counting machines (if used by the farm).</p> <p>-</p> <p>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).</p>	<p>Counting takes place during vaccination and at harvest.</p> <p>At Smolt Facility:  Nordland Akva: Data Sheet for Aquascan Fishcounter; Registration Unit CSE1600. Accuracy 98-100%.  Internal Supplier Forsan: Macro Serien from Vaki Makro. Accuracy 99%.  Ranfjord: Statement from Pharmaq dated 04-02-2020 ("Tellenøyaktighet ved vaksinerings av fisk"). Accuracy 100%.</p> <p>Harvest: Data Sheet for AquaScan Fishcounter; Registration Unit CSF4000. Accuracy 98-100%.  Data submitted to the ASC 13-03-2020.</p>	Compliant		98-100%
Footnote	[48] Accuracy shall be determined by the spec sheet for counting machines and through common estimates of error for any hand-counts.					
3.4.3	<p><b>Indicator:</b> Estimated unexplained loss [49] of farmed salmon is made publicly available</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p><b>Instruction to Clients for Indicator 3.4.3 - Calculation of Estimated Unexplained Loss</b>  The Estimated Unexplained Loss (EUL) of fish is calculated at the end of each production cycle as follows:</p> <p>EUL = (stocking count) - (harvest count) - (mortalities) - (recorded escapes)</p> <p>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.</p> <p>a. Maintain detailed records for mortalities, stocking count, harvest count, and escapes (as per 3.4.1).</p> <p>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.</p> <p>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.</p> <p>d. Submit estimated unexplained loss to ASC as per Appendix VI for each production cycle.</p> <p>-</p>	<p>Records maintained on FishTalk and provided in Transparency Data sheets.  Kråkevika farm has demonstrated the ability to calculate and disclose EUL by providing data on the previous cycle.</p> <p>EUL of the Previous cycle 17G: 0.93%</p> <p>Data made publically available via Cermaq's ASC Dashboard website: <a href="https://www.cermaq.com/wps/wcm/connect/cermaq-no/cermaq-norway/baerekraft/asc-rapportering">https://www.cermaq.com/wps/wcm/connect/cermaq-no/cermaq-norway/baerekraft/asc-rapportering</a></p> <p>Data submitted to the ASC 13-03-2020.</p>	Compliant		0.93%
Footnote	[49] Calculated at the end of the production cycle as: Unexplained loss = Stocking count – harvest count – mortalities – other known escapes. Where possible, use of the pre-smolt vaccination count as the stocking count is preferred.					

3.4.4	<p><b>Indicator:</b> Evidence of escape prevention planning and related employee training, including: net strength testing; appropriate net mesh size; net traceability; system robustness; predator management; record keeping and reporting of risk events (e.g., holes, infrastructure issues, handling errors, reporting and follow up of escape events); and worker training on escape prevention and counting technologies</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Prepare an Escape Prevention Plan and submit it to the CAB before the first audit. This plan may be part of a more comprehensive farm planning document as long as it addresses all required elements of Indicator 3.4.4.</p> <p>b. If the farm operates an open (net pen) system, ensure the plan (3.4.4a) covers the following areas:</p> <ul style="list-style-type: none"> <li>- net strength testing;</li> <li>- appropriate net mesh size;</li> <li>- net traceability;</li> <li>- system robustness;</li> <li>- predator management;</li> <li>- record keeping;</li> <li>- reporting risk events (e.g. holes, infrastructure issues, handling errors);</li> <li>- planning of staff training to cover all of the above areas; and</li> <li>- planning of staff training on escape prevention and counting technologies.</li> </ul> <p>c. If the farm operates a closed system, ensure the plan (3.4.4a) covers the following areas:</p> <ul style="list-style-type: none"> <li>- system robustness;</li> <li>- predator management;</li> <li>- record keeping;</li> <li>- reporting risk events (e.g. holes, infrastructure issues, handling errors);</li> <li>- planning of staff training to cover all of the above areas; and</li> <li>- planning of staff training on escape prevention and counting technologies.</li> </ul> <p>d. Maintain records as specified in the plan.</p> <p>e. Train staff on escape prevention planning as per the farm's plan.</p> <p>-</p>	<p>Risk Assessment for events that could cause an escape, as reviewed in "Riskovurderinger lokale forhold Kråkevika" dated 25-03-2020. Plan for handling potential escapes presented in Cermaq's Contingency Plan, Section 1.3 ("Beredskapsplan" Version 6; Date: 09-12-2019. 1.3 Sjekkliste Rømming/Mistanke om rømming). Both documents provided evidence of compliance with the indicator. Further documentation seen from escape training performed 23-01-2020 demonstrated the farm's commitment to staff training. Staff from Kråkevika, and nearby Nordnes and Store Lerresfjord, participated in an escape role play. Photos presented of participants and activities.</p>	Compliant		
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PRINCIPLE 4: USE RESOURCES IN AN ENVIRONMENTALLY EFFICIENT AND RESPONSIBLE MANNER					
Criterion 4.1 Traceability of raw materials in feed					
Compliance Criteria (Required Client Actions):			Auditor Evaluation (Required CAB Actions):		
<p><b>Instruction to Clients for Indicators 4.1.1 through 4.4.2 - Sourcing of Responsibly Produced Salmon Feeds</b></p> <p>Farms must show that all feeds used by the farm are produced in compliance with the requirements of Indicators 4.1.1 through 4.4.4. To do so, farms must obtain documentary evidence that the feed producers (see note 1) are audited at regular intervals by an independent auditing firm or a conformity assessment body against a recognized standard which substantially incorporate requirements for traceability. Acceptable certification schemes include GLOBALG.A.P or other schemes that have been acknowledged by the ASC (see 4.1.1c below). Results from these audits shall demonstrate that feed producers have robust information systems and information handling processes to allow the feed producers to be able to bring forward accurate information about their production and supply chains. Declarations from the feed producer that are provided to the farm to demonstrate compliance with these indicators must be supported by the audits. Farms must also show that all of their feed producers are duly informed of the requirements of the ASC Salmon Standard relating to sourcing of responsibly produced salmon feed (see 4.1.1b below).</p> <p>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:</p> <p>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.</p> <p>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.</p> <p>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.</p>					
4.1.1	<p><b>Indicator:</b> Evidence of traceability, demonstrated by the feed producer, of feed ingredients that make up more than 1% of the feed [50].</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Maintain detailed records of all feed suppliers and purchases including contact information and purchase and delivery records.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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].</p> <p>-</p>	<p>Feed delivery dated 27-03-2020, Order Number: 15119 seen. All records maintained on internal database. The previous generation (17G) received feed from EWOS. Current 19G generation started with EWOS feed and are currently receiving feed from BioMar AS. Both companies are aware of the ASC requirements for feed as demonstrated by company statements. Both feed producers are Global GAP approved (see 4.3.3 for more details).</p> <p>"Innkjøpspolicy for Førråvarer" dated 12-09-2018, states that BioMar will ensure feed ingredients are ASC approved, only using species with a Fish Source score of 6 or higher. Method #2, massbalance, is used.</p> <p>Documentation reviewed describing EWOS' policy for sourcing of marine raw produce and traceability, signed by the Food Safety Lead of EWOS ("ERKLÆRING: Dokumentasjon og informasjon om før levert iht. ASC", dated 13-03-2020). All feed ingredients making &gt;1% composition of feed are traceable to source. Method #2 massbalance, is used.</p>	Compliant	
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.). Feed manufacturers will need to supply the farm with third-party documentation of the ingredients covered under this standard.				

Criterion 4.2 Use of wild fish for feed [51]							
Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):					
Footnote	[51] See Appendix VI for transparency requirements for 4.2.1 and 4.2.2.						
4.2.1	<p><b>Indicator:</b> Fishmeal Forage Fish Dependency Ratio (FFDRm) for grow-out (calculated using formulas in Appendix IV- 1)</p> <p><b>Requirement:</b> &lt; 1.2</p> <p><b>Applicability:</b> All</p>	<p><b>Instruction to Clients for Indicator 4.2.1 - Calculation of FFDRm</b></p> <p>Farms must calculate the Fishmeal Forage Fish Dependency Ration (FFDRm) according to formula presented in Appendix IV-1 using data from the most recent complete production cycle. Farms must also show that they have maintained sufficient information in order to make an accurate calculation of FFDRm as outlined below. For first audits, farms may be exempted from compliance with Indicator 4.2.1 for the most recent complete production cycle (i.e. if the FFDRm of the most recent crop was &gt; 1.2) if the farm can satisfactorily demonstrate to the auditor that:</p> <ul style="list-style-type: none"><li>- the client understands how to accurately calculate FFDRm;</li><li>- the client maintains all information needed to accurately calculate FFDRm (i.e. all feed specs for &gt; 6 months) for the current production cycle; and</li><li>- the client can show how feed used for the current production cycle will ensure that the farm will meet requirements at harvest (i.e. FFDRm &lt; 1.2).</li></ul>					
		<p>a. Maintain a detailed inventory of the feed used including:</p> <ul style="list-style-type: none"><li>- Quantities used of each formulation (kg);</li><li>- Percentage of fishmeal in each formulation used;</li><li>- Source (fishery) of fishmeal in each formulation used;</li><li>- Percentage of fishmeal in each formulation derived from trimmings; and</li><li>- Supporting documentation and signed declaration from feed supplier.</li></ul>	<p>Feed inventories maintained on company database.</p>			Compliant	0.41
		<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>For the previous generation (17G) Feed from EWOS was used.</p> <p>4537500kg feed in total</p> <p>% Fishmeal in feed =16.1</p> <p>Of that Fishmeal; % Forage Fish = 52</p> <p>% Trimmings = 48</p> <p>eFCR (17G) = 1.17</p> <p>FFDRm (17G) = 0.41</p>				
		<p>c. Calculate eFCR using formula in Appendix IV-1 (use this calculation also in 4.2.2 option #1).</p>	<p>For the current (19G) Generation, two different feed suppliers have been used. To date:</p> <p>eFCR (19G to date) = 1.04</p> <p>Weighted Average FFDRm (19G to date) = 0.62</p>				
		<p>d. Calculate FFDRm using formulas in Appendix IV-1.</p>	<p>Data submitted to the ASC 13-03-2020.</p>				
		<p>e. Submit FFDRm to ASC as per Appendix VI for each production cycle.</p>					

4.2.2	<p><b>Indicator:</b> Fish Oil Forage Fish Dependency Ratio (FFDRo) for grow-out (calculated using formulas in Appendix IV-1), or, Maximum amount of EPA and DHA from direct marine sources [52] (calculated according to Appendix IV-2)</p> <p><b>Requirement:</b> FFDRo &lt; 2.52 or (EPA + DHA) &lt; 30 g/kg feed</p> <p><b>Applicability:</b> All</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.					
		a. Maintain a detailed inventory of the feed used as specified in 4.2.1a.	<p>Option #1 FFDRo selected.</p> <p>For previous cycle 17G: % Fish oil in feed = 10.8 % Fish Oil from Forage Fish North Atlantic in feed = 6.1 % Fish Oil from Forage Fish South America in feed = 1.8 FFDRo = 1.73</p> <p>Current 19G to date: Weighted Average FFDRo = 1.67</p> <p>Data submitted to the ASC 13-03-2020.</p>	Compliant		1.73	
		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.					
		c. Inform the CAB whether the farm chose option #1 or option #2 to demonstrate compliance with the requirements of the Standard.					
		d. For option #1, calculate FFDRo using formulas in Appendix IV-1 and using the eFCR calculated under 4.2.1c.					
		e. For option #2, calculate amount of EPA + DHA using formulas in Appendix IV-2.					
		f. Submit FFDRo or EPA & DHA to ASC as per Appendix VI for each production cycle.					
Footnote	<p>[52] Calculation excludes DHA and EPA derived from fisheries by-products and trimmings. Trimmings are defined as by-products when fish are processed for human consumption or if whole fish is rejected for use of human consumption because the quality at the time of landing does not meet official regulations with regard to fish suitable for human consumption.</p> <p>Fishmeal and fish oil that are produced from trimmings can be excluded from the calculation as long as the origin of the trimmings is not any species that are classified as critically endangered, endangered or vulnerable in the IUCN Red List of Threatened Species (<a href="http://www.iucnredlist.org">http://www.iucnredlist.org</a>).</p>						
Criterion 4.3 Source of marine raw materials							
	Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):				
4.3.1	<p><b>Indicator:</b> Timeframe for all fishmeal and fish oil used in feed to come from fisheries [53] certified under a scheme that is an ISEAL member [54] and has guidelines that specifically promote responsible environmental management of small pelagic fisheries</p> <p><b>Requirement:</b> Not required</p> <p><b>Applicability:</b> N/A</p>	N/A			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 trimmings used in feed.						
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.						

4.3.2	<p><b>Indicator:</b> Prior to achieving 4.3.1, the FishSource score [55] for the fishery(ies) from which all marine raw material in feed is derived</p> <p><b>Requirement:</b> All individual scores ≥ 6, and biomass score ≥ 6</p> <p><b>Applicability:</b> All</p>	<p><b>Instruction to Clients for Indicator 4.3.2 - FishSource Score of Fish Used in Feed</b></p> <p>To determine FishSource scores of the fish species used as feed ingredients, do the following:</p> <ul style="list-style-type: none"><li>-go to <a href="http://www.fishsource.org/">http://www.fishsource.org/</a></li><li>- type the species into the search function box and choose the accurate fishery</li><li>-confirm that the search identifies the correct fishery then scroll down or click on the link from the menu on the left reads "Scores"</li></ul> <p>For first audits, farms must have scoring records that cover all feeds purchased during the previous 6-month period.</p> <p>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.</p>	Compliant			
		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).				BioMar Statement "Innkjøpspolicy for Førråvarer" (12-09-2018) states that BioMar will ensure feed ingredients are ASC approved, only using species with a Fish Source score of 6 or higher.
		b. Confirm that each individual score ≥ 6 and the biomass score is ≥ 6.				
		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: <ul style="list-style-type: none"><li>1. Contact FishSource via Sustainable Fisheries Partnerships to identify the species as a priority for assessment.</li><li>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.</li></ul>				
		-				
Footnote	[55] Or equivalent score using the same methodology. See Appendix IV-3 for explanation of FishSource scoring.					
4.3.3	<p><b>Indicator:</b> Prior to achieving 4.3.1, demonstration of third party verified chain of custody and traceability for the batches of fishmeal and fish oil which are in compliance with 4.3.2.</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p><b>Instruction to Clients for Indicator 4.3.3 - Third-Party Verification of Traceability</b></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>	Compliant			
		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.				Origin of fishmeal and fish oil is traceable. Both feed producers are Global GAP approved. BioMar AS Global GAP: GGN: 4050373810030, Valid: 21-08-19 to 20-08-20
		b. Ensure evidence covers all the species used (as consistent with 4.3.2a, 4.2.1a, and 4.2.2a).				EWOS Global GAP: GGN: 4050373825744, Valid: 25-06-19 to 24-06-20



4.3.4	<p><b>Indicator:</b> Feed containing fishmeal and/or fish oil originating from by-products [56] or trimmings from IUU [57] catch or from fish species that are categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species [58], whole fish and fish meal from the same species and family as the species being farmed</p> <p><b>Requirement:</b> None [59]</p> <p><b>Applicability:</b> All except as noted in [59]</p>	<p>a. Compile and maintain, consistent with 4.2.1a and 4.2.2a, a list of the fishery of origin for all fishmeal and fish oil originating from by-products and trimmings.</p> <p>b. Obtain a declaration from the feed supplier stating that no fishmeal or fish oil originating from IUU catch was used to produce the feed.</p> <p>c. Obtain from the feed supplier declaration that the meal or oil did not originate from a species categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species [58] and explaining how they are able to demonstrate this (i.e. through other certification scheme or through their independent audit).</p> <p>d. If meal or oil originated from a species listed as “vulnerable” by IUCN, obtain documentary evidence to support the exception as outlined in [59].</p>	<p>Declarations from both BioMar AS ( "Innkjøpspolicy for Fôrråvarer", dated 12-09-2018) and EWOS ("ERKLÆRING: Dokumentasjon og informasjon om ført iht. ASC", dated 13-03-2020) state that the feed companies do not use fish meal or oil originating from species categorised as vulnerable, endangered or critically endangered according to the IUCN Red List of Threatened Species, nor do they use IUU catch. Both companies maintain they have fully traceable feed sources.</p>	Compliant		
4.3.5	<p><b>Indicator:</b> Presence and evidence of a responsible sourcing policy for the feed manufacturer for marine ingredients that includes a commitment to continuous improvement of source fisheries</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Request a link to a public policy from the feed manufacturer stating the company's support of efforts to shift feed manufacturers purchases of fishmeal and fish oil to fisheries certified under a scheme that is an ISEAL member and has guidelines that specifically promote responsible environmental management of small pelagic fisheries and committing to continuous improvement of source fisheries.</p> <p>b. Prepare a letter stating the farm's intent to source feed containing fishmeal and fish oil originating from fisheries certified under the type of certification scheme noted in indicator 4.3.1.</p> <p>c. Compile a list of the origin of all fish products used as feed ingredients in all feed.</p>	<p>EWOS: Public Policy on source fisheries used in fish feed (specifically page 26 onwards): <a href="https://www.cargill.com/doc/1432142322239/cargill-aqua-nutrition-sustainability-report.pdf">https://www.cargill.com/doc/1432142322239/cargill-aqua-nutrition-sustainability-report.pdf</a></p> <p>BioMar AS: Public Statement on sustainability: <a href="https://www.biomar.com/no/norway/historier/barekraft/er-sjomat-fra-oppdrett-barekraftig/">https://www.biomar.com/no/norway/historier/barekraft/er-sjomat-fra-oppdrett-barekraftig/</a></p> <p>Cermaq: Cermaq has issued a sustainability report detailing "No ingredients shall originate from IUU catch or vulnerable or endangered species" (Cermaq Sustainability Report 2018. Available on company website: <a href="https://www.cermaq.com/wps/wcm/connect/18c43ffd-1acd-4e4e-9d77-28b59b926abd/Cermaq-Sustainability-Report-2018_WEB.pdf?MOD=AJPERES&amp;CONVERT_TO=url&amp;CACHEID=ROOTWORKSPACE-18c43ffd-1acd-4e4e-9d77-28b59b926abd-mscmwr">https://www.cermaq.com/wps/wcm/connect/18c43ffd-1acd-4e4e-9d77-28b59b926abd/Cermaq-Sustainability-Report-2018_WEB.pdf?MOD=AJPERES&amp;CONVERT_TO=url&amp;CACHEID=ROOTWORKSPACE-18c43ffd-1acd-4e4e-9d77-28b59b926abd-mscmwr</a>)</p>	Compliant		
Footnote	[56] Trimmings are defined as by-products when fish are processed for human consumption or if whole fish is rejected for use of human consumption because the quality at the time of landing does not meet official regulations with regard to fish suitable for human consumption.					
Footnote	[57] IUU: Illegal, Unregulated and Unreported.					
Footnote	[58] The International Union for the Conservation of Nature reference can be found at <a href="http://www.iucnredlist.org/">http://www.iucnredlist.org/</a> .					
Footnote	[59] For species listed as “vulnerable” by IUCN, an exception is made if a regional population of the species has been assessed to be not vulnerable in a National Red List process that is managed explicitly in the same science-based way as IUCN. In cases where a National Red List doesn't exist or isn't managed in accordance with IUCN guidelines, an exception is allowed when an assessment is conducted using IUCN's methodology and demonstrates that the population is not vulnerable.					

Criterion 4.4 Source of non-marine raw materials in feed						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
4.4.1	<p><b>Indicator:</b> Presence and evidence of a responsible sourcing policy for the feed manufacturer for feed ingredients that comply with recognized crop moratoriums [60] and local laws [61]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Compile and maintain a list of all feed suppliers with contact information. (See also 4.1.1a)</p> <p>b. Obtain from each feed manufacturer a copy of the manufacturer's responsible sourcing policy for feed ingredients showing how the company complies with recognized crop moratoriums and local laws.</p> <p>c. Confirm that third party audits of feed suppliers (4.1.1c) show evidence that supplier's responsible sourcing policies are implemented.</p>	<p>BioMar AS: "Innkjøpspolicy for Førråvarer" (12-09-2018) states that BioMar's production of vegetable produce follows international and national laws. They do not purchase goods sourced from vulnerable habitats.</p> <p>EWOS: "ERKLÆRING: Dokumentasjon og informasjon om før levert iht. ASC" (13-03-2020) states that EWOS demands all suppliers operate legally and that the suppliers policies follow the United Nations Global Compact principles.</p> <p>Additionally, both BioMar AS and EWOS are GlobalGAP certified.</p>	Compliant		
Footnote	[60] Moratorium: A period of time in which there is a suspension of a specific activity until future events warrant a removal of the suspension or issues regarding the activity have been resolved. In this context, moratoriums may refer to suspension of the growth of defined agricultural crops in defined geographical regions.					
Footnote	[61] Specifically, the policy shall include that vegetable ingredients, or products derived from vegetable ingredients, must not come from areas of the Amazon Biome that were deforested after July 24, 2006, as geographically defined by the Brazilian Soy Moratorium. Should the Brazilian Soy Moratorium be lifted, this specific requirement shall be reconsidered.					
4.4.2	<p><b>Indicator:</b> Percentage of soya or soya-derived ingredients in the feed that are certified by the Roundtable for Responsible Soy (RTRS) or equivalent [62]</p> <p><b>Requirement:</b> 100%</p> <p><b>Applicability:</b> All</p>	<p>a. Prepare a policy stating the company's support of efforts to shift feed manufacturers' purchases of soya to soya certified under the Roundtable for Responsible Soy (RTRS) or equivalent.</p> <p>b. Prepare a letter stating the farm's intent to source feed containing soya certified under the RTRS (or equivalent)</p> <p>c. Notify feed suppliers of the farm's intent (4.4.2b).</p> <p>d. Obtain and maintain declaration from feed supplier(s) detailing the origin of soya in the feed.</p> <p>e. Provide evidence that soya used in feed is certified by the Roundtable for Responsible Soy (RTRS) or equivalent [62]</p>	<p>Kråkevik sources their feed from both BioMar AS and EWOS, both companies committed to using soya certified under ProTerra or RTRS.</p> <p>BioMar AS : Soya products will only be sourced from certified ProTerra and RTRS, or equivalent known standards (BioMar Statement "Innkjøpspolicy for Førråvarer" dated 12-09-2018)</p> <p>EWOS: Soya products are only sourced from certified ProTerra, RTRS or equivalent ASC approved standards ("ERKLÆRING: Dokumentasjon og informasjon om før levert iht. ASC", dated 13-03-2020)</p>	Compliant		100%
Footnote	[62] Any alternate certification scheme would have to be approved as equivalent by the Technical Advisory Group of the ASC.					

4.4.3	<p><b>Indicator:</b> Evidence of disclosure to the buyer [63] of the salmon of inclusion of transgenic [64] plant raw material, or raw materials derived from transgenic plants, in the feed</p> <p><b>Requirement:</b> Yes, for each individual raw material containing &gt; 1% transgenic content [65]</p> <p><b>Applicability:</b> All</p>	<p>a. Obtain from feed supplier(s) a declaration detailing the content of soya and other plant raw materials in feed and whether it is transgenic.</p> <p>b. Disclose to the buyer(s) a list of any transgenic plant raw material in the feed and maintain documentary evidence of this disclosure. For first audits, farm records of disclosures must cover &gt; 6 months.</p> <p>c. Inform ASC whether feed contains transgenic ingredients (yes or no) as per Appendix VI for each production cycle.</p>	<p>BioMar AS: Following Norwegian law, raw produce will contain no more than 0.9% GMO. All potential sources of GMO produce will be fully traceable. ("Innkjøpspolicy for Førråvarer" 12-09-2018)</p> <p>EWOS: EWOS do not source raw goods containing more than 0.9% of genetically modified sources. ("ERKLÆRING: Dokumentasjon og informasjon om før levert iht. ASC", dated 13-03-2020)</p> <p>No feed ingredients have been sourced from raw produce containing &gt;1% transgenic material.</p>	Compliant		
Footnote	[63] The company or entity to which the farm or the producing company is directly selling its product. This standard requires disclosure by the feed company to the farm and by the farm to the buyer of their salmon.					
Footnote	[64] Transgenic: Containing genes altered by insertion of DNA from an unrelated organism. Taking genes from one species and inserting them into another species to get that trait expressed in the offspring.					
Footnote	[65] See Appendix VI for transparency requirement for 4.4.3.					
Criterion 4.5 Non-biological waste from production						
		<b>Compliance Criteria (Required Client Actions):</b>	<b>Auditor Evaluation (Required CAB Actions):</b>			
4.5.1	<p><b>Indicator:</b> Presence and evidence of a functioning policy for proper and responsible [66] treatment of non-biological waste from production (e.g., disposal and recycling)</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Prepare a policy stating the farm's commitment to proper and responsible treatment of non-biological waste from production. It must explain how the farm's policy is consistent with best practice in the area of operation.</p> <p>b. Prepare a declaration that the farm does not dump non-biological waste into the ocean.</p> <p>c. Provide a description of the most common production waste materials and how the farm ensures these waste materials are properly disposed of.</p> <p>d. Provide a description of the types of waste materials that are recycled by the farm.</p>	<p>Reviewed Cermaq's waste plan "191029 Avfalls Plan Cermaq Norway V21 med Kassefabrik." (Version 20-25, September 2019). The document lists types of waste, where to dispose items and with which company. Additionally it has site specific information for all sites in Norway. Interview with site manager confirmed this.</p>	Compliant		
Footnote	[66] Proper and responsible disposal will vary based on facilities available in the region and remoteness of farm sites. Disposal of non-biological waste shall be done in a manner consistent with best practice in the area. Dumping of non-biological waste into the ocean does not represent "proper and responsible" disposal.					
4.5.2	<p><b>Indicator:</b> Evidence that non-biological waste (including net pens) from grow-out site is either disposed of properly or recycled</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<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)</p> <p>b. Provide a description of the types of waste materials that are recycled by the farm. (See also 4.5.1d)</p> <p>c. Inform the CAB of any infractions or fines for improper waste disposal received during the previous 12 months and corrective actions taken..</p> <p>d. Maintain records of disposal of waste materials including old nets and cage equipment.</p>	<p>Reviewed Cermaq's waste plan "191029 Avfalls Plan Cermaq Norway V21 med Kassefabrik." (Version 20-25, September 2019). The document lists types of waste, where to dispose items and with which company. Examples of materials that are recycled include paper, cardboard, glass. Waste delivered to Lerresfjord shore base, where it is then stored and collected by the appropriate, named company. No fines related to waste disposal present.</p> <p>Net, pens and related equipment are returned to the supplier Mørenot for processing ("Kavlitetshåndbok Mørenot Aquaculture AS", 20.01.2014)</p>	Compliant		

		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><b>Indicator:</b> Presence of an energy use assessment verifying the energy consumption on the farm and representing the whole life cycle at sea, as outlined in Appendix V- 1</p> <p><b>Requirement:</b> Yes, measured in kilojoule/mt fish produced/production cycle</p> <p><b>Applicability:</b> All</p>	<p><b>Instruction to Clients for Indicator 4.6.1 - Energy Use Assessment</b></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>Energy consumption data present in the transparency data file submitted to ASC 13-03-2020.</p> <p>Previous Generation 17G: Farm's total energy consumption per ton of fish for 17G = 1 658 474 kJ/mT</p> <p>Current Generation 19G: To date (19G) = 528 132 kJ/mT Energy use is updated and reported every quarter.</p>	Compliant	1658474kJ/mT
		b. Calculate the farm's total energy consumption in kilojoules (kj) during the last production cycle.			
		c. Calculate the total weight of fish in metric tons (t) produced during the last production cycle.			
		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.			
		e. Submit results of energy use calculations (4.6.1d) to ASC as per Appendix VI for each production cycle.			
		f. Ensure that the farm has undergone an energy use assessment that was done in compliance with requirements of Appendix V-1.			

4.6.2	<p><b>Indicator:</b> Records of greenhouse gas (GHG [68]) emissions [69] on farm and evidence of an annual GHG assessment, as outlined in Appendix V-1</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p><b>Instruction to Clients for Indicator 4.6.2 - Annual GHG Assessment</b></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 (CO<sub>2</sub>); methane (CH<sub>4</sub>); nitrous oxide (N<sub>2</sub>O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF<sub>6</sub>).</p>			
		a. Maintain records of greenhouse gas emissions on the farm.	<p>Greenhouse Gas emmissions data present in the transparency data file submitted to ASC 13-03-2020.</p> <p>Previous 17G: 117.04 CO2e/mT</p> <p>Scope 1: 463960 CO2e</p> <p>Scope 2: N/A</p> <p>Tons produced: 3964</p> <p>Current generation to date 19G: 37.25 CO2e/ tonn</p>	Compliant	117.04CO2e/mT
		b. At least annually, calculate all scope 1 and scope 2 GHG emissions in compliance with Appendix V-1.			
		c. For GHG calculations, select the emission factors which are best suited to the farm's operation. Document the source of those emissions factors.			
		d. For GHG calculations involving conversion of non-CO <sub>2</sub> gases to CO <sub>2</sub> equivalents, specify the Global Warming Potential (GWP) used and its source.			
		e. Submit results of GHG calculations (4.6.2d) to ASC as per Appendix VI at least once per year.			
		f. Ensure that the farm undergoes a GHG assessment as outlined in Appendix V-1 at least annually.			
Footnote	[68] For the purposes of this standard, GHGs are defined as the six gases listed in the Kyoto Protocol: carbon dioxide (CO <sub>2</sub> ); methane (CH <sub>4</sub> ); nitrous oxide (N <sub>2</sub> O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF <sub>6</sub> ).				
Footnote	[69] GHG emissions must be recorded using recognized methods, standards and records as outlined in Appendix V.				

4.6.3	<b>Indicator:</b> Documentation of GHG emissions of the feed [70] used during the previous production cycle, as outlined in Appendix V, subsection 2  <b>Requirement:</b> Yes  <b>Applicability:</b> All	<b>Instruction to Clients for Indicator 4.6.3 - GHG Emissions of Feed</b> Indicator 4.6.3 requires that farms document the greenhouse gas emissions (GHG) associated with any feeds used during salmon production. Farms will need to obtain this information from their feed supplier(s) and thereafter maintain a continuous record of Feed GHG emissions throughout all production cycles. This requirement applies across the entire previous production cycle. Therefore farms should inform their feed supplier(s) and: - the farm provides its feed suppliers with detailed information about the requirements including a copy of the methodology outlined in Appendix V, subsection 2; - the farm explain what analyses must be done by feed suppliers; and - the farm explains to feed suppliers what documentary evidence will be required by the farm to demonstrate compliance.  Note1: Farms may calculate GHG emissions of feed using the average raw material composition used to produce the salmon (by weight) rather than using feed composition on a lot-by-lot basis.  Note2: Feed supplier's calculations must include Scope 1, Scope 2, and Scope 3 GHG emissions as specified in Appendix V, subsection 2.								
		a. Obtain from feed supplier(s) a declaration detailing the GHG emissions of the feed (per kg feed).	Greenhouse Gas emissions of the feed used during the previous production cycle data is present in the transparency data file submitted to ASC 13-03-2020.  17G GHG Emission: 6359 ton CO2	Compliant	6359 T					
		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.								
		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.								
		d. Submit GHG emissions of feed to ASC as per Appendix VI for each production cycle.								
Footnote	[70] GHG emissions from feed can be given based on the average raw material composition used to produce the salmon (by weight) and not as documentation linked to each single product used during the production cycle. Feed manufacturer is responsible for calculating GHG emissions per unit feed. Farm site then shall use that information to calculate GHG emissions for the volume of feed they used in the prior production cycle.									
Criterion 4.7 Non-therapeutic chemical inputs [71,72]										
	<b>Compliance Criteria (Required Client Actions):</b>			<b>Auditor Evaluation (Required CAB Actions):</b>						
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.									
4.7.1	<b>Indicator:</b> For farms that use copper-treated nets [73], evidence that nets are not cleaned [74] or treated in situ in the marine environment  <b>Requirement:</b> Yes  <b>Applicability:</b> All farms except as noted in [71]	a. Prepare a farm procedure for net cleaning and treatment that describes techniques, technologies, use of off-site facilities, and record keeping.	Kråkevika uses nets that are treated with a dicopper oxide coating (Safety Data Sheet Netwax NI Gold 30808, date:30.06.2011) . Nets are not cleaned at site, they are delivered to Mørenot in Rypefjord where nets are deep cleaned inbetween generations. Documentation for net control and cleaning reviewed ("Prosedyre for kontroll, ettesyn of renhold av not" doc. 315, date: 24-10-2018). During the cycle, nets may be cleaned on site with a low pressure in accordance with ASC requirements.	Compliant						
		b. Maintain records of antifoulants and other chemical treatments used on nets.								
		c. Declare to the CAB whether copper-based treatments are used on nets.								
		d. If copper-based treatments are used, maintain documentary evidence (see 4.7.1b) that farm policy and practice does not allow for heavy cleaning of copper-treated nets in situ.								
		e. Inform ASC whether copper antifoulants are used on farm (yes or no) as per Appendix VI for each production cycle.								
Footnote	[73] Under the SAD, "copper-treated net" is defined as a net that has been treated with any copper-containing substance (such as a copper-based antifoulant) during the previous 18 months, or has not undergone thorough cleaning at a land-based facility since the last treatment. Farms that use nets that have, at some point prior in their lifespan, been treated with copper may still consider nets as untreated so long as sufficient time and cleaning has elapsed as in this definition. This will allow farms to move away from use of copper without immediately having to purchase all new nets.									
Footnote	[74] Light cleaning of nets is allowed. Intent of the standard is that, for example, the high-pressure underwater washers could not be used on copper treated nets under this standard because of the risk of copper flaking off during this type of heavy or more thorough cleaning.									

4.7.2	<p><b>Indicator:</b> For any farm that cleans nets at on-land sites, evidence that net-cleaning sites have effluent treatment [75]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms except as noted in [71]</p>	<p>a. Declare to the CAB whether nets are cleaned on-land.</p> <p>b. If nets are cleaned on-land, obtain documentary evidence from each net-cleaning facility that effluent treatment is in place.</p> <p>c. If yes to 4.7.2b, obtain evidence that effluent treatment used at the cleaning site is an appropriate technology to capture of copper in effluents.</p>	Due to the nets being copper treated, only low pressure cleaning of nets occurs on site. Nets are washed by Mørenot, Rypefjord, at the end of each generation. Mørenot follow "Kvalitetshåndbok Mørenot Aquaculture AS" (Revised Edition 3, Dated 20-01-2014) procedure for the handling of waste water post-cleaning.	Compliant		
Footnote	[75] Treatment must have appropriate technologies in place to capture copper if the farm uses copper-treated nets.					
4.7.3	<p><b>Indicator:</b> For farms that use copper nets or copper-treated nets, evidence of testing for copper level in the sediment outside of the AZE, following methodology in Appendix I-1</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms except as noted in [71]</p>	<p>Note: If the benthos throughout and immediately outside the full AZE is hard bottom, provide evidence to the CAB and request an exemption from Indicator 4.7.3 (see 2.1.1c).</p> <p>a. Declare to the CAB whether the farm uses copper nets or copper-treated nets. (See also 4.7.1c). If "no", Indicator 4.7.3 does not apply.</p> <p>b. If "yes" in 4.7.3a, measure and record copper in sediment samples from the reference stations specified in 2.1.1d and 2.1.2c which lie outside the AZE.</p> <p>c. If "yes" in 4.7.3a, maintain records of testing methods, equipment, and laboratories used to test copper level in sediments from 4.7.3b.</p>	Copper treated nets are used. Sediment has been sampled as described in Appendix I-1. Sampling zones and results can be found in the report "Cermaq Norway AS ASC og C-Undersøkelse 10614 Kråkevika, 2018." (Akvaplan-niva AS Rapport: 60720.02. Report Date: 05.04.2019). Aquaplan Niva are accredited by Norsk Akkreditering for Test 079, NS-EN ISO/IEC 17025.	Compliant		
4.7.4	<p><b>Indicator:</b> Evidence that copper levels [76] are &lt; 34 mg Cu/kg dry sediment weight, or, in instances where the Cu in the sediment exceeds 34 mg Cu/kg dry sediment weight, demonstration that the Cu concentration falls within the range of background concentrations as measured at three reference sites in the water body</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms except as noted in [71] and excluding those farms shown to be exempt from Indicator 4.7.3</p>	<p>a. Inform the CAB whether:</p> <ol style="list-style-type: none"> <li>1) farm is exempt from Indicator 4.7.4 (as per 4.7.3a), or</li> <li>2) Farm has conducted testing of copper levels in sediment.</li> </ol> <p>b. Provide evidence from measurements taken in 4.7.3b that copper levels are &lt; 34 mg Cu/kg dry sediment weight.</p> <p>c. If copper levels in 4.7.4b are ≥ 34 mg Cu/kg dry sediment weight, provide evidence the farm tested copper levels in sediments from reference sites as described in Appendix I-1 (also see Indicators 2.1.1 and 2.1.2).</p> <p>d. Analyze results from 4.7.4c to show the background copper concentrations as measured at three reference sites in the water body.</p> <p>e. Submit data on copper levels in sediments to ASC as per Appendix VI for each production cycle.</p>	Results from sediment samples range from 4.0 - 20.5 mg CU/kg dry sediment. (Cermaq Norway AS ASC og C-Undersøkelse 10614 Kråkevika, 2018. Akvaplan-niva AS Rapport: 60720.02. Report Date: 05.04.2019) Data submitted to the ASC 13-03-2020.	Compliant		4.0 - 20.5
Footnote	[76] According to testing required under 4.7.3. The standards related to testing of copper are only applicable to farms that use copper-based nets or copper-treated nets.					

4.7.5	<p><b>Indicator:</b> Evidence that the type of biocides used in net antifouling are approved according to legislation in the European Union, or the United States, or Australia</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms except as noted in [71]</p>	<p>a. Identify all biocides used by the farm in net antifouling.</p> <p>b. Compile documentary evidence to show that each chemical used in 4.7.5a is approved according to legislation in one or more of the following jurisdictions: the European Union, the United States, or Australia.</p>	<p>Netwax NI Gold, contains Dicopper oxide.</p> <p>EU-direktiv 2008/58/EC (30 ATP), EU-forordning 1907/2006/EC. (Safety DataSheet Netwax NI Gold, 30806, date: 30.06.2011)</p>	Compliant		
<b>PRINCIPLE 5: MANAGE DISEASE AND PARASITES IN AN ENVIRONMENTALLY RESPONSIBLE MANNER</b>						
<i>Criterion 5.1 Survival and health of farmed fish [77]</i>						
		<b>Compliance Criteria (Required Client Actions):</b>	<b>Auditor Evaluation (Required CAB Actions):</b>			
Footnote	[77] See Appendix VI for transparency requirements for 5.1.4, 5.1.5 and 5.1.6.					
5.1.1	<p><b>Indicator:</b> Evidence of a fish health management plan for the identification and monitoring of fish diseases, parasites and environmental conditions relevant for good fish health, including implementing corrective action when required</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Prepare a fish health management plan that incorporates components related to identification and monitoring of fish disease and parasites. This plan may be part of a more comprehensive farm planning document.</p> <p>b. Ensure that the farm's current fish health management plan was reviewed and approved by the farm's designated veterinarian [78].</p>	<p>Fish Health Plan "Fiskhelseplan CN Kråkevikaa 20190621" (Version 5 21-06-2019) reviewed. Fish health plan covers biosecurity, handling of disease and treatments, water quality, and approved therapeutants. Signed and approved by Fish Health Manager/Veterinarian. All site staff are required to undergo training in Fish Health and Welfare every 5 years. Site technician certificate of course completion in fish welfare dated 08-11-18 seen.</p>	Compliant		
5.1.2	<p><b>Indicator:</b> Site visits by a designated veterinarian [78] at least four times a year, and by a fish health manager [79] at least once a month</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Maintain records of visits by the designated veterinarian [78] and fish health managers [82]. If schedule cannot be met, a risk assessment must be provided.</p> <p>b. Maintain a current list of personnel who are employed as the farm's designated veterinarian(s) [78] and fish health manager(s) [79].</p> <p>c. Maintain records of the qualifications of persons identified in 5.1.2b.</p>	<p>Regular visits by Fish Health Biologist and Veterinarian recorded for every month. Health Visit Reports available on database. Visit by Fish Health Biologist 22-10-2019 and Veterinarian visit 26-03-2020 confirmed by review of fish health visit reports and the corresponding sample results. Health Personal registered and verified by cross checking with Norwegian Health Personal Database. Surplus to internal visits, qualified health personal from Marine Helse visit the farm.</p>	Compliant		
Footnote	[78] A designated veterinarian is the professional responsible for health management on the farm who has the legal authority to diagnose disease and prescribe medication. In some countries such as Norway, a fish health biologist or other professional has equivalent professional qualifications and is equivalent to a veterinarian for purposes of these standards. This definition applies to all references to a veterinarian throughout the standards document.					
Footnote	[79] A fish health manager is someone with professional expertise in managing fish health, who may work for a farming company or for a veterinarian, but who does not necessarily have the authority to prescribe medicine.					
5.1.3	<p><b>Indicator:</b> Percentage of dead fish removed and disposed of in a responsible manner</p> <p><b>Requirement:</b> 100% [80]</p> <p><b>Applicability:</b> All</p>	<p>a. Maintain records of mortality removals to show that dead fish are removed regularly and disposed of in a responsible manner.</p> <p>b. Collect documentation to show that disposal methods are in line with practices recommended by fish health managers and/or relevant legal authorities.</p> <p>c. For any exceptional mortality event where dead fish were not collected for post-mortem analysis, keep a written justification.</p>	<p>Dead fish are disposed of via ensilage in containers. These are then removed of by ScanBio in line with Norwegian regulations (Analysis Report RP-21531, date: 28-01-2020). No labelling present on ensilage, as addressed in indicator 1.1.1.</p>	Compliant		100%
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 norm.					



5.1.4	<p><b>Indicator:</b> Percentage of mortalities that are recorded, classified and receive a post-mortem analysis</p> <p><b>Requirement:</b> 100% [81]</p> <p><b>Applicability:</b> All</p>	<p>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.</p>	<p>All mortalities are recorded and classified on the company database in accordance to ASC requirements. The records include information in relation to date of mortality, total number of mortalities and reason for mortality. Samples sent to external laboratories for diagnosis along with monthly screening for Pancreas Disease (PD) and Infectious Salmon Anaemia (ISA). Site technicians are trained by fish health personnel to be able to appropriately classify mortalities. Additional fish health visits performed by health personnel to ensure correct categorisation of mortalities. For example, in response to mortalities, fish health personnel visited the site and diagnosed the presence of Parvicapsulose (<i>Parvicapsula pseudobranchicola</i>) being present (Fish Health Visit Report from 20-02-2020). Data submitted to the ASC 13-03-2020.</p>	Compliant		100%
		<p>a. Maintain detailed records for all mortalities and post-mortem analyses including:</p> <ul style="list-style-type: none"><li>- date of mortality and date of post-mortem analysis;</li><li>- total number of mortalities and number receiving post-mortem analysis;</li><li>- name of the person or lab conducting the post-mortem analyses;</li><li>- qualifications of the individual (e.g. veterinarian [78], fish health manager [79]);</li><li>- cause of mortality (specify disease or pathogen) where known; and</li><li>- classification as 'unexplained' when cause of mortality is unknown (see 5.1.6).</li></ul>				
		<p>b. For each mortality event, ensure that post-mortem analyses are done on a statistically relevant number of fish and keep a record of the results.</p>				
		<p>c. If on-site diagnosis is inconclusive and disease is suspected or results are inconclusive over a 1-2 week period, ensure that fish are sent to an off-site laboratory for diagnosis and keep a record of the results (5.1.4a).</p>				
		<p>d. Using results from 5.1.3a-c, classify each mortality event and keep a record of those classifications.</p>				
		<p>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).</p>				
		<p>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).</p>				
Footnote	[81] If on-site diagnosis is inconclusive, this standard requires off-site laboratory diagnosis. A qualified professional must conduct all diagnosis. One hundred percent of mortality events shall receive a post-mortem analysis, not necessarily every fish. A statistically relevant number of fish from the mortality event shall be analyzed.					
5.1.5	<p><b>Indicator:</b> Maximum viral disease-related mortality [82] on farm during the most recent production cycle</p> <p><b>Requirement:</b> ≤ 10%</p> <p><b>Applicability:</b> All</p>	<p>a. Calculate the total number of mortalities that were diagnosed (see 5.1.4) as being related to viral disease.</p>	<p>Total Mortalities 17G: 5.98%</p> <p>Mortalities related to virus for 17G: 1.00%</p> <p>Unexplained mortalities for 17G: 0.77%</p> <p>Maximum viral-related mortalities for 17G: 1.77%</p> <p>Data submitted to the ASC 13-03-2020.</p>	Compliant		1.77%
		<p>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.</p>				
		<p>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).</p>				
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><b>Indicator:</b> Maximum unexplained mortality rate from each of the previous two production cycles, for farms with total mortality &gt; 6%</p> <p><b>Requirement:</b> ≤ 40% of total mortalities</p> <p><b>Applicability:</b> All farms with &gt; 6% total mortality in the most recent complete production cycle.</p>	<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 &gt; 6%, proceed to 5.1.6b.</p> <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> <p>c. Submit data on maximum unexplained mortality to ASC as per Appendix VI for each production cycle.</p>	<p>Mortality rate for the most recent production cycle was 5.98%. This is below 6% and therefore the requirement of 5.1.6 does not apply.</p> <p>Total Mortalities for 17G: 5.98% 17G Unexplained mortality: 0.77%</p> <p>Data submitted to the ASC 13-03-2020.</p>	Compliant		0.77%
5.1.7	<p><b>Indicator:</b> A farm-specific mortalities reduction programme that includes defined annual targets for reductions in mortalities and reductions in unexplained mortalities</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<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).</p> <p>a. Use records in 5.1.4a to assemble a time-series dataset on farm-specific mortalities rates and unexplained mortality rates.</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>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>Mortalities are recorded and monitored on FishTalk. Fish Health Plan sets in place the procedures for handling of mortalities (Fiskhelseplan CN Kråkevikaa 20190621, Version 5 21.06.2019) as well as in the contingency plan (Beredskapsplan Version 6; Date: 09.12.2019; Sections 1. 5). This means there are datasets of farm specific mortality rates, with the fish health practices being adjusted accordingly.</p>	Compliant		
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 therapeutic 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><b>Indicator:</b> On-farm documentation that includes, at a minimum, detailed information on all chemicals [84] and therapeutants used during the most recent production cycle, the amounts used (including grams per ton of fish produced), the dates used, which group of fish were treated and against which diseases, proof of proper dosing, and all disease and pathogens detected on the site</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Maintain a detailed record of all chemical and therapeutic use that includes:</p> <ul style="list-style-type: none"> <li>- name of the veterinarian prescribing treatment;</li> <li>- product name and chemical name;</li> <li>- reason for use (specific disease)</li> <li>- date(s) of treatment;</li> <li>- amount (g) of product used;</li> <li>- dosage;</li> <li>- t of fish treated;</li> <li>- the WHO classification of antibiotics (also see note under 5.2.8); and</li> <li>- the supplier of the chemical or therapeutant.</li> </ul> <p>b. If not already available, assemble records of chemical and therapeutic 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>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>Records are maintained on Cermaq's database. Details include; therapeutants used, dosage, withholding periods, dates prescribed, fish group treated. Cross referencing with prescriptions demonstrate accurate record keeping. All treatments are fully traceable throughout the production cycle. Fish CVs provided to buyers (For example: Product and Quality Control. Fish Group: 17.1703. Cage 10. Fish Input 26.08-2017) document all therapeutants used during production. Fish Health Visit reports document the site visits and cycle history. Records cover the full previous production cycle.</p> <p>Data submitted to the ASC 13-03-2020.</p>	Compliant		
Footnote	[84] Chemicals used for the treatment of fish.					

5.2.2	<p><b>Indicator:</b> Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [85] in any of the primary salmon producing or importing countries [86]</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All</p>	<p>a. Prepare a list of therapeutants, including antibiotics and chemicals, that are proactively banned for use in food fish for the primary salmon producing and importing countries listed in [86].</p> <p>b. Maintain records of voluntary and/or mandatory chemical residue testing conducted or commissioned by the farm from the prior and current production cycles.</p> <p>-</p>	Allowed therapeutants, dosage and withholding periods are also maintained in the Fish Health Plan (Fiskhelseplan CN Kråkevikaa 20190621, Version 5 21-06-2019).	Compliant		
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 any salmon farm certified under the SAD, regardless of country of production or destination of the product. The SAD recommends that ASC maintain a list of a banned therapeutants.					
Footnote	[86] For purposes of this standard, those countries are Norway, the UK, Canada, Chile, the United States, Japan and France.					
5.2.3	<p><b>Indicator:</b> Percentage of medication events that are prescribed by a veterinarian</p> <p><b>Requirement:</b> 100%</p> <p><b>Applicability:</b> All</p>	<p>a. Obtain prescription for all therapeutant use in advance of application from the farm veterinarian (or equivalent, see [78] for definition of veterinarian).</p> <p>b. Maintain copies of all prescriptions and records of veterinarian responsible for all medication events. Records can be kept in conjunction with those for 5.2.1 and should be kept for the current and two prior production cycles.</p>	<p>Prescriptions are prescribed by qualified personal (Veterinarian and Fish Health Biologists, HPR numbers verified through Norwegian Health Personal Database).</p> <p>Reviewed prescription for Slice, issued 15-08-2019, reference: 190815eam. Contained information such as dosage and withholding periods.</p>	Compliant		100%
5.2.4	<p><b>Indicator:</b> Compliance with all withholding periods after treatments</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Incorporate withholding periods into the farm’s fish health management plan (see 5.1.1a).</p> <p>b. Compile and maintain documentation on legally-required withholding periods for all treatments used on-farm. Withholding period is the time interval after the withdrawal of a drug from the treatment of the salmon before the salmon can be harvested for use as food.</p> <p>c. Show compliance with all withholding periods by providing treatment records (see 5.2.1a) and harvest dates for the most recent production cycle.</p>	<p>Allowed therapeutants, dosage and withholding periods are also documented in the Fish Health management Plan (Fiskhelseplan CN Kråkevikaa 20190621, Version 5 21.06.2019. Signed by Head of Fish Health).</p> <p>Withholding periods are present on both prescriptions (Prescription for Slice, issued 15-08-2019, reference 190815eam) and Fish CVs (Product and Quality Control. Fish Group: 17.1703. Cage 10. Fish Input 26.08-2017.) demonstrating compliance regarding withholding periods and harvest dates.</p>	Compliant		
5.2.5	<p><b>Indicator:</b> The farm shall publicly report (via Appendix VI) the:</p> <p>1. Weighted Number of Medicinal Treatments (see Appendix VII) for each production cycle</p> <p>2. The parasiticide load for each agent over the production cycle</p> <p>3. The benthic parasiticide residue levels</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>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.</p> <p>b. Provide the auditor with access to records showing how the farm calculated the WMNT score.</p> <p>c. Submit data on farm level WMNT score to ASC as per Appendix VI for each production cycle.</p>	<p>All treatments are disclosed in the Transparency Data submission.</p> <p>WNMT recorded: Previously Cycle 17G: 3 Current 19G Cycle thus far: 1</p> <p>Data submitted to the ASC 13-03-2020.</p>	Compliant		3

5.2.6	<b>Indicator:</b> The Weighted Number of Medicinal Treatments shall be at or below the country Entry Level (see Appendix VII)	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 Norway is 5. Both the previous and current cycle WNMTs are below the country level requirements. Data submitted to the ASC 13-03-2020.	Compliant		
	<b>Requirement:</b> Yes <b>Applicability:</b> All	b. As applicable, submit data to ASC on WNMT score for the most recent production cycle (Appendix VI).				
5.2.7	<b>Indicator:</b> The farm shall reduce the Weighted Number of Medicinal Treatments, after achieving indicator 5.2.6, with 25% per 2 years until the WNMT is at or below the Global Level (see Appendix VII).	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 WNMT score between current cycle and cycle of 2 years before.	WNMTs have not exceeded the Global Level in the previous or current generation.	Compliant		
	<b>Requirement:</b> Yes <b>Applicability:</b> All	b. As applicable, submit data to ASC on WNMT score for the most recent production cycle and the two previous production cycles (Appendix VI).				
5.2.8	<b>Indicator:</b> The farm shall implement Integrated Pest Management (IPM) according to the guidance in Appendix VII.	a. Implement Integrated Pest Management (IPM) into farm management plans (see Appendix VII).	Implemented Pest Management (Skadedyrkontroll Cermaq Norway, Date: 05-02-2020) reviewed. Document is produced for all Cermaq farms in Norway. It comprehensively covers regulatory requirements and fish parasite issues specific to farms in the region.	Compliant		
	<b>Requirement:</b> Yes <b>Applicability:</b> All	b. Review and update IPM on a production cycle basis to reflect the effectiveness of applied methods and to determine next approaches.				
5.2.9	<b>Indicator:</b> The farm shall public present (e.g. via company website) the IPM-measures that the company applies which need to be approved by a authorised veterinarian.	a. Ensure the latest version of the IPM is public on the company website	IPM publically available on Cermaq website ( <a href="https://www.cermaq.com/wps/wcm/connect/9de63508-f396-493d-80ae-8b35e3f8d657/IPM+Cermaq+Norway+2020.pdf?MOD=AJPERES&amp;CVID=n0Pr2e3">https://www.cermaq.com/wps/wcm/connect/9de63508-f396-493d-80ae-8b35e3f8d657/IPM+Cermaq+Norway+2020.pdf?MOD=AJPERES&amp;CVID=n0Pr2e3</a> ). IPM is signed by an authorised veterinarian, HPR number verified through the Norwegian Health Personal database.	Compliant		
	<b>Requirement:</b> Yes <b>Applicability:</b> All	b. Ensure the IPM is signed-off by an authorized veterinarian.				

5.2.10	<p><b>Indicator:</b> The farm shall monitor parasiticide residue levels annually in the benthic sediment directly outside the AZE.</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>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>	N/A in accordance with ASC Q&A111, effective as of 15-01-2020. Guidance on this indicator has not been published.	N/A		
5.2.11	<p><b>Indicator:</b> Allowance for prophylactic use of antimicrobial treatments</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All</p>	<p>a. Maintain records for all purchases of antibiotics (invoices, prescriptions) for the current and prior production cycles.</p> <p>b. Maintain a detailed log of all medication-related events (see also 5.2.1a and 5.2.3)</p> <p>c. Calculate the total amount (g) and treatments (#) of antibiotics used during the current and prior production cycles (see also 5.2.13).</p>	No Antibiotics have been used during the previous 17G or current 19G cycles. All medicinal related events are registered in Cermaq's FishTalk database.	Compliant		
5.2.12	<p><b>Indicator:</b> Allowance for use of antibiotics listed as critically important for human medicine by the World Health Organization (WHO )</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All</p>	<p>a. Maintain a current version of the WHO list of antimicrobials critically and highly important for human health [89].</p> <p>b. If the farm has <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.</p> <p>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.</p> <p>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 tracea</p>	WHO list of critically important antimicrobials Version 6, released 2019 available on internal server. No Antibiotics have been used during the previous 17G or current 19G cycles.	Compliant		

5.2.13	<p><b>Indicator:</b> Number of treatments of antibiotics over the most recent production cycle</p> <p><b>Requirement:</b> ≤ 3</p> <p><b>Applicability:</b> All</p>	<p>a. Maintain records of all treatments of antibiotics (see 5.2.1a). For first audits, farm records must cover the current and immediately prior production cycles in a verifiable statement.</p> <p>b. Calculate the total number of treatments of antibiotics over the most recent production cycle and supply a verifiable statement of this calculation.</p>	No Antibiotics used during the previous 17G or current 19G cycles.	compliant		0
5.2.14	<p><b>Indicator:</b> If more than one antibiotic treatment is used in the most recent production cycle, demonstration that the antibiotic load is at least 15% less than that of the average of the two previous production cycles</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Use results from 5.2.13b to show whether more than one antibiotic treatment was used in the most recent production cycle. If not, then the requirement of 5.2.14 does not apply. If yes, then proceed to 5.2.14b.</p> <p>b. Calculate antibiotic load (antibiotic load = the sum of the total amount of active ingredient of antibiotic used in kg) for most recent production cycle and for the two previous production cycles. For first audit, calculation must cover one full production cycle.</p> <p>c. Provide the auditor with calculations showing that the antibiotic load of the most recent production cycle is at least 15% less than that of the average of the two previous production cycles.</p> <p>d. Submit data on antibiotic load to ASC as per Appendix VI (if applicable) for each production cycle.</p>	N/A	N/A		
					No antibiotics used.	
5.2.15	<p><b>Indicator:</b> Presence of documents demonstrating that the farm has provided buyers of its salmon a list of all therapeutants used in production</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Prepare a procedure which outlines how the farm provides buyers [94] of its salmon with a list of all therapeutants used in production (see 4.4.3b).</p> <p>b. Maintain records showing the farm has informed all buyers of its salmon about all therapeutants used in production.</p>	Fish CVs (For example: Product and Quality Control. Fish Group: 17.1703. Cage 10. Fish Input 26.08-2017) are given to buyers of the salmon detailing all therapeutants, mechanical treatments and feeds used during production.	Compliant		

Criterion 5.3 Resistance of parasites, viruses and bacteria to medicinal treatments						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
5.3.1		<b>Instruction to Clients for Indicator 5.3.1 - Identifying the 'Expected Effect' of Medicinal Treatment</b> Indicator 5.3.1 requires that farms identify treatments that have not produced the expected effect. The SAD Steering Committee recognizes that the “expected effect” will vary with health condition and type of medicinal treatment. Therefore farms and auditors will need to review the pre- and post-treatment condition of fish in order to understand and evaluate the impact of treatment.  <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.				
	<b>Indicator:</b> Bio-assay analysis to determine resistance when two applications of a treatment have not produced the expected effect	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.	Finmark ABM group restricts the use of therapeutants for lice to not more than once a cycle. Fish health reports and prescriptions shows the use of Emamectin Benzoate occurring once per cycle. Therefore two applications of a treatment has not been performed. Results of treatments were as expected. However, as part of the ABM strategy, genetic testing of sea lice resistance occurs. Report from week 12 (Rapport 2020 Uke 12) showed testing of lice from nearby farm (Nordnes) showed some resistance to Hydrogen Peroxide, Deltrametrin and Azametiphos. Resistance has decreased between testing in 2019 and 2020.	Compliant		
	<b>Requirement:</b> Yes	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.				
	<b>Applicability:</b> All	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.				
		d. Keep a record of all results arising from 5.3.1c.				
5.3.2	<b>Indicator:</b> When bio-assay tests determine resistance is forming, use of an alternative, permitted treatment, or an immediate harvest of all fish on the site	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.	Annual testing of <i>Lepeophtheirus salmonis</i> showed some resistance to Hydrogen Peroxide, Deltrametrin and Azametiphos in 2019. Site has not used any of these treatments for the current 19G cycle.	compliant		
	<b>Requirement:</b> Yes  <b>Applicability:</b> All	b. When bio-assay tests show evidence that resistance has formed, keep records showing that the farm took one of two actions: - used an alternative treatment (if permitted in the area of operation); or - immediately harvested all fish on site.				
5.3.3	<b>Indicator:</b> Specific rotation, providing that the farm has >1 effective medicinal treatment product available, every third treatment must belong to a different family of drugs.	a. Determine how many effective medicinal treatment products the farm uses.	All medicinal treatment products are listed in the Fish Health Plan (Fiskhelseplan CN Kråkevikaa 20190621, Version 5 21.06.2019.). For 19G: Kråkevikaa has used slice once as a medicinal treatment. For the previous 17G cycle: both slice and hydrogen peroxide were utilised. Slice was used once, hydrogen peroxide twice.	Compliant		
	<b>Requirement:</b> Yes  <b>Applicability:</b> All	b. If farm uses >1 effective medicinal treatment product, ensure every third treatment belongs to a different family of drugs.				

		Criterion 5.4 Biosecurity management [95]				
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
Footnote	[95] See Appendix VI for transparency requirements for 5.4.2 and 5.4.4.					
5.4.1	<p><b>Indicator:</b> Evidence that all salmon on the site are a single-year class [96]</p> <p><b>Requirement:</b> 100% [97]</p> <p><b>Applicability:</b> All farms except as noted in [97]</p>	<p>a. Keep records of the start and end dates of periods when the site is fully fallow after harvest.</p> <p>b. Provide evidence of stocking dates (purchase receipts, delivery records) to show that there were no gaps &gt; 6 months for smolt inputs for the current production cycle.</p> <p>-</p>	<p>Fish CV from 17G confirm input dates from previous generation to be single year class.</p> <p>Stocking of 19G occurred from 21-6-2019 to 13-8 2019 . Input of 1039229 fish with an average weight of 105.5g.</p>	Compliant		100%
Footnote	[96] Gaps of up to six months between inputs of smolts derived from the same stripping are acceptable as long as there remains a period of time when the site is fully fallow after harvest.					
Footnote	[97] Exception is allowed for: 1) farm sites that have closed, contained production units where there is complete separation of water between units and no sharing of filtration systems or other systems that could spread disease, or, 2) farm sites that have ≥95% water recirculation, a pre-entry disease screening protocol, dedicated quarantine capability and biosecurity measures for waste to ensure there is no discharge of live biological material to the natural environment (e.g. UV or other effective treatment of effluent) .					
5.4.2	<p><b>Indicator:</b> Evidence that if the farm suspects an unidentifiable transmissible agent, or if the farm experiences unexplained increased mortality, [98] the farm has: 1. Reported the issue to the ABM and to the appropriate regulatory authority 2. Increased monitoring and surveillance [99] on the farm and within the ABM 3. Promptly [100] made findings publicly available</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. For mortality events logged in 5.1.4a, show evidence that the farm promptly evaluated each to determine whether it was a statistically significant increase over background mortality rate on a monthly basis [98]. The accepted level of significance (for example, p &lt; 0.05) should be agreed between farm and CAB.</p> <p>b. For mortality events logged in 5.1.4a, record whether the farm did or did not suspect (yes or no) an unidentified transmissible agent.</p> <p>c. Proceed to 5.4.2d if, during the most recent production cycle, either: - results from 5.4.2a showed a statistically significant increase in unexplained mortalities; or - the answer to 5.4.2b was 'yes'. Otherwise, Indicator 5.4.2 is not applicable.</p> <p>d. If required, ensure that the farm takes and records the following steps: 1) Report the issue to the ABM and to the appropriate regulatory authority; 2) Increase monitoring and surveillance [99] on the farm and within the ABM; and 3) Promptly (within one month) make findings publicly available.</p> <p>e. As applicable, submit data to ASC as per Appendix VI about unidentified transmissible agents or unexplained increases in mortality. If applicable, then data are to be sent to ASC on an ongoing basis (i.e. at least once per year and for each production cycle).</p>	<p>No evidence of significantly, unexplained mortalities from data, nor evidence of an unidentifiable transmissible agent. Further discussions with Fish Health Area Manager confirmed this.</p>	Compliant		
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><b>Indicator:</b> Evidence of compliance [101] with the OIE Aquatic Animal Health Code [102]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p><b>Instruction to Clients for Indicator 5.4.3 - Compliance with the OIE Aquatic Animal Health Code</b></p> <p>Indicator 5.4.3 requires that farms show evidence of compliance with the OIE Aquatic Animal Health Code (see <a href="http://www.oie.int/index.php?id=171">http://www.oie.int/index.php?id=171</a>). Compliance is defined as farm practices consistent with the intentions of the Code. For purposes of the ASC Salmon Standard, this means that the farm must have written procedures stating how the farm will initiate an aggressive response to detection of an exotic OIE-notifiable disease on the farm ['exotic' = not previously found in the area or had been fully eradicated (area declared free of the pathogen)]. An aggressive response will involve, at a minimum, the following actions:</p> <ul style="list-style-type: none"><li>- depopulation of the infected site;</li><li>- implementation of quarantine zones (see note below) in accordance with guidelines from OIE for the specific pathogen; and</li><li>- additional actions as required under Indicator 5.4.4.</li></ul> <p>To demonstrate compliance with Indicator 5.4.3, clients have the option to describe how farm practices are consistent with the intentions of the OIE Aquatic Animal Health Code by developing relevant policies and procedures and integrating them into the farm's fish health management plan.</p> <p>Note: The Steering Committee recognizes that establishment of quarantine zones will likely incorporate mandatory depopulation of sites close to the infected site and affect some, though not necessarily all, of the ABM.</p>																	
		<table><tr><td>a. Maintain a current version of the OIE Aquatic Animal Health Code on site or ensure staff have access to the most current version.</td><td rowspan="3">OIE Aquatic Animal Health Code Version 6 (2018) is available on the Cermaq common server, and is accessible to all on site via use of the farm's computer. The farm's Fish Health Plan (Fiskhelseplan CN Kråkevikaa 20190621, Version 5 21.06.2019. Signed by Head of Fish Health) is consistent with the OIE Aquatic Animal Health Code.</td></tr><tr><td>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.</td></tr><tr><td>-</td></tr></table>	a. Maintain a current version of the OIE Aquatic Animal Health Code on site or ensure staff have access to the most current version.	OIE Aquatic Animal Health Code Version 6 (2018) is available on the Cermaq common server, and is accessible to all on site via use of the farm's computer. The farm's Fish Health Plan (Fiskhelseplan CN Kråkevikaa 20190621, Version 5 21.06.2019. Signed by Head of Fish Health) is consistent with the OIE Aquatic Animal Health Code.	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.	-	Compliant												
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5.4.4	<p><b>Indicator:</b> If an OIE-notifiable disease [103] is confirmed on the farm, evidence that:</p> <ol style="list-style-type: none"><li>1. the farm, at a minimum, immediately culled the pen(s) in which the disease was detected</li><li>2. the farm immediately notified the other farms in the ABM [104]</li><li>3. the farm and the ABM enhanced monitoring and conducted rigorous testing for the disease</li><li>4. the farm promptly [105] made findings publicly available</li></ol> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<table><tr><td>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.</td><td rowspan="5">Kråkevik is located in a ISA surveillance area, therefore proactive monitor monthly OIE-notifiable diseases ISA and PD. Monthly screening for Pancreas Disease (PD) and Infectious Salmon Anaemia (ISA) performed. Samples sent to Patogen (Norsk Akkrediting certified as a laboratory according to ISO17025, registered number: TEST 235). Review of Patogen Report reference PG058009, date: 03-03-2020 confirmed screening for PD and ISA. All results negative. Both the Fish Health Plan (Fiskhelseplan CN Kråkevikaa 20190621) and Contingency Planning document (Beredskapsplan Version 6; Date: 09.12.2019; Sections 1. 5) provide policies and procedures on how to respond to OIE-notifiable diseases should they become present at the site.</td></tr><tr><td>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.</td></tr><tr><td>c. If an OIE-notifiable disease was confirmed on the farm (see 5.4.4b), then retain documentary evidence to show that the farm:</td></tr><tr><td>1) immediately culled the pen(s) in which the disease was detected;</td></tr><tr><td>2) immediately notified the other farms in the ABM [104]</td></tr><tr><td>3) enhanced monitoring and conducted rigorous testing for the disease; and</td><td></td></tr><tr><td>4) promptly (within one month) made findings publicly available.</td><td></td></tr><tr><td>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).</td><td></td></tr><tr><td>-</td><td></td></tr></table>	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.	Kråkevik is located in a ISA surveillance area, therefore proactive monitor monthly OIE-notifiable diseases ISA and PD. Monthly screening for Pancreas Disease (PD) and Infectious Salmon Anaemia (ISA) performed. Samples sent to Patogen (Norsk Akkrediting certified as a laboratory according to ISO17025, registered number: TEST 235). Review of Patogen Report reference PG058009, date: 03-03-2020 confirmed screening for PD and ISA. All results negative. Both the Fish Health Plan (Fiskhelseplan CN Kråkevikaa 20190621) and Contingency Planning document (Beredskapsplan Version 6; Date: 09.12.2019; Sections 1. 5) provide policies and procedures on how to respond to OIE-notifiable diseases should they become present at the site.	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.	c. If an OIE-notifiable disease was confirmed on the farm (see 5.4.4b), then retain documentary evidence to show that the farm:	1) immediately culled the pen(s) in which the disease was detected;	2) immediately notified the other farms in the ABM [104]	3) enhanced monitoring and conducted rigorous testing for the disease; and		4) promptly (within one month) made findings publicly available.		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).		-		Compliant		
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4) promptly (within one month) made findings publicly available.																			
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).																			
-																			
Footnote	[103] At the time of publication of the final draft standards, OIE-notifiable diseases relevant to salmon aquaculture were: Epizootic haematopoietic necrosis, Infectious haematopoietic necrosis (IHN), Infectious salmon anemia (ISA), Viral hemorrhagic septicemia (VHS) and Gyrodactylus (Gyrodactylus salaris).																		
Footnote	[104] This is in addition to any notifications to regulatory bodies required under law and the OIE Aquatic Animal Health Code.																		
Footnote	[105] Within one month.																		

Social requirements in the standards shall be audited by an individual who is a lead auditor in conformity with SAAS Procedure 200 section 3.1.					
PRINCIPLE 6: DEVELOP AND OPERATE FARMS IN A SOCIALLY RESPONSIBLE MANNER					
6.1 Freedom of association and collective bargaining [106]					
Compliance Criteria					
Footnote	[106] Bargain collectively: A voluntary negotiation between employers and organizations of workers in order to establish the terms and conditions of employment by means of collective (written) agreements.				
6.1.1	<b>Indicator:</b> Evidence that workers have access to trade unions (if they exist) and union representative(s) chosen by themselves without managerial interference  <b>Requirement:</b> Yes  <b>Applicability:</b> All	Cermaq Norway is operating according to Norwegian law, where freedom associations, and trade unions are a statutory right for all employees. Cermaq Norway Code of ethics dated 28.08.2018 supports this. Cermaq has national, regional and local union representatives from different Norwegian trade unions. The representatives are chosen among the employees without interference by the management. The freedom of association was confirmed by the employees in interviews held during the audit.	Compliant		
6.1.2	<b>Indicator:</b> Evidence that workers are free to form organizations, including unions, to advocate for and protect their rights  <b>Requirement:</b> Yes  <b>Applicability:</b> All	Employee contracts were reviewed during the audits, verifying freedom of association. Cermaq Norway Code of ethics dated 28.08.2018 supports this. In Cermaq region Finnmark farm operators are organized through organization Fellesforbundet. They have a regional representative elected by the members. Approximately 50% of the employees are member of a trade union. For site Kråkevik 4 out of 8 is members.	Compliant		
6.1.3	<b>Indicator:</b> Evidence that workers are free and able to bargain collectively for their rights  <b>Requirement:</b> Yes  <b>Applicability:</b> All	The trade union is representing the employees for collective bargaining. Regional and national representatives are involved. All members can give their advice on union meetings which are held several times a year. Also non-members are covered by the collective bargaining. The employees are covered by the collective agreement "Havbruksvernkomsten" and regional agreements. No cases registered against the farm site management for violations of employees' freedom of association and collective bargaining rights. The information was confirmed by the employees in interviews held during the audit.	Compliant		
Criterion 6.2 Child labor					
Compliance Criteria					
6.2.1	<b>Indicator:</b> Number of incidences of child [107] labor [108]  <b>Requirement:</b> None  <b>Applicability:</b> All except as noted in [107]	0 incidents of child labor. Minimum age for working is 15 years. Cermaq Norway Code of ethics dated 28.08.2018 supports this, and child labor is prohibited in Cermaq. Employee registers and contract can be used for verification. The information was confirmed by the employees in interviews held during the audit.	Compliant		0
Footnote	[107] Child: Any person under 15 years of age. A higher age would apply if the minimum age law of an area stipulates a higher age for work or mandatory schooling. Minimum age may be 14 if the country allows it under the developing country exceptions in ILO convention 138.				
Footnote	[108] Child Labor: Any work by a child younger than the age specified in the definition of a child.				
6.2.2	<b>Indicator:</b> Percentage of young workers [109] that are protected [110]  <b>Requirement:</b> 100%  <b>Applicability:</b> All	100% of young workers are protected. Young workers are employed on site in relation to education and apprenticeships. Regulations and procedure "Young workers" ID 147 rev. 12, 2017-05-30 related to young workers are implemented. This is compliant with the standard requirements. Age can be checked on ID's and staff records. Site has currently one apprentice, aged 18, which is working 50% and attending school 50%. The information was confirmed by the employees in interviews held during the audit.	Compliant		100%
Footnote	[109] Young Worker: Any worker between the age of a child, as defined above, and under the age of 18.				
Footnote	[110] Protected: Workers between 15 and 18 years of age will not be exposed to hazardous health and safety conditions; working hours shall not interfere with their education and the combined daily transportation time and school time, and work time shall not exceed 10 hours.				
Footnote	[111] Hazard: The inherent potential to cause injury or damage to a person's health (e.g., unequipped to handle heavy machinery safely, and unprotected exposure to harmful chemicals).				
Footnote	[112] Hazardous work: Work that, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of workers (e.g., heavy lifting disproportionate to a person's body size, operating heavy machinery, exposure to toxic chemicals).				

Criterion 6.3 Forced, bonded or compulsory labor					
Compliance Criteria					
6.3.1	<p><b>Indicator:</b> Number of incidences of forced, [113] bonded [114] or compulsory labor</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All</p>	No incidents of forced or compulsory labor. Cermaq Norway Code of ethics dated 28.08.2018 supports this. Verification performed during interviews with employees, and review of work contracts and pay slips.	Compliant		
Footnote	[113] Forced (Compulsory) labor: All work or service that is extracted from any person under the menace of any penalty for which a person has not offered himself/herself voluntarily or for which such work or service is demanded as a repayment of debt. "Penalty" can imply monetary sanctions, physical punishment, or the loss of rights and privileges or restriction of movement (e.g., withholding of identity documents).				
Footnote	[114] Bonded labor: When a person is forced by the employer or creditor to work to repay a financial debt to the crediting agency.				
Criterion 6.4 Discrimination [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 merit- or performance-based pay increase or bonus is not by itself discriminatory. Positive discrimination in favor of people from certain underrepresented groups may be legal in some countries.				
6.4.1	<p><b>Indicator:</b> Evidence of comprehensive [116] and proactive anti-discrimination policies, procedures and practices</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	Anti discrimination policy is included as part of Cermaq Norway Code of ethics dated 28.08.2018 and Whistle blowing procedure (2017-08-16). Whistle Blowing reporting on: <a href="https://www.cermaq.com/wps/wcm/connect/cermaq/Contact-us/whistleblowing/whistleblowing">https://www.cermaq.com/wps/wcm/connect/cermaq/Contact-us/whistleblowing/whistleblowing</a> . This can be performed anonymous. Managers have received training and education to ensure anti-discrimination in all parts of the organization. All employees have received internal training in Anti- discrimination and equality. The information was confirmed by the employees in interviews held during the audit.	Compliant		
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	<p><b>Indicator:</b> Number of incidences of discrimination</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All</p>	No incidents registered. The rights of employees are respected. During interview no discrimination cases were reported. The information was confirmed by the employees in interviews held during the audit.	Compliant		
Criterion 6.5 Work environment health and safety					
Compliance Criteria					
6.5.1	<p><b>Indicator:</b> Percentage of workers trained in health and safety practices, procedures [117] and policies on a yearly basis</p> <p><b>Requirement:</b> 100%</p> <p><b>Applicability:</b> All</p>	All health and safety related policies are displayed on site. Risk assessments including H&S factors are updated annually. Emergency preparedness plan ( Beredskapsplan Cermaq Norway Rev 6 9/12 2019 doc 1154) and Alarm plans are displayed in all vessels, barges and landbases. Alarm plan was updated 22.08.2019. Procedures are available for all employees on Intellex QMS system. Annual training are performed within H&S, fire, evacuation and first aid. Training logs and certificates were reviewed for employees during audit, on system Intellex Kompetansesystem. The information was confirmed by the employees in interviews held during the audit. It was documented that the site had performed fire rehearsal, first aid rehearsal and emergency evacuation rehearsal both in 2019 and 2020.	Compliant		100%
Footnote	[117] Health and safety training shall include emergency response procedures and practices.				

6.5.2	<p><b>Indicator:</b> Evidence that workers use Personal Protective Equipment (PPE) effectively</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	Risk assessments includes H&S and site specific H&S assessments are developed and maintained. Last site specific risk assessment was performed 25.03.2020. Reviewed by auditor. Organization has implemented procedures for use and maintenance of PPE. The maintenance system notifies each responsible when equipment is due for control. All required PPE are provided free of charge for all employees, and training in use of equipment is documented. Employees state that the safety culture is good and mandatory use of PPE are followed at site.	Compliant		
6.5.3	<p><b>Indicator:</b> Presence of a health and safety risk assessment and evidence of preventive actions taken</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	Risk assessments for general H&S and site specific H&S are developed and maintained. Last site specific risk assessment was performed 25.03.2020. This was reviewed by auditor. An action plan was included. Safety procedures are developed based on results from risk assessments and implemented in Intellex QMS, and training, both introduction and annual was documented in Intellex Kompetansestyring. A selection was reviewed by auditor. The information was confirmed by the employees in interviews held during the audit.	Compliant		
6.5.4	<p><b>Indicator:</b> Evidence that all health- and safety-related accidents and violations are recorded and corrective actions are taken when necessary</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	QMS system Intellex has a separate module for registration and handling of incidents, including personal injuries and near misses. Root cause analysis and investigation methods are included. Incident log was reviewed by auditor, and interviews of site managers and employees confirmed both that the organization had implemented procedures for incident handling and investigation, that these were followed, and that HSE Manager onshore was used as support. All interviewed had received training in use of system, was able to show how register in the system, and had used the last 3 months. Monthly HSE reports are issued by HSE department each month with overview of incidents and corrective actions. Site specific HSE meetings (Local safety committee) are held monthly with all employees. All reported incidents and monthly HSE report are reviewed, including follow-up of corrective and preventive actions. MoM form last meeting 21.03.2020 was reviewed during audit.	Compliant		
6.5.5	<p><b>Indicator:</b> Evidence of employer responsibility and/or proof of insurance (accident or injury) for 100% of worker costs in a job-related accident or injury when not covered under national law</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	The organization provide all required insurances for employees according to Norwegian law for the specific trade. In addition Cermaq provides additional insurances: Travel insurance which includes family, and an extensive health insurance. Insurance policies are maintained, and available for all employees. The information was confirmed by the employees in interviews held during the audit.	Compliant		
6.5.6	<p><b>Indicator:</b> Evidence that all diving operations are conducted by divers who are certified</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<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.</p> <p>Organization uses external diving services. Supplier delivers a report for each diving operation which includes diver documentation (certificates and health certificates. In addition Cermaq complete an internal checklist for each diver operation. During audit checklist for Dive operation performed 02.08.2019 by supplier AQS was reviewed. 3 divers - 1 dive master and 2 divers were inspecting all nets (4 at time) on site. Name, dive certificate number and health certification expiry date was stated in report. All information according to requirements.</p>	Compliant		
<b>Criterion 6.6 Wages</b>					
<b>Compliance Criteria</b>					
6.6.1	<p><b>Indicator:</b> The percentage of workers whose basic wage [118] (before overtime and bonuses) is below the minimum wage [119]</p> <p><b>Requirement:</b> 0 (None)</p> <p><b>Applicability:</b> All</p>	Zero below basic wages, according to national and local collective agreement. HR system Auditor is used for maintenance and monitoring. Records and pay slips reviewed by auditor during audit. All information according to requirements.	Compliant		0
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	<p><b>Indicator:</b> Evidence that the employer is working toward the payment of basic needs wage [120]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	The organization have performed an assessment of cost of living were conducted. Reference is made to Norwegian Livsoppholdssatser - Statens innkrevingssentral 1. juli 2019. Calculation and comparison with Cermaq wages are conducted. The company wages are above BNW. Example used for calculation: Single employee, born 1996, no children, tax card 1701. Site technician without craftsmanship. Worked one year. The calculation proves that wages exceed basic needs wage. Calculation was presented to auditor during audit	Compliant		
Footnote	[120] Basic needs wage: A wage that covers the basic needs of an individual or family, including housing, food and transport. This concept differs from a minimum wage, which is set by law and may or may not cover the basic needs of workers.				
6.6.3	<p><b>Indicator:</b> Evidence of transparency in wage-setting and rendering [121]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	Wage settings are based on national union and trade organizations agreements. For farming activities the collective agreement is "Havbruksvernkomsten". Cermaq and organizations union representatives maintain a local collective agreement. All employees can provide input prior to negotiations. All employee contract states wages and benefits, and pay slips provide detailed information. All salary is paid by bank transfer on an agreed date. During audit contracts and pay slips were reviewed, and employees interviewed. All information according to requirements.	Compliant		
Footnote	[121] Payments shall be rendered to workers in a convenient manner.				
Criterion 6.7 Contracts (labor) including subcontracting					
Compliance Criteria					
6.7.1	<p><b>Indicator:</b> Percentage of workers who have contracts [122]</p> <p><b>Requirement:</b> 100%</p> <p><b>Applicability:</b> All</p>	All employees have contract, and national regulations and union requirements are followed. HR system Aditro are used for contracts management. During audit employment contracts for employees selected and interviewed by the auditor was reviewed. All found according to requirements.	Compliant		100%
Footnote	[122] Labor-only contracting relationships or false apprenticeship schemes are not acceptable. This includes revolving/consecutive labor contracts to deny benefit accrual or equitable remuneration. False Apprenticeship Scheme: The practice of hiring workers under apprenticeship terms without stipulating terms of the apprenticeship or wages under contract. It is a "false" apprenticeship if its purpose is to underpay people, avoid legal obligations or employ underage workers. Labor-only contracting arrangement: The practice of hiring workers without establishing a formal employment relationship for the purpose of avoiding payment of regular wages or the provision of legally required benefits, such as health and safety protections.				
6.7.2	<p><b>Indicator:</b> Evidence of a policy to ensure social compliance of its suppliers and contractors</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	Cermaq has implemented a Code of conduct for supplier and supplier behavior, last dated January 2017. This includes requirements and compliance level related to National laws, human rights, employee rights, HSE, Anti-corruption, Environment, Food safety, quality and management systems, which need to be followed to become a Cermaq supplier. All suppliers are assessed and qualified according to "Prosedyre for klassifisering av leverandører", doc 644, dated 12.07.2019. This is followed by supplier classification risk assessment. Supplier classified as critical needs to be reviewed to become approved. Supplier audits can be used as tool. A list of approved suppliers are maintained. Sustainability manager is responsible in general. Each department manager is responsible for suppliers under their jurisdiction. Supplier list and supplier audit plan 2020 was reviewed during audit.	Compliant		
Criterion 6.8 Conflict resolution					
Compliance Criteria					
6.8.1	<p><b>Indicator:</b> Evidence of worker access to effective, fair and confidential grievance procedures</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	Cermaq Norway Code of ethics dated 28.08.2018. Procedure for Conflict resolution defines ways of communication of conflicts. Whistle blowing procedure is developed, which is included in Personnel handbook. Conflict management procedure ID 429 is defined. Whistle blowing reporting on net: <a href="https://www.cermaq.com/wps/wcm/connect/cermaq-no/cermaq-norway/Selskapet/vaare-retningslinjer/Vaare-retningslinjer">https://www.cermaq.com/wps/wcm/connect/cermaq-no/cermaq-norway/Selskapet/vaare-retningslinjer/Vaare-retningslinjer</a> . HR department have a detailed process to follow, and awareness training and information is provided as part of the Cermaq instruction course, and during annual meetings with all employees. Interviews with employees confirmed knowledge about process, and how to report both anonymous and by name.	Compliant		
6.8.2	<p><b>Indicator:</b> Percentage of grievances handled that are addressed [123] within a 90-day timeframe</p> <p><b>Requirement:</b> 100%</p> <p><b>Applicability:</b> All</p>	All incidents are addressed within the 90 day time frame. Internal procedure has a shorter time line. Organization has record of both anonymous and named cases which are raised, and conformity can be proven. The information was confirmed by the employees in interviews held during the audit.	Compliant		100%
Footnote	[123] Addressed: Acknowledged and received, moving through the company's process for grievances, corrective action taken when necessary.				

Criterion 6.9 Disciplinary practices					
		Compliance criteria			
6.9.1	<b>Indicator:</b> Incidences of excessive or abusive disciplinary actions  <b>Requirement:</b> None  <b>Applicability:</b> All	No incidents of excessive or abusive disciplinary actions are registered. No such incidents handled by HR department. The information was confirmed by the employees in interviews held during the audit.	Compliant		
Footnote	[124] Mental Abuse: Characterized by the intentional use of power, including verbal abuse, isolation, sexual or racial harassment, intimidation or threat of physical force.				
6.9.2	<b>Indicator:</b> Evidence of a functioning disciplinary action policy whose aim is to improve the worker [125]  <b>Requirement:</b> Yes  <b>Applicability:</b> All	Disciplinary policy is defined in Cermaq Personal handbook, and is available on intranet Casa. The verbal and written disciplinary warnings may be used in case of misbehavior during the work. At site no warning is issued, but in the region the process has been used several time during last year, and documentation of the process is maintained. In interviews during audit employees confirmed understanding and fairness of disciplinary policy.	Compliant		
Footnote	[125] If disciplinary action is required, progressive verbal and written warnings shall be engaged. The aim shall always be to improve the worker; dismissal shall be the last resort. Policies for bonuses, incentives, access to training and promotions are clearly stated and understood, and not used arbitrarily. Fines or basic wage deductions shall not be acceptable disciplinary practices.				
Criterion 6.10 Working hours and overtime					
		Compliance criteria			
6.10.1	<b>Indicator:</b> Incidences, violations or abuse of working hours and overtime laws [126]  <b>Requirement:</b> None  <b>Applicability:</b> All	<div>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 Labor Organization (<a href="http://www.ilo.org">www.ilo.org</a>).</div> <div>Working hours, use of overtime, rotational work and compensation is managed according to Norwegian law - Arbeidsmiljøloven, and defined in employee contract, collective agreements and personal handbook. Resource management system Capitech is used for registration, management and monitoring of hours. Payroll is generated based on registrations in Capitech. During audit employee contracts an payslips were reviewed for selected employees, and the persons were interviewed. They confirmed compliance with regulations related to working hours.</div>	Compliant		
Footnote	[126] In cases where local legislation on working hours and overtime exceed internationally accepted recommendations (48 regular hours, 12 hours overtime), the international standards will apply.				
6.10.2	<b>Indicator:</b> Overtime is limited, voluntary [127], paid at a premium rate [128] and restricted to exceptional circumstances  <b>Requirement:</b> Yes  <b>Applicability:</b> All except as noted in [130]	Interviews with employees and review of their pay slips was conducted during audit. It was verified that use of overtime compliant with standard requirements. 1 of 8 pay slips had 2 hours overtime for February 2020. Paid at premium rate.	Compliant		
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	<b>Indicator:</b> Evidence that the company regularly performs training of staff in fish husbandry, general farm and fish escape management and health and safety procedures  <b>Requirement:</b> Yes  <b>Applicability:</b> All	Procedures for training related to fish welfare, HSE and Hygiene, and several more subjects are implemented, and distributed in Intellex. Organization performs mandatory introduction and training of all farm workers in a broad specter of subjects including: Fish welfare, H&S introduction, assistant fish health, lice counting, escape prevention, food safety and hygiene. Records and certificates is available on Intellex kompetansestyring, and was reviewed by auditor for selected employees.	Compliant		

Criterion 6.12 Corporate policies for social responsibility					
Compliance criteria					
6.12.1	<p><b>Indicator:</b> Demonstration of company-level [129] policies in line with the standards under 6.1 to 6.11 above</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>Company level policies are developed by senior management, implemented and communicated to all employees through introductions, regular meetings, intranet Casa and displayed on site. In addition all procedures are distributed on Intellex QMS. For site the following policies were displayed: Cermaq Code of Ethics, Cermaq Core Values, Work environment policy, Quality Policy, Environmental Policy, Food safety policy, and Social Policy. In addition Hygiene rules, Alarm plan and emergency preparedness plan were displayed. Compliance with 6.1 - 6.12 verified by review of policies.</p>	Compliant		
Footnote	[129] Applies to the headquarters of the company in a region or country where the site applying for certification is located. The policy shall relate to all of the company's operations in the region or country, including grow-out, smolt production and processing facilities.				
Social requirements in the standards shall be audited by an individual who is a lead auditor in conformity with SAAS Procedure 200 section 3.1.					
PRINCIPLE 7: BE A GOOD NEIGHBOR AND CONSCIENTIOUS CITIZEN					
Criterion 7.1 Community engagement					
Compliance Criteria					
7.1.1	<p><b>Indicator:</b> Evidence of regular and meaningful [130] consultation and engagement with community representatives and organizations</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>The farm as part of Cermaq region Finnmark have activities and arrangements to proactively communication with stakeholders on different levels. Stakeholder meetings have been held annually supported by other initiatives to compensate for low number of participants on stakeholder meetings several years in row. Overview of initiatives for region Finnmark last 2 years, reviewed by auditor: 2020: Cermaq newsletter with ASC information, sent to all stakeholders week 13/2020. Stakeholder meeting scheduled in Alta in June 2020. Beach cleaning campaign planned 2019: Stakeholder meeting 13.06.2019 Hammerfest, for sites in Vest-Finnmark - Cermaq slakteri Rypefjord. 3 participants (community representatives from Alta, Kvalsund and Hammerfest Kommuner). Stand and presentation at exhibition "Bolyt" in Havøysund, 5 days, with presentation of Cermaq including ASC for stakeholders. Beach cleaning campaign performed. Participation and presentation events in the region: Finnmarksløpet, Aronnesrocken and Offroad Finnmark 2018: Stakeholder meeting at Cermaq site Havøysund 11.06.2018. 5 participants. Beach cleaning campaign performed. Participation and presentation events in the region: Arctic Race, NM 2018, Finnmarksløpet, Aronnesrocken and Offroad Finnmark. VR-225.</p> <p>The farm has a good relation and cooperation with neighbors and other parties operating in the area, such local fishermen. No complaints have been raised or registered. Confirmed by employees during audit.</p>	Compliant		
Footnote	[130] Regular and meaningful: Meetings shall be held at least bi-annually with elected representatives of affected communities. The agenda for the meetings should in part be set by the community representatives. Participatory Social Impact Assessment methods may be one option to consider here.				
7.1.2	<p><b>Indicator:</b> Presence and evidence of an effective [131] policy and mechanism for the presentation, treatment and resolution of complaints by community stakeholders and organizations</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>The communication plan for Cermaq Norway includes external communication and stakeholders. Handling of media officials and external parties are described. Procedure handling of external complaints are included. Responsible for handling is Sustainability manager and CEO. Complaints could be delivered via company e-mail, company workers or whistle blowing channel <a href="https://www.cermaq.com/wps/wcm/connect/cermaq-no/kontakt-oss/varsling/">https://www.cermaq.com/wps/wcm/connect/cermaq-no/kontakt-oss/varsling/</a> For registering and follow-up the non-conformity system Intellex is used. There are no registration of complaints at farm level. Confirmed by employees during audit.</p> <p>Representatives from the local community and organizations are invited to give feedback and participate in audit, ref Form 3, Public disclosure form. No feedback received. No interviews considered necessary to perform for audit of site.</p>	Compliant		
Footnote	[131] Effective: In order to demonstrate that the mechanism is effective, evidence of resolutions of complaints can be given.				
7.1.3	<p><b>Indicator:</b> Evidence that the farm has posted visible notice [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</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>The procedure for using therapeutics ID 191, dated 05.04.2018 gives a description on how to ensure visible notice, and in which periods it is required. The procedures is known to site employees, and they confirmed that a signed stating "Medisinering pågår" is used in treatment and withholding periods.</p>	Compliant		
Footnote	[132] Signage shall be visible to mariners and, for example, to fishermen passing by the farm.				

Criterion 7.2 Respect for indigenous and aboriginal cultures and traditional territories					
Compliance Criteria					
<p align="center"><b>Instruction to Clients and CABs on Criterion 7.2 - Traditional Territories of Indigenous Groups</b></p> <p>The ASC Salmon Standard requires that farms must be respectful of the traditional territories of indigenous groups. The Indicators listed under Criterion 7.2 were designed to fulfill this purpose in a manner consistent with the United Nations Declaration on the Rights of Indigenous Peoples. In many locales, the territorial boundaries of indigenous groups have a defined legal status according to local or national law. In such cases, it is straightforward to know whether a farm is operating in close proximity to indigenous people. However, when boundaries of indigenous territories are undefined or unknown, there is no simple way to establish whether the farm is operating in close proximity to indigenous groups. Here ASC provides the following guidance.</p> <p>The intent behind the ASC Salmon Standard is that the farm will identify all neighboring groups who are potentially negatively impacted by the farm's activities. The actual physical distance between the farm and an indigenous group is less important than understanding whether the farm is having a detrimental impact upon its neighbors. Effective community consultations are one of the best ways to identify such impacts to neighbor groups. Through a transparent process of consultation, indigenous groups who are put under “stress” by the farm will identify themselves and voice their concerns about the nature of the farm's impacts. Continued consultations between farm and neighbors should create a forum where any key issue can be discussed and resolved.</p>					
7.2.1	<p><b>Indicator:</b> Evidence that indigenous groups were consulted as required by relevant local and/or national laws and regulations</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [133]</p>	<p>The Sami people is an indigenous group living in Finnmark and northern Norway. They have limited autonomy rights through the official institution "Sametinget", to accept activity and sites related fish farms in the region. As part of the aquaculture license issued for the site, Sametinget has issued a separate acceptance statement. This states that the activity on site does not interfere or come in conflict with Sami interests.</p>	Compliant		
7.2.2	<p><b>Indicator:</b> Evidence that the farm has undertaken proactive consultation with indigenous communities</p> <p><b>Requirement:</b> Yes [133]</p> <p><b>Applicability:</b> All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [133]</p>	<p>All groups of Sami Reindeer breeders (Reindriftsdistrikter) are invited to all stakeholder meetings and events held by the company and receives information such as company newsletters. No representatives from these groups have responded on Cermaq communication or participated in meetings.</p> <p>Representatives from the indigenous people and organizations are invited to give feedback and participate in audit, ref Form 3, Public disclosure form. No feedback received. No interviews considered necessary to perform for audit of site.</p>	Compliant		
Footnote	[133] All standards related to indigenous rights only apply where relevant, based on proximity of indigenous territories.				
7.2.3	<p><b>Indicator:</b> Evidence of a protocol agreement, or an active process [134] to establish a protocol agreement, with indigenous communities</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [133]</p>	<p>Acceptance from Sametinget on operation of site for fish farm activities, ref 16/3810-4 06.09.2016, as attachment to Aquaculture license for site.</p>	Compliant		
Footnote	[134] To demonstrate an active process, a farm must show ongoing efforts to communicate with indigenous communities, an understanding of key community concerns and responsiveness to key community concerns through adaptive farm management and other actions.				
Criterion 7.3 Access to resources					
Compliance Criteria					
7.3.1	<p><b>Indicator:</b> Changes undertaken restricting access to vital community resources [135] without community approval</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All</p>	<p>No resources that are vital for community are impacted by the site. This is verified by government during the application to get the license to start the site. The community approval for reviewing potential restricting access to vital resources was done during operation application processing to start the sites.</p>	Compliant		
Footnote	[135] Vital community resources can include freshwater, land or other natural resources that communities rely on for their livelihood. If a farm site were to block, for example, a community's sole access point to a needed freshwater resource, this would be unacceptable under the Dialogue standard.				



7.3.2	<p><b>Indicator:</b> Evidence of assessments of company's impact on access to resources</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	Documented assessments are performed and communicated during the application processing to start the sites, and is approved by government. Annual risk assessments and Consequence surveys are used to monitor and control any changes. Stakeholder communication and meetings are used to corroborate the accuracy of conclusions in site impact assessments. No interviews considered necessary to perform for audit of site.	Compliant		
<p align="center"><b>INDICATORS AND STANDARDS FOR SMOLT PRODUCTION</b></p> <p align="center">A farm seeking certification must have documentation from all of its smolt suppliers to demonstrate compliance with the following standards. The requirements are, in general, a subset of the standards in Principles 1 through 7, focusing on the impacts that are most relevant for smolt facilities. In addition, specific standards are applied to open systems (net pens), and to closed and semi-closed systems (recirculation and flow-through). [136]</p>					
Footnote	[136] The SAD SC proposes this approach to addressing environmental and social performance during the smolt phase of production. In the medium term, the SC anticipates a system to audit smolt production facilities on site. In the meantime, farms will need to work with their smolt suppliers to generate the necessary documentation to demonstrate compliance with the standards. The documentation will be reviewed as part of the audit at the grow-out facility.				
<b>SECTION 8: STANDARDS FOR SUPPLIERS OF SMOLT</b>		<i>Standards related to Principle 1</i>			
		<b>Compliance Criteria (Required Client Actions):</b>	<b>Auditor Evaluation (Required CAB Actions):</b>		
8.1	<p><b>Indicator:</b> Compliance with local and national regulations on water use and discharge, specifically providing permits related to water quality</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Identify all of the farm's smolt suppliers. For each supplier, identify the type of smolt production system used (e.g. open, semi or closed systems) and submit this information to ASC (Appendix VI).</p> <p>b. Where legal authorization related to water quality are required, obtain copies of smolt suppliers' permits.</p> <p>c. Obtain records from smolt suppliers showing monitoring and compliance with discharge laws, regulations, and permit requirements as required.</p> <p>-</p>	<p>Smolt suppliers Kråkevik 2019G: Forsan (internal), Ranfjord (external), Nordland Akva (external). All sites are semi-closed with discharge to seawater. Principles 8.24 - 8.28 does not apply. Information submitted to ASC in email 13.03.2020. Auditor on copy. Documents referred in principles 8.1 - 8.23 below are reviewed by auditor during audit.</p> <p>Forsan: Aqua culture license issued by Nordland Fylkeskommune dt. 19.04.16 for max for production of 12,2 million smolts /1600 ton dry feed Discharge permit - Issued by Fylkesmannen i Nordland 19.04.2016, ref 2015/43 Government inspection: Mattilsynet report 2019/071794, 26.03.2019, no findings</p> <p>Ranfjord: Aqua culture license issued by Fiskeridirektoratet region Nordland to Ranfjord Fiskeprodukter AS 19.01.2007, ref 02/17513, permits N-R-6/8/9/10 and 12 for hatching roe and production of smolts; salmon, trout and arctic char. Maximum use of feed per year 285 + 270 tons of dry feed. Discharge permit -Issued by Fylkesmannen i Nordland 19.07.2004, ref 2003/384 Government inspection: Mattilsynet report 2018/067352 31.01.2019 - audit 11-12.07.2018. All NC's closed</p> <p>Nordland Akva: Aqua culture license issued by Nordland Fylkeskommune to Nordland Akva AS 26.06.2014, ref 2014029207, permit N-ME-49 for hatching roe and production of smolts; salmon, trout and rainbow trout. Maximum use of feed per year 1500 tons of dry feed / 6 million fish. Discharge permit - Mangler Government inspection: Mattilsynet report 2018/169125, 05 - 06.09 2018. All NC's closed</p>	Compliant	
8.2	<p><b>Indicator:</b> Compliance with labor laws and regulations</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Obtain declarations from smolt suppliers affirming compliance with labor laws and regulations.</p> <p>b. Keep records of supplier inspections for compliance with national labor laws and codes (only if such inspections are legally required in the country of operation; see 1.1.3a)</p>	<p>Forsan: Cermaq internal site, and part of Cermaq system for compliance with labor laws and regulations.</p> <p>Ranfjord: Declaration issued by Ranfjord 04.02.2020 with confirmation of compliance with labor laws. No inspections</p> <p>Nordland Akva: Declaration issued by Nordland Akva 12.04.2018 with confirmation of compliance with labor laws. No inspections</p>	Compliant	
		<i>Standards related to Principle 2</i>			
		<b>Compliance Criteria (Required Client Actions):</b>	<b>Auditor Evaluation (Required CAB Actions):</b>		
8.3	<p><b>Indicator:</b> Evidence of an assessment of the farm's potential impacts on biodiversity and nearby ecosystems that contains the same components as the assessment for grow-out facilities under 2.4.1</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>Note: If the smolt facility has previously undertaken an independent assessment of biodiversity impact (e.g. as part of the regulatory permitting process), the farm may obtain and use such documents as evidence to demonstrate compliance with Indicator 8.3 as long as all components are covered.</p> <p>a. Obtain from the smolt supplier(s) a documented assessment of the smolt site's potential impact on biodiversity and nearby ecosystems. The assessment must address all components outlined in Appendix I-3.</p> <p>b. Obtain from the smolt supplier(s) a declaration confirming they have developed and are implementing a plan to address potential impacts identified in the assessment.</p>	<p>Source/Documents reviewed:</p> <p>Forsan: Cermaq internal site. Separate environment and biodiversity assessment for smolt producers. Seen plan for 2019 which is compliant with Appendix I-3, including environmental aspects, compliance assessment, objectives and action plan. Site specific risk assessment for environmental aspects for Forsan dated 17.06.2019 reviewed</p> <p>Ranfjord: Process review Biodiversity and Environment Ranfjord dated 08.11.2019. Includes action plan</p> <p>Nordland Akva: Risk assessment for Environment dated 27.11.2018 and Biodiversity dated 31.10.2018. Includes action plan Benthic Sediment report metals Argus Miljø, Bodø, (374-09-18) 15.09.2018</p>	Compliant	

8.4	<p><b>Indicator:</b> Maximum total amount of phosphorus released into the environment per metric ton (mt) of fish produced over a 12-month period (see Appendix VIII-1)</p> <p><b>Requirement:</b> 4 kg/t of fish produced over a 12-month period</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p><b>Instruction to Clients for Indicator 8.4 - Calculating Total Phosphorus Released per Ton of Fish Produced</b></p> <p>Farms must confirm that each of their smolt suppliers complies with the requirement of indicator 8.4. This specifies the maximum amount of phosphorus that a smolt production facility can release into the environment per metric ton (mt) of fish produced over a 12-month period. The requirement is set at 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"><li>- the smolt supplier has records showing the total quantity of sludge removed from site over the relevant time period;</li><li>- the supplier determined phosphorus concentration (% P) in removed sludge by sampling and analyzing representative batches; and</li><li>- the sludge was properly disposed off site and in accordance with the farm's biosolid management plan.</li></ul>				
	a. Obtain records from smolt suppliers showing amount and type of feeds used for smolt production during the past 12 months.			Compliant	Reference is made to VR 39 on phosphorus release to sea confirmed by ASC. See <a href="http://www.asc-aqua.org">www.asc-aqua.org</a> for VR 39 determination by ASC dt.15.09.14	9,63/ 17,19/ 13,85 kg/ton  Ref VR 39
	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).	Forsan: Source a-g Phosphor calculation 1.1-31.12-2019 Cermaq Forsan a) Feed: 961556 kg dry feed for period b) Declaration per feed type and particle size from feed suppliers. c) 16306,2 kg P in total feed d) Records for stocking, harvest and mortality which are sufficient to calculate the amount of biomass produced are available. Biomass produced: 1170594 kg, 1170,6 mt e) Calculations are correct. 9,63 kg phosphorus in fish biomass (mt) produced f) No sludge produced/removed g) NA				
	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.	Ranfjord: Source Ranfjord Phosphor calculation 2019 a) Feed: 573,635 kg dry feed for period c) 10741 kg P in total feed d) Records for stocking, harvest and mortality which are sufficient to calculate the amount of biomass produced are available. Biomass produced: 499,799 kg, 499,8 mt e) Calculations are correct. 17,19 kg phosphorus in fish biomass (mt) produced f) No sludge produced/removed g) NA				
	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.	Nordland Akva: Feed, Biomass and Phosphor calculation Nordland Akva 2019 a) Feed: 729900 kg dry feed for period c) 10741 kg P in total feed d) Records for stocking, harvest and mortality which are sufficient to calculate the amount of biomass produced are available. Biomass produced: 775,786 kg, 775,8 mt e) Calculations are correct. 13,85 kg phosphorus in fish biomass (mt) produced f) No sludge produced/removed g) NA				
	e. Calculate the amount of phosphorus in fish biomass produced (result from 8.4d) using the formula in Appendix VIII-1.					
	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.					
	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.	C) Reference is made to VR 39 on phosphorus release to sea confirmed by ASC. See <a href="http://www.asc-aqua.org">www.asc-aqua.org</a> for VR 39 determination by ASC dt.15.09.14				

Standards related to Principle 3						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
8.5	<p><b>Indicator:</b> If a non-native species is being produced, the species shall have been widely commercially produced in the area prior to the publication of the ASC Salmon Standard</p> <p><b>Requirement:</b> Yes [137]</p> <p><b>Applicability:</b> All Smolt Producers except as noted in [137]</p>	<p>a. Obtain written evidence showing whether the smolt supplier produces a non-native species or not. If not, then Indicator 8.5 does not apply.</p> <p>b. Provide the farm with documentary evidence that the non-native species was widely commercially produced in the area before publication of the ASC Salmon Standard. (See definition of area under 3.2.1 ).</p> <p>c. If the smolt supplier cannot provide the farm with evidence for 8.5b, provide documentary evidence that the farm uses only 100% sterile fish.</p> <p>d. If the smolt supplier cannot provide the farm with evidence for 8.5b or 8.5c, provide documented evidence for each of the following: 1) non-native species are separated from wild fish by effective physical barriers that are in place and well maintained; 2) barriers ensure there are no escapes of reared fish specimens that might survive and subsequently reproduce; and 3) barriers ensure there are no escapes of biological material that might survive and subsequently reproduce.</p> <p>e. Retain evidence as described in 8.5a-d necessary to show compliance of each facility supplying smolt to the farm.</p>	<p>Salmo salar is native to region. Breed verified as Salmo salar through Fish CV for all 3 sites</p>	Compliant		
Footnote	[137] Exceptions shall be made for production systems that use 100 percent sterile fish or systems that demonstrate separation from the wild by effective physical barriers that are in place and well-maintained to ensure no escapes of reared specimens or biological material that might survive and subsequently reproduce.					
8.6	<p><b>Indicator:</b> Maximum number of escapees [138] in the most recent production cycle</p> <p><b>Requirement:</b> 300 fish [139]</p> <p><b>Applicability:</b> All Smolt Producers except as noted in [139]</p>	<p>a. Obtain documentary evidence to show that smolt suppliers maintained monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapees.</p> <p>b. Using smolt supplier records from 8.6a, determine the total number of fish that escaped. Verify that there were fewer than 300 escapees from the smolt production facility in the most recent production cycle.</p> <p>c. Inform smolt suppliers in writing that monitoring records described in 8.6a must be maintained for at least 10 years beginning with the production cycle for which the farm is first applying for certification (necessary for farms to be eligible to apply for the exception noted in [139]).</p> <p>d. If an escape episode occurs at the smolt production facility (i.e. an incident where &gt; 300 fish escaped), the farm may request a rare exception to the Standard [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.</p>	<p>Source: Supplier declarations and Fiskeridirektoratet www.fiskeridir.no Reported escapes 2006-2019</p> <p>Forsan: No escapes recorded in in Fishtalk. 0 escapes in Fiskeridirektoratet register 2017-2020. Records available, in Fishtalk. Escapes covered in site risk assessment.</p> <p>Ranfjord: No escapes recorded in in Fishtalk. 0 escapes in Fiskeridirektoratet register 2017-2020. Records available, in Fishtalk. Escapes covered in environment risk assessment.</p> <p>Nordland Akva: No escapes recorded in Biomass record 2019. 0 escapes in Fiskeridirektoratet register 2017-2020. Records available, in Biomass record. Escapes covered in environment and biodiversity risk assessment.</p>	Compliant		0
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. The 10-year period starts at the beginning of the production cycle for which the farm is applying for certification. The farmer must demonstrate that there was no reasonable way to predict the events that caused the episode. Extreme weather (e.g., 100-year storms) or accidents caused by farms located near high-traffic waterways are not intended to be covered under this exception.					

8.7	<p><b>Indicator:</b> Accuracy [140] of the counting technology or counting method used for calculating the number of fish</p> <p><b>Requirement:</b> ≥98%</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Obtain records showing the accuracy of the counting technology used by smolt suppliers. Records must include copies of spec sheets for counting machines and common estimates of error for hand-counts.</p> <p>B. Review records to verify that accuracy of the smolt supplier's counting technology or counting method is ≥ 98%.</p>	<p>Source: Supplier declarations. Secure counting point is during vaccination process</p> <p>Forsan: Macro Serien from Vaki Makro. 99% accuracy. Verified by provider specifications.</p> <p>Ranfjord: NFT 10-20-25-30 Vaccination machine counters. 100% accuracy. Verified by provider specifications.</p> <p>Nordland Akva: AquaScan Registration Unit CSE1600 fish counter. 98-100% accuracy. Verified by provider specifications</p>	Compliant		>98 %
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	<p><b>Indicator:</b> Evidence of a functioning policy for proper and responsible treatment of non-biological waste from production (e.g., disposal and recycling)</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. From each smolt supplier obtain a policy which states the supplier's commitment to proper and responsible treatment of non-biological waste from production. It must explain how the supplier's policy is consistent with best practice in the area of operation.</p>	<p>Source/Documents reviewed:</p> <p>Forsan: Internal supplier, Cermaq procedures apply. Site specific waste management plan dated 29.10.2019, with overview of handling, segregation and delivery of waste. Approved suppliers: IRIS and Østbø</p> <p>Ranfjord: Waste management plan dated 10.01.2017. with overview of handling, segregation and delivery of waste. Approved supplier Retura. Waste statistics for delivered waste divided into different fragments seen.</p> <p>Nordland Akva: Waste management plan dated 24.06.2018. with overview of handling, segregation and delivery of waste. Waste statistics for delivered waste divided into different fragments seen.</p>	Compliant		
8.9	<p><b>Indicator:</b> Presence of an energy-use assessment verifying the energy consumption at the smolt production facility (see Appendix V subsection 1 for guidance and required components of the records and assessment)</p> <p><b>Requirement:</b> Yes, measured in kilojoule/mt fish/production cycle</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>Note: see instructions for Indicator 4.6.1.</p> <p>a. Obtain records from the smolt supplier for energy consumption by source (fuel, electricity) at the supplier's facility throughout each year.</p> <p>b. Confirm that the smolt supplier calculates total energy consumption in kilojoules (kj) during the last year.</p> <p>c. Obtain records to show the smolt supplier calculated the total weight of fish in metric tons (mt) produced during the last year.</p> <p>d. Confirm that the smolt supplier used results from 8.9b and 8.9c to calculate energy consumption on the supplier's facility as required and that the units are reported as kilojoule/mt fish/production cycle.</p> <p>e. Obtain evidence to show that smolt supplier has undergone an energy use assessment in compliance with requirements of Appendix V-1. Can take the form of a declaration detailing a e.</p>	<p>Forsan:</p> <p>a) Records OK in excel documents. (Energibruk settefisk Cermaq Forsan YTD19)</p> <p>b) 2019 consumption of scope 1 =402085606 KJ and scope 2 = purchased electricity = 28051810560 KJ. Tot Scope 1+2 = 28453896166 KJ</p> <p>c) 1170,6 mt BM produced</p> <p>d) 24307104 kj/Mt BM produced</p> <p>e) Records OK in excel. Continuous evaluation.</p> <p>Ranfjord:</p> <p>a) Records OK Energy report. (Energiforbruk og drivhusgasser Ranfjord)</p> <p>b) 2019 consumption of scope 1 =79628400 KJ and scope 2 = purchased electricity = 5157702000 KJ. Tot Scope 1+2 = 5237330400 KJ</p> <p>c) 499,8 mt BM produced</p> <p>d) 10478873 kj/Mt BM produced</p> <p>e) Records OK. Continuous evaluation.</p> <p>Nordland Akva:</p> <p>a) Records OK Energy report. (Energiforbruk Nordland Akva)</p> <p>b) 2018 consumption of scope 1 =258701400 KJ and scope 2 = purchased electricity = 27173635200 KJ. Tot Scope 1+2 = 27432336600 KJ</p> <p>c) 2018: 622 mt BM produced</p> <p>d) 44103435 kj/Mt BM produced</p> <p>e) Records OK. Continuous evaluation.</p>	Compliant		<p>Forsan: 24307104 Kj/mt</p> <p>Ranfjord: 10478873 Kj/mt</p> <p>Nordland: 44103435 Kj/mt</p>

8.10	<p><b>Indicator:</b> Records of greenhouse gas (GHG [141]) emissions [142] at the smolt production facility and evidence of an annual GHG assessment (See Appendix V, subsection 1)</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> 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.	<p>Forsan:</p> <p>a) Records OK (Energibruk settefisk Cermaq Forsan YTD19)</p> <p>b) Scope 1 2019: emission from Fuel: 28.384 kg CO2</p> <p>Scope 2 2019: emission from electricity: 1.980.495 kg CO2</p> <p>Scope 1+2: 2.008.879 kg CO2</p> <p>Ranfjord:</p> <p>a) Records OK (Energiforbruk og drihugasser Ranfjord)</p> <p>b) Scope 1 2019: emission from Fuel: 70.560 kg CO2</p> <p>Scope 2 2019: emission from electricity: 121.779 kg CO2</p> <p>Scope 1+2: 192.339 kg CO2</p> <p>Nordland Akva:</p> <p>a) Records OK (Energiforbruk og drivhusgasser Nordland Akva)</p> <p>b) Scope 1 2019: emission from Fuel: 47.450 kg CO2</p> <p>Scope 2 2019: emission from electricity: 507.200 kg CO2</p> <p>Scope 1+2: 554.650 kg CO2</p> <p>Applies for all 3:</p> <p>c &amp; e) Calculations and assessment provided by CO2 focus. Data from IEA 2013, SSB 2013, EIA 2011, IPCC 2006.</p> <p>d) CO2 used</p>	Compliant		<p>Forsan:</p> <p>2008879 Kg Co2</p> <p>Ranfjord:</p> <p>192339 Kg Co2</p> <p>Nordland:</p> <p>554650 Kg Co2</p>		
		b. Confirm that, on at least an annual basis, the smolt supplier calculates all scope 1 and scope 2 GHG emissions in compliance with Appendix V-1.						
		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.						
		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.						
		e. Obtain evidence to show that the smolt supplier has undergone a GHG assessment in compliance with requirements Appendix V-1 at least annually.						
Footnote [141] For the purposes of this standard, GHGs are defined as the six gases listed in the Kyoto Protocol: carbon dioxide (CO <sub>2</sub> ); methane (CH <sub>4</sub> ); nitrous oxide (N <sub>2</sub> O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and Sulphur hexafluoride (SF <sub>6</sub> ).								
Footnote [142] GHG emissions must be recorded using recognized methods, standards and records as outlined in Appendix V.								
Standards related to Principle 5								
8.11	<p><b>Indicator:</b> Evidence of a fish health management plan, approved by the designated veterinarian, for the identification and monitoring of fish diseases and parasites</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):		Compliant		
		a. Obtain a copy of the supplier's fish health management plan for the identification and monitoring of fish disease and parasites.	<p>Forsan: Internal Fish Health Plan (FHP). Plan covers all aspect of relevant diseases and parasite diagnostics and control measures. Approved and signed by veterinarian (fish health manager) dt 26.08.2019 .</p> <p>Ranfjord: Internal Fish Health Plan. Plan covers all aspect of relevant diseases and parasite diagnostics and control measures. Approved and signed by veterinarian (fish health biologist) dt 28.01.2020 .</p> <p>Nordland Akva: Internal Fish Health Plan. Plan covers all aspect of relevant diseases and parasite diagnostics and control measures. Approved and signed by veterinarian dt 19.01.2019 .</p>					
		b. Keep documentary evidence to show that the smolt supplier's health plans were approved by the supplier's designated veterinarian.						

8.12	<p><b>Indicator:</b> Percentage of fish that are vaccinated for selected diseases that are known to present a significant risk in the region and for which an effective vaccine exists [143]</p> <p><b>Requirement:</b> 100%</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Maintain a list of diseases that are known to present a significant risk in the region, developed by farm veterinarian and supported by scientific evidence.</p> <p>b. Maintain a list of diseases for which effective vaccines exist for the region, developed by the farm veterinarian and supported by scientific evidence.</p> <p>c. Obtain from the smolt supplier(s) a declaration detailing the vaccines the fish received.</p> <p>d. Demonstrate, using the lists from 8.12a-c above, that all salmon on the farm received vaccination against all selected diseases known to present a significant risk in the regions for which an effective vaccine exists.</p>	<p>The below is valid for all three suppliers Forsan, Ranfjord and Nordland Akva:</p> <p>a) Fish Health Plans covers all aspect of relevant diseases and parasite diagnostics and control measures. Approved and signed by veterinarian dt 26.08.19/ 28.01.2020/ 19.01.2019. All suppliers use Fishtalk as monitoring system</p> <p>b) In fish health plan and CV type of disease and control monitoring strategies, vaccines/pathogens type/product name detailed</p> <p>c) In smolt CV transferred to sea and Fish Talk with dates and type for smolts for site, 100% vaccination is a legal requirement controlled by NFSA. Examples suppliers from CV's Forsan: Vaccination 03.07.2019 Alpha Ject Micro 6, fish group 19.02.005 Ranfjord: Vaccination 27.02.2019 Alpha Ject Micro 6, fish group 18.06.224 Nordland Akva: Vaccination 12.06.2019 Alpha Ject Micro 6, fish group 18.05.044</p> <p>d) 100% vaccinated according to national legislation. Verified in smolt FHP/ CV and Fishtalk. Verified towards registrations in FHP / CV / Fishtalk.</p>	Compliant		100%
Footnote	[143] The farm's designated veterinarian is responsible for undertaking and providing written documentation of the analysis of the diseases that pose a risk in the region and the vaccines that are effective. The veterinarian shall determine which vaccinations to use and demonstrate to the auditor that this decision is consistent with the analysis.					
8.13	<p><b>Indicator:</b> Percentage of smolt groups [144] tested for select diseases of regional concern prior to entering the grow-out phase on farm</p> <p><b>Requirement:</b> 100%</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p><b>Instruction to Clients for Indicator 8.13-- Testing of Smolt for Select Diseases</b></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 that originate in freshwater and are proven or suspected to occur in seawater (and for which seawater fish-to-fish transmission is a concern).</p> <p>The designated veterinarian <u>to the smolt supplier</u> is required to evaluate, based on scientific criteria and publicly available information, which diseases should be tested for. This analysis shall include an evaluation of whether clinical disease or a pathogen carrier state in fresh water is deemed to have a negative impact on the grow-out phase, thereby disqualifying a smolt group from being transferred. The analysis must be available to the CAB upon request.</p> <p>Note: A "smolt group" is defined as a population that shares disease risk, including environment, husbandry, and host factors that might contribute to sharing disease agents for each group.</p>	<p>a. Obtain from the smolt supplier a list of diseases of regional concern for which smolt should be tested. List shall be supported by scientific analysis as described in the Instruction above.</p> <p>b. Obtain from the smolt supplier(s) a declaration and records confirming that each smolt group received by the farm has been tested for the diseases in the list (8.13a).</p>	<p>The below is valid for all three suppliers Forsan, Ranfjord and Nordland Akva:</p> <p>a) Covered in Fish Health Plan (FHP) per site. Including risk based testing regime, sampling and veterinary visits. Broodstock is included in screening program</p> <p>b) Veterinary visits are performed according to FHP. Smolt group has a health certificate (Fish CV) Screening reports from Patogen analyse seen for 2019 fish groups from all suppliers , tested for ILAV, IPNV-PH. PMCV and PRV pre-stocking. All results negative</p>	Compliant	100%
Footnote	[144] A smolt group is any population that shares disease risk, including environment, husbandry and host factors that might contribute to sharing disease agents for each group. Only diseases that are proven, or suspected, as occurring in seawater (and for which seawater fish-to-fish transmission is a concern) but originating in freshwater should be on the list of diseases tested. The designated veterinarian to the smolt farm is required to evaluate, based on scientific criteria and publicly available information, which diseases should be tested for. This analysis shall include an evaluation of whether clinical disease or a pathogen carrier state in fresh water is deemed to have a negative impact on the grow-out phase, thereby disqualifying a smolt group from being transferred. A written analysis must be available to the certifier on demand.					

8.14	<p><b>Indicator:</b> Detailed information, provided by the designated veterinarian, of all chemicals and therapeutants used during the smolt production cycle, the amounts used (including grams per ton of fish produced), the dates used, which group of fish were treated and against which diseases, proof of proper dosing and all disease and pathogens detected on the site</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Obtain from the smolt supplier(s) a detailed record of all chemical and therapeutant use for the fish sold to the farm that is signed by their veterinarian and includes:</p> <ul style="list-style-type: none"> <li>- name of the veterinarian prescribing treatment;</li> <li>- product name and chemical name;</li> <li>- reason for use (specific disease)</li> <li>- date(s) of treatment;</li> <li>- amount (g) of product used;</li> <li>- dosage;</li> <li>- mt of fish treated;</li> <li>- the WHO classification of antibiotics (also see note under 5.2.8); and</li> <li>- the supplier of the chemical or therapeutant.</li> </ul>	<p>The below is valid for all three suppliers Forsan, Ranfjord and Nordland Akva:</p> <p>All therapeutants used are recorded in Fish CV, and documented in FishTalk according to FHP. Prescriptions are issued and signed by responsible veterinary / FHB/ Vaccines produced by Pharmaq. Therapeutant used and documented per fish group. FHP for all three sites meets standard requirements for the indicator</p>	Compliant		
8.15	<p><b>Indicator:</b> Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [145] in any of the primary salmon producing or importing countries [146]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Provide to the smolt supplier the list (see 5.2.2a) of therapeutants, including antibiotics and chemicals, that are proactively banned for use in food fish for the primary salmon producing and importing countries listed in [146].</p> <p>b. Inform smolt supplier that the treatments on the list cannot be used on fish sold to a farm with ASC certification.</p> <p>c. Compare therapeutant records from smolt supplier (8.14) to the list (8.15a) and confirm that no therapeutants appearing on the list (8.15a) were used on the smolt purchased by the farm.</p>	<p>The below is valid for all three suppliers Forsan, Ranfjord and Nordland Akva:</p> <p>a) Instruction provided to all smolt suppliers. Reference made to "Forskrift om grenseverdier for legemidler i næringsmidler" "Norwegian regulation/NFSA. Substances banned in marked " in FHP " oversikt MRL for EU, USA, Japan, Kina, Australia og Russia" last revised in March 2018. Statement dt.18.01.18 - "Medicines and antibiotics allowed by Cermaq Norway". Approved and used substances are referred in FHP. Doc. dated 18.01.2018 with overview of banned substances. List for USA and Japan only permitted substances</p> <p>b) Cermaq has informed all suppliers related to requirements in principle 8.15. Information is shared by fish health department, and suppliers have confirmed compliance in statements and FHP. Forsan is internal and follows Cermaq system. Ranfjord in statement signed 04.02.2020, and Nordland Akva in FHP dated 23.01.2018 part 5.1 .</p> <p>c) Therapeutant records (vaccines, anesthetics and antiparasitic treatment) in Fish CV and Fish Talk - type and producer and batch. No therapeutants on list used. No antibiotics used suppliers.</p>	Compliant		
Footnote	[145] "Banned" means proactively prohibited by a government entity because of concerns around the substance.					
Footnote	[146] For purposes of this standard, those countries are Norway, the UK, Canada, Chile, the United States, Japan and France.					
8.16	<p><b>Indicator:</b> Number of treatments of antibiotics over the most recent production cycle</p> <p><b>Requirement:</b> ≤ 3</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Obtain from the smolt supplier records of all treatments of antibiotics (see 8.14a).</p> <p>b. Calculate the total number of treatments of antibiotics from their most recent production cycle.</p>	<p>The below is valid for all three suppliers Forsan, Ranfjord and Nordland Akva:</p> <p>No AB used. Seen fish CV with all treatments identified.</p>	Compliant		0

8.17	<p><b>Indicator:</b> Allowance for use of antibiotics listed as critically important for human medicine by the WHO [147]</p> <p><b>Requirement:</b> None [148]</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Provide to smolt supplier(s) a current version of the WHO list of antimicrobials critically and highly important for human health [147].</p> <p>b. Inform smolt supplier that the antibiotics on the WHO list (8.17a) cannot be used on fish sold to a farm with ASC certification.</p> <p>c. Compare smolt supplier's records for antibiotic usage (8.14, 8.15a) with the WHO list (8.17a) to confirm that no antibiotics listed as critically important for human medicine by the WHO were used on fish purchased by the farm.</p>	<p>The below is valid for all three suppliers Forsan, Ranfjord and Nordland Akva: All smolt supplier are instructed to comply with WHO list. Fish Health Plan, approved and signed by veterinarians covers all aspect of relevant diseases and parasite diagnostics and control measures. List of allowed and banned substances - against WHO critical list included in the plan. No antibiotics used. Fish CVs with all treatments were verified.</p>	Compliant		
Footnote	[147] The 3rd edition of the WHO list of critically and highly important antimicrobials was released in 2009 and is available at: <a href="http://www.who.int/foodborne_disease/resistance/CIA_3.pdf">http://www.who.int/foodborne_disease/resistance/CIA_3.pdf</a> .					
Footnote	[148] If the antibiotic treatment is applied to only a portion of the pens on a farm site, fish from pens that did not receive treatment are still eligible for certification.					
8.18	<p><b>Indicator:</b> Evidence of compliance [149] with the OIE Aquatic Animal Health Code [150]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>Note: see instructions for Indicator 5.4.3 regarding evidence of compliance with the OIE Aquatic Animal Health Code.</p> <p>a. Provide the smolt supplier with a current version of the OIE Aquatic Animal Health Code (or inform the supplier how to access it from the internet).</p> <p>b. Inform the supplier that an ASC certified farm can only source smolt from a facility with policies and procedures that ensure that its smolt production practices are compliant with the OIE Aquatic Animal Health Code.</p> <p>c. Obtain a declaration from the supplier stating their intent to comply with the OIE code and copies of the smolt suppliers policies and procedures that are relevant to demonstrate compliance with the OIE Aquatic Animal Health Code.</p>	<p>a, b) All smolt suppliers are instructed to operated in accordance with the Cermaq policy and procedures concerning compliance with the OIE Aquatic Animal Health Code. See Cermaq Statement dated 26.08.2019 on ASC requirements regarding OIE Aquatic Animal Health Code for smolt deliveries. The statement is signed by a designated veterinarian.</p> <p>c) Forsan: Fish Health Plan covers all aspect of relevant disease and parasite diagnostics and control measures, and meet OIE Aquatic Animal Health Code requirements. External veterinary service Marin Helse. Approved and signed by veterinarian dt 26.08.2019</p> <p>Ranfjord: Fish Health Plan covers all aspect of relevant disease and parasite diagnostics and control measures, and meet OIE Aquatic Animal Health Code requirements.. External veterinary service Marin Helse. Approved and signed by veterinarian dt 28.01.2020</p> <p>Nordland Akva: Fish Health Plan covers all aspect of relevant diseases and parasite diagnostics and control measures, and meet OIE Aquatic Animal Health Code requirements.. External veterinary service Marin Helse. Approved and signed by veterinarian dt 19.01.2019</p>	Compliant		
Footnote	[149] Compliance is defined as farm practices consistent with the intentions of the Code, to be further outlined in auditing guidance. For purposes of this standard, this includes an aggressive response to detection of an exotic OIE-notifiable disease on the farm, which includes depopulating the infected site and implementation of quarantine zones in accordance with guidelines from OIE for the specific pathogen. Exotic signifies not previously found in the area or had been fully eradicated (area declared free of the pathogen).					
Footnote	[150] OIE 2011. Aquatic Animal Health Code. <a href="http://www.oie.int/index.php?id=171">http://www.oie.int/index.php?id=171</a> .					
Standards related to Principle 6						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
8.19	<p><b>Indicator:</b> Evidence of company-level policies and procedures in line with the labor standards under 6.1 to 6.11</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Obtain copies of smolt supplier's company-level policies and procedures and a declaration of compliance with the labor standards under 6.1 to 6.11.</p> <p>b. Review the documentation and declaration from 8.19a to verify that smolt supplier's policies and procedures are in compliance with the requirements of labor standards under 6.1 to 6.11.</p>	<p>Forsan: Is an internal smolt supplier. Cermaq system applies as described for site in 6.1 - 6.11</p> <p>Ranfjord: Declaration of compliance covering requirements according to 6.1 - 6.11 issued and signed by senior management 04.02.2020</p> <p>Nordland Akva: Declaration of compliance covering requirements according to 6.1 - 6.11 issued and signed by senior management 12.04.2018</p>	Compliant		



Standards related to Principle 7						
Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):				
8.20	<b>Indicator:</b> Evidence of regular consultation and engagement with community representatives and organizations  <b>Requirement:</b> Yes  <b>Applicability:</b> All Smolt Producers	<b>Instruction to Clients for Indicator 8.20 - Consultation and Engagement with Community Representatives</b>  Farms must comply with Indicator 7.1.1 which requires that farms engage in regular consultation and engagement with community representatives and organizations. Under Indicator 8.20, farms must show how each of their smolt suppliers complies with an equivalent requirement. Farms are obligated to maintain evidence that is sufficient to show their suppliers remain in full compliance. Evidence shall be documentary (e.g. meeting agenda, minutes, report) and will substantiate the following: <ul style="list-style-type: none"> <li>- the smolt supplier engaged in "regular" consultations with the local community at least twice every year (bi-annually);</li> <li>- the supplier's consultations were effective (e.g. using participatory Social Impact Assessment (pSIA) or similar methods); and</li> <li>- the supplier's consultations included participation by elected representatives from the local community who were asked to contribute to the agenda.</li> </ul>				
		a. From each smolt supplier obtain documentary evidence of consultations and engagement with the community.	Forsan: Reviewed invitation to Stakeholder meeting for Cermaq activities in Steigen and Hamarøy area 19.02.2019 (includes Forsan). Agenda: Presentation of Cermaq, production sites and ASC. Neighbors and 27 stakeholders invited. 2 stakeholders met. Meeting for Forsan, Dyping, Holmvåg and Nordlaks 4.10.2018, 12 stakeholders participated. List of stakeholders seen and minutes from the meetings. VR 225 applies  Ranfjord: Reviewed invitation and MoM from Stakeholder meeting 07.02.2020. Agenda: Presentation of company, production and sustainability. 3 externals met. Previous stakeholders meeting was organized 28.12.16 and 25.04.18. The minutes of meetings and presentation material are available. VR 225 applies  Nordland Akva: Reviewed invitation to "Open day" event 8. September 2018, and article from local newspaper. Presentation of company, and their activity. Many visitors. No documentation on stakeholder meetings available after 2018.	Minor	No evidence of stakeholder communication for supplier Nordland Akva since September 2018. As the 2 other supplier are compliant finding is considered minor.  <b>With reference to explanation and description provided by organisation: As supplier has not been used after the supply to Kråkevik, and given the time between receive of fish and time of audit, the explanation is accepted as sufficient to close the NC. It is expected that the requirements related to stakeholder communication is controlled before supplier is used again. NC closed. Lead auditor Lars Erik Flatøy 06.05.2020</b>	
		b. Review documentation from 8.20a to verify that the smolt supplier's consultations and community engagement complied with requirements.				
8.21	<b>Indicator:</b> Evidence of a policy for the presentation, treatment and resolution of complaints by community stakeholders and organizations  <b>Requirement:</b> Yes  <b>Applicability:</b> 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.	Forsan: According to Cermaq system - "Procedure handling of external complaints"  Ranfjord: Procedure "Reklamasjon og klager" dated 09.01.2020 reviewed - OK  Nordland Akva: Procedure "Håndtering av klager fra naboer" doc 1010, dated 28.02.2017 reviewed - OK	Compliant		

8.22	<p><b>Indicator:</b> Where relevant, evidence that indigenous groups were consulted as required by relevant local and/or national laws and regulations</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Obtain documentary evidence showing that the smolt supplier does or does not operate in an indigenous territory (to include farms that operate in proximity to indigenous or aboriginal people (see Indicator 7.2.1). If not then the requirements of 8.22 do not apply.</p> <p>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.</p>	<p>Forsan: No indigenous groups in the area with specific indigenous rights</p> <p>Ranfjord: Declaration from supplier dated 04.02.2020 - No indigenous groups in the area with specific indigenous rights</p> <p>Nordland Akva: No indigenous groups in the area with specific indigenous rights</p>	Compliant		
8.23	<p><b>Indicator:</b> Where relevant, evidence that the farm has undertaken proactive consultation with indigenous communities</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. See results of 8.22a (above) to determine whether the requirements of 8.23 apply to the smolt supplier.</p> <p>b. Where relevant, obtain documentary evidence that smolt suppliers undertake proactive consultations with indigenous communities.</p>	<p>Forsan: No indigenous groups in the area with specific indigenous rights</p> <p>Ranfjord: Declaration from supplier dated 04.02.2020 - No indigenous groups in the area with specific indigenous rights</p> <p>Nordland Akva: No indigenous groups in the area with specific indigenous rights</p>	Compliant		
<p align="center"><b>ADDITIONAL REQUIREMENTS FOR OPEN (NET-PEN) PRODUCTION OF SMOLT</b></p> <p align="center">In addition to the requirements above, if the smolt is produced in an open system, evidence shall be provided that the following are met:</p>						
8.24	<p><b>Indicator:</b> Allowance for stocking smolts produced in cage-culture</p> <p><b>Requirement:</b> Permitted only if supplying farms are 1) operated in a region where indigenous salmonids are present of the same species being cultivated and 2) the farm is certified to the</p>	<p>a. Obtain documentary evidence that the smolt suppliers operates in a region where indigenous salmonids are present of the same species being cultivated.</p> <p>b. Obtain documentary evidence that the smolt supplier is certified to the ASC Freshwater trout Standard</p>	<p>N/A all sites are semi-closed with discharge to seawater</p>	N/A		

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	<b>Indicator:</b> Water quality monitoring matrix completed and submitted to ASC (see Appendix VIII-2)  <b>Requirement:</b> Yes [155]  <b>Applicability:</b> All Smolt Producers Using Semi-Closed or Closed Production Systems	a. Obtain records from smolt suppliers showing that water quality monitoring was conducted at least quarterly (i.e. once every 3 months) over the last 12 months.  b. Obtain water quality monitoring matrix from smolt suppliers and review for completeness.  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.	N/A all sites are semi-closed with discharge to seawater	N/A		
Footnote	[155] See Appendix VI for transparency requirements for 8.25.					
8.26	<b>Indicator:</b> Minimum oxygen saturation in the outflow (methodology in Appendix VIII-2)  <b>Requirement:</b> 60% [156,157]  <b>Applicability:</b> All Smolt Producers Using Semi-Closed or Closed Production Systems	a. Obtain the water quality monitoring matrix from each smolt supplier (see 8.32b).  b. Review the results (8.33a) for percentage dissolved oxygen saturation in the effluent to confirm that no measurements fell below 60% saturation.  c. If a single DO reading (as reported in 8.33a) fell below 60%, obtain evidence that the smolt supplier performed daily continuous monitoring with an electronic probe and recorder for at least a week demonstrating a minimum 60% saturation at all times (Ap	N/A all sites are semi-closed with discharge to seawater	N/A		
Footnote	[156] A single oxygen reading below 60 percent would require daily continuous monitoring with an electronic probe and recorder for at least a week demonstrating a minimum 60 percent saturation at all times.					
Footnote	[157] See Appendix VI for transparency requirements for 8.33.					
8.27	<b>Indicator:</b> Macro-invertebrate surveys downstream from the farm's effluent discharge demonstrate benthic health that is similar or better than surveys upstream from the discharge (methodology in Appendix VIII-3)  <b>Requirement:</b> Yes  <b>Applicability:</b> All Smolt Producers Using Semi-Closed or Closed Production Systems	a. Obtain documentation from smolt supplier(s) showing the results of macro-invertebrate surveys.  b. Review supplier documents (8.34a) to confirm that the surveys followed the prescribed methodology (Appendix VIII-3).  c. Review supplier documents (8.34a) to confirm the survey results show that benthic health is similar to or better than upstream of the supplier's discharge.	N/A all sites are semi-closed with discharge to seawater	N/A		

8.28	<b>Indicator:</b> Evidence of implementation of biosolids (sludge) Best Management Practices (BMPs) (Appendix VIII-4)  <b>Requirement:</b> Yes  <b>Applicability:</b> All Smolt Producers Using Semi-Closed or Closed Production Systems	a. Maintain a copy of smolt supplier's biosolids (sludge) management plan and confirm that the plan addresses all requirements in Appendix VIII-2.	N/A all sites are semi-closed with discharge to seawater	N/A		
		b. Obtain from smolt suppliers a process flow diagram (detailed in Appendix VIII-2) showing how the farm is dealing with biosolids responsibly.				
		c. Obtain a declaration from smolt supplier stating that no biosolids were discharged into natural water bodies in the past 12 months.				
		d. Obtain records from smolt suppliers showing monitoring of biosolid (sludge) cleaning maintenance, and disposal as described in Appendix VIII-2.				

# 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 (R)	Root cause (by client)	Corrective/ preventive actions proposed by UoC and accepted by CAB	Deadline for NC close-out	Evaluation by CAB (including evidence)	Actual date of close-out	Date request for delay received	Justification for delay	Next deadline	Request evaluation by CAB	Date request approved		
	1.1.1	Minor	Lack of this sign is a breach on provisions in the animal by-product regulation <a href="https://lovdata.no/dokument/SF/forskrift/2016-09-14-1064">https://lovdata.no/dokument/SF/forskrift/2016-09-14-1064</a> and therefore not in compliance with all applicable local and national legal requirements and regulations regarding aquaculture land and water use. Failure does not meet the definition of a major Non-conformity and is not likely to result in the breakdown of a system to meet an ASC requirement.  Evidence seen as photo of sign attached to ensilage tank on barge. Corrective action accepted. NC closed. Lead auditor Lars Erik Flatøy, 06.05.2020	A) Cermaq Norway has electronic copies of laws, regulations and requirements with references to Lovdata with updates and electronic links in Intellex system. Covered by internal procedures in QMS. Strict monitored by relevant authorities on these issues.  B) Following approval licenses and approval held by site - Reviewed during audit: Aquaculture license site 10614 Kråkevik in Alta kommune, Finnmark issued by Finnmark Fylkeskommune by approval of change of area for the site. Issued 06.04.2017, reference 201602384-23. MTB allowed 3480 tons. Approval includes sub approvals form Mattilsynet, Kystverket, Fylkesmannen, Alta Kommune, Fiskeridirektoratet and Sametinget for the change of area. Permits included in site (ref <a href="http://www.barentswatch.com">www.barentswatch.com</a> and Aquaculture register <a href="https://register.fiskeridir.no/akvareg">https://register.fiskeridir.no/akvareg</a> ): F-A-34/41/42/54/61 and F-M-21  Approved Production plan 2020 Cermaq sites Finnmark including 10614 Kråkevik by Fiskeridirektoratet, ref 19/14131, dated 20.11.2019  Discharge permit for site 10614 Kråkevik, issued by Fylkesmannen in Finnmark 16.01.2012. Approved production volume is 3480 tons MTB  Site Technical certificate: Certificate APN-294 site 10614 Kråkevik issued 22.09.2016, 5 years validity. Issued by Akvaplan Niva according to NYTEK-regulation  C) Following inspection from officials - Reviewed during audit: Mattilsynet inspection report site Kråkevik doc ref 2019/273800, dated 20.12.2019. Inspection of site Kråkevik 18.12.2019. Mattilsynet stated site to be in compliance with regulations. No NC's issued. Mattilsynet inspection report site Kråkevik doc ref 2019/087038, dated 10.04.2019. Inspection of site Kråkevik 10.04.2019. 2 NC's issued, related to sorting of cleaner fish prior to harvest and to compliance reviews related to aquaculture regulations. Both NC's confirmed closed 15.11.2019 (within time frame) in letter from Mattilsynet 12.02.2020.  D) Site does not conflict with national preservation areas - Verified through licenses (ref point A) and Norwegian government registers: Site Kråkevik status on Government maps and web pages: Miljødirektoratet: <a href="http://www.naturbase.no">www.naturbase.no</a> : No conflict with protected areas or preservation areas. ASC GIS Online farm Mapping Tool - Kråkevik GIS 23.30610335124246,70.26270878308861. No conflict with preservation areas  NC: Interview with employees verified: Lack of sign" KAT 2 Dødfisk ensilage on dead fish ensilage tank onboard barge"	01/04/2020	Closed		Site manager was not aware of the requirement. Not sufficient communication.	As a corrective action, signs are now in place (see separate sheet for proof). As a preventive action, the information will be known to everyone in the company through the quarterly qualityreport going out week 19.	13.05.2020	Evidence seen as photo of sign attached to ensilage tank on barge. Corrective action accepted. NC closed. Lead auditor Lars Erik Flatøy, 06.05.2020	06.05.2020							
	2.1.3	Minor	<2 Highly abundant taxa on both sampling stations (C1 and C5) within AZE. Ref: C-survey report Akvaplan Niva Report 60720.02, dated 05.04.2019. NC raised is Minor, as site is classified as class II Good, overall  Corrective action as described in reply from organisation is accepted as sufficient to close NC. Result from new C-survey to be reviewed at next audit. NC closed. Lead auditor Lars Erik Flatøy 06.05.2020	A) Ref 2.1.1 A) and D). No exemptions  B) Ref 2.1.1 H) and C-survey report Akvaplan Niva Report 60720.02, dated 05.04.2019, part 7 attachment 1, 3 and 4 includes detailed description of sampling, methods, classification and analysis.  C) <2 Highly abundant taxa on both sampling stations (C1 and C5) within AZE  D) Ref C-survey report Akvaplan Niva Report 60720.02, dated 05.04.2019, and 2.1.2 H)  E) Data submitted to ASC by email 13.03.2020. Auditor was copied on email	01/04/2020	Closed		It may be due to production load, but it can also be due natural variations.	We have made an action plan for the next generation: Prolonging the following period and we wish to only have input of smolt from the same batch to be able to abbreviate the production cycle and therefore the period of input of production load. We will also evaluate the next samples and consider if we need to change the sites configuration before the next generation.	13.05.2020	Corrective action as described in reply from organisation is accepted as sufficient to close NC. Result from new C-survey to be reviewed at next audit. NC closed. Lead auditor Lars Erik Flatøy 06.05.2020	06.05.2020							
	8.20	Minor	No evidence of stakeholder communication for supplier Nordland Akva since September 2018. As the 2 other supplier are compliant finding is considered minor.  With reference to explanation and description provided by organisation: As supplier has not been used after the supply to Kråkevik, and given the time between receive of fish and time of audit, the explanation is accepted as sufficient to close the NC. It is expected that the requirements related to stakeholder communication is controlled before supplier is used again. NC closed. Lead auditor Lars Erik Flatøy 06.05.2020	Forsan: Reviewed invitation to Stakeholder meeting for Cermaq activities in Steigen and Hamarøy area 19.02.2019 (includes Forsan). Agenda: Presentation of Cermaq, production sites and ASC. Neighbors and 27 stakeholders invited. 2 stakeholders met. Meeting for Forsan, Dyping, Holmvåg and Nordlaks 4.10.2018, 12 stakeholders participated. List of stakeholders seen and minutes from the meetings. VR 225 applies  Ranfjord: Reviewed invitation and MoM from Stakeholder meeting 07.02.2020. Agenda: Presentation of company, production and sustainability. 3 externals met. Previous stakeholders meeting was organized 28.12.16 and 25.04.18. The minutes of meetings and presentation material are available. VR 225 applies  Nordland Akva: Reviewed invitation to "Open day" event 8. September 2018, and article from local newspaper. Presentation of company, and their activity. Many visitors. No documentation on stakeholder meetings available after 2018.	31/03/2020	Closed	VR-225		I do not consider this to be a valid non-conformity since Cermaq recieved smolt from Nordland Akva in spring/summer 2019. That means that as long as the fish was at the site (Nordland Akva smolt facility), the previous stakeholder meeting was valid. Cermaq has not bought any fish from this facility since.	13.05.2020	With reference to explanation and description provided by organisation: As supplier has not been used after the supply to Kråkevik, and given the time between receive of fish and time of audit, the explanation is accepted as sufficient to close the NC. It is expected that the requirements related to stakeholder communication is controlled before supplier is used again. NC closed. Lead auditor Lars Erik Flatøy 06.05.2020	06.05.2020							

## ASC Audit Report - Traceability

10	Traceability Factor	Description of risk factor if present.	Describe any traceability, segregation, or other systems in place to manage the risk.
10.1	The possibility of mixing or substitution of certified and non-certified product, including product of the same or similar appearance or species, produced within the same operation.	No risk of substitution of certified with non-certified product within the unit of certification as all salmon in the farm is within the scope of the ASC Salmon Standard audit.	N/A
10.2	The possibility of mixing or substitution of certified and non-certified product, including product of the same or similar appearance or species, present during production, harvest, transport, storage, or processing activities.	No risk of substitution of certified with non-certified product within the unit of certification as all salmon in the farm is within the scope of the ASC Salmon Standard audit.	Transports are always identifiable on production unit level (cage). Transport from sea farm to the slaughterhouse at the time, only.
10.3	The possibility of subcontractors being used to handle, transport, store, or process certified products.	Subcontractors are used in the transshipment of salmon from site to waiting cage/harvest plant.	Only approved wellboats is used during transshipments of salmon between the site and waiting cages/harvest plant. Biosecurity legislation and implemented QMS management system and procedures at the site and within the company prevent the wellboats from visiting/ harvesting from other salmon farms/sites. The possibility for mixture of salmon in waiting 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. There are slaughtered fish from only one waiting cage at a time in the harvest/processing plant Transports are always identifiable on production unit level (cage). All information is kept both in electronic system FishTalk and Intellex in hard copies.

10.4	Any other opportunities where certified product could potentially be mixed, substituted, or mislabelled with non-certified product before the point where product enters the chain of custody.	No other possibility for mixing products.	N/A
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	Owned by client	Subcontracted by client
10.4.a	Total number of sites owned/subcontracted by client producing the same species that is included in the scope of certification	33
	Number of sites included in the unit of certification	1

	Site name(s)	Reason(s)
10.4.b	Site(s) within UoC that has product to be excluded from entering the chain of custody	0

10.5	Detail description of the flow of certified product within the operation and the associated traceability system which allows product to be traced from final sale back to the unit of certification	<p>The company has a robust and well implemented quality system, which covers the whole organization from smolt to finished slaughtered fish. The company is certified according to GLOBALG.A.P in the whole production chain.</p> <p>All stages of fish live cycle within the scope of this certification standard are traceable. Documents describe a satisfactory control with incoming products, from own freshwater sites, and corresponding documentation of production site, suppliers lists and reception control, both in harvesting and processing.</p> <p>Digital information is handled in Fish Talk for all freshwater stages and on-growing phase in seawater. Subsequent harvest, processing and sales are handled in Innova/Maritech system. It comprises sufficient information of traceability from Broodstock and ova, via smolts to harvestable fish, purchases, invoices and suppliers registers.</p> <p>The harvest plant is; Cermaq Norway Rypefjord, Havneveien 6, 9600 Hammerfest, Norway. ASC-C-00687, Exp. date 2021-06-04 . Ref. to <a href="http://www.asc-aqua.org">www.asc-aqua.org</a> where updated information can be found.</p>
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10.6 **Traceability Determination:**

10.6.1 The traceability and segregation systems in the operation are sufficient to ensure all products identified and sold as certified by the operation originate from the unit of certification, or	The traceability and segregation system is ASC compliant.
10.6.2 The traceability and segregation systems are not sufficient and a separate chain of custody certification is required for the operation before products can be sold as ASC-certified or can be eligible to carry the ASC logo.	The traceability and segregation system is ASC compliant.
10.6.3 The point from which chain of custody is required to begin	From the point where the fish is harvested at the cages. During transport from the cages to the slaughterhouse the fish will be covered by the slaughterhouse CoC certification.
10.6.4 If a separate chain of custody certificate is required for the unit of certification	No

**For Multi-site clients**



## ASC Audit Report - Closing

### 12 Evaluation Results

12.1 A report of the results of the audit of the operation against the specific elements in the standard and guidance documents

The evaluation of the company's compliance to the requirements in the ASC Salmon Standard and all references and findings is described in detail in the report section II Audit template and section IV Audit Report Closing.

Most of the principles where full compliance, however, 3 minor NCs were found on indicators 1.1.1, 2.1.3 and 8.20

VRs used during audit:

- VR nr.39 approved 15.09.2014 by ASC on phosphorus release from smolt producer.
- Q&A97\_Salmon\_v1.3\_5.2.6 Weighted Number of Medicinal Treatments (WRTM) values for EL and GL for different regions
- VR nr. 136\_Salmon\_V1.0\_3.1.6, 3.1.7 Monitoring wild salmon by farms
- VR nr.179 approved 24.08.2016 by ASC for audit reports in local language.
- VR nr.225 approved 23.04.2018 by ASC for indicator 7.1.1, reducing stakeholders / community meetings in-person from bi-annually to once every year.
- VR227\_Salmon\_v1.0\_3.1.7 New sea lice limit 0.2 in sensitive periods

VR list and updated documentation for VR can be found on the ASC website: <http://variance-requests.asc-aqua.org/>.

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

Site Kråkevik has the capability to meet the ASC salmon standard.

123 In cases where BEIA or PSIA is available, it shall be added in full to the audit report. IF these documents are not in English, then a synopsis in English shall be added to the report.

NA

### 13 Decision

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

Yes

13.2 The Eligibility Date (if applicable)

13.3 Is a separate CoC certificate required for the producer? (yes/no)

No

13.4 If a certificate has been issued this section shall include:

13.4.1 The date of issue and date of expiry of the certificate.

Issue date: 30-06-2020  
Expiry date: 29-06-2023

13.4.2 The scope of the certificate

Production of Atlantic salmon (Salmo salar).

<p>13.4.3 Instructions to stakeholders that any complaints or objections to the CAB decision are to be subject to the CAB's complaints procedure. This section shall include information on where to review the procedure and where further information on complaints can be found.</p>	<p>Stakeholders are welcome to contact Bureau Veritas on E-mail: <a href="mailto:asc.farm@dk.bureauveritas.com">asc.farm@dk.bureauveritas.com</a>. Information on Bureau Veritas complaints procedure is available on <a href="http://www.bureauveritas.dk">www.bureauveritas.dk</a>.</p>
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## 14 Surveillance

14.1 Next planned Surveillance	
14.1.1 Planned date	March 2021
14.1.2 Planned site	Kråkevik
14.2 Next audit type	
14.2.1 Surveillance 1	X
14.2.2 Surveillance 2	
14.2.3	
Re-certification	
14.2.4 Other (specify type)	

# Internal Auditors Requirements

Annex B - Table D - Internal auditors qualifications and competencies

Items denoted with (\*) are required when the training is made available by the ASC

Req.#	Requirement	Evidence	Met	Unmet
<b>For all internal auditors</b>				
B45	Auditor training	* Completed the ASC training for new requirements as specified by the ASC within the deadlines set by ASC		
		Undertake additional training on changes to legislation, specific standards, codes or conventions as appropriate		
B60	Work experience	The individual shall have experience relevant to the business being audited.		
B51	Interviewing	Be experienced in different types of interviewing techniques		
B52	Language	Fluent speaker and reader of the language(s) used by managers, administrators and workers or accompanied by an independent interpreter		
<b>For internal audit team leader</b>				
B42	Audit/inspection Experience	At least two satisfactory witness audits as an acting audit (team) leader, shadowed by and under the supervision of a competent internal auditor		
<b>For auditing multi-site requirements (IMS)</b>				
B44	Audit/inspection training	Successfully completed an Internal Assessor training course based on ISO 19011 principles that have a minimum duration of sixteen (16) hours		
B45	Auditor training	successfully completed either an ISO management system internal auditor course (ISO 9001/14001/22000/27000/OHSAS/etc.) provided by a certification body or a professional auditor training institution		
		* Successfully passed the 'ASC Farm Traceability' online training module		
		Had an audit peer witnessed by a qualified ASC internal auditor no less than once in each two (2) year period		

B54	Management systems and reference documents	Have a general knowledge of management systems standards (such as ISO 9001), applicable procedures or other management systems documents used as audit criteria			
<b>For auditing environmental requirements</b>					
B59	Technical language	Have knowledge of the technical language employed in aquaculture and processing of aquaculture products			
<b>For auditing social requirements</b>					
B45	Auditor training	Successfully completed a training course for auditing social requirements provided by a certification body or professional training institution specialised in social auditing			

### List of sites of multi-site unit of certification

Name of Certificate Holder	
Certificate Number	
Date of certificate issuance	
Date of certificate expiry	

[illegible]