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**	28-10-2019/29-10-2019/ 26-11-2019
PDF 1.3	**CAB Contact Person**	
PDF 1.3.1	Name of Contact Person	Irene Watten
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
PDF 1.3.5	Phone number	0045 7731 1100
PDF 1.3.6	Other	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	Horsvågen 10518
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	silje.ramsvatn@cermaq.com
PFD 1.4.6	Phone number	0047 41148216
PDF 1.4.7	Other	www.cermaq.com

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/ fallowing /in harvest)
Horsvågen 10518	N: 68.021135 E: 15.302012	Salmon (Salmo Salar) In scope	Owned	10-12-2019 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 1.2	Salmon (Salmo Salar)	Yes	ASC Salmon Standard	Version 1.2 - March 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
Kystverket	Authorities	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
Nordland Fylkeskommune	Local Municipality	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Hamarøy kommune	Local Municipality	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Fylkesmannen i Nordland	regional office	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Nordland Fylkes Fiskarlag	Local Fishermens` Association	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit
Steigen Fiskarlag v Jon Vegard Strømsnes	Local Fishermens` Association	Invitation to participate in the audit and submit input.	The week before audit	Sending e-mail before Audit

Steigen Jeger og fisk v Marius Falck Folland	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:	10-12-2019
PDF 1.9.3	Onsite Audit(s):	10-12-2019
PDF 1.9.4	Determination/Decision:	A certificate has been issued on the basis of the outcome of the audit.

PDF 1.10 Audit Team

	Column1	Name	ASC Registration
PDF 1.10.1	Lead Auditor	Irene Watten	
PDF 1.10.2	Team member	Mohammad Jasour	
	Team member	Trygve Helle	
PDF 1.10.3	Social Auditor	Irene Watten	

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 reproducable 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 reproducable 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]	10-12-2019 Cermaq Horsvågen ASC Initial Audit Final Report
1.3 CAB name	Bureau Veritas Certification Denmark A/S
1.4 Name of Lead Auditor	Irene Watten
1.5 Names and positions of report authors and reviewers	Report Author: Mohammad Jasour, ASC Lead Auditor. Reviewer: Sølvi Skare
1.6 Client's Contact person: Name and Title	Silje Ramsvatn, Sustainability manager
1.7 Date	Date of audit 10-11-2019. Date of report writing: 15-11-2019

2 Table of Contents

3 Glossary

Terms and abbreviations that are specific to this audit report and that are not otherwise defined in the ASC glossary	MOM-B and MOM-C: Surveys of benthic environment at or near farm, according to NS 9410 (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. 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.

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*)	This audit covers all the principles and criteria in ASC salmon standard, Version 1.2 - March 2019. The audit include interview of the farm workers and review of documentation. Audit covering principle 6 was performed by review of relevant documentation, interviews with the quality management and confidential interviews with the employees. The interview was performed without interruption from management. 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 Horsvågen seafarm, site number 10518. Anevila is an ongrowing farm for Atlantic Salmon from smolt and until the salmon is ready for slaughtering. The farm is located , Økssundet waterbody in Hamarøy and Steigen municipality in Nordland County. The production system is based on 8 cages 160 m. The MTB is 2340 tons.
4.3	Type of unit of certification (*select only one type of unit of certification in the list*)	Single farm
4.4	Type of audit (*select all the types of audit that apply in the list)*	Initial

4.4.1	Number of sites included in the unit of certification	Owned by client	Subcontracted by client
	Initial audit - mm/yyyy	1	
	Surveillance audit 1 - mm/ yyyy		
	Surveillance audit 2 - mm/ yyyy		
	Recertification audit - mm/ yyyy		

4.5	A summary of the major findings	One minor NC was found on indicator 2.2.6
4.6	The Audit determination	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 unit of certification has the capability to consistently meet the objectives of the relevant ASC salmon standard - version 1.2

5 CAB Contact Information

5.1	CAB Name	Bureau Veritas Certification Certification Denmark A/S
5.2	CAB Mailing Address	Oldenborggade 25-31, 7000 Fredericia, Denmark
5.3	Email Address	asc.farm@dk.bureaueveritas.dk
5.4	Other Contact Information	www.bureaueveritas.dk

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.	
6.2	A description of the unit of certification (*for intial audit)* / changes, if any (*for surveillance and recertification audits)*	Horsvågen is a conventional floating cage salmon farm. The 8 production cages are circular floating plastic rings with the dimension 160 m circumference, with pointed nets. Central on the farm is a feed barge, with centralized feeding system and visual/camera control of feeding. All installations are certified after "NS-9415 NYTEK" regulations standard.Register, details and maps of location for the site available at: http://www.fiskeridir.no/register/akvareg/
6.3	Other certifications currently held by the unit of certification	GlobalGAP
6.4	Other certification(s) obtained by the UoC before this audit	
6.5	Estimated annual production volumes of the unit of certification of the current year	5000 mt
6.6	Actual annual production volumes of the unit of certification of the previous year *(mandatory for surveillance and recertification audits)*	2018: 5334 mt
6.7	Production system(s) employed within the unit of certification *(select one or more in the list)*	Floating net-pens/cages

6.8	Number of employees working at the unit of certification (*see notes in comment to this cell*)	10 permanent employees plus site manager.
6.9	Size, and/or number of ponds, pens (if multi site, per site)	8 cages with the dimension 160 m circumference

7 Scope

7.1	The Standard(s) against which the audit was conducted, including version number	ASC Salmon Standard, version 1.2 March 2019
7.2	The species produced at the applicant farm (*in English and Latin names)*	Atlantic Salmon (Salmo salar)
7.3	A description of the scope of the audit including a description of whether the unit of certification covers all production or harvest areas (i.e. ponds) managed by the operation or located at the included sites, or whether only a sub-set of these are included in the unit of certification. If only a sub-set of production or harvest areas are included in the unit of certification these shall be clearly named.	The audit was conducted as document reviews (digital and hard-copy information) as well as interviews conducted with relevant staff of the site Horsvågen in which Salmo salar is grown. Demonstrations of equipment and processes took place, relevant to the scope of the audit, according to the ASC Salmon Standard v1.2. No sub-sites are operated by the farm and the complete farm is included in the scope of certification. Harvest was not witnessed during the audit. Live fish for harvest is transported to harvest plants by subcontracted wellboates (se 7.4 below for details).

7.4	The names and addresses of any storage, processing, or distribution sites included in the operation (including subcontracted operations) that will potentially be handling certified products, up until the point where product enters further chain of custody.	NA.
7.5	Description of the receiving water body(ies).	The farm is located in municipaity of Hamarøy, in Nordland country. Sites receiving water-body is Økssundet. Regional water-body authority is Nordland 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 not defined in public documentation. Details @ www.vannportalen.no The site is under voluntary ABM system. There is other salmon farming activity in the area, including nearby farms. There are natural wild salmon populations in the area. Overview of salmon watercourses in the area are available in map tools from the Environment Agency / Salmon Registry: http://lakseregister.fylkesmannen.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.	Audit date: 10-12-2019 ASC lead auditor: Mohammad Jasour and Irene Watten ASC auditor: Trygve Helle Reporting date: 15-12-2019 Reviewer: Sølvi Skare Reviewing date:14-02-2020/16-02-2020 Certification decision: 12-03-2020 - Annette Kaalund

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		2.2.6.	The NC
Surveillance audit 1 - mm/ yyyy			
Surveillance audit 2 - mm/ yyyy			
Recertification audit - mm/ yyyy			
Unannounced audit - mm/ yyyy			
NC close-out audit - mm/ yyyyy			
Scope extention audit mm/ yyyy			

8.3 Audit plan as implemented including:

	Dates	Locations
8.3.1 Desk Reviews	dec-19	Bureau Veritas Certification, Fredericia, Denmark
8.3.2 Onsite audits	10-12-2019	Main office Cermaq Norway AS, Nordfold, Norway Horsvågen site
8.3.3 Stakeholder interviews and Community meetings	02-12-2019	No stakeholder attended the audit
8.3.4 Draft report sent to client	17-02-2020	Bureau Veritas Certification, Fredericia, Denmark
8.3.5 Draft report sent to ASC	17-02-2020	Bureau Veritas Certification, Fredericia, Denmark
8.3.6 Final report sent to Client and ASC	12-03-2020	Bureau Veritas Certification, Fredericia, Denmark

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 Torbjørn Hjertø, Health and Saftey Manager Tiril Slettjord, Fish Health Area manager Nordland 2 Site managers with 6 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-sitt audit, public comment period)

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

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 fallowing period included in the audit (*only for surveillance and re-certification audits)*	

AUDIT MANUAL - ASC Salmon Standard v1.2

Scope: species belonging to the genus *Salmo* and *Oncorhynchus*

INSTRUCTION TO FARMS/AUDITORS:

This audit manual was developed to accompany version 1.2 of the ASC Salmon Standard.

References in this Audit Manual to Appendices can be found in the ASC Salmon Standard document.

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						
		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 explanitory 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	**Indicator:** Presence of documents demonstrating compliance with local and national regulations and requirements on land and water use **Requirement:** Yes **Applicability:** All	a. Maintain digital or hard copies of applicable land and water use laws. b. Maintain original (or legalised copies of) lease agreements, land titles, or concession permit on file as applicable. c. Keep records of inspections for compliance with national and local laws and regulations (if such inspections are legally required in the country of operation). d. Obtain permits and maps showing that the farm does not conflict with national preservation areas.	A) Electronic copies of laws, regulations and requirements with references to Lovdata with updates and electronic links in Intelex system. Covered by internal procedures in QMS. Strict monitored by relevant authorities on these issues. B) Approved operating plan for 2019-2020 from Fisheries Directorate dated 26.02.2019 with reference number of 18/15753. Discharge permit Fylkesmannen i Nordland dt 21.05.2019, MTB 2340 tonns valid until 31.12.2021. C) Inspection from NFSA (Mattilsynet), dt. 24.11.2019.No NCs. Inspection from Fiskeridirektoratet on 30.12.2019, Report has not been issued yet. D) Permit approval for location from Norwegian authorites. Fisheries directorate map "kart .fiskeridir.no" , map from "Naturbase"and map nasjonale laksefjorder shows no conflicts with national preservation areas and is within area designated for Aquaculture. The site is located in a approved area for aquaculture	Compliant		
1.1.2	**Indicator:** Presence of documents demonstrating compliance with all tax laws **Requirement:** Yes **Applicability:** All	a. Maintain records of tax payments to appropriate authorities (e.g. land use tax, water use tax, revenue tax). Note that CABs will not disclose confidential tax information unless client is required to or chooses to make it public. b. Maintain copies of tax laws for jurisdiction(s) where company operates. c. Register with national or local authorities as an “aquaculture activity".	A) Authorised auditor report/statement for organisation number 980211282, dt.01.07.2019 by Deloitte B) Lovdata access to updated versions in quality system Intelex C) Approved operating plan for 2019-2020 from Fisheries Directorate dated 26.02.2019 with reference number of 18/15753. Discharge permit Fylkesmannen i Nordland dt 21.05.2019, MTB 2340 tonns valid until 31.12.2021.	Compliant		
1.1.3	**Indicator:** Presence of documents demonstrating compliance with all relevant national and local labor laws and regulations **Requirement:** Yes **Applicability:** All	a. Maintain copies of national labor codes and laws applicable to farm (scope is restricted to the farm sites within the unit certification.) 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).	a) Lovdata access to updated versions in quality system Intelex b) No inspection from NLA (Arbeidstilsynet)	Compliant		

1.1.4	**Indicator:** Presence of documents demonstrating compliance with regulations and permits concerning water quality impacts **Requirement:** Yes **Applicability:** All	a. Obtain permits for water quality impacts where applicable. b. Compile list of and comply with all discharge laws or regulations. c. Maintain records of monitoring and compliance with discharge laws and regulations as required.	A) Approved operating plan for 2019-2020 from Fisheries Directorate dated 26.02.2019 with reference number of 18/15753. Discharge permit Fylkesmannen i Nordland dt 21.05.2019, MTB 2340 tonns valid until 31.12.2021. B) As described in above permits. MOM-B according to Norwegian legislation and NS9410 dt. performed by Akvaplan Niva, an accredited company C) MTB reported to auhtorities/ Altinn end of month. Compliance and updates assured according to "Prosedyre for miljøovervåking av havbunn og omkringliggende miljø matfiskanlegg" ID 332, dt. 05.02.18.	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.					
Instruction to Clients and CABs on Criterion 2.1 - Modification of the Benthic Sampling Methodology For farms located in a jurisdiction where specific benthic sampling locations are required under law, clients may request to modify the benthic sampling methodology prescribed in Appendix I-1 to allow for sampling at different locations and/or changes in the total number of samples. Where modifications are sought, farms shall provide a full justification to the CAB for review. Requests for modification shall be supported by mapping of differences in sampling locations. In any event, the sampling locations must at a minimum include samples from the cage edge and samples taken from inside and outside of a defined AZE. CABs shall evaluate client requests to modify benthic methodology based on whether there is a risk that such changes would jeopardize the intent and rigor of the ASC Salmon Standard. If the CAB determines that proposed modifications are low risk, the CAB shall ensure that details of the modified benthic sampling methodology are fully described and justified in the audit report.						
2.1.1	**Indicator:** Redox potential or [2] sulphide levels in sediment outside of the Allowable Zone of Effect (AZE) [3], following the sampling methodology outlined in Appendix I-1 **Requirement:** Redox potential > 0 mV or Sulphide ≤ 1,500 µMol/L **Applicability:** All farms except as noted in [1]	Note: Under Indicator 2.1.1, farms can choose to measure redox potential (Option #1) or sulphide concentration (Option #2). Farms do not have to demonstrate that they meet both threshold values. a. Prepare a map of the farm showing boundary of AZE (30 m) and GPS locations of all sediment collections stations. If the farm uses a site-specific AZE, provide justification [3] to the CAB. 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. c. Inform the CAB whether the farm chose option #1 or option #2 to demonstrate compliance with the requirements of the Standard. 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). e. For option #1, measure and record redox potential (mV) in sediment samples using an appropriate, nationally or internationally recognized testing method. f. For option #2, measure and record sulphide concentration (µM) using an appropriate, nationally or internationally recognized testing method. 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.	A) Olex map and GPS coordinates with ASC sampling points. Site-specific sampling regime (MOM-B - ASC adapted) Modified MOM-B according to NS 9410:2016 (Norwegian authortites and legislation requirement) Point adapted to bathymetric conditions. Performed by Akvaplan Niva, report nr. APN-61153.01 dt 28.05.19. VanVeen grab used according to established method. Done at peak biomasse. B) Hard bottom /Sediments C) Option #1 D) Site-specific sampling regime (MOM-B - ASC adapted) Modified MOM-B according to NS 9410:2016 (Norwegian authortites and legislation requirement) E) Redox Eh values ranging from 67-260 mV MOM-B as per national regulations (NS 9410:2016) ASC adapted (ISO 5667-19,). F) Redox potential. National regulations (NS 9410) G) Submitted to ASC in email dt.29-11-2019	Compliant		
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	**Indicator:** Faunal index score indicating good [4] to high ecological quality in sediment outside the AZE, following the sampling methodology outlined in Appendix I-1 **Requirement:** AZTI Marine Biotic Index (AMBI [5]) score ≤ 3.3, or Shannon-Wiener Index score > 3, or Benthic Quality Index (BQI) score ≥ 15, or Infaunal Trophic Index (ITI) score ≥ 25 **Applicability:** All farms except as noted in [1]	Notes: - 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) Olex map and GPS coordinates with ASC sampling points. Site-specific sampling regime (MOM-C hybrid - ASC adapted) Modified MOM-C according to NS9410 (Norwegian authortites and legislation requirement) Point adapted to bathymetric conditions. Performed by Akvaplan Niva, report nr. 61151.01 reporting dt 05.07.2019 b) Opt #2 Shannon Wierner used. c) Van Veen grab used according to site specific MOM-C (NS9410) Done at peak biomasse d) Opt #2 Shannon Wierner used. e) Shannon Wierner ranging from 3.08-4.35 f) Opt #2 Shannon Wierner used. g) Opt #2 Shannon Wierner used. h) MOM-C as per national regulations (NS 9410) ASC adapted (ISO 16665 on faunal). Independent laboratory performed the sampling and calculation of faunal index. i) Submitted to ASC in email dt.29-11-2019	Compliant		
		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] http://www.azti.es/en/ambi-azti-marine-biotic-index.html.					
2.1.3	**Indicator:** Number of macrofaunal taxa in the sediment within the AZE, following the sampling methodology outlined in Appendix I-1 **Requirement:** ≥ 2 highly abundant [6] taxa that are not pollution indicator species **Applicability:** All farms except as noted in [1]	a. Document appropriate sediment sample collection as for 2.1.1a and 2.1.1c, or exemption as per 2.1.1b.	a-b) Olex map and GPS coordinates with ASC sampling points. Site-specific sampling regime (MOM-C hybrid - ASC adapted) Modified MOM-C according to NS9410 (Norwegian authortites and legislation requirement) Point adapted to bathymetric conditions. Performed by Akvaplan Niva, report nr. 61151.01 reporting dt 05.07.2019 c) 3 highly abundant non-pollution taxa whitin AZE d) MOM-B/C as per national regulations (NS 9410) ASC adapted (ISO 16665 on faunal). Independent laboratory performed the sampling and calculation of faunal index. e) Submitted to ASC in email dt.29-11-2019	Compliant		
		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.				
Footnote	[6] Highly abundant: Greater than 100 organisms per square meter (or equally high to reference site(s) if natural abundance is lower than this level).					

2.1.4	**Indicator:** Definition of a site-specific AZE based on a robust and credible [7] modeling system **Requirement:** Yes **Applicability:** All farms except as noted in [1]	a. Undertake an analysis to determine the site-specific AZE and depositional pattern.	a-c) Site-specific sampling regime (MOM-C hybrid - ASC adapted/NS9410. Modified MOM-C according to NS9410 (Norwegian authortites and legislation requirement) survey developed and performed 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.				
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	**Indicator**: Weekly average percent saturation [9] of dissolved oxygen (DO) [10] on farm, calculated following methodology in Appendix I-4 **Requirement:** ≥ 70% [11] **Applicability:** All farms except as noted in [11]	**Instruction to Clients for Indicator 2.2.1 - Monitoring Average Weekly Percent Saturation of Dissolved Oxygen** Appendix I-4 presents the required methodology that farms must follow for sampling the average weekly percent saturation of dissolved oxygen (DO). Key points of the method are as follows: - measurements may be taken with a handheld oxygen meter or equivalent chemical method; - equipment is calibrated according to manufacturer's recommendations; - measurements are taken at least twice daily: once in the morning (6 -9 am) and once in the afternoon (3-6 pm) as appropriate for the location and season; - salinity and temperature must also be measured when DO is sampled; - sampling should be done at 5 meters depth in water conditions that would be experienced by fish (e.g. at the downstream edge of a net pen array): - each week, all DO measurements are used in the calculation of a weekly average percent saturation. If monitoring deviates from prescribed sampling methodology, the farm shall provide the auditor with a written justification (e.g. when samples are missed due to bad weather). In limited and well-justified situations, farms may request that the CAB approve reduction of DO monitoring frequency to one sample per day. Exception [see footnote 12] If a farm does not meet the minimum 70 percent weekly average saturation requirement, the farm must demonstrate the consistency of percent saturation with a reference site. The reference site shall be at least 500 meters from the edge of the net pen array, in a location that is understood to follow similar patterns in upwelling to the farm site and is not influenced by nutrient inputs from anthropogenic causes including aquaculture, agricultural runoff or nutrient releases from coastal communities. For any such exceptions, the auditor shall fully document in the audit report how the farm has demonstrated consistency with the reference site. Note 1: *Percent saturation* is the amount of oxygen dissolved in the water sample compared to the maximum amount that could be present at the same temperature and salinity.				
		a. Monitor and record on-farm percent saturation of DO at a minimum of twice daily using a calibrated oxygen meter or equivalent method. For first audits, farm records must cover ≥ 6 months.	a) Continuos logging (AKVA log) of oxygen and temperature at 3 sampling stations at cages (additional reference station at barge).	Compliant		
		b. Provide a written justification for any missed samples or deviations in sampling time.	b) No missed data			
		c. Calculate weekly average percent saturation based on data.	c) Seen record for the period week 34 in 2018-48 in 2019 for the current generation Percent = ≥ 70 %			
		d. If any weekly average DO values are < 70%, or approaching that level, monitor and record DO at a reference site and compare to on-farm levels (see Instructions).	d) No measurements below 70 % dissolved oxygen has been registered/observed. e) Monitoring of oxygen and calibration routines verified on site. Good knowledge, instructions from equipment producer available.			
		e. Arrange for auditor to witness DO monitoring and calibration while on site.	f) Submitted to ASC in email dt.29-11-2019			
		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	**Indicator**: Maximum percentage of weekly samples from 2.2.1 that fall under 2 mg/L DO **Requirement:** 5% **Applicability:** All	a. Calculate the percentage of on-farm samples taken for 2.2.1a that fall under 2 mg/L DO. b. Submit results from 2.2.2a as per Appendix VI to ASC at least once per year.	a) All above limits. b) Submitted to ASC in email dt.29-11-2019	Compliant		
2.2.3	**Indicator**: For jurisdictions that have national or regional coastal water quality targets [12], demonstration through third-party analysis that the farm is in an area recently [13] classified as having “good” or “very good” water quality [14] **Requirement:** Yes [15] **Applicability:** All farms except as noted in [15]	a. Inform the CAB whether relevant targets and classification systems are applicable in the jurisdiction. If applicable, proceed to "2.2.3.b". If not applicable, take action as required under 2.2.4 b. Compile a summary of relevant national or regional water quality targets and classifications, identifying the third-party responsible for the analysis and classification. c. Identify the most recent classification of water quality for the area in which the farm operates.	a-c) EU Water Directive 2000 gives Water quality objectives for area Økssundet (ref. "vannportalen.no). Noldland Fylkeskommune authority. Hamarøy muncipility") ecological conditions good -chemical condition good	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	**Indicator**: For jurisdictions without national or regional coastal water quality targets, evidence of monitoring of nitrogen and phosphorous [16] levels on farm and at a reference site, following methodology in Appendix I-5 **Requirement:** Consistency with reference site **Applicability:** All farms except as noted in [16]	a. Develop, implement, and document a weekly monitoring plan for N, NH4, NO3, total P, and ortho-P in compliance with Appendix I-5. For first audits, farm records must cover ≥ 6 months. b. Calibrate all equipment according to the manufacturer's recommendations. c. Submit data on N and P to ASC as per Appendix VI at least once per year.	a-c) EU Water Directive 2000 gives Water quality objectives for area Økssundet (ref. "vannportalen.no). Noldland Fylkeskommune authority. Hamarøy muncipility") ecological conditions good -chemical condition good	Compliant		
Footnote	[16] Farms shall monitor total N, NH4, NO3, total P and Ortho-P in the water column. Results shall be submitted to the ASC database. Methods such as a Hach kit are acceptable.					

2.2.5	**Indicator**: Demonstration of calculation of biochemical oxygen demand (BOD [17]) of the farm on a production cycle basis **Requirement:** Yes **Applicability:** All	**Instruction to Clients for Indicator 2.2.5 - Calculating Biochemical Oxygen Demand** Biochemical Oxygen Demand (BOD) can be calculated based on cumulative inputs of N and C to the environment over the course of the production cycle. BOD = ((total N in feed – total N in fish)*4.57) + ((total C in feed – total C in fish)*2.67). • A farm may deduct N or C that is captured, filtered or absorbed through approaches such as IMTA or through direct collection of nutrient wasted. In this equation, "fish" refers to harvested fish. In this case, farm must submit breakdown of N & C captured/filtered/absorbed to ASC along with method used to estimate nutrient reduction. • Reference for calculation methodology: Boyd C. 2009. Estimating mechanical aeration requirement in shrimp ponds from the oxygen demand of feed. In: Proceedings of the World Aquaculture Society Meeting; Sept 25-29, 2009; VeraCruz, Mexico. And: Global Aquaculture Performance Index BOD calculation methodology available at http://web.uvic.ca/~gapi/explore-gapi/bod.html. Note 1: Calculation requires a full production cycle of data and is required beginning with the production cycle first undergoing certification. If it is the first audit for the farm, the client is required to demonstrate to the CAB that data is being collected and an understanding of the calculations. Note 2: Farms may seek an exemption to Indicator 2.2.5 if: the farm collects BOD samples at least once every two weeks, samples are independently analyzed by an accredited laboratory, and the farm can show that BOD monitoring results do not deviate significantly from calculated annual BOD load.				
		a. Collect data throughout the course of the production cycle and calculate BOD according to formula in the instruction box.	a) Details for BOD calculation of cycle 18G. The calculation was checked and found complaint. Harvested Fish for production cycle [mt]: 1190.73 Total amount of feed for production cycle [mt]: 1011.45 Total C in feed for production cycle [mt]: 641.81 Total N in feed for production cycle [mt]: 61.70 Total C in fish (species specific) [mt]: 595.37 Total N in fish (species specific) [mt]: 35.72 BOD [mT O2]: 242.70 b) Submitted to ASC in email dt.29-11-2019	Compliant		
		b. Submit calculated BOD as per Appendix VI to ASC for each production cycle.				
Footnote	[17] BOD calculated as: ((total N in feed – total N in fish)*4.57) + ((total C in feed – total C in fish)*2.67). A farm may deduct N or C that is captured, filtered or absorbed through approaches such as IMTA or through direct collection of nutrient wasted. In this equation, "fish" refers to harvested fish. Reference for calculation methodology: Boyd C. 2009. Estimating mechanical aeration requirement in shrimp ponds from the oxygen demand of feed. In: Proceedings of the World Aquaculture Society Meeting; Sept 25-29, 2009; VeraCruz, Mexico. And: Global Aquaculture Performance Index BOD calculation methodology available at http://web.uvic.ca/~gapi/explore-gapi/bod.html.				
2.2.6	**Indicator**: Appropriate controls are in place that maintain good culture and hygienic conditions on the farm which extends to all chemicals, including veterinary drugs, thereby ensuring that adverse impacts on environmental quality are minimised. **Requirement:** Yes **Applicability:** All	a. Document control systems in good culture and hygene that includes all appropriate elements.	a) Procedure "Hygienereglement - Matfisk" ID 127, dt. 06.12.2017 Prosedure "Prosedyre for oppbevaring håndtering av kjemikalier og gasser", ID 473, howevere, the storage for chemicals was missing collection for chemicals and several paint cans was placed outside. The storage for formic acid was not locked. b) Verfified during audit	Minor	The storage for chemicals was missing collection for chemicals nad and several paint cans was placed outside. The storage for formic acid was not locked.	On-site visit on 10-12-2019
		b. Apply the systems ensuring that staff are aware, qualified and trained to proberly implement them.				
		-				

Criterion 2.3 Nutrient release from production						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
2.3.1	**Indicator**: Percentage of fines [18] in the feed at point of entry to the farm [20] (calculated following methodology in Appendix I-2) **Requirement:** < 1% by weight of the feed **Applicability:** All farms except as noted in [19]	Note: The methodology given in Appendix I-2 is used to determine the fines (dust and small fragments) in finished product of fish feed which has a 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) Percentage of fines according to requirements. Registrations and calculations ranging from 0,1 to 0,3% . Monthly testing according to internal QMS Intelex procedure "Prosedyre fôrmottak og lagring" ID 260, dated 27.09.17 b) Appropriate testing technology as per ASC c) Percentage of fines according to requirements.	Compliant		
		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	**Indicator**: Evidence of an assessment of the farm's potential impacts on biodiversity and nearby ecosystems that contains at a minimum the components outlined in Appendix I-3 **Requirement:** Yes **Applicability:** All	Note: If a farm has previously undertaken an independent assessment of biodiversity impact (e.g. as part of the regulatory permitting process), the farm may use such documents 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-c) Impacts consequence assessment performed according to Appendix I-3. Document "Plan for miljø og biodiversitetsledelse". Cermaq Group AS annual corportae level environmental and sustainability report 2017. Internal impacts consequence assement performed using data from reaserch institutes and reports also considered in local impact from site/company performed for 2018." Procedure "Særskilt om ytre miljø og vedlegg til riskovurdering" ID 387 Marginal impacts only. Ref also license permit and assessment as part of the regulatory permitting process. Site has risk assessment for environmental impact with developed actions for potential environmental and biodiversity risks from site. Additional RA "Biodiversitetsfokusert risikovurdering for Vargsundet og Korsfjorden", dated 30.07.2019 including action plan for environement (for all). Also MOM-B and MOM-C according to requirements in national legislation. Risk assessment for Storholmen/Olderfjord "Ytre miljø- utlsipp", dt. 15.04.2018	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	**Indicator**: Allowance for the farm to be sited in a protected area [20] or High Conservation Value Areas [21] (HCVAs) **Requirement:** None [22] **Applicability:** All farms except as noted in [22]	**Instruction to Clients for Indicator 2.4.2 - Exceptions to Requirements that Farms are not sited within Protected Areas or HCVAs** The following exceptions shall be made for Indicator 2.4.2: Exception #1: For protected areas classified by the International Union for the Conservation of Nature (IUCN) as Category V or VI (these are areas preserved primarily for their landscapes or for sustainable resource management). Exception #2: For HCVAs if the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the 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. 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. **Definitions** 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." 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. Provide a map showing the location of the farm relative to nearby protected areas or High Conservation Value Areas (HCVAs) as defined above (see also 1.1.1a).	a) Fiskeridirektoratet.no map and DN Naturbase map with all known protected areas defined. - site is not in conflict with protected areas - HCVAs or CAs. Also considered in Impacts consequence assement performed according to Appendix I-3. Naturebase.no confrims that the sites are not located in a protected area.	Compliant		
		b. If the farm is not sited in a protected area or High Conservation Value Area as defined above, prepare a declaration attesting to this fact. In this case, the requirements of 2.4.2c-d do not apply.	b) Statement Cermaq Norway AS Biodiversity RA above dt 01.08.16, that sites are not operating in HCVAs. Cermaq Group AS annual corporate level environmental and sustainability report 2017 also refers to policy and approach for HCVA.			
		c. If the farm is sited in a protected area or HCVA, review the scope of applicability of Indicator 2.4.2 (see Instructions above) to determine if your farm is allowed an exception to the requirements. If yes, inform the CAB which exception (#1, #2, or #3) is allowed and provide supporting evidence.	c) Not within HCVA			
		d. If the farm is sited in a protected area or HCVA and the exceptions provided for Indicator 2.4.2 do not apply, then the farm does not comply with the requirement and is ineligible for ASC certification.	d) Not within HCVA			
Footnote	[20] Protected area: "A clearly defined geographical space, recognized, dedicated and managed through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values." 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 (http://www.hcvnetwork.org/).					
Footnote	[22] The following exceptions shall be made for Standard 2.4.2: • For protected areas classified by the International Union for the Conservation of Nature (IUCN) as Category V or VI (these are areas preserved primarily for their landscapes or for sustainable resource management). • For HCVAs if the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the HCVA designation. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the core reason an area has been identified as a HCVA. • For farms located in a protected area if it was designated as such after the farm was already in operation and provided the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the protected area and it is in compliance with any relevant conditions or regulations placed on the farm as a result of the formation/designation of the protected area. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the core reason an area has been protected.					

Criterion 2.5 Interaction with wildlife, including predators [23]						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
Footnote	[23] See Appendix VI for transparency requirements for 2.5.2, 2.5.5 and 2.5.6.					
2.5.1	**Indicator**: Number of days in the production cycle when acoustic deterrent devices (ADDs) or acoustic harassment devices (AHDs) were used **Requirement:** 0 **Applicability:** All	a. Compile documentary evidence to show that no ADDs or AHDs have been used by the farm. -	No use of ADDs or AHDs.	Compliant		
2.5.2	**Indicator**: Number of mortalities [25] of endangered or red-listed [26] marine mammals or birds on the farm **Requirement:** 0 (zero) **Applicability:** All	a. Prepare a list of all predator control devices and their locations. b. Maintain a record of all predator incidents. c. Maintain a record of all mortalities of marine mammals and birds on the farm identifying the species, date, and apparent cause of death. d. Maintain an up-to-date list of endangered or red-listed marine mammals and birds in the area (see 2.4.1) -	a) Nest on the cages are only devices used by the farm to control birds. b) The predators incidents are recorded by the farm empolyess. c) No mortality of endangered or red-listed marine mammals and birds in the farm. Internal records checked. d) Red list of endangered or red-listed marine mammals and birds in the area from "Norsk Rødliste for arter-2018" - fra Artsdatabanken". The species in the Red List are assigned to one of six categories, ranked by their risk of extinction	Compliant		
Footnote	[25] Mortalities: Includes animals intentionally killed through lethal action as well as accidental deaths through entanglement or other means.					
Footnote	[26] Species listed as endangered or critically endangered by the IUCN or on a national endangered species list.					
2.5.3	**Indicator**: Evidence that the following steps were taken prior to lethal action [27] against a predator: 1. All other avenues were pursued prior to using lethal action 2. Approval was given from a senior manager above the farm manager 3. Explicit permission was granted to take lethal action against the specific animal from the relevant regulatory authority **Requirement:** Yes [28] **Applicability:** All except cases where human safety is endangered as noted in [28]	a. Provide a list of all lethal actions that the farm took against predators during the previous 12-month period. Note: "lethal action" is an action taken to deliberately kill an animal, including marine mammals and birds. b. For each lethal action identified in 2.5.4a, keep record of the following: 1) a rationale showing how the farm pursued all other reasonable avenues prior to using lethal action; 2) approval from a senior manager above the farm manager of the lethal action; 3) where applicable, explicit permission was granted by the relevant regulatory authority to take lethal action against the animal. 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].	a) No lethal actions taken at farm. Internal records checked. There is a procedure "Prosedyre for samspill med dyr og fugler 395" in place. b, c) NA	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.					

	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" The ASC Salmon Standard has defined "Lethal incident" to include all lethal actions as well as entanglements or other accidental mortalities of non-salmonids [footnote 29]. For the purpose of assisting farms and auditors with understanding how to evaluate compliance with Indicators 2.5.4, 2.5.5, and 2.5.6, ASC has clarified this definition further: Total number of lethal Incidents = sum of all non-salmonid deaths arising from all lethal actions taken by the farm during a given time period There should be a 1:1 relationship between the number of animal deaths and the number of lethal incidents reported by the farm. For example, if a farm has taken one (1) lethal action in past last two years and that single lethal action resulted in killing three (3) birds, it is considered three (3) lethal incidents within a two year period. The term "non-salmonid" was intended to cover any predatory animals which are likely to try to feed upon farmed salmon. In practice these animals will usually be seals or birds.					
2.5.4	**Indicator**: Evidence that information about any lethal incidents [30] on the farm has been made easily publicly available [29] **Requirement:** Yes **Applicability:** All	a. For all lethal actions (see 2.5.3), keep records showing that the farm made the information available within 30 days of occurrence. a. For all lethal actions (see 2.5.3), keep records showing that the farm made the information available within 30 days of occurrence. b. Ensure that information about all lethal actions listed in 2.5.4a are made easily publicly available (e.g. on a website).	a, b, c) System implemented to make information easily publicly available if any lethal incidents occur on birds or marine mammals at the certified site. List on https://www.cermaq.com/wps/wcm/connect/cermaq-no/cermaq-norway/baerekraft/asc-rapportering/; showing no lethal incidents	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	**Indicator**: Maximum number of lethal incidents [30] on the farm over the prior two years **Requirement:** < 9 lethal incidents [31], with no more than two of the incidents being marine mammals **Applicability:** All	a. Maintain log of lethal incidents (see 2.5.3a) for a minimum of two years. For first audit, > 6 months of data are required. b. Calculate the total number of lethal incidents and the number of incidents involving marine mammals during the previous two year period. 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).	a, b) No lethal actions taken at farm. Internal records checked. There is a procedure "Prosedyre for samspill med dyr og fugler with ID 395" in place. List on https://www.cermaq.com/wps/wcm/connect/cermaq-no/cermaq-norway/baerekraft/asc-rapportering/; showing no lethal incidents c) Submitted to ASC in email dt.08.08.2019	Compliant		
Footnote	[30] Lethal incident: Includes all lethal actions as well as entanglements or other accidental mortalities of non-salmonids.					
Footnote	[31] Standard 2.5.6 applicable to incidents related to non-endangered and non-red-listed species. This standard complements, and does not contradict, 2.5.3.					
2.5.6	**Indicator**: In the event of a lethal incident, evidence that an assessment of the risk of lethal incident(s) has been undertaken and demonstration of concrete steps taken by the farm to reduce the risk of future incidences **Requirement:** Yes **Applicability:** All	a. Keep records showing that the farm undertakes an assessment of risk following each lethal incident and how those risk assessments are used to identify concrete steps the farm takes to reduce the risk of future incidents. b. Provide documentary evidence that the farm implements those steps identified in 2.5.6a to reduce the risk of future lethal incidents.	a) No lethal incident. There is a risk assessment "Ytre miljø- utlsipp", dt. 15.04.2018 b) NA	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.					
Instruction to Clients and CABs on Exemptions to Criterion 3.1 According to footnote [32], farm sites for which there is no release of water that may contain pathogens into the natural (freshwater or marine) environment are exempt from the requirements under Criterion 3.1. More specifically, farms are only eligible for exemption from Criterion 3.1 if it can be shown that either of the following holds: 1) the farm does not release any water to the natural environment; or 2) any effluent released by the farm to the natural environment has been effectively treated to kill pathogens (e.g. UV and/or chemical treatment of water with testing demonstrating efficacy). Auditors shall fully document the rationale for any such exemptions in the audit report.						
3.1.1	**Indicator**: Participation in an Area-Based Management (ABM) scheme for managing disease and resistance to treatments that includes coordination of stocking, fallowing, therapeutic treatments and information-sharing. Detailed requirements are in Appendix II-1. **Requirement:** Yes **Applicability:** All except farms that release no water as noted in [32]	a. Keep record of farm's participation in an ABM scheme. 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.	a, b, c) ABM a requirement in national legislation. Records and overview over ABM and ref to "Samordnet plan for lusebekjempelse i subregion Nordland Nord " dt. 11-12-2019 in zones defined by NFSA and companys in ABM. ABM for zone 5 Hamarøy only Cermaq's sites located in the zone. Weekly updates to AltInn, where info is available for all farms in zone. Also regular meetings between participants where ABM issues are discussed 100% of farms included. Routines and procedures for notification included in ABM related to treatments and diseases according to legislation from NFSA. d) Submitted to ASC in email dt.29-11-2019	Compliant		

3.1.2	**Indicator**: A demonstrated commitment [34] to collaborate with NGOs, academics and governments on areas of mutually agreed research to measure possible impacts on wild stocks **Requirement:** Yes **Applicability:** 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.	a) Commitment and participation of Cermaq Norway AS is documented n several projects with NGOs, academics and governments: 1. Varpa project - Ruseprosjektet 2016, with Norwegian Authorites, active 2018 (Nordland) GSI member, active 2018 ASRC project with Ewos Inovation, feed for arctic conditions, 4 R&D licences "Skjellprøveprosjektet". Repafjordelva og Altaelva, active 2018, together with local stakeholders (Jeger og Fisk, ALI og VFJF) Monitoringprogram with NINA, ALI and VFJF, active 2018 Kompetanseklynge laks (Knowledge-cluster Salmon), leading by a commites where Cermaq is included, active 2018. Including several subprojects, year to year perspective HI, NIVA and Hammerfest Kommune, kunstig rev/tareskog, creating a godd environment for cod stock (conditions for cod spawning in Hammerfest community), active 2018, descrription form 2016, project owner Hammerfest community, ongoing to 2020 ClimeFish (2017), contribute with data and input from production, EU project 677039, NOFIMA, UiT, University of Stirling, AVS, how climate changes affect aquaculture, ongoing to 2020. b) Some of the projects described in 3.1.2 includes non-financial support. c) Cermaq is part of a reasearch network called Kompetanse-Klynge Laks. Applications are recived and evaluated through the team of Kompetanse-Klynge Laks. No rejection without justification is made. d) E.g.documents available in projectreport NINA nr. 1307 "Monitoring Altaelva og Repparfjordelva 2016". e.g communication and electronic project folders e.g. projectmail for AquaDom to NOFIMA dt.11.11.14 and aggrements as described in 3.1.2.a	Compliant		
		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.				
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	**Indicator**: Establishment and annual review of a maximum sea lice load for the entire ABM and for the individual farm as outlined in Appendix II-2 **Requirement:** Yes **Applicability:** All except farms that release no water as noted in [32]	a. Keep records to show that a maximum sea lice load has been set for: - the entire ABM; and - the individual farm.	a) The maximum sea lice load for the entire ABM and the individual farm is: 0.5 mature sea lice per fish and 0.2 sea lice per fish in the sensitive smolt migration period according to norwegian regulation of FOR-2012-12-05-1140. Also internal procedures in Intelex Quality System, system to prevent maximum sea lice load. Procedure "Prosedyre for samordnet kontroll og bekjempelse av lakselus" ID 394, dated 04.04.17. Procedure "Rapportering av Lakselus" ID 348, dated 19.06.16. Procedure "Prosdyre for luetelling" ID 321 dated 03.03.17 Registered on farm in FishTalk. b) Governmental researh institutes monitor sea lice load on wild salmon. Sea lice load are set by and controlled by the authorities through legal regulations and maximum levels are adapted to different geographical areas in Norway. c) Results available at webpages "lusedata.no" and "barentswatch.no" with lice levels, treatment etc. published in this public website. The site manager reports to the authorities the lice number each week. Reports are reviewed by NFSA and Luse -nettverket weekly. d) Submitted to ASC in email dt.08.Aug.2019	Compliant		
		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).				
		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.				
		d. Submit the maximum sea lice load for the ABM to ASC as per Appendix VI at least once per year.				

3.1.4	**Indicator**: Frequent [35] on-farm testing for sea lice, with test results made easily publicly available [36] within seven days of testing **Requirement:** Yes **Applicability:** All except farms that release no water as noted in [32]	a. Prepare an annual schedule for testing sea lice that identifies timeframes of routine testing frequency (at a minimum, monthly) and for high-frequency testing (weekly) due to sensitive periods for wild salmonids (e.g. during and immediately prior to outmigration of juveniles). 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. 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. 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. e. Keep records of when and where test results were made public. f. Submit test results to ASC (Appendix VI) at least once per year.	a) There are legal limits for maximum sea lice load for the entire ABM and the individual farm. Maximum 0,5 mature female sea lice all year, except in sensitive period (week 21 to week 26) were the action limit is 0,2 mature female lice and moving lice based on the legal authorities regulations for lice control Procedure ""Prosedyre for samordnet kontroll og bekjempelse av lakselus" shows regularity of lice count, how to count and maximum sea lice load. Sea lice counted weekly and recorded in FishTalk b) Sea lice counted weekly and recorded in FishTalk, and reported to Labora and authorities "Altinn" weekly. Seen report and record in BarentsWatch for the site c) The method is ASC compliance. d) Procedure "Prosedyre for samordnet kontroll og bekjempelse av lakselus" shows regularity of lice count, how to count and maximum sea lice load. Training in lice identification and counting, dated 14.03.2018 e) Result of sea lice count made public in "Lusenettverket", website BarentsWatch.no, company website (https://www.cermaq.com/wps/wcm/connect/cermaq-no/cermaq-norway/baerekraft/asc-rapportering/) f) Submitted to ASC in email dt.29-11-2019	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	**Indicator**: In areas with wild salmonids [37], evidence of data [38] and the farm's understanding of that data, around salmonid migration routes, migration timing and stock productivity in major waterways within 50 kilometers of the farm **Requirement:** Yes **Applicability:** All farms operating in areas with wild salmonids except farms that release no water as noted in [32]	**Instruction to Clients for Indicator 3.1.5 - Evidence for Wild Salmonid Health and Migration** 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. 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. 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". 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.				
		a. Identify all salmonid species that naturally occur within 75 km of the farm through literature search or by consulting with a reputable authority. If the farm is not in an area with wild salmonids, then 3.1.5b and c do not apply.	a) Atlantic salmon (Salmo salar) and trout (Salmo trutta) is naturally occurring in the area.	Compliant		
		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.	Migratory routes as defined in web site "environmental statistics" (miljøstatatus.no) on salmonid carrying rivers, and Lakseregisteret from Miljødirektoratet. Also map from DN with rivers identified.the migration routes are located 16-30 km from the sites. Report "Risikorapport norsk fiskeoppdrett 2017" by Institute of Marine Research, published on their website. Report "Smolt - en kunnskapsoppdatering" by Directorate of Environment 2014.			
		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.	Sensitive period defined in regulation "Forskrift om endring i forskrift om bekjempelse av lakselus", states less than 0,2 adult female lice per fish from week 21 to week 26.			
		-	Sufficient awarness and also participation in related scientific projects by Cermaq staff			
Footnote	[37] For purposes of these standards, "areas with wild salmonids" are defined as areas within 75 kilometers of a wild salmonid migration route or habitat. This definition is expected to encompass all, or nearly all, of salmon-growing areas in the northern hemisphere.					
Footnote	[38] Farms do not need to conduct research on migration routes, timing and the health of wild stocks under this standard if general information is already available. Farms must demonstrate an understanding of this information at the general level for salmonid populations in their region, as such information is needed to make management decisions related to minimizing potential impact on those stocks.					

3.1.6	**Indicator**: In areas of wild salmonids, monitoring of sea lice levels on wild out-migrating salmon juveniles or on coastal sea trout or Arctic char, with results made publicly available. See requirements in Appendix III-1. **Requirement:** Yes **Applicability:** All farms operating in areas with wild salmonids except farms that release no water as noted in [32]	a. Inform the CAB if the farm operates in an area of wild salmonids. If not, then Indicator 3.1.6 does not apply.	a) Salmonides, ex. S salar, S. trouta, S.etc. naturally occurring in the area.	Compliant		
		b. Keep records to show the farm participates in monitoring of sea lice on wild salmonids.	b) It is a breach of Norwegian regulations for the applicant to conduct sea lice counts in wild salmonids. However, according to VR 136 it is accepted that the farm may contribut to governmental monitoring if the program is geographically relevant.			
		c. Provide the CAB access to documentation which is sufficient for the auditor to evaluate whether the methodology used for monitoring of sea lice on wild salmonids is in compliance with the requirements in Appendix III-1.	c) IMR/NINA/NOFIMA/VI - Risk Assessment for Norway, fish farming report 2018, where sealice issues are covered. IMR report on wild stock sealice sitaution "lakselusinfeksjon på vill laksefisk langs norskekysten i 2018. and IMR/vet Institute report on measuring environmental effects on wild salmon. Vitenskapsrådet yearly reports on salmon river managment			
		d. Make the results from 3.1.6b easily publicly available (e.g. posted to the company's website) within eight weeks of completion of monitoring.	d) Report published and generally available. Govermental reports publicly available			
		e. Submit to ASC the results from monitoring of sea lice levels on wild salmonids as per Appendix VI.	e) Submitted to ASC in email dt.29-11-2019			
3.1.7	**Indicator**: In areas of wild salmonids, maximum on-farm lice levels during sensitive periods for wild fish [39]. See detailed requirements in Appendix II, subsection 2. **Requirement:** 0.1 mature female lice per farmed fish **Applicability:** All farms operating in areas with wild salmonids except farms that release no water as noted in [32]	a. Inform the CAB if the farm operates in an area of wild salmonids. If not, then Indicator 3.1.7 does not apply.	a) S. salar and S. trutta and S.Salvelinus) naturally occurring in area.	Compliant		
		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.	b) Sensitive periods for migration, week 21- 26 for area definded by the Norwegian government to be <0.2 mature female lice per farmed fish. Samples documents compliance <0.2 mature females per salmon for 2017-2019.			
		c. Maintain detailed records of monitoring on-farm lice levels (see 3.1.4) during sensitive periods as per Appendix II-2.	c) Invested in a lot of resources for non therapautic sea lice treatment. Weekly testing form predetermined cages, according NFSA regulations. Sealice lifestage identified and recorded. (in aquafarmer and excel sheet for submittance to NSA via Altinn) Record of weekly testing for period 2009 to 2018. Samples documents compliance <0.1 mature females per salmon for 2017-2019.			
		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).	d) It is a breach of Norwegian regulations for the applicant to conduct sea lice counts in wild salmonids. However, according to VR 136 it is accepted that the farm may contribut to governmental monitoring if the program is geographically relevant. Public reports regarding this issue is easily publicly available.			
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	**Indicator**: If a non-native species is being produced, demonstration that the species was widely commercially produced in the area by the date of publication of the ASC Salmon standard **Requirement:** Yes [40] **Applicability:** All farms except as noted in [40]	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.	NA	N/A		
		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	**Indicator**: If a non-native species is being produced, evidence of scientific research [41] completed within the past five years that investigates the risk of establishment of the species within the farm's jurisdiction and these results submitted to ASC for review [42] **Requirement:** Yes **Applicability:** All [43]	**Instruction to Clients for Indicator 3.2.2 - Exceptions to Allow Production of Non-Native Species** Farms have had five years to demonstrate compliance with this standard from the time of publication of the ASC Salmon Standard (i.e. full compliance by June 13, 2017). Farms are exempt from this standard if they are in a jurisdiction where the non-native species became established prior to farming activities in the area and the following three conditions are met: eradication would be impossible or have detrimental environmental effects; the introduction took place prior to 1993 (when the Convention on Biological Diversity (CBD) was ratified); the species is fully self-sustaining. Note: For the purposes of Indicator 3.2.2, "jurisdiction" is defined the same as "area" in 3.2.1.				
		a. Inform the ASC of the species in production (Appendix VI).	NA	N/A		
		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	**Indicator**: Use of non-native species for sea lice control for on-farm management purposes **Requirement:** None **Applicability:** All	a. Inform the CAB if the farm uses fish (e.g. cleaner fish or wrasse) for the control of sea lice.	No cleaning fish were used at the farm	Compliant		
		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	**Indicator**: Use of transgenic [44] salmon by the farm **Requirement:** None **Applicability:** All	a. Prepare a declaration stating that the farm does not use transgenic salmon.	a, b, c) Statement dt. 23.March.2017, from genetics provider AquaGen breeding stock, stating that only conventional breeding and genetics are applied. Cermaq policies on non-GMO available in statement dated 26.June.2019, signed by Product Quality Manager Aquagen is GlobleGAP certified (GGN 4049929687783) valid until 30.01.2020.	Compliant		
		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.				
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	**Indicator**: Maximum number of escapees [46] in the most recent production cycle **Requirement:** 300 [47] **Applicability:** All farms except as noted in [47]	a. Maintain monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapees. 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).	a-d) No escape registered on FOD. Documented in production and recording system Fishtalk. Environmental company/site reports for 2019 states 0 escapes. Documented by report from company and register at Directorate of Fisheries (DOF) (www.fiskeridir.no).Cross-checked and verified with the estimate of unexplained loss. e) Submitted to ASC in email dt.29-11-2019	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	**Indicator**: Accuracy [48] of the counting technology or counting method used for calculating stocking and harvest numbers **Requirement:** ≥ 98% **Applicability:** All	a. Maintain records of accuracy of the counting technology used by the farm at times of stocking and harvest. Records include copies of spec sheets for counting machines and common estimates of error for hand-counts. 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). c. During audits, arrange for the auditor to witness calibration of counting machines (if used by the farm). - 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).	a) Counting performed at fresh water (FW) site, vaccination numbers used for stocking number at sea net cage, and final accurate numbers at harvest plant where individual fish is handled and regsitered. b) Vaccination numbers in FW used as accurate number stocked.Statement from aquascanon 98% accuracy and Wingtech installed on Wellboats 98%. EUL was used to cross check the and verify the accuracy. c) Equipment used according to requrements when stocking and any grading spiltting/counting operations are performed by weelboat on site. No counting machines were used on site during the audit. d) Cross-checked with EUL% e) Submitted to ASC in email dt.29-11-2019	Compliant		
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	**Indicator**: Estimated unexplained loss [49] of farmed salmon is made publicly available **Requirement:** Yes **Applicability:** All	**Instruction to Clients for Indicator 3.4.3 - Calculation of Estimated Unexplained Loss** The Estimated Unexplained Loss (EUL) of fish is calculated at the end of each production cycle as follows: EUL = (stocking count) - (harvest count) - (mortalities) - (recorded escapes) Units for input variables are number of fish (i.e. counts) per production cycle. Where possible, farms should use the pre-smolt vaccination count as the stocking count. This formula is adapted from footnote 59 of the ASC Salmon Standard.				
		a. Maintain detailed records for mortalities, stocking count, harvest count, and escapes (as per 3.4.1).	a) Spesific site reports and records documented and available in production and recording system Fishtalk b) EUL 0% for last generation harvested in July 2018 c) System implemented to make EUL value information easily publicaly available on corporate webpage https://www.cermaq.com/wps/wcm/connect/cermaq/cermaq/our-sustainable-choice/asc-dashboard/ d) Submitted to ASC in email dt.29-11-2019	Compliant		
		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.				
		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.				
		d. Submit estimated unexplained loss to ASC as per Appendix VI for each production cycle.				
		-				
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	**Indicator**: Evidence of escape prevention planning and related employee training, including: net strength testing; appropriate net mesh size; net traceability; system robustness; predator management; record keeping and reporting of risk events (e.g., holes, infrastructure issues, handling errors, reporting and follow up of escape events); and worker training on escape prevention and counting technologies **Requirement:** Yes **Applicability:** All	a. Prepare an Escape Prevention Plan and submit it to the CAB before the first audit. This plan may be part of a more comprehensive farm planning document as long as it addresses all required elements of Indicator 3.4.4.	a) Risk assessments and several procedures describes actions to prevent escape (inspection, maintenance, etc.), e.g.: Risk assessment for escapes, d.t 25.04.2019, including relevant issues related to potensial causes to escapes, e.g delicing procedure "Prosedyre for a avlusning med lukket presenning not og mære" ID 189, d.t 15.03.2019 Producer for daily maintaice of sites (prosedyre for daglig ettersyn og røkting matfisk) updated on 10.12.2019. b) The Escape Prevention Plan and accompanying documents covers the following areas: net strength testing; appropriate net mesh size; net traceability; system robustness; predator management; record keeping; reporting risk events (e.g. holes, infrastructure issues, handling errors); planning of staff training to cover all of the above areas; planning of staff training on escape prevention and counting technologies. No training records for staffs was available. c) Open system d) All structures NYTEK certified Norwegian standard NS9415 (Certificate APN-344 by Akvaplan Niva dated 19.09.2018). Furthermore there was a risk assessment for escapes, d.t 25.04.2019, including relevant issues related to potensial causes to escapes, e.g delicing procedure "Prosedyre for a avlusning med lukket presenning not og mære" ID 189, d.t 15.03.2019 Producer for daily maintaice of sites (prosedyre for daglig ettersyn og røkting matfisk) updated on 10.12.2019. e) Escape prevention training internal/external for sitemanagers and site employee. Annual revision of escape prevention plan, risk assessment and contingency plans. Test of escape prevention plan included in training in 2018 and 2019. Seen training record for all employees in 2019	Compliant		
		b. If the farm operates an open (net pen) system, ensure the plan (3.4.4a) covers the following areas: - net strength testing; - appropriate net mesh size; - net traceability; - system robustness; - predator management; - record keeping; - reporting risk events (e.g. holes, infrastructure issues, handling errors); - planning of staff training to cover all of the above areas; and - planning of staff training on escape prevention and counting technologies.				
		c. If the farm operates a closed system, ensure the plan (3.4.4a) covers the following areas: - system robustness; - predator management; - record keeping; - reporting risk events (e.g. holes, infrastructure issues, handling errors); - planning of staff training to cover all of the above areas; and - planning of staff training on escape prevention and counting technologies.				
		d. Maintain records as specified in the plan.				
		e. Train staff on escape prevention planning as per the farm's plan.				
		-				

PRINCIPLE 4: USE RESOURCES IN AN ENVIRONMENTALLY EFFICIENT AND RESPONSIBLE MANNER						
Criterion 4.1 Traceability of raw materials in feed						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
Instruction to Clients for Indicators 4.1.1 through 4.4.2 - Sourcing of Responsibly Produced Salmon Feeds Farms must show that all feeds used by the farm are produced in compliance with the requirements of Indicators 4.1.1 through 4.4.4. To do so, farms must obtain documentary evidence that the feed producers (see note 1) are audited at regular intervals by an independent auditing firm or a conformity assessment body against a recognized standard which substantially incorporate requirements for traceability. Acceptable certification schemes include GlobalGAP or other schemes that have been acknowledged by the ASC (see 4.1.1c below). Results from these audits shall demonstrate that feed producers have robust information systems and information handling processes to allow the feed producers to be able to bring forward accurate information about their production and supply chains. Declarations from the feed producer that are provided to the farm to demonstrate compliance with these indicators must be supported by the audits. Farms must also show that all of their feed producers are duly informed of the requirements of the ASC Salmon Standard relating to sourcing of responsibly produced salmon feed (see 4.1.1b below). In addition to the above, farms must also show that their feed suppliers comply with the more detailed requirements for traceability and ingredient sourcing that are specified under indicators 4.1.1 through 4.4.2. The ASC Salmon Standard allows farms to use one of two different methods to demonstrate compliance of feed producers: Method #1: Farms may choose to source feed from feed producers who used only those ingredients allowed under the ASC Salmon Standards during the production of a given batch of feed. For example, the farm may request its feed supplier to produce a batch of feed according to farm specifications. Audits of the feed producer will independently verify that manufacturing processes are in compliance with ASC requirements. Method #2: Farms may choose to source feed from feed producers who demonstrate compliance using a "mass-balance" method. In this method, feed producers show that the balance of all ingredients (both amount and type) used during a given feed production period meets ASC requirements. However, mixing of ingredients into the general silos and production lines is allowed during manufacturing. Audits of the feed producer will independently verify that manufacturing processes are in compliance with ASC requirements. The mass balance method can be applied, for example, to integrated feed production companies that handle all steps of feed manufacturing (purchasing of raw materials, processing to finished feed, and sales) under the management of a single legal entity. Note 1: The term "feed producer" is used here to identify the organization that produces the fish feed (i.e. it is the "feed manufacturer"). In most cases, the organization supplying feed to a farm (i.e. the feed supplier) will be the same organization that produced the feed, but there may be instances where feed suppliers are not directly responsible for feed production. Regardless of whether the farm sources feeds directly from a feed producer or indirectly through an intermediary organization, it remains the farm's obligation to show evidence that all feeds used are in compliance with requirements.					
4.1.1	**Indicator**: Evidence of traceability, demonstrated by the feed producer, of feed ingredients that make up more than 1% of the feed [50]. **Requirement:** Yes **Applicability:** All	a. Maintain detailed records of all feed suppliers and purchases including contact information and purchase and delivery records. 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. 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. 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. 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]. -	a) Feed suppliers: EWOS (www.cargill.com) Records of purchase:1 297000 kg delivered in FishTalk for current G b) Feed suppliers informed of certifications of site and relevant ASC requirements in mail to EWOS dt.26.03.18 c) EWOS: Audited by DNV GL GG CFM dt26.06.2019, Global G.A.P. CFM Version 2.1 Dec13. Certifcate GGN CoC 4050373825744 , valid to 24.06.2020 d) Method #2 Massbalance e) Statement from Cargill/EWOS on complete traceability dated 03.01.2019 f) Statement and certificate for feed supplier verified.	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	**Indicator**: Fishmeal Forage Fish Dependency Ratio (FFDRm) for grow-out (calculated using formulas in Appendix IV- 1) **Requirement:** < 1.2 **Applicability:** All	**Instruction to Clients for Indicator 4.2.1 - Calculation of FFDRm** 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 > 1.2) if the farm can satisfactorily demonstrate to the auditor that: - the client understands how to accurately calculate FFDRm; - the client maintains all information needed to accurately calculate FFDRm (i.e. all feed specs for > 6 months) for the current production cycle; and - the client can show how feed used for the current production cycle will ensure that the farm will meet requirements at harvest (i.e. FFDRm < 1.2).				
		a. Maintain a detailed inventory of the feed used including: - Quantities used of each formulation (kg); - Percentage of fishmeal in each formulation used; - Source (fishery) of fishmeal in each formulation used; - Percentage of fishmeal in each formulation derived from trimmings; and - Supporting documentation and signed declaration from feed supplier.	a) Total feed used at the farm for G18: 496000 kg Total fish meal of the feed: 25.2% Fish meal from forage fish: 14.4% Fish meal from trimming: 42.9% of the total fishmeal in the feed b) Trimmings is excluded. c) eFCR 2018G (cycle not finished yet, full cycle will be provided after harvest): 0.96 d) FFDRm 2018G (cycle not finished yet, full cycle will be provided after harvest): 0,60 e) Submitted to ASC in email dt.29-11-2019	Compliant		0,6
		b. For FFDRm calculation, exclude fishmeal derived from rendering of seafood by-products (e.g. the "trimmings" from a human consumption fishery.				
		c. Calculate eFCR using formula in Appendix IV-1 (use this calculation also in 4.2.2 option #1).				
		d. Calculate FFDRm using formulas in Appendix IV-1.				
		e. Submit FFDRm to ASC as per Appendix VI for each production cycle.				
4.2.2	**Indicator**: Fish Oil Forage Fish Dependency Ratio (FFDRo) for grow-out (calculated using formulas in Appendix IV-1), or, Maximum amount of EPA and DHA from direct marine sources [52] (calculated according to Appendix IV-2) **Requirement:** FFDRo < 2.52 or (EPA + DHA) < 30 g/kg feed **Applicability:** All	Note: Under Indicator 4.2.2, farms can choose to calculate FFDRo (Option #1) or EPA & DHA (Option #2). Farms do not have to 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.	a) Total feed used at the farm for G18: 496000 kg Total fish oil of the feed: 11.8% Fish oil from forage fish: 8.50% b)option 1 is used. Trimmings is excluded. c) eFCR 2018G (cycle not finished yet, full cycle will be provided after harvest): 0.96 d) FFDRo 2018G (cycle not finished yet, full cycle will be provided after harvest): 1.53 e) NA f) Submitted to ASC in email dt.29-11-2019	Compliant		1,53
		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	[52] Calculation excludes DHA and EPA derived from fisheries by-products and trimmings. Trimmings are defined as by-products when fish are processed for human consumption or if whole fish is rejected for use of human consumption because the quality at the time of landing does not meet official regulations with regard to fish suitable for human consumption. Fishmeal and fish oil that are produced from trimmings can be excluded from the calculation as long as the origin of the trimmings is not any species that are classified as critically endangered, endangered or vulnerable in the IUCN Red List of Threatened Species (http://www.iucnredlist.org).					

Criterion 4.3 Source of marine raw materials						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
4.3.1	**Indicator**: Timeframe for all fishmeal and fish oil used in feed to come from fisheries [53] certified under a scheme that is an ISEAL member [54] and has guidelines that specifically promote responsible environmental management of small pelagic fisheries **Requirement:** Not required **Applicability:** N/A	NA		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	**Indicator**: Prior to achieving 4.3.1, the FishSource score [55] for the fishery(ies) from which all marine raw material in feed is derived **Requirement:** All individual scores ≥ 6, and biomass score ≥ 6 **Applicability:** All	**Instruction to Clients for Indicator 4.3.2 - FishSource Score of Fish Used in Feed** To determine FishSource scores of the fish species used as feed ingredients, do the following: -go to http://www.fishsource.org/ - type the species into the search function box and choose the accurate fishery -confirm that the search identifies the correct fishery then scroll down or click on the link from the menu on the left reads "Scores" For first audits, farms must have scoring records that cover all feeds purchased during the previous 6-month period. Note: Indicator 4.3.2 applies to fishmeal and oil from forage fisheries, pelagic fisheries, or fisheries where the catch is directly reduced (including krill) and not to by-products or trimmings used in feed.				
		a. Record FishSource score for each species from which fishmeal or fish oil was derived and used as a feed ingredient (all species listed in 4.2.1a).	a) Statement from Cargill/EWOS (Dokumentasjon og informasjon om for levert iht. ASC) on complete traceability dated 03.01.2019with details of raw material sources in specific feeds for this site in this period have scores according to ASC s requirement for this indicator. b) Correspondence verified. Individual score >6 and Biomass score >8, e. g. European sprat North Sea (Sprattus Sprattus) used in feed from EWOS was checked and the scores were more than 6. c) No independent assessment	Compliant		
		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: 1. Contact FishSource via Sustainable Fisheries Partnerships to identify the species as a priority for assessment. 2. Contract a qualified independent third party to conduct the assessment using the FishSource methodology and provide the assessment and details on the third party qualifications to the CAB for review.				
		-				
Footnote	[55] Or equivalent score using the same methodology. See Appendix IV-3 for explanation of FishSource scoring.					

4.3.3	**Indicator**: Prior to achieving 4.3.1, demonstration of third party verified chain of custody and traceability for the batches of fishmeal and fish oil which are in compliance with 4.3.2. **Requirement:** Yes **Applicability:** All	**Instruction to Clients for Indicator 4.3.3 - Third-Party Verification of Traceability** Indicator 4.3.3 requires that farms show that their feed producers can demonstrate chain of custody and traceability as verified through third-party audits. Farms may submit reports from audits of feed producers (see 4.1.1c) as evidence that traceability systems are in compliance. Alternatively, farms may show that their feed producers comply with traceability requirements of Indicator 4.3.3 by submitting evidence that suppliers, and the batches of fishmeal and oil, are certified to the International Fishmeal and Fish Oil Organization's Global Standard for Responsible Supply or to the Marine Stewardship Council Chain of Custody Standard. For the first audit, a minimum of 6 months of data on feed is required and evidence shall relate to species used in said dataset.				
		a. Obtain from the feed supplier documentary evidence that the origin of all fishmeal and fish oil used in the feed is traceable via a third-party verified chain of custody or traceability program.	EWOS: Audited by DNV GL GG CFM dt26.06.2019, Global G.A.P. CFM Version 2.1 Dec13. Certifcate GGN CoC 4050373825744 , valid to 24.06.2020	Compliant		
		b. Ensure evidence covers all the species used (as consistent with 4.3.2a, 4.2.1a, and 4.2.2a).				
4.3.4	**Indicator**: Feed containing fishmeal and/or fish oil originating from by-products [56] or trimmings from IUU [57] catch or from fish species that are categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species [58], whole fish and fish meal from the same species and family as the species being farmed **Requirement:** None [59] **Applicability:** All except as noted in [59]	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.	a, b, c) Statement from Cargill/EWOS (Dokumentasjon og informasjon om for levert iht. ASC) on complete traceability dated 03.01.2019with details of raw material sources in specific feeds for this site in this period have scores according to ASC s requirement for this indicator. EWOS: Audited by DNV GL GG CFM dt26.06.2019, Global G.A.P. CFM Version 2.1 Dec13. Certifcate GGN CoC 4050373825744 , valid to 24.06.2020 d) Not from vulnerable fisheries	Compliant		
		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.				
		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).				
		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].				
4.3.5	**Indicator:** Presence and evidence of a responsible sourcing policy for the feed manufacturer for marine ingredients that includes a commitment to continuous improvement of source fisheries **Requirement:** Yes **Applicability:** All	a. Request a link to a public policy from the feed manufacturer stating the company's support of efforts to shift feed manufacturers purchases of fishmeal and fish oil to fisheries certified under a scheme that is an ISEAL member and has guidelines that specifically promote responsible environmental management of small pelagic fisheries and committing to continuous improvement of source fisheries.	a, b, c) Statement from Cargill/EWOS (Dokumentasjon og informasjon om for levert iht. ASC) on complete traceability dated 03.01.2019with details of raw material sources in specific feeds for this site in this period have scores according to ASC s requirement for this indicator. EWOS: Audited by DNV GL GG CFM dt26.06.2019, Global G.A.P. CFM Version 2.1 Dec13. Certifcate GGN CoC 4050373825744 , valid to 24.06.2020	Compliant		
		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.				
		c. Compile a list of the origin of all fish products used as feed ingredients in all feed.				
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 http://www.iucnredlist.org/.					
Footnote	[59] For species listed as “vulnerable” by IUCN, an exception is made if a regional population of the species has been assessed to be not vulnerable in a National Red List process that is managed explicitly in the same science-based way as 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	**Indicator**: Presence and evidence of a responsible sourcing policy for the feed manufacturer for feed ingredients that comply with recognized crop moratoriums [60] and local laws [61] **Requirement:** Yes **Applicability:** All	a. Compile and maintain a list of all feed suppliers with contact information. (See also 4.1.1a) 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. c. Confirm that third party audits of feed suppliers (4.1.1c) show evidence that supplier's responsible sourcing policies are implemented.	a, b) Statement from Cargill/EWOS (Dokumentasjon og informasjon om for levert iht. ASC) on complete traceability dated 03.01.2019 with details of raw material sources in specific feeds for this site in this period have scores according to ASC s requirement for this indicator. c) EWOS: Audited by DNV GL GG CFM dt26.06.2019, Global G.A.P. CFM Version 2.1 Dec13. Certifcate GGN CoC 4050373825744 , valid to 24.06.2020	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	**Indicator**: Percentage of soya or soya-derived ingredients in the feed that are certified by the Roundtable for Responsible Soy (RTRS) or equivalent [62] **Requirement:** 100% **Applicability:** All	a. Prepare a policy stating the company's support of efforts to shift feed manufacturers' purchases of soya to soya certified under the Roundtable for Responsible Soy (RTRS) or equivalent. b. Prepare a letter stating the farm's intent to source feed containing soya certified under the RTRS (or equivalent) c. Notify feed suppliers of the farm's intent (4.4.2b). d. Obtain and maintain declaration from feed supplier(s) detailing the origin of soya in the feed. e. Provide evidence that soya used in feed is certified by the Roundtable for Responsible Soy (RTRS) or equivalent [62]	a-b) Annual Cermaq Group report 2017 on sustainability policy, requiring feed raw material from sutainable sourcing, (ISEAL scheme fisheries). Code of conduct feed suppliers for Cermaq Group with statement of intent and policy, dated 18.01.17 c) Feed suppliers informed of relevant ASC requirements in mail to EWOS dt.18.06.15 . Continuous communication related to ASC feed issues. d-e) Statement from Cargill/EWOS (Dokumentasjon og informasjon om for levert iht. ASC) dated 03.01.2019 with details of raw material sources according to ASC s requirement for this indicator. EWOS: Audited by DNV GL GG CFM dt26.06.2019, Global G.A.P. CFM Version 2.1 Dec13. Certifcate GGN CoC 4050373825744 , valid to 24.06.2020	Compliant		
Footnote	[62] Any alternate certification scheme would have to be approved as equivalent by the Technical Advisory Group of the ASC.					
4.4.3	**Indicator**: Evidence of disclosure to the buyer [63] of the salmon of inclusion of transgenic [64] plant raw material, or raw materials derived from transgenic plants, in the feed **Requirement:** Yes, for each individual raw material containing > 1% transgenic content [65] **Applicability:** All	a. Obtain from feed supplier(s) a declaration detailing the content of soya and other plant raw materials in feed and whether it is transgenic. b. Disclose to the buyer(s) a list of any transgenic plant raw material in the feed and maintain documentary evidence of this disclosure. For first audits, farm records of disclosures must cover > 6 months. c. Inform ASC whether feed contains transgenic ingredients (yes or no) as per Appendix VI for each production cycle.	a, b) Statement from Cargill/EWOS (Dokumentasjon og informasjon om for levert iht. ASC) on complete traceability dated 03.01.2019, no GMO product is used as feed ingredients c) Submitted to ASC in email dt.29-11-2019	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						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
4.5.1	**Indicator**: Presence and evidence of a functioning policy for proper and responsible [66] treatment of non-biological waste from production (e.g., disposal and recycling) **Requirement:** Yes **Applicability:** All	a. Prepare a policy stating the farm's commitment to proper and responsible treatment of non-biological waste from production. It must explain how the farm's policy is consistent with best practice in the area of operation. b. Prepare a declaration that the farm does not dump non-biological waste into the ocean. c. Provide a description of the most common production waste materials and how the farm ensures these waste materials are properly disposed of. d. Provide a description of the types of waste materials that are recycled by the farm.	a) Environmental policy for Cermaq Norway AS (11.04.2019) wtih referance to other relevant internal documents and reports Procedure for general waste management 7 june 2018 number 163 was avaiable. b) Statment on date 06.04.2017 that no wast is dumpted to sea. Definition of dangerous waste and how to be handled were provided on the waste management procedure ID 291 and 20. June. 2018. c) Nest, old production equipments, bags, empty chemical boxes, old PPEs, waste feed, old feed, silage, and plastics are the general wastes produced on farms. d) All nonbiological waste (Nest, old production equipments, bags, empty chemical boxes, old PPEs, waste feed, old feed, silage, and plastics) handled by accredited companies which are apporved receivers of all kind of waste. The site has site specific plan for waste handling in their environmental targets, updated annually. Nets are collected by Mørenot. General waste has been delivered to Østbø, last delivery was on 10.11.2019. Dangerous waste are delivered to Østbø, for example a delivery note on 04.11.2019 was seen. Dead fish are delivied to Scanbio. Last delivery was on 06.06.2019	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	**Indicator**: Evidence that non-biological waste (including net pens) from grow-out site is either disposed of properly or recycled **Requirement:** Yes **Applicability:** All	a. Provide a description of the most common production waste materials and how the farm ensures these waste materials are properly disposed of. (see also 4.5.1c) b. Provide a description of the types of waste materials that are recycled by the farm. (See also 4.5.1d) c. Inform the CAB of any infractions or fines for improper waste disposal received during the previous 12 months and corrective actions taken.. d. Maintain records of disposal of waste materials including old nets and cage equipment.	a-d) All nonbiological waste (Nest, old production equipments, bags, empty chemical boxes, old PPEs, waste feed, old feed, silage, and plastics) handled by accredited companies which are apporved receivers of all kind of waste. The site has site specific plan for waste handling in their environmental targets, updated annually. Nets are collected by Mørenot. General waste has been delivered to Østbø, last delivery was on 10.11.2019. Dangerous waste are delivered to Østbø, for example a delivery note on 04.11.2019 was seen. Dead fish are delivied to Scanbio. Last delivery was on 06.06.2019	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	**Indicator**: Presence of an energy use assessment verifying the energy consumption on the farm and representing the whole life cycle at sea, as outlined in Appendix V- 1 **Requirement:** Yes, measured in kilojoule/t fish produced/production cycle **Applicability:** All	**Instruction to Clients for Indicator 4.6.1 - Energy Use Assessment** Indicator 4.6.1 requires that farms must have an assessment to verify energy consumption. The scope of this requirement is restricted to operational energy use for the farm site(s) that is applying for certification. Boundaries for operational energy use should correspond to the sources of Scope 1 and Scope 2 emissions (see Appendix V-1). Energy use corresponding to Scope 3 emissions (i.e. the energy used to fabricate materials that are purchased by the farm) is not required. However the SAD Steering Committee encourages companies to integrate energy use assessments across the board in the company. For the purposes of calculating energy consumption, the duration of the production cycle is the entire life cycle "at sea" - it does not include freshwater smolt production stages. Farms that have integrated smolt rearing should break out the grow-out stage portion of energy consumption if possible. Quantities of energy (fuel and electricity) are converted to kilojoules. Verification is done by internal or external assessment following either the GHG Protocol Corporate Standard or ISO 14064-1 (see Appendix V-1 for more details).				
		a. Maintain records for energy consumption by source (fuel, electricity) on the farm throughout each production cycle.	a) Records and calculations were verified b) Total energy consumption in kilojoules (kj): 4167396000 c) Biomass produced during last complete production cyclus 18G: 5334.76 mt d) Energy consumption KJ/tonn/generation: 781.179 e) Submitted to ASC in email dt.29-11-2019 f) Scope 1 Diesel, fuel oil, crude oil, petrol, propane Scope 2 Electricity. Assessed and compared between sites and production forms.	Compliant		781.179
		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	**Indicator**: Records of greenhouse gas (GHG [68]) emissions [69] on farm and evidence of an annual GHG assessment, as outlined in Appendix V-1 **Requirement:** Yes **Applicability:** All	**Instruction to Clients for Indicator 4.6.2 - Annual GHG Assessment** Indicator 4.6.2 requires that farms must have an annual Greenhouse Gas (GHG) assessment. Detailed instructions are presented in Appendix V-1 and references therein. The scope of this requirement is restricted to operational boundaries for the farm site(s) that is applying for certification. However the SAD Steering Committee encourages companies to integrate GHG accounting practices across the board in the company. Verification may be done by internal or external assessment following either the GHG Protocol Corporate Standard or ISO 14064-1 (see Appendix V-1 for more details). Note: For the purposes of this standard, GHGs are defined as the six gases listed in the Kyoto Protocol: carbon dioxide (CO_2); methane (CH_4); nitrous oxide (N_2O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF_6).				
		a. Maintain records of greenhouse gas emissions on the farm.	a) Farm records of GHG assessment. b) Farm records of GHG are done continuesly for a month period. Record for 18G: 3002 KJ/mT/gen CO2e c) Farm records of GHG assessment. Scope 1 diesel from diesel/gasoline workboat, truck, generator and scope 2 is purchased electricity and purchased service boat diesel consumption. d) Submitted to ASC in email dt.29-11-2019	Compliant		3002
		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_2 gases to CO_2 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_2); methane (CH4); nitrous oxide (N_2O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF_6).					
Footnote	[69] GHG emissions must be recorded using recognized methods, standards and records as outlined in Appendix V.					

4.6.3	**Indicator**: Documentation of GHG emissions of the feed [70] used during the previous production cycle, as outlined in Appendix V, subsection 2 **Requirement:** Yes **Applicability:** All	**Instruction to Clients for Indicator 4.6.3 - GHG Emissions of Feed** Indicator 4.6.3 requires that farms document the greenhouse gas emissions (GHG) associated with any feeds used during salmon production. Farms will need to obtain this information from their feed supplier(s) and thereafter maintain a continuous record of Feed GHG emissions throughout all production cycles. This requirement applies across the entire previous production cycle. Therefore farms should inform their feed supplier(s) and: - the farm provides its feed suppliers with detailed information about the requirements including a copy of the methodology outlined in Appendix V, subsection 2; - the farm explain what analyses must be done by feed suppliers; and - the farm explains to feed suppliers what documentary evidence will be required by the farm to demonstrate compliance. Note1: Farms may calculate GHG emissions of feed using the average raw material composition used to produce the salmon (by weight) rather than using feed composition on a lot-by-lot basis. Note2: Feed supplier's calculations must include Scope 1, Scope 2, and Scope 3 GHG emissions as specified in Appendix V, subsection 2.				
		a. Obtain from feed supplier(s) a declaration detailing the GHG emissions of the feed (per kg feed).	a) The statement from the feed supplier show following details: GHG emission for 2018G: b) Feed usage in 2018G: 496000 kg from EWOS EWOS factor 1.382 EWOS: 685 ton CO2/ total feed volume d) Submitted to ASC in email dt.29-11-2019	Compliant		
		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]					
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
Footnote	[71] Closed production systems that do not use nets and do not use antifoulants shall be considered exempt from standards under Criterion 4.7.					
Footnote	[72] See Appendix VI for transparency requirements for 4.7.1, 4.7.3 and 4.7.4.					
4.7.1	**Indicator**: For farms that use copper-treated nets [73], evidence that nets are not cleaned [74] or treated in situ in the marine environment **Requirement:** Yes **Applicability:** 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.	a) Procedure "Prosedyre for kontroll, ettersyn og renhold av not" ID 315, d.t. 22.08.17. Internal statement/procedure on antifouling used and not cleaning in sea defined in procedure and confirm that nets are not to be cleaned on site b) Documents and traceability available in QMS system and net log from Mørenot. "Netcoating Plus" whitout copper by Sten-Hansen is used, ref safety sheet dt 13.05.2016, nr 1907/2006 (REACH), EU 2015/830. No need for classification according to the Norwegian Enviromental Agency c) Copper-based treatments are used. d) Copper-based treatments are used. e) Submitted to ASC in email dt.29-11-2019	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) durng 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	**Indicator**: For any farm that cleans nets at on-land sites, evidence that net-cleaning sites have effluent treatment [75] **Requirement:** Yes **Applicability:** All farms except as noted in [71]	a. Declare to the CAB whether nets are cleaned on-land. b. If nets are cleaned on-land, obtain documentary evidence from each net-cleaning facility that effluent treatment is in place. 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.	a) Nets are cleaned on land by net producer and contractor Morenøt AS. b) Each net facility has certification form the authorities to clean nets at their facilities. All the nest are serviced and cleaned by Morenøt AS. They are certified to ISO 14001:2015. All solids are collected and effluent water is tested for compliance to strict effluent requirements according to Section 25-04 of the Pollution Regulation (Discharges of up to 2 kg of copper / year from land-based facilities for washing farmed nets) c) No copper effluent is allowed by law in Norway.	Compliant		
Footnote	[75] Treatment must have appropriate technologies in place to capture copper if the farm uses copper-treated nets.					
4.7.3	**Indicator**: For farms that use copper nets or copper-treated nets, evidence of testing for copper level in the sediment outside of the AZE, following methodology in Appendix I-1 **Requirement:** Yes **Applicability:** All farms except as noted in [71]	Note: If the benthos throughout and immediately outside the full AZE is hard bottom, provide evidence to the CAB and request an exemption from Indicator 4.7.3 (see 2.1.1c).				
		a. Declare to the CAB whether the farm uses copper nets or copper-treated nets. (See also 4.7.1c). If "no", Indicator 4.7.3 does not apply. 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. 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.	a) Copper-based treatments are used. b) Copper is measured as part of the MOM C reqquirements following the NS 9410 sampling standard on all salmon farms carried out at peak feeding. c) Methods follow the requirement of NS 9410 and are carried out at independent labs by Aquacompetanse AS.	Compliant		
4.7.4	**Indicator**: Evidence that copper levels [76] are < 34 mg Cu/kg dry sediment weight, or, in instances where the Cu in the sediment exceeds 34 mg Cu/kg dry sediment weight, demonstration that the Cu concentration falls within the range of background concentrations as measured at three reference sites in the water body **Requirement:** Yes **Applicability:** All farms except as noted in [71] and excluding those farms shown to be exempt from Indicator 4.7.3	a. Inform the CAB whether: 1) farm is exempt from Indicator 4.7.4 (as per 4.7.3a), or 2) Farm has conducted testing of copper levels in sediment. b. Provide evidence from measurements taken in 4.7.3b that copper levels are < 34 mg Cu/kg dry sediment weight. 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). d. Analyze results from 4.7.4c to show the background copper concentrations as measured at three reference sites in the water body. e. Submit data on copper levels in sediments to ASC as per Appendix VI for each production cycle.	a) Farm has conducted copper testing onsite. B) Levels are below the requirements. Results ranging from 2.6 to 11.2 mg Cu/kg dry sediment weight C) NA d) NA e) submitted to ASC on 29-11-2019	Compliant		
Footnote	[76] According to testing required under 4.7.3. The standards related to testing of copper are only applicable to farms that use copper-based nets or copper-treated nets.					
4.7.5	**Indicator**: Evidence that the type of biocides used in net antifouling are approved according to legislation in the European Union, or the United States, or Australia **Requirement:** Yes **Applicability:** All farms except as noted in [71]	a. Identify all biocides used by the farm in net antifouling. 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.	a) Nets consist of Netwax NI3, active substance (3% Cu2O). b) Cu2O is approved according to EU-regulation number Reg (EU) 2016/1089 on 01/01/2018	Compliant		

PRINCIPLE 5: MANAGE DISEASE AND PARASITES IN AN ENVIRONMENTALLY RESPONSIBLE MANNER						
Criterion 5.1 Survival and health of farmed fish [77]						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
Footnote	[77] See Appendix VI for transparency requirements for 5.1.4, 5.1.5 and 5.1.6.					
5.1.1	**Indicator**: Evidence of a fish health management plan for the identification and monitoring of fish diseases, parasites and environmental conditions relevant for good fish health, including implementing corrective action when required **Requirement:** Yes **Applicability:** All	a. Prepare a fish health management plan that incorporates components related to identification and monitoring of fish disease and parasites. This plan may be part of a more comprehensive farm planning document. b. Ensure that the farm's current fish health management plan was reviewed and approved by the farm's designated veterinarian [78].	Site specific Fish Health Plan for Rivarbukt in QMS with links to relevant procedures. Plan covers all aspect of relevant diseaes and parasite diagnostics and control measures. Internal veterinary services, responsible veterinarian. Approved and signed by veterinarian dt. 25.06.2019 Karl Fredrik Otem. Approved and signed by veterinarian dt. 25.06.2019 Karl Fredrik Ottem, Fish Health Manager.	Compliant		
5.1.2	**Indicator**: Site visits by a designated veterinarian [78] at least four times a year, and by a fish health manager [79] at least once a month **Requirement:** Yes **Applicability:** All	a. Maintain records of visits by the designated veterinarian [78] and fish health managers [82]. If schedule cannot be met, a risk assessment must be provided. b. Maintain a current list of personnel who are employed as the farm's designated veterinarian(s) [78] and fish health manager(s) [79]. c. Maintain records of the qualifications of persons identified in 5.1.2b.	Minimum 12 visits annually. System for weekly scheduled meetings covering e.g FH issues. 4 visits for current G, last visit on 28.11.2019. The list of fish health personnel with valid HPR number was verified. External fish health service provider, Labora AS is also used.	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	**Indicator**: Percentage of dead fish removed and disposed of in a responsible manner **Requirement:** 100% [80] **Applicability:** All	a. Maintain records of mortality removals to show that dead fish are removed regularly and disposed of in a responsible manner. b. Collect documentation to show that disposal methods are in line with practices recommended by fish health managers and/or relevant legal authorities. c. For any exceptional mortality event where dead fish were not collected for post-mortem analysis, keep a written justification.	b) System established for handling and documentation according to requirements in national legislation handled by NFSA. Seen "Prosedyre for håndtering av dødfisk,svimere og ensillasje" ID 289 dated 29.09.17 in QMS system. Daily removal of dead fish (registration in FishTalk system) and processed to ensilage. All mortalitys to ensilage. Scanbio.Scanbio AS Invoice dated 06-06-2019 on retrival ensilage c) No exceptional mortalitys without post-mortem analysis	Compliant		
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	**Indicator**: Percentage of mortalities that are recorded, classified and receive a post-mortem analysis **Requirement:** 100% [81] **Applicability:** All	Note: Farms are required to maintain mortality records from the current and two previous production cycles. For first audit, records for the current and prior production cycle are required. It is recommended that farms maintain a compiled set of records to demonstrate compliance with 5.1.3 - 5.1.6.				
		a. Maintain detailed records for all mortalities and post-mortem analyses including: - date of mortality and date of post-mortem analysis; - total number of mortalities and number receiving post-mortem analysis; - name of the person or lab conducting the post-mortem analyses; - qualifications of the individual (e.g. veterinarian [78], fish health manager [79]); - cause of mortality (specify disease or pathogen) where known; and - classification as 'unexplained' when cause of mortality is unknown (see 5.1.6).	a)100 % of mortality is categorised for 18G, the last complete production cyclus, documented in Fishtalk: Precent cycle 18G accumulated: Total mortality 3,88 % Virus 1.73 % + Unspesified 1.17 % = Virus + Unspesified = 2.90 % b) All mortalitys are diagnoesed and post-mortem analyses are done on a statistically relevant number of fish (ref unspecified numbers above). Lab analyses routinely. c) 100 % of mortality is categorised for 18G, the last complete production cyclus, documented in Fishtalk: Precent cycle 18G accumulated: Total mortality 3,88 % Virus 1.73 % + Unspesified 1.17 % = Virus + Unspesified = 2.90 % d) Record are available and documented in Fishtalk, all mortalitys are categorised. e) Record are available and documented in Fishtalk production system where mortalitys are recorded and categorised according to FHP and mortality guide. f) Submitted to ASC in email dt.29-11-2019	Compliant		
		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.				
		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).				
		d. Using results from 5.1.3a-c, classify each mortality event and keep a record of those classifications.				
		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).				
		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).				
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	**Indicator**: Maximum viral disease-related mortality [82] on farm during the most recent production cycle **Requirement:** ≤ 10% **Applicability:** All	a. Calculate the total number of mortalities that were diagnosed (see 5.1.4) as being related to viral disease.	a-b) 100 % of mortality is categorised for 18G, the last complete production cyclus, documented in Fishtalk: Precent cycle 18G accumulated: Total mortality 3,88 % Virus 1.73 % + Unspesified 1.17 % = Virus + Unspesified = 2.90 % c) Submitted to ASC in email dt.29-11-2019	Compliant		
		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.				
		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).				
Footnote	[82] Viral disease-related mortality count shall include unspecified and unexplained mortality as it could be related to viral disease.					

5.1.6	**Indicator**: Maximum unexplained mortality rate from each of the previous two production cycles, for farms with total mortality > 6% **Requirement:** ≤ 40% of total mortalities **Applicability:** All farms with > 6% total mortality in the most recent complete production cycle.	a. Use records in 5.1.4a to calculate the unexplained mortality rate (%) for the most recent full production cycle. If rate was ≤ 6%, then the requirement of 5.1.6 does not apply. If total mortality rate was > 6%, proceed to 5.1.6b. 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. c. Submit data on maximum unexplained mortality to ASC as per Appendix VI for each production cycle.	NA. Total mortality for the last G: 3.88%	N/A		
5.1.7	**Indicator**: A farm-specific mortalities reduction program that includes defined annual targets for reductions in mortalities and reductions in unexplained mortalities **Requirement:** Yes **Applicability:** All	Note: Farms have the option to integrate their farm-specific mortality reduction program into the farm's fish health management plan (5.1.1). a. Use records in 5.1.4a to assemble a time-series dataset on farm-specific mortalities rates and unexplained mortality rates. 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. c. Ensure that farm management communicates with the veterinarian, fish health manager, and staff about annual targets and planned actions to meet targets.	a-b) Mortality rate reduction programme (Corporate leve Finnmark on <10% morts pr.generation). Mortality reduction programs also part of managment review for Cermaq Norway and Cermaq Group. Specified in FHP, on site level with concrete objectives for actions to reduce to less than 4,8 % 12 months rolling. c) Confirmed during interviews	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 therapeutant use. Those records maintained for compliance with 5.2.1, if all consolidated into a single place, can be used to demonstrate performance against subsequent Indicators (5.2.1 through 5.2.10) under Criterion 5.2.						
5.2.1	**Indicator**: On-farm documentation that includes, at a minimum, detailed information on all chemicals [84] and therapeutants used during the most recent production cycle, the amounts used (including grams per ton of fish produced), the dates used, which group of fish were treated and against which diseases, proof of proper dosing, and all disease and pathogens detected on the site **Requirement:** Yes **Applicability:** All	a. Maintain a detailed record of all chemical and therapeutant use that includes: - name of the veterinarian prescribing treatment; - product name and chemical name; - reason for use (specific disease) - date(s) of treatment; - amount (g) of product used; - dosage; - t of fish treated; - the WHO classification of antibiotics (also see note under 5.2.8); and - the supplier of the chemical or therapeutant. b. If not already available, assemble records of chemical and therapeutant use to address all points in 5.2.1a for the previous two production cycles. For first audits, available records must cover one full production cycle immediately prior to the current cycle. 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).	a-b) Allowed usage defined in Fish Health Plan. Antibiotics not used. Treatments done are anaesthetics all under responsible veterinarian prescriptions. Registered in Fishtalk/fish CV including dates for usage, quantity and dosage, withdrawal periods defined and regsitered in Fishtalk. b) Allowed usage defined in FHP. Other treatments done are anaesthetics all under responsible veterinarian prescriptions. Registered in Fishtalk/fish CV. Dates for usage, quantity and dosage, withdrawal periods defined and registered in Fishtalk. c) Submitted to ASC in email dt.29-11-2019	Compliant		
Footnote	[84] Chemicals used for the treatment of fish.					

5.2.2	**Indicator**: Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [85] in any of the primary salmon producing or importing countries [86] **Requirement:** None **Applicability:** All	a. Prepare a list of therapeutants, including antibiotics and chemicals, that are proactively banned for use in food fish for the primary salmon producing and importing countries listed in [86]. b. Maintain records of voluntary and/or mandatory chemical residue testing conducted or commissioned by the farm from the prior and current production cycles. -	a) Listed in "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 b) Listed in "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 c) Compliance verified and in accordance with requirements and also in accordance with reports and usage recorded in production system Fishtalk.	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	**Indicator**: Percentage of medication events that are prescribed by a veterinarian **Requirement:** 100% **Applicability:** All	a. Obtain prescription for all therapeutant use in advance of application from the farm veterinarian (or equivalent, see [78] for definition of veterinarian). 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.	a) Record of prescriptions was seen in the internal system. For example: Prescription from 27.09.2019 for Slice Vet EWOS by Åkerblå. The HPR number was verified. b) 100% of treatment events are prescribed by a veterinarian Original presciption in site folder and regsitered in Fishtalk with witholding periods defined in prescription and in Fishtalk.	Compliant		
5.2.4	**Indicator**: Compliance with all withholding periods after treatments **Requirement:** Yes **Applicability:** All	a. Incorporate withholding periods into the farm's fish health management plan (see 5.1.1a). 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. c. Show compliance with all withholding periods by providing treatment records (see 5.2.1a) and harvest dates for the most recent production cycle.	a) In Fishtalk, automatically notified/blocked according to degreedays witholdingtime stated in prescription. According to FHMP/VHP on withholding periods defined in Fishtalk and specific presescription. b) Documented in Fishtalk, automatically notified/blocked according to degreedays witholdingtime stated in prescription. c) In Fish Talk where treatment dates are specified and compared to harvest dates. According to FHMP/VHP on withholding periods defined.	Compliant		
5.2.5	**Indicator**: Maximum farm level cumulative parasiticide treatment index (PTI) score as calculated according to the formula in Appendix VII **Requirement:** PTI score ≤ 13 **Applicability:** All	a. Using farm data for therapeutants usage (5..2.1a) and the formula presented in Appendix VII, calculate the cumulative parasiticide treatment index (PTI) score for the most recent production cycle. Calculation should be made and updated on an ongoing basis throughout the cycle by farm manager, fish health manager, and/or veterinarian. b. Provide the auditor with access to records showing how the farm calculated the PTI score. c. Submit data on farm level cumulative PTI score to ASC as per Appendix VI for each production cycle.	a) Calculations verified. PTI score calculated according to ASC and reference is made to VR 97,on PTI calculation method confirmed by ASC See www.asc-aqua.org for VR details firmed by ASC dt.20.08.15 b) PTI score (2018G): 0,34 c) Submitted to ASC in email dt.29-11-2019	Compliant		

5.2.6	**Indicator**: For farms with a cumulative PTI ≥ 6 in the most recent production cycle, demonstration that parasiticide load [87] is at least 15% less that of the average of the two previous production cycles **Requirement:** Yes **Applicability:** All farms with a cumulative PTI ≥ 6 in the most recent production cycle	a. Review PTI scores from 5.2.5a to determine if cumulative PTI ≥ 6 in the most recent production cycle. If yes, proceed to 5.2.6b; if no, Indicator 5.2.6 does not apply.	NA	N/A		
		b. Using results from 5.2.5 and the weight of fish treated (kg), calculate parasiticide load in the most recent production cycle [90].				
		c. Calculate parasiticide load in the two previous production cycles as above (5.2.6b) and compute the average. Calculate the percent difference in parasiticide load between current cycle and average of two previous cycles. For first audit, calculation must cover one full production cycle immediately prior to the current cycle.				
		d. As applicable, submit data to ASC on parasiticide load for the most recent production cycle and the two previous production cycles (Appendix VI).				
Footnote	[87] Parasiticide load = Sum (kg of fish treated x PTI). Reduction in load required regardless of whether production increases on the site. Farms that consolidate production across multiple sites within an ABM can calculate reduction based on the combined parasiticide load of the consolidated sites.					
5.2.7	**Indicator**: Allowance for prophylactic use of antimicrobial treatments [88] **Requirement:** None **Applicability:** All	a. Maintain records for all purchases of antibiotics (invoices, prescriptions) for the current and prior production cycles.	No antibiotics used the recent cycles.	N/A		
		b. Maintain a detailed log of all medication-related events (see also 5.2.1a and 5.2.3)				
		c. Calculate the total amount (g) and treatments (#) of antibiotics used during the current and prior production cycles (see also 5.2.9).				
Footnote	[88] The designated veterinarian must certify that a pathogen or disease is present before prescribing medication.					
5.2.8	**Indicator**: Allowance for use of antibiotics listed as critically important for human medicine by the World Health Organization (WHO [89]) **Requirement:** None [90] **Applicability:** All	Note 1: Farms have the option to certify only a portion of the fish or farm site when WHO-listed [89] antibiotics have been used at the production facility (see 5.2.8d). To pursue this option, farms must request an exemption from the CAB in advance of the audit and provide sufficient records giving details on which pens were treated and traceability of those treated fish. Note 2: It is recommended that the farm veterinarian review the WHO list [see 89] in detail and be aware that the list is meant to show examples of members of each class of drugs, and is not inclusive of all drugs.				
		a. Maintain a current version of the WHO list of antimicrobials critically and highly important for human health [89].	a) Valid WHO CIA list 6th edition 2018, released in 2019 demonstrated for antimicrobials critically and highly important for human health presented. b-d) No antibiotics used. Audit planned and perforemd accordingly.	N/A		
		b. If the farm has <u>not</u> used any antibiotics listed as critically important (5.2.8a) in the current production cycle, inform the CAB and proceed to schedule the audit.				
		c. If the farm <u>has</u> used antibiotics listed as critically important (5.2.8a) to treat any fish during the current production cycle, inform the CAB prior to scheduling audit.				
		d. If yes to 5.2.8c, request an exemption from the CAB to certify only a portion of the farm. Prior to the audit, provide the CAB with records sufficient to establish details of treatment, which pens were treated, and how the farm will ensure full traceability and separation of treated fish through and post- harvest.				
Footnote	[89] The fifth edition of the WHO list of critically and highly important antimicrobials was released in 2009 and is available at: http://www.who.int/foodsafety/publications/antimicrobials-fifth/en/.					
Footnote	[90] If the antibiotic treatment is applied to only a portion of the pens on a farm site, fish from pens that did not receive treatment are still eligible for certification.					

5.2.9	**Indicator**: Number of treatments [91] of antibiotics over the most recent production cycle **Requirement:** ≤ 3 **Applicability:** All	Note: for the purposes of Indicator 5.2.9, "treatment" means a single course of medication given to address a specific disease issue and that may last a number of days and be applied in one or more pens (or cages).				
		a. Maintain records of all treatments of antibiotics (see 5.2.1a). For first audits, farm records must cover the current and immediately prior production cycles in a verifiable statement.	No antibiotics used the recent cycles.	N/A		
		b. Calculate the total number of treatments of antibiotics over the most recent production cycle and supply a verifiable statement of this calculation.				
Footnote	[91] A treatment is a single course medication given to address a specific disease issue and that may last a number of days.					
5.2.10	**Indicator**: If more than one antibiotic treatment is used in the most recent production cycle, demonstration that the antibiotic load [92] is at least 15% less that of the average of the two previous production cycles **Requirement:** Yes [93] **Applicability:** All	Note: Indicator 5.2.10 requires that farms must demonstrate a reduction in load required, regardless of whether production increases on the site. Farms that consolidate production across multiple sites within an ABM can calculate reduction based on the combined antibiotic load of the consolidated sites.				
		a. Use results from 5.2.9b to show whether more than one antibiotic treatment was used in the most recent production cycle. If not, then the requirement of 5.2.10 does not apply. If yes, then proceed to 5.2.10b.	No antibiotics used the recent cycles.	N/A		
		b. Calculate antibiotic load (antibiotic load = the sum of the total amount of active ingredient of antibiotic used in kg) for most recent production cycle and for the two previous production cycles. For first audit, calculation must cover one full production cycle immediately prior to the current cycle.				
		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.				
		d. Submit data on antibiotic load to ASC as per Appendix VI (if applicable) for each production cycle.				
Footnote	[92] Antibiotic load = the sum of the total amount of active ingredient of antibiotics used (kg).					
Footnote	[93] Reduction in load required, regardless of whether production increases on the site. Farms that consolidate production across multiple sites within an ABM can calculate reduction based on the combined antibiotic load of the consolidated sites.					
5.2.11	**Indicator**: Presence of documents demonstrating that the farm has provided buyers [94] of its salmon a list of all therapeutants used in production **Requirement:** Yes **Applicability:** All	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).	a-b) Internal Procedure in QMS Traceability procedure defines information flow within the company. Procedure "Prosedyre for utarbeidelse av sporingsdokument på fisk (CV), ID 484, d.t 27.10.2017 Data from "Product control and tracebility" all treatments, included anaesthetics used, dates withdrawal time etc. For example this was verified on a fish CV on harvest cage 2 dated 10-12-2019.	Compliant		
		b. Maintain records showing the farm has informed all buyers of its salmon about all therapeutants used in production.				
Footnote	[94] Buyer: The company or entity to which the farm or the producing company is directly selling its product.					

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	**Indicator**: Bio-assay analysis to determine resistance when two applications of a treatment have not produced the expected effect **Requirement:** Yes **Applicability:** All	**Instruction to Clients for Indicator 5.3.1 - Identifying the 'Expected Effect' of Medicinal Treatment** Indicator 5.3.1 requires that farms identify treatments that have not produced the expected effect. The SAD Steering Committee recognizes that the "expected effect" will vary with health condition and type of medicinal treatment. Therefore farms and auditors will need to review the pre- and post-treatment condition of fish in order to understand and evaluate the impact of treatment. <u>Example: sea lice treatment with emamectin benzoate</u> The SAD SC recommends that a typical baseline for effectiveness of emamectin benzoate is a minimum of 90 percent reduction in abundance of lice on the farmed fish. To determine whether treatment has produced the expected effect, farm and auditor must review pre- and post-treatment lice counts. If the calculated percent reduction in lice is < 90% then the treatment did not produce the expected effect and a bio-assay should be performed to determine whether sea lice have developed resistance. Note: If field-based bio-assays for determining resistance are ineffective or unavailable, the farm shall have samples analyzed by an independent laboratory to detemine resistance formation. The auditor shall record in the audit report why field-based bio-assays were deemed ineffective and shall include results from the laboratory analyses of resistance formation.				
		a. In addition to recording all therapeutic treatments (5.2.1a), keep a record of all cases where the farm uses two successive medicinal treatments.	No consecutive treatments done in present cycle without desired effect.	N/A		
		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.				
		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	**Indicator**: When bio-assay tests determine resistance is forming, use of an alternative, permitted treatment, or an immediate harvest of all fish on the site **Requirement:** Yes **Applicability:** All	a. Review results of bio-assay tests (5.3.1d) for evidence that resistance has formed. If yes, proceed to 5.3.2b. If no, then Indicator 5.3.2 is not applicable.	No consecutive treatments done in present cycle without desired effect.	N/A		
		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.				
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	**Indicator**: Evidence that all salmon on the site are a single-year class [96] **Requirement:** 100% [97] **Applicability:** All farms except as noted in [97]	a. Keep records of the start and end dates of periods when the site is fully fallow after harvest.	a) In Fish Talk and stocking/harvest reports: Fallowing periode between 16G and 18G: 07.08. 2017 to 17.08.2018 (376 days)	Compliant		
		b. Provide evidence of stocking dates (purchase receipts, delivery records) to show that there were no gaps > 6 months for smolt inputs for the current production cycle.	b) In Fish Talk and stocking/harvest reports. First stocking date 18G: 18-08/20.09.2018 last date of the fish is cages (harvest date): 31.05.2019			
		-	c) Ova CVs, Smolt CVs, smolts health cerificates, all information available in Fishtalk.			
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	**Indicator**: 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 **Requirement:** Yes **Applicability:** All	a. For mortality events logged in 5.1.4a, show evidence that the farm promptly evaluated each to determine whether it was a statistically significant increase over background mortality rate on a monthly basis [98]. The accepted level of significance (for example, $p < 0.05$) should be agreed between farm and CAB. 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. 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. 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. 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).	a-e Continuous evaluation. No events of UIA category mortality categorised nor suspected at farm. Ref to indicator 5.1.4a for details of monitoring. System available for prompt publication in website www.cermaq.no.	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	**Indicator**: Evidence of compliance [101] with the OIE Aquatic Animal Health Code [102] **Requirement:** Yes **Applicability:** All	**Instruction to Clients for Indicator 5.4.3 - Compliance with the OIE Aquatic Animal Health Code** Indicator 5.4.3 requires that farms show evidence of compliance with the OIE Aquatic Animal Health Code (see http://www.oie.int/index.php?id=171). Compliance is defined as farm practices consistent with the intentions of the Code. For purposes of the ASC Salmon Standard, this means that the farm must have written procedures stating how the farm will initiate an aggressive response to detection of an exotic OIE-notifiable disease on the farm ['exotic' = not previously found in the area or had been fully eradicated (area declared free of the pathogen)]. An aggressive response will involve, at a minimum, the following actions: - depopulation of the infected site; - implementation of quarantine zones (see note below)in accordance with guidelines from OIE for the specific pathogen; and - additional actions as required under Indicator 5.4.4. To demonstrate compliance with Indicator 5.4.3, clients have the to 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. 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.				
		a. Maintain a current version of the OIE Aquatic Animal Health Code on site or ensure staff have access to the most current version.	a) OIE AAHC presented and awareness demonstrated. Awareness of OIE aquatic Animal Health Code. VHP "Helseplan for matfiskanlegg" refers to OIE Aquatic Animal Health Code.	Compliant		
		b. Develop policies and procedures as needed to ensure that farm practices remain consistent with the OIE Aquatic Animal Health Code (5.4.3a) and with actions required under indicator 5.4.4.	b) Internal procedure in Intelex on practices in accordance with OIE AHC" Described in VHP, notification of diseases, contingency plan (Beredskapsplan for Cermaq, d.t. 27.03.2018, ID 1154) "Notification of diseases". Statment from Cermaq, Adhernce to the OIE Aquatiq, Health Code" d.t 18.01.2018, signed fish healh manager Karl Fredrik Ottem			
		-	c) Confirmed during interviews			
Footnote	[101] Compliance is defined as farm practices consistent with the intentions of the Code, to be further outlined in auditing guidance. For purposes of this standard, this includes an aggressive response to detection of an exotic OIE-notifiable disease on the farm, which includes depopulating the infected site and implementation of quarantine zones in accordance with guidelines from OIE for the specific pathogen. Quarantine zones will likely incorporate mandatory depopulation of sites close to the infected site and affect some, though not necessarily all, of the ABM. Exotic signifies not previously found in the area or had been fully eradicated (area declared free of the pathogen).					
Footnote	[102] OIE 2011. Aquatic Animal Health Code. http://www.oie.int/index.php?id=171.					

5.4.4	**Indicator**: If an OIE-notifiable disease [103] is confirmed on the farm, evidence that: 1. the farm has, at a minimum, immediately culled the pen(s) in which the disease was detected 2. the farm immediately notified the other farms in the ABM [104] 3. the farm and the ABM enhanced monitoring and conducted rigorous testing for the disease 4. the farm promptly [105] made findings publicly available **Requirement:** Yes **Applicability:** All	a. Ensure that farm policies and procedures in 5.4.3a describe the four actions required under Indicator 5.4.4 in response to an OIE-notifiable disease on the farm. b. Inform the CAB if an OIE-notifiable disease has been confirmed on the farm during the current production cycle or the two previous production cycles. If yes, proceed to 5.4.4c. If no, then 5.4.4c an 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). -	a) Fish health manager has the responsibility to inform governments if notifiable diseases occur. b) No occurrence of OIE-notifiable diseases. c) No occurrence of OIE-notifiable diseases. d) No occurrence of OIE-notifiable diseases. e) No occurrence of OIE-notifiable diseases.	Compliant		
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 Gyrodactylosis (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	**Indicator:** Evidence that workers have access to trade unions (if they exist) and union representative(s) chosen by themselves without managerial interference **Requirement:** Yes **Applicability:** All	a) The Freedom of Association is stated in mail labour law. Workers have fully implemented right of Freedom of association. Employer makes no interference to decisions of workers. 50% of employees organised. b) Worker Trade union (TU) representative was elected during meeting of employees. c) Worker representative have meetings with management for coordination. The workers are visited case by case. The rest of the time open channel by phone and e-mail. If there is request visits to sites will be organised without obstacles. d) Interview has confirmed information. The TU representative has possibility to visit farms. Management is encouraging to be organised.		Compliant		
6.1.2	**Indicator:** Evidence that workers are free to form organizations, including unions, to advocate for and protect their rights **Requirement:** Yes **Applicability:** All	a) The job contracts do not specifically states the right of freedom of association but it has reference to labour law and Tariff agreement. Both of documents state that right. b) Employer has created WEB based Personal handbook and Ethical guidelines (last revision 2015-12-14) those documents have stated the right of association. c) Interview confirms communication with exception of one temporary worker. All workers confirmed free possibilities to be organised.		Compliant		
6.1.3	**Indicator:** Evidence that workers are free and able to bargain collectively for their rights **Requirement:** Yes **Applicability:** All	a) Trade union representative confirms no outstanding cases against the farm site management for violations to the right of Freedom of associations. b) Collective bargaining is implemented via consultations and Tariff agreement with Trade unions. c) Now in power Tariff agreement for period 2016 end 2018.		Compliant		

Criterion 6.2 Child labor					
		Compliance Criteria			
6.2.1	**Indicator:** Number of incidences of child [107] labor [108] **Requirement:** None **Applicability:** All except as noted in [107]	a) Requirements of standard applies b) At the audit time none of young workers are employed. c) The age records are in place	Compliant		
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	**Indicator:** Percentage of young workers [109] that are protected [110] **Requirement:** 100% **Applicability:** All	a) The procedure for Young workers ID 147 rev. 12, 2017-05-30 is developed. There are personal training to be done for each young worker indicating allowed and forbidden works. b) Identification process in place. c) Time sheets are maintained. d) No young workers employed during the audit to be interviewed. e) Personal risk assessment was done for young workers indicating forbidden works as per procedure for Young workers ID 147 with risk evaluation template ID 371. The assessment of young workers of last period is available. f) Site was inspected. No interviews were conducted as no young workers are employed during the audit.	Compliant		
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	**Indicator:** Number of incidences of forced, [113] bonded [114] or compulsory labor **Requirement:** None **Applicability:** All	a) Contracts are understood. Contracts do not lead to workers being indebted. Trainings are paid by the company without obligations from workers to compensate if they are leaving the company. b) After shift workers are free to leave c) No cases identified. d) No cases identified. e) No cases identified. f) Interview has confirmed information. Payroll records are maintained.	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	**Indicator:** Evidence of comprehensive [116] and proactive anti-discrimination policies, procedures and practices **Requirement:** Yes **Applicability:** All	a) Ethical guidelines (last revision 2015-12-14) and Whistle blowing procedure (2014-05-27). b) Whistle blowing procedure (2017-08-16) is implemented. No discrimination cases reported. The complaints are managed according Conflict management procedure ID 429 last rev. 2017-02-25. c) The equal access to job opportunities is provided. The equal pay principle is followed. The job vacancies are published on intranet. The Tariff agreement defines local salary grades and payment condition equal for all employees to get same salary for the same job and taking into consideration experience. d) The trainings for site manager and workers are included in competence list.	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	**Indicator:** Number of incidences of discrimination **Requirement:** None **Applicability:** All	a) No cases identified. b) The rights of employees are respected. During interview no discrimination cases reported	Compliant		
Criterion 6.5 Work environment health and safety					
		Compliance Criteria			
6.5.1	**Indicator:** Percentage of workers trained in health and safety practices, procedures [117] and policies on a yearly basis **Requirement:** 100% **Applicability:** All	a) Documentation is developed and is available in working places. b) Employees know emergency respond procedures. The training records are kept on site. Employees are trained and annual refreshment trainings. Procedure for conducting the drills (ID 1126) is implemented. c) Safety drills were organised on site. 2019-April for both shifts separately.	Compliant		
Footnote	[117] Health and safety training shall include emergency response procedures and practices.				
6.5.2	**Indicator:** Evidence that workers use Personal Protective Equipment (PPE) effectively **Requirement:** Yes **Applicability:** All	a) The List of health and safety hazards is maintained in H&S risk assessment documentation. b) PPE is provided. c) The training in proper use of PPE use is done. d) Interview confirms PPE management.	Compliant		
6.5.3	**Indicator:** Presence of a health and safety risk assessment and evidence of preventive actions taken **Requirement:** Yes **Applicability:** All	a) The procedure for risk assessment No 366 is implemented. b) Employees are trained and annual refreshment trainings are organised during risk analysis. Training records are maintained. Last evaluation of the H&S risks and the training for employees took place April 2018 The safe job analysis is done prior to all major works on the site with definitions of risks and their management measures. c) Monthly H&S committee meetings are discussing the need to update the procedures based on practices or OHS incidents accidents. Minutes of meetings are maintained. The site manager has possibility to suggest changes to procedure.	Compliant		

6.5.4	**Indicator:** Evidence that all health- and safety-related accidents and violations are recorded and corrective actions are taken when necessary **Requirement:** Yes **Applicability:** All	a) Company level electronic database INTELEX is used to report for all H&S and environmental accidents and near accidents. Monthly H&S report is generated. Sites have monthly discussions on H&S accidents, incidents and near misses form site and the report. b) Company level electronic database INTELEX is managed with records for all H&S and environmental accidents and near accidents and their investigation. c) Corrective action plans are managed by INTELEX. d) The analysis is understood and improvements are implemented.	Compliant		
6.5.5	**Indicator:** Evidence of employer responsibility and/or proof of insurance (accident or injury) for 100% of worker costs in a job-related accident or injury when not covered under national law **Requirement:** Yes **Applicability:** All	a) Insurance is provided. Temporary employees are provided with accident insurance.	Compliant		
6.5.6	**Indicator:** Evidence that all diving operations are conducted by divers who are certified **Requirement:** Yes **Applicability:** All	Note: If the farm outsources its diving operations to an independent company, the farm shall ensure that auditors have access to specified information sufficient to demonstrate compliance with Indicator 6.5.6. It is the farm's responsibility to obtain copies of relevant documentation (e.g. certificates) from the dive company. a) The diving activities procedure is in use. The records of diving activities maintained on site. The check list was introduced to check information/documents prior to diving. b) Copies of divers' certificates are maintained.	Compliant		
Criterion 6.6 Wages					
		Compliance Criteria			
6.6.1	**Indicator:** The percentage of workers whose basic wage [118] (before overtime and bonuses) is below the minimum wage [119] **Requirement:** 0 (None) **Applicability:** All	a) Documents are available at the company. The Tariff agreement sets the minimum salary. b) Wages meet legal minimum wage according Tariff agreement and contracts with local trade unions. c) The information is available per employee. Documentary evidence is in place.	Compliant		
Footnote	[118] Basic wage: The wages paid for a standard working week (no more than 48 hours).				
Footnote	[119] If there is no legal minimum wage in a country, basic wages must meet the industry-standard minimum wage.				
6.6.2	**Indicator:** Evidence that the employer is working toward the payment of basic needs wage [120] **Requirement:** Yes **Applicability:** All	a) The assessment of cost of living were conducted. b) The calculations and comparison are done. The comparison with wages was conducted. The company wages are above BNW. c) Wages exceed basic needs wage.	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	**Indicator:** Evidence of transparency in wage-setting and rendering [121] **Requirement:** Yes **Applicability:** All	a) The contracts of employees has appendix defining the bonus application. The bonuses are defined in Bonus document. b) The clearly understood by workers. c) Wages are transferred to personal bank accounts d) Interview has confirmed information about wages	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	**Indicator:** Percentage of workers who have contracts [122] **Requirement:** 100% **Applicability:** All	a) Contracts available, records maintained. b) No evidences c) Interview confirms legal employment by contracts.	Compliant		
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	**Indicator:** Evidence of a policy to ensure social compliance of its suppliers and contractors **Requirement:** Yes **Applicability:** All	a) The Ethical and corporate responsibility policy has statements of evaluation of suppliers and subcontractors. Procedure for Classification of suppliers ID 644 is used for dividing to critical or non-critical suppliers. b) Supplier qualification procedure ID316 applies. The evaluation criteria is defined in procedure of classification of suppliers and sub-contractors. The suppliers evaluation matrix was created. c) The reference to Ethical guidelines for suppliers was sent to suppliers and subcontractors.	Compliant		
Criterion 6.8 Conflict resolution					
		Compliance Criteria			
6.8.1	**Indicator:** Evidence of worker access to effective, fair and confidential grievance procedures **Requirement:** Yes **Applicability:** All	a) Procedure of 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. b) Workers are familiar with procedures for conflict resolution. c) The interviews are confirming the information above.	Compliant		
6.8.2	**Indicator:** Percentage of grievances handled that are addressed [123] within a 90-day timeframe **Requirement:** 100% **Applicability:** All	a) The system of handling of grievances, complaints and labour conflicts is in place and effective. b) The system of handling of grievances, complaints and labour conflicts is in place. Documentation is maintained. The conflict had place. Management had applied all necessary procedures and addressed the conflict in good way. c) Documentation is maintained. The case was addressed in time.	Compliant		
Footnote	[123] Addressed: Acknowledged and received, moving through the company's process for grievances, corrective action taken when necessary.				
Criterion 6.9 Disciplinary practices					
		Compliance criteria			
6.9.1	**Indicator:** Incidences of excessive or abusive disciplinary actions **Requirement:** None **Applicability:** All	a) The employer does not use excessive or abusive disciplinary actions. No cases of improper disciplinary behaviour, no warnings were issued. b) No cases identified. c) Interview has confirmed no cases of improper disciplinary behaviour.	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	**Indicator:** Evidence of a functioning disciplinary action policy whose aim is to improve the worker [125] **Requirement:** Yes **Applicability:** All	a) Disciplinary policy is defined in Personal handbook. The verbal and written disciplinary warnings may be used in case of misbehaviour during the work. One written warning was issued for oversleeping. b) Company has the working disciplinary system. Workers confirmed understanding and fairness of disciplinary policy. Documentation is maintained.	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	**Indicator:** Incidences, violations or abuse of working hours and overtime laws [126] **Requirement:** None **Applicability:** All	Note: Working hours, night work and rest periods for workers in agriculture should be in accordance with national laws and regulations or collective agreements (e.g. The Safety and Health in Agriculture Convention, 2001). Additional information can be found on the website of the International Labour Organization (www.ilo.org).			
		a) The time scheme 1:1 is used. (7 days x 10 hours and 7 days-off). It is approved by ASC. The OT limits are defined by Labour law and Tariff agreement. b) Workers are registering working hours daily into Capitech system. Site manager approves. Working hours are within allowed limits. c) The work in shifts is applied and agreed by workers. d) Interview has confirmed no abuse of working time and overtime amounts.	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	**Indicator:** Overtime is limited, voluntary [127], paid at a premium rate [128] and restricted to exceptional circumstances **Requirement:** Yes **Applicability:** All except as noted in [130]	a) Overtime for workers is paid at premium rate as could be seen in payslips. b) The procedure for working hours was developed. The timesheets are managed in Capitech system. c) Interviews have confirmed voluntary overtime.	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	**Indicator:** Evidence that the company regularly performs training of staff in fish husbandry, general farm and fish escape management and health and safety procedures **Requirement:** Yes **Applicability:** All	a) Company encourages the workers to participate in additional training based on Work environment policy. The Tariff agreement define the support that company would provide for employees. b) Training records maintained on site and Intelex system. c) Interview confirms that company supports education initiatives.	Compliant		
Criterion 6.12 Corporate policies for social responsibility					
		Compliance criteria			
6.12.1	**Indicator:** Demonstration of company-level [129] policies in line with the standards under 6.1 to 6.11 above **Requirement:** Yes **Applicability:** All	a) Company level policies are available and are in line with requirements of the standard. b) Policies are approved. c) The policies cover all company operations. d) The access is provided.	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	**Indicator:** Evidence of regular and meaningful [130] consultation and engagement with community representatives and organizations **Requirement:** Yes **Applicability:** All	a) The invitation was sent in 08.01.2019 to interested parties.The meeting was organised on 2019-02-19. 2 people attended in the meeting. b) Consultations have included main points required by the standard. c) The participants from local community have participated in consultation. They were invited to contribute to agenda. d) Consultations have included main points required by the standard. Potential health risks of therapeutic treatments were mentioned during consultation meeting. The risks related to external environment and people were well defined. e) The invitation and minutes of meeting are available. f) The extensive communication is completed during initial certification stage. No inquiries received. The interview was not organised due to logistics and time limitations.	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	**Indicator:** Presence and evidence of an effective [131] policy and mechanism for the presentation, treatment and resolution of complaints by community stakeholders and organizations **Requirement:** Yes **Applicability:** All	a) The complaints could be delivered via company e-mail, company workers or whistle blowing channel. b) No complaints related to farm. c) No complaints related to farm received. d) The extensive communication is completed during initial certification stage. No inquiries received. The interview was not organised due to logistics and time limitations.	Compliant		
Footnote	[131] Effective: In order to demonstrate that the mechanism is effective, evidence of resolutions of complaints can be given.				
7.1.3	**Indicator:** Evidence that the farm has posted visible notice [132] at the farm during times of therapeutic treatments and has, as part of consultation with communities under 7.1.1, communicated about potential health risks from treatments **Requirement:** Yes **Applicability:** All	a) The yellow signs are available. The procedure for using therapeutic and handling of waste, dated 05.04.2018 covers this requirment. b) Signs at site are used. c) Communications for potential health risks took place during the consultation meeting. The risks related to external environment and people is not well defined. d) The extensive communication is completed during licence processing and initial certification stage. No inquiries received. The interview was not organised due to logistics and time limitations.	Compliant		
Footnote	[132] Signage shall be visible to mariners and, for example, to fishermen passing by the farm.				

Criterion 7.2 Respect for indigenous and aboriginal cultures and traditional territories					
		Compliance Criteria			
Instruction to Clients and CABs on Criterion 7.2 - Traditional Territories of Indigenous Groups The ASC Salmon Standard requires that farms must be respectful of the traditional territiories of indigenous groups. The Indicators listed under Criterion 7.2 were designed to fulfill this purpose in a manner consistent with the United Nations Declaration on the Rights of Indigenous Peoples. In many locales, the territorial boundaries of indigenous groups have a defined legal status according to local or national law. In such cases, it is straightforward to know whether a farm is operating in close proximity to indigenous people. However, when boundaries of indigenous territories are undefined or unknown, there is no simple way to establish whether the farm is operating in close proximity to indigenous groups. Here ASC provides the following guidance. The intent behind the ASC Salmon Standard is that the farm will identify all neighboring groups who are potentially negatively impacted by the farm's activities. The actual physical distance between the farm and an indigenous group is less important than understanding whether the farm is having a detrimental impact upon its neighbors. Effective community consultations are one of the best ways to identify such impacts to neighbor groups. Through a transparent process of consultation, indigenous groups who are put under "stress" by the farm will identify themselves and voice their concerns about the nature of the farm's impacts. Continued consultations between farm and neighbors should create a forum where any key issue can be discussed and resolved.					
7.2.1	**Indicator:** Evidence that indigenous groups were consulted as required by relevant local and/or national laws and regulations **Requirement:** Yes **Applicability:** All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [133]	a) The application to have permission to operate covered identification and hearing of indigenous groups. The Sammi group of rain deer owners present in the area. b) Farm management demonstrates an understanding of relevant local and national laws and regulations. No consultations are required. c) No specific consultations are required. d) The extensive communication is completed during licence processing and initial certification stage. No inquiries received. The interview was not organised due to logistics and time limitations. e) It was communicated during the application processing to start the sites. Sami representatives were invited, but no participants nor enquires were presented. f) It was communicated during the application processing to start the sites. Sami representatives were invited, but no participants appeared nor enquires were presented.	Compliant		
7.2.2	**Indicator:** Evidence that the farm has undertaken proactive consultation with indigenous communities **Requirement:** Yes [133] **Applicability:** All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [133]	a) It was communicated during the application processing to start the sites. Some Sami groups are present in the area. b) It was communicated during the application processing to start the sites. Sami representatives were invited to stake holders consultation meeting, but no participants appeared nor enquires presented. c) The extensive communication is completed during licence processing and initial certification stage. No inquiries received. The interview was not organised due to logistics and time limitations.	Compliant		
Footnote	[133] All standards related to indigenous rights only apply where relevant, based on proximity of indigenous territories.				
7.2.3	**Indicator:** Evidence of a protocol agreement, or an active process [134] to establish a protocol agreement, with indigenous communities **Requirement:** Yes **Applicability:** All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [133]	a) It was communicated during the application processing to start the sites. Sami representatives were invited, but no participants nor enquires were presented. b) It was communicated during the application processing to start the sites. Sami representatives were invited, but no participants appeared nor enquires were presented.	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	**Indicator:** Changes undertaken restricting access to vital community resources [135] without community approval **Requirement:** None **Applicability:** All	a) The resources that are vital for community are known by the site. It was communicated during the application to get the licence to start the sites. b) The community approval for resources was done during operation application processing to start the sites. c) The extensive communication is completed during licence processing and initial certification stage. No inquiries received. The interview was not organised due to logistics and time limitations.	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	**Indicator:** Evidence of assessments of company's impact on access to resources **Requirement:** Yes **Applicability:** All	a) It is communicated during the application processing to start the sites. b) The extensive communication is completed during licence processing and initial certification stage. No inquiries received. The interview was not organised due to logistics and time limitations.		Compliant		
INDICATORS AND STANDARDS FOR SMOLT PRODUCTION A farm seeking certification must have documentation from all of its smolt suppliers to demonstrate compliance with the following standards. The requirements are, in general, a subset of the standards in Principles 1 through 7, focusing on the impacts that are most relevant for smolt facilities. In addition, specific standards are applied to open systems (net pens), and to closed and semi-closed systems (recirculation and flow-through). [136]						
Footnote	[136] The SAD SC proposes this approach to addressing environmental and social performance during the smolt phase of production. In the medium term, the SC anticipates a system to audit smolt production facilities on site. In the meantime, farms will need to work with their smolt suppliers to generate the necessary documentation to demonstrate compliance with the standards. The documentation will be reviewed as part of the audit at the grow-out facility.					
SECTION 8: STANDARDS FOR SUPPLIERS OF SMOLT						
Standards related to Principle 1						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
8.1	**Indicator**: Compliance with local and national regulations on water use and discharge, specifically providing permits related to water quality **Requirement:** Yes **Applicability:** All Smolt Producers	a. Identify all of the farm's smolt suppliers. For each supplier, identify the type of smolt production system used (e.g. open, semi or closed systems) and submit this information to ASC (Appendix VI). b. Where legal authorisation related to water quality are required, obtain copies of smolt suppliers' permits. c. Obtain records from smolt suppliers showing monitoring and compliance with discharge laws, regulations, and permit requirements as required. -	a) The suppliers of smolts: Akvafarm (semiclosed), Ranfjord (semiclosed), and Forsan Smolt (semiclosed) b) Akvafarm: Approval from Fylkesmannen i Tromso og Finnmark dated 17.Juni. 2019. ref. 2019/4888 for the max production of 2.5 million smolts. Ranfjord: Approval from Fylkesmannen i Nordland dated 19.07.2004, ref 2003/384 for the max of feed 285 tonn use and no limit for production of smolt. Forsan: Nordland Fylkeskommune dt. 19.04.16 for max 1600 MT feed / 12,2 mill smolts.Water abstraction permit from NVE, dated 28.1.2011, ref 200707783-22 Fylkesmannen Nordland discharge permit dt. 19.04.16, ref 2015/43 c) Akvafarm: Insepection from NFSA on date 04.12.2017. No NC. MOM B on date 20.02.2018 classified as 1. Ranfjord:Inspection form Mattilsynet on 11/12.June.2018. There was one NC regarding the updating some procedure handling NCs in their intrernal quality system. The NC was closed on 31.01.2019. Forsan: No inspection form relevat authorities.	Compliant		
8.2	**Indicator**: Compliance with labor laws and regulations **Requirement:** Yes **Applicability:** All Smolt Producers	a. Obtain declarations from smolt suppliers affirming compliance with labor laws and regulations. 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)	Ranfjord: Stetment on labor laws 18.11.2016. Arbejdesmiljø LOV-2005-06-17-62. No Inspections relating to labour conditions/issues has been held recent years. Akvafarm statement signed on 09-01-2019 regarding labor laws and regulations. No inspection Forsan is an internal supplier, therefore Cermaq policies are followed. No inspection form relevant authorities.	Compliant		

Standards related to Principle 2						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
8.3	**Indicator**: Evidence of an assessment of the farm's potential impacts on biodiversity and nearby ecosystems that contains the same components as the assessment for grow-out facilities under 2.4.1 **Requirement:** Yes **Applicability:** All Smolt Producers	Note: If the smolt facility has previously undertaken an independent assessment of biodiversity impact (e.g. as part of the regulatory permitting process), the farm may obtain and use such documents as evidence to demonstrate compliance with Indicator 8.3 as long as all components are covered.				
		a. Obtain from the smolt supplier(s) a documented assessment of the smolt site's potential impact on biodiversity and nearby ecosystems. The assessment must address all components outlined in Appendix I-3.	a, b) Forsan: the risk assessment of the smolt production was revised on 17.June.2019. which include asociated risked related to animals, escapes, enviroments, sea floor. A. Fiskeridirektoratet permit and Recipient survey performed by AkvaPlan Niva AS 31.1.2017, 13.09.17 and 13.3.2018, all results category 1, very good.. MOM-B Report no APN-0130.01 Result category 1 very good. Akvafarm: envirometal impact assesment dated on 13.05.2019.MOM B on date 20.02.2018 classified as 1. Ranfjord: The risk assessment for environment and action plan, dated 31.10.2018	Compliant		
		b. Obtain from the smolt supplier(s) a declaration confirming they have developed and are implementing a plan to address potential impacts identified in the assessment.				
8.4	**Indicator**: Maximum total amount of phosphorus released into the environment per metric ton (mt) of fish produced over a 12-month period (see Appendix VIII-1) **Requirement:** 4 kg/mt of fish produced over a 12-month period **Applicability:** All Smolt Producers	**Instruction to Clients for Indicator 8.4 - Calculating Total Phosphorus Released per Ton of Fish Produced** 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. If applicable, farms may take account of any physical removals of phosphorus in the form of sludge provided there is evidence to show: - the smolt supplier has records showing the total quantity of sludge removed from site over the relevant time period; - the supplier determined phosphorus concentration (% P) in removed sludge by sampling and analyzing representative batches; and - the sludge was properly disposed off site and in accordance with the farm's biosolid management plan.				
		a. Obtain records from smolt suppliers showing amount and type of feeds used for smolt production during the past 12 months.	a) Forsan:1270660 kg feed for period 01.01.18-31.12.18. Akvafarm: 228610 kg feed for 2018-2019 Ranfjord: 497313 kg feed used b) Values for different feed types delivered from feed suppliers were seen and verified. c) Forsan: 20980,1 kg total amount of phosphorus in feed. Akvafarm: 3900.6 kg total amount of phosphorus in feed Ranfjord:2138.5 kg total amount of phosphorus in feed d) Records for stocking, harvest and mortality which are sufficient to calculate the amount of biomass produced are availabl Forsan: 1 047 833 kg biomass production. Akvafarm:225420 kg biomass production. Ranfjord:497300 kg biomass production. e) Calculations are correct. Forsan:19,49 kg phosphorus in fish biomass (mt) produced Akvafarm:16.30 kg phosphorus in fish biomass (mt) produced Ranfjord:17.2 kg phosphorus in fish biomass (mt) produced Reference is made to VR 39 on phosphorus release to sea confirmed by ASC. See www.asc-aqua.org for VR 39 determination by ASC dt.15.09.14 f) No sludge produced/removed g) NA	Compliant		
		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).				
		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.				
		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.				
		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.				

Standards related to Principle 3						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
8.5	**Indicator**: If a non-native species is being produced, the species shall have been widely commercially produced in the area prior to the publication of the ASC Salmon Standard **Requirement:** Yes [137] **Applicability:** All Smolt Producers except as noted in [137]	a. Obtain written evidence showing whether the smolt supplier produces a non-native species or not. If not, then Indicator 8.5 does not apply. 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). 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. 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. e. Retain evidence as described in 8.5a-d necessary to show compliance of each facility supplying smolt to the farm.	Salmo salar is native to region.	N/A		
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	**Indicator**: Maximum number of escapees [138] in the most recent production cycle **Requirement:** 300 fish [139] **Applicability:** All Smolt Producers except as noted in [139]	a. Obtain documentary evidence to show that smolt suppliers maintained monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapees. 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. 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]). d. If an escape episode occurs at the smolt production facility (i.e. an incident where > 300 fish escaped), the farm may request a rare exception to the Standard [139]. Requests must provide a full account of the episode and must document how the smolt producer could not have predicted the events that caused the escape episode.	a) No escaped according to internal statement. Internal Risk Assessment with instruction for registration and reporting. No incident reported. Verified by Fisheries Directorate escape incidents overviw (www.F.Dir.no) b) No incident reported. Verified by Fisheries Directorate escape incidents overviw (www.F.Dir.no) c) Internal smolt supplier. All records in Fish Talk d) Internal Risk Assessment/contingency plan with instruction for registration and reporting. No incident reported. Verified by Fisheries Directorate escape incidents overviw (www.F.Dir.no)	Compliant		
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	**Indicator**: Accuracy [140] of the counting technology or counting method used for calculating the number of fish **Requirement:** ≥98% **Applicability:** All Smolt Producers	a. Obtain records showing the accuracy of the counting technology used by smolt suppliers. Records must include copies of spec sheets for counting machines and common estimates of error for hand-counts. B. Review records to verify that accuracy of the smolt supplier's counting technology or counting method is ≥ 98%.	a, b) Last secure point of counting in vaccination. Forsan, using Macro Serien from Vaki Makcro. 99% accuracy. Verified by provider specsifications. Ranfjord: Aquascan, 98-100% acuracy. Verified by provider specsifications. Akvafarm: using Macro Serien from Vaki Makcro. 98-100% accuracy. Verified by provider specsifications.	Compliant		
Footnote	[140] Accuracy shall be determined by the spec sheet for counting machines and through common estimates of error for any hand counts.					
	Standards related to Principle 4					
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
8.8	**Indicator**: Evidence of a functioning policy for proper and responsible treatment of non-biological waste from production (e.g., disposal and recycling) **Requirement:** Yes **Applicability:** All Smolt Producers	a. From each smolt supplier obtain a policy which states the supplier's commitment to proper and responsible treatment of non-biological waste from production. It must explain how the supplier's policy is consistent with best practice in the area of operation.	a) Forsan: Cermaq internal document "Avfallsplan Cermaq Norway" version 14, dated 27.03.18 with authorised service provider Iris on specialwaste and Østbø. Public service on domestic, type of waste defined, domestic, special waste/chemicals, for recycling etc. evaluation of environmental impacts Ranfjord: avfallsplan" with authorised service provider Retura on special waste, Public service on domestic, type of waste defined, domestic, special waste/chemicals, for recycling etc. Evaluation of environmental impacts. Akvafarm: 10.05.2019. Instrustion regarding handling waste, dated 10.05.2019 was seen.	Compliant		
8.9	**Indicator**: Presence of an energy-use assessment verifying the energy consumption at the smolt production facility (see Appendix V subsection 1 for guidance and required components of the records and assessment) **Requirement:** Yes, measured in kilojoule/mt fish/production cycle **Applicability:** All Smolt Producers	Note: see instructions for Indicator 4.6.1.				
		a. Obtain records from the smolt supplier for energy consumption by source (fuel, electricity) at the supplier's facility throughout each year.	a) Records OK in excel documents. b, c, d) Ranfjord: Total biomass production: 497313 kg Electericity: 4700725200 kj Fuel: 18180000 kj Total energy per mt biomass: 9494779,07 kj/mt Forsan: Electrticity: 12889100000 kj Fuels: 36978 616 200 kj Total production: 1229 ton Total energy: 30 677 499 kj/ton Akvafarm: Electrticity: 8420626800 kj Fuels: 286516800 kj Total production: 225.42 ton Total energy: 11763624,8872858 kj/ton e) Records OK in excel. Continuous evaluation.	Compliant		
		b. Confirm that the smolt supplier calculates total energy consumption in kilojoules (kj) during the last year.				
		c. Obtain records to show the smolt supplier calculated the total weight of fish in metric tons (mt) produced during the last year.				
		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.				
		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.				

8.10	**Indicator**: Records of greenhouse gas (GHG [141]) emissions [142] at the smolt production facility and evidence of an annual GHG assessment (See Appendix V, subsection 1) **Requirement:** Yes **Applicability:** All Smolt Producers	Note: see instructions for Indicator 4.6.2.				
		a. Obtain records of greenhouse gas emissions from the smolt supplier's facility.	a, b, c) Records OK Ranfjord: Scope 1: emission from Fuel: 16.110 kg CO2 Scope 2: emission from electricity: 110.989 kg CO2 Forsan Scope 1: emission from Fuel: 51 102 kg CO2 Scope 2: emission from electricity: 2 610 739,7 kg CO2 Akvafarm: Scope 1: emission from Fuel: 198820 kg CO2 Scope 2: emission from electricity: 253886 kg CO2 d) CO2 used e) Calculaitons and asessment provided by CO2 focus. Data from IEA 2013, SSB 2013, EIA 2011, IPCC 2006.	Compliant		
		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_2); methane (CH_4); nitrous oxide (N2O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF_6).					
Footnote	[142] GHG emissions must be recorded using recognized methods, standards and records as outlined in Appendix V.					
Standards related to Principle 5						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
8.11	**Indicator**: Evidence of a fish health management plan, approved by the designated veterinarian, for the identification and monitoring of fish diseases and parasites **Requirement:** Yes **Applicability:** All Smolt Producers	a. Obtain a copy of the supplier's fish health management plan for the identification and monitoring of fish disease and parasites.	a, b) Forsan: Internal Fish Health Plan. 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 . Ranfjord: Fish Health Plan. Plan covers all aspect of relevant diseases and parasite diagnostics and control measures. Approved and signed by veterinarian dt 14.12.2018 . Akvafaram: Fish Health Plan. Plan covers all aspect of relevant diseases and parasite diagnostics and control measures. Approved and signed by veterinarian dt 09.01.2019	Compliant		
		b. Keep documentary evidence to show that the smolt supplier's health plans were approved by the supplier's designated veterinarian.				

8.12	**Indicator**: Percentage of fish that are vaccinated for selected diseases that are known to present a significant risk in the region and for which an effective vaccine exists [143] **Requirement:** 100% **Applicability:** All Smolt Producers	a. Maintain a list of diseases that are known to present a significant risk in the region, developed by farm veterinarian and supported by scientific evidence. b. Maintain a list of diseases for which effective vaccines exist for the region, developed by the farm veterinarian and supported by scientific evidence. c. Obtain from the smolt supplier(s) a declaration detailing the vaccines the fish received. 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.	a) Forsan: Internal Fish Health Plan. 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 . Ranfjord: Fish Health Plan. Plan covers all aspect of relevant diseases and parasite diagnostics and control measures. Approved and signed by veterinarian dt 14.12.2018 . Akvafaram: Fish Health Plan. Plan covers all aspect of relevant diseases and parasite diagnostics and control measures. Approved and signed by veterinarian dt 09.01.2019. b) In fish health plan and CV Ttype of disease and control monitoring strategies, vaccines/pathogens type/product name detailed c) In smolt CV transfered to sea and Fish Talk with dates and type for smolts for site, 100% vaccination is a legal requirement controlled by NFSA. Hopen: For example vaccination on 20-07-2018 with Alpha Ject Micro 6 was seen in Fish CV to Eitnes Site. d) 100% vaccinated according to national legislation. Verified in smolt CV and Fishtalk. Verified towards registrations in FHP / CV / Fishtalk. Internal supplier: All fish vaccinated with vaccine type AJ-micro-6.	Compliant		
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	**Indicator**: Percentage of smolt groups [144] tested for select diseases of regional concern prior to entering the grow-out phase on farm **Requirement:** 100% **Applicability:** All Smolt Producers	**Instruction to Clients for Indicator 8.13-- Testing of Smolt for Select Diseases** The farm is responsible for developing and maintaining a list of diseases of regional concern for which each smolt group should be tested. The list of diseases shall include diseases that originate in freshwater and are proven or suspected to occur in seawater (and for which seawater fish-to-fish transmission is a concern). The designated veterinarian to the smolt supplier is required to evaluate, based on scientific criteria and publicly available information, which diseases should be tested for. This analysis shall include an evaluation of whether clinical disease or a pathogen carrier state in fresh water is deemed to have a negative impact on the grow-out phase, thereby disqualifying a smolt group from being transferred. The analysis must be available to the CAB upon request. Note: A "smolt group" is defined as a population that shares disease risk, including environment, husbandry, and host factors that might contribute to sharing disease agents for each group.				
		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. 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).	a) Risk based testing regime.VHP and Veterinary visits: lists and documented according to local VHP predetermined sampling and visits regime defined in VHP plan. b) Veterinary visits according to VHP. Smolt group health certificate. Patogen analyse, tested for PRV and ILA, IPN, PRV, PMCV pre-stocking. No positive	Compliant		
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	**Indicator**: Detailed information, provided by the designated veterinarian, of all chemicals and therapeutants used during the smolt production cycle, the amounts used (including grams per ton of fish produced), the dates used, which group of fish were treated and against which diseases, proof of proper dosing and all disease and pathogens detected on the site **Requirement:** Yes **Applicability:** All Smolt Producers	a. Obtain from the smolt supplier(s) a detailed record of all chemical and therapeutant use for the fish sold to the farm that is signed by their veterinarian and includes: - name of the veterinarian prescribing treatment; - product name and chemical name; - reason for use (specific disease) - date(s) of treatment; - amount (g) of product used; - dosage; - mt of fish treated; - the WHO classification of antibiotics (also see note under 5.2.8); and - the supplier of the chemical or therapeutant.	a) Therapeutant used, verified in fish CV also documented in FishTalk according to FHP - type, producer and batch. Prescription signed by responsible vetrinary / FHB/ Vaccines produced by Pharmaq. Therapeutant used and documented on fishgroup.	Compliant		
8.15	**Indicator**: Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [145] in any of the primary salmon producing or importing countries [146] **Requirement:** Yes **Applicability:** All Smolt Producers	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]. b. Inform smolt supplier that the treatments on the list cannot be used on fish sold to a farm with ASC certification. 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.	a) Listed in "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 b) Listed in "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 c) Vaccines in fish CV and Fish Talk - type and producer and batch. Ananesthetics and antiparasite treatment formalin, ok according to list. No AB used.	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	**Indicator**: Number of treatments of antibiotics over the most recent production cycle **Requirement:** ≤ 3 **Applicability:** All Smolt Producers	a. Obtain from the smolt supplier records of all treatments of antibiotics (see 8.14a). b. Calculate the total number of treatments of antibiotics from their most recent production cycle.	a) No AB used. Seen fish CV with all treatments identifed. b) No AB used. Seen fish CV with all treatments identifed.	Compliant		
8.17	**Indicator**: Allowance for use of antibiotics listed as critically important for human medicine by the WHO [147] **Requirement:** None [148] **Applicability:** All Smolt Producers	a. Provide to smolt supplier(s) a current version of the WHO list of antimicrobials critically and highly important for human health [147]. 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. 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.	a, b, c) Forsan is an internal supplier. Fish Health Plan. Plan 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 AB used. Fish CVs with all treatments were verified. Ranfjord: Fish Health Plan. Plan covers all aspect of relevant diseases and parasite diagnostics and control measures. Approved and signed by veterinarian dt 14.12.2018 . No anitbiotics used. Seen fish CV at the audit with all treatments identifed. Akvafaram: Fish Health Plan. Plan covers all aspect of relevant diseases and parasite diagnostics and control measures. Approved and signed by veterinarian dt 09.01.2019. No anitbiotics used. Seen fish CV at the audit with all treatments identifed	Compliant		
Footnote	[147] The 3rd edition of the WHO list of critically and highly important antimicrobials was released in 2009 and is available at: http://www.who.int/foodborne_disease/resistance/CIA_3.pdf.					
Footnote	[148] If the antibiotic treatment is applied to only a portion of the pens on a farm site, fish from pens that did not receive treatment are still eligible for certification.					

8.18	**Indicator**: Evidence of compliance [149] with the OIE Aquatic Animal Health Code [150] **Requirement:** Yes **Applicability:** All Smolt Producers	Note: see instructions for Indicator 5.4.3 regarding evidence of compliance with the OIE Aquatic Animal Health Code.				
		a. Provide the smolt supplier with a current version of the OIE Aquatic Animal Health Code (or inform the supplier how to access it from the internet).	a, b, c) Forsan : Forsan Smolt is an internal supplier, is operated in accordance with the Cermaq policy and procedures concerning compliance with the OIE Aquatic Animal Health Code. See Cermaq Statement dated 18.01.2018 on ASC requirements regarding OIE Aquatic Animal Health Code for smolt deliveries. The statement is signed by a designated veterinarian. Ranfjord: Fish Health Plan. Plan covers all aspect of relevant diseaes and parasite diagnostics and control measures. External veterinary service Marin Helse. Approved and signed by veterinarian dt 02.10.16. Akvafaram: Fish Health Plan. Plan covers all aspect of relevant diseases and parasite diagnostics and control measures. Approved and signed by veterinarian dt 09.01.2019.	Compliant		
		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.				
		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.				
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. http://www.oie.int/index.php?id=171.					
	Standards related to Principle 6					
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
8.19	**Indicator**: Evidence of company-level policies and procedures in line with the labor standards under 6.1 to 6.11 **Requirement:** Yes **Applicability:** All Smolt Producers	a. Obtain copies of smolt supplier's company-level policies and procedures and a declaration of compliance with the labor standards under 6.1 to 6.11.	a) The internal Smolt supplier used: company documents applies.	Compliant		
		b. Review the documentation and declaration from 8.19a to verify that smolt supplier's policies and procedures are in compliance with the requirements of labor standards under 6.1 to 6.11.	b) Statements from suppliers were seen. No inspection on labor issues.			
	Standards related to Principle 7					
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
8.20	**Indicator**: Evidence of regular consultation and engagement with community representatives and organizations **Requirement:** Yes **Applicability:** All Smolt Producers	**Instruction to Clients for Indicator 8.20 - Consultation and Engagement with Community Representatives** Farms must comply with Indicator 7.1.1 which requires that farms engage in regular consultation and engagement with community representatives and organizations. Under 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: - the smolt supplier engaged in "regular" consultations with the local community at least twice every year (bi-annually); - the supplier's consultations were effective (e.g. using participatory Social Impact Assessment (pSIA) or similar methods); and - the supplier's consultations included participation by elected representatives from the local community who were asked to contribute to the agenda.				
		a. From each smolt supplier obtain documentary evidence of consultations and engagement with the community.	a) Interested parties and communities were invited for a meeting. Agenda and the name of invitees were seen.The list of atendee was seen.	Compliant		
		b. Review documentation from 8.20a to verify that the smolt supplier's consultations and community engagement complied with requirements.	b) Consultations have included main points required by the standard. No minutes of meeting just presentation of the activities and treatment.			

8.21	**Indicator**: Evidence of a policy for the presentation, treatment and resolution of complaints by community stakeholders and organizations **Requirement:** Yes **Applicability:** All Smolt Producers	a. Obtain a copy of the smolt supplier's policy for presentation, treatment and resolution of complaints by community stakeholders and organizations.	a) The procedure for complaints was presented, dated 09.10.2018. If any complaint is received it will be effectively addressed. No complaint has been recieved.	Compliant		
8.22	**Indicator**: Where relevant, evidence that indigenous groups were consulted as required by relevant local and/or national laws and regulations **Requirement:** Yes **Applicability:** All Smolt Producers	a. Obtain documentary evidence showing that the smolt supplier does or does not operate in an indigenous territory (to include farms that operate in proximity to indigenous or aboriginal people (see Indicator 7.2.1). If not then the requirements of 8.22 do not apply. 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.	a) It was communicated during the application processing to start the sites. No indigenous groups or aboriginal people are present in neighbourhood. No traditional and indigenous groups are involved. b) It was communicated during the application processing to start the sites.No traditional and indigenous groups are involved. No traditional and indigenous groups are involved.	Compliant		
8.23	**Indicator**: Where relevant, evidence that the farm has undertaken proactive consultation with indigenous communities **Requirement:** Yes **Applicability:** All Smolt Producers	a. See results of 8.22a (above) to determine whether the requirements of 8.23 apply to the smolt supplier. b. Where relevant, obtain documentary evidence that smolt suppliers undertake proactive consultations with indigenous communities.	a) It was communicated during the application processing to start the sites. Based on 8.2.2 a) the requirements of 8.2.3. do not apply. b) No consultation is applicable. c) No traditional and indigenous groups are involved.	Compliant		
ADDITIONAL REQUIREMENTS FOR OPEN (NET-PEN) PRODUCTION OF SMOLT In addition to the requirements above, if the smolt is produced in an open system, evidence shall be provided that the following are met:						
Instruction to Clients for Indicators 8.24 through 8.31 - Requirements for Smolt Produced in Open Systems Client shall provide documentary evidence to the CAB about the production system(s) from which they source smolt. If smolt used by the farm are produced, for part or all of the growth phase from alevin to smolt, in open (net-pen) systems, indicators 8.24 - 8.31 are applicable.						
	Indicator: Allowance for producing or holding smolt in net pens in water bodies with native salmonids **Requirement:** None **Applicability:** All Smolt Producers Using Open Systems	a. Obtain a declaration from the farm's smolt supplier stating whether the supplier operates in water bodies with native salmonids. b. Request smolt suppliers to identify all water bodies in which they operate net pens for producing smolt and from which facilities they sell to the client. c. For any water body identified in 8.24b as a source of smolt for the farm, determine if native salmonids are present by doing a literature search or by consulting with a reputable authority. Retain evidence of search results.	No net-pens, tanks only.	N/A		
8.25	**Indicator**: Allowance for producing or holding smolt in net pens in any water body **Requirement:** Yes **Applicability:** All Smolt Producers Using Open Systems	a. Take steps to ensure that the farm does not source smolt that was produced or held in net pens.	No net-pens, tanks only.	N/A		

8.26	**Indicator**: Evidence that carrying capacity (assimilative capacity) of the freshwater body has been established by a reliable entity [151] within the past five years [152] and total biomass in the water body is within the limits established by that study (see Appendix VIII-5 for minimum requirements) **Requirement:** Yes **Applicability:** All Smolt Producers Using Open Systems	a. For the water body(s) where the supplier produces smolt for the client (see 8.24b), obtain a copy of the most recent assessment of assimilative capacity.	No net-pens, tanks only.	N/A		
		b. Identify which entity was responsible for conducting the assessment (8.26a) and obtain evidence for their reliability.				
		c. Review the assessment (8.26a) to confirm that it establishes a carrying capacity for the water body, it is less than five years old, and it meets the minimum requirements presented in Appendix VIII-5.				
		d. Review information to confirm that the total biomass in the water body is within the limits established in the assessment (8.26a).				
		e. If the study in 8.26a is more than two years old and there has been a significant increase in nutrient input to the water body since completion, request evidence that an updated assessment study has been done.				
Footnote	[151] E.g., Government body or academic institution.					
Footnote	[152] If the study is older than two years, and there has been a significant increase in nutrient input to the water body since the completion of the study, a more recent assessment is required.					
8.27	**Indicator**: Maximum baseline total phosphorus concentration of the water body (see Appendix VIII-6) **Requirement:** ≤ 20 µg/l [153] **Applicability:** All Smolt Producers Using Open Systems	**Instruction to Clients for Indicator 8.27 and 8.28 - Monitoring TP and DO in Receiving Water for Open Smolt Systems** Farms must confirm that any smolt supplier using an open (net-pen) system is also engaged in monitoring of water quality of receiving waters. Requirements for the supplier's water quality monitoring program are presented in detail in Appendix VIII-6 and only re-stated briefly here. Monitoring shall sample total phosphorus (TP) and dissolved oxygen (DO). TP is measured in water samples taken from a representative composite sample through the water column to a depth of the bottom of the cages. Samples are submitted to an accredited laboratory for analysis of TP to a method detection limit of < 0.002 mg/L. DO measurements will be taken at 50 centimeters from the bottom sediment. The required sampling regime is as follows: - all stations are identified with GPS coordinates on a map of the farm and/or available satellite imagery; - stations are at the limit of the farm management zone on each side of the farm, roughly 50 meters from the edge of enclosures; - the spatial arrangement of stations is shown in the table in Appendix VIII-6; - sampling is done at least quarterly (1X per 3 months) during periods without ice, including peak biomass; and - samples are also collected at two reference stations located ~ 1-2 km upcurrent and downcurrent from the farm. Note: Some flexibility on the exact location and method of sampling is allowed to avoid smolt suppliers needing to duplicate similar sampling for their local regulatory regime.				
		a. Obtain documentary evidence to show that smolt suppliers conducted water quality monitoring in compliance with the requirements of Appendix VIII-6.	No net-pens, tanks only.	N/A		
		b. Obtain from smolt suppliers a map with GPS coordinates showing the sampling locations.				
		c. Obtain from smolt suppliers the TP monitoring results for the past 12 months and calculate the average value at each sampling station.				
		d. Compare results to the baseline TP concentration established below (see 8.29) or determined by a regulatory body.				
		e. Confirm that the average value for TP over the last 12 months did not exceed 20 ug/l at any of the sampling stations nor at the reference station.				
Footnote	[153] This concentration is equivalent to the upper limit of the Mesotrophic Trophic Status classification as described in Appendix VIII-7.					

8.28	**Indicator**: Minimum percent oxygen saturation of water 50 centimeters above bottom sediment (at all oxygen monitoring locations described in Appendix VIII-6) **Requirement:** ≥ 50% **Applicability:** All Smolt Producers Using Open Systems	Note: see instructions for Indicator 8.27.				
		a. Obtain evidence that smolt supplier conducted water quality monitoring in compliance with the requirements (see 8.27a).	No net-pens, tanks only.	N/A		
		b. Obtain from smolt suppliers the DO monitoring results from all monitoring stations for the past 12 months.				
		c. Review results (8.28b) to confirm that no values were below the minimum percent oxygen saturation.				
8.29	**Indicator**: Trophic status classification of water body remains unchanged from baseline (see Appendix VIII-7) **Requirement:** Yes **Applicability:** All Smolt Producers Using Open Systems	a. Obtain documentary evidence from the supplier stating the trophic status of water body if previously set by a regulator body (if applicable).	No net-pens, tanks only.	N/A		
		b. If the trophic status of the waterbody has not been classified (see 8.29a), obtain evidence from the supplier to show how the supplier determined trophic status based on the concentration of TP.				
		c. As applicable, review results from 8.29b to verify that the supplier accurately assigned a trophic status to the water body in accordance with the table in Appendix VIII-7 and the observed concentration of TP over the past 12 months.				
		d. Compare the above results (8.29c) to trophic status of the water body as reported for all previous time periods. Verify that there has been no change.				
8.30	**Indicator**: Maximum allowed increase in total phosphorus concentration in lake from baseline (see Appendix VIII-7) **Requirement:** 25% **Applicability:** All Smolt Producers Using Open Systems	a. Determine the baseline value for TP concentration in the water body using results from either 8.29a or 8.29b as applicable.	No net-pens, tanks only.	N/A		
		b. Compare the baseline TP concentration (result from 8.30a) to the average observed TP concentration over the past 12 months (result from 8.27e).				
		c. Verify that the average observed TP concentration did not increase by more than 25% from baseline TP concentration.				
8.31	**Indicator**: Allowance for use of aeration systems or other technological means to increase oxygen levels in the water body **Requirement:** None **Applicability:** All Smolt Producers Using Open Systems	a. Obtain a declaration from the farm's smolt supplier stating that the supplier does not use aeration systems or other technological means to increase oxygen levels in the water bodies where the supplier operates.	No net-pens, tanks only.	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]:						
Instructions to Client for Indicators 8.32-8.35 - Requirement for smolts produced in open systems Client shall provide documentary evidence to the CAB about the production system(s) from which they source smolt. -If smolt used by the farm are not produced, for part or all of the growth phase from alevin to smolt, in open (net-pen) systems, indicators 8.32 - 8.35 are applicable. -If the production system is closed or semi-closed and does not discharge into freshwater, Indicators 8.32 - 8.35 are not applicable to smolt producers as per [154]. For such an exemption, farms must provide documentary evidence to the CAB. Auditors shall fully document their rationale for awarding exemptions in the audit report.						
Footnote	[154] Production systems that don't discharge into fresh water are exempt from these standards.					
8.32	**Indicator**: Water quality monitoring matrix completed and submitted to ASC (see Appendix VIII-2) **Requirement:** Yes [155] **Applicability:** 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.	Discharge into sea water	N/A		
Footnote	[155] See Appendix VI for transparency requirements for 8.32.					
8.33	**Indicator**: Minimum oxygen saturation in the outflow (methodology in Appendix VIII-2) **Requirement:** 60% [156,157] **Applicability:** All Smolt Producers Using Semi-Closed or Closed Production Systems	a. Obtain the water quality monitoring matrix from each smolt supplier (see 8.32b). b. Review the results (8.33a) for percentage dissolved oxygen saturation in the effluent to confirm that no measurements fell below 60% saturation. c. If a single DO reading (as reported in 8.33a) fell below 60%, obtain evidence that the smolt supplier performed daily continuous monitoring with an electronic probe and recorder for a least a week demonstrating a minimum 60% saturation at all times (Appendix VIII-2).	Discharge into sea water	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.					
8.34	**Indicator**: Macro-invertebrate surveys downstream from the farm's effluent discharge demonstrate benthic health that is similar or better than surveys upstream from the discharge (methodology in Appendix VIII-3) **Requirement:** Yes **Applicability:** All Smolt Producers Using Semi-Closed or Closed Production Systems	a. Obtain documentation from smolt supplier(s) showing the results of macro-invertebrate surveys. 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.	Discharge into sea water	N/A		
8.35	**Indicator**: Evidence of implementation of biosolids (sludge) Best Management Practices (BMPs) (Appendix VIII-4) **Requirement:** Yes **Applicability:** All Smolt Producers Using Semi-Closed or Closed Production Systems	a. Maintain a copy of smolt supplier's biosolids (sludge) management plan and confirm that the plan addresses all requirements in Appendix VIII-2. 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.	Discharge into sea water	N/A		

11 Findings

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

NC reference	Indicator	Grade of NC	Description of NC	Evidence	Date of detection	Status	Related VR (#)	Root cause (by client)	Corrective/ preventive actions proposed by UoC and accepted by CAB	Deadline for NC close-out	Evaluation by CAB (including evidence)	Actual date of close-out	Date request for delay received	Justification for delay	Next deadline	Request evaluation by CAB	Date request approved
2019-Initial-1	2.2.6	Minor	The storage for chemicals was missing collection for chemicals nad and several paint cans was placed outside. The storage for formic acid was not locked.	On-site visit on 10-12-2019	10-12-2019	Closed		Lack of attention to task. This is supposed to be in place at every site.	Chemicals missing collection has now recieved it. Additional collectors and a seperate chemichal closet is ordered. Paint cans are placed inside in collectors. Storage for formic acid is locked. (see seperate sheet for NC documentation)	10-12-2020	The root cause and corrective/preventive action proposed by client, is accepted. The evidence of the implementation is also approved.	05-01-2020					

ASC Audit Report - Traceablity

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.	NA	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 SalmonStandard audit.
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.	NA	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 one seasite to the slaughterhouse at the time, only.
10.3	The possibility of subcontractors being used to handle, transport, store, or process certified products.	NA	NA. Within the unit of certification no subcontractor is used to handle the fish.
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.	NA	No other possibility for mixing products.

	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	1	
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		

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	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. 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. 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. The harvest plants are; Cermaq Norway Steigen N-2284, Bogøyveien 153, BOGØY, Norway. ASC-C-01773, Exp. date 2021-08-02 . Ref. to www.asc-aqua.org where updated information can be found.

10.6 **Traceablity 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. The harvest plants are; Cermaq Norway Steigen N-2284, Bogøyveien 153, BOGØY, Norway. ASC-C-01773, Exp. date 2021-08-02 . Ref. to www.asc-aqua.org where updated information can be found.
10.6.4	If a sepearate 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, howevere, one minor NC was found during the audit on inidicator 2.2.6. VRs used during audit: - VR nr.39 approved 15.09.2014 by ASC on phosphorus release from smolt producer. - VR nr.97 approved 20.08.2015 by ASC for indicator 5.2.5 for PTI Calculations when Slice is used for treatment against sea lice. - VR 136 approved on 02/03/2016 by ASC: It is a breach of Norwegian ragulations for the applicant to conduct sealice counts in wild salmonids, unless the applicant is a recogniced researsch institute with government aknowledgement. -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. 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 Horsvågen 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 Eligiblity Date (if applicable)	N/A
13,3 Is a separate CoC certificte 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: 12-03-2020 Expiry date: 11-03-2023
13.4.2 The scope of the certificate	ASC Salmon. Production species: Salmo salar

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.	Stakeholders are welcome to contact Bureau Veritas on E-mail: asc.farm@dk.bureauveritas.com. Information on Bureau Veritas complaints procedure is available on www.bureauveritas.dk.

14 Surveillence

14.1 Next planned Surveillance		
14.1.1	Planned date	dec-20
14.1.2	Planned site	Horsvågen
14.2 Next audit type		
14.2.1	Surveillence 1	X
14.2.2	Surveillance 2	
14.2.3	Re-certification	
14.2.4	Other (specify type)	