

ASC SALMON STANDARD REVISJONSRAPPORT

# ASC Førstegangsrevisjon, Foreløpig Rapport

Marine Harvest Norway - 10318 Gulestø.  
6729 Kalvåg, Norway.

**Report No.:** 01, Rev 01.

**Date:** 13.03.15



Prosjekt navn: ASC Salmon Standard Revisjonsrapport DNV GL - Business Assurance  
Rapport tittel: ASC Førstegangsrevisjon, Foreløpig Rapport Veritasveien 1  
Kunder: Marine Harvest Norway - 10318 Gulestø. 1322 Høvik  
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Utgivelses dato: 13.03.15 Tel: +47 67 57 99 00  
Prosjekt No.: PRJC-516330-2014-MSC-NOR  
Organisasjons- Gulestø matfiskanlegg  
enhet:  
Rapport No. 01: 01, Rev. 01

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- Foreløpig rapport (kundens versjon)  
 Offentlige kommentarer Report (Interessenters gjennomgang)  
 Slutt-rapport
- Førstegangs revisjon  
 Periodisk revisjon  
 Resertifiserings-revisjon

Rev. No.	Dato	Utgave	Utarbeidet av:	Verifisert av:	Godkjent av:
0	2015-03-13	Foreløpig rapport	KIMAK	J.Rios	J.Rios

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VEDLEGG 1: INTERESSENTERS HENVENDELSER

VEDLEGG 2: SJEKKLISTE (DETALJERTE EVALUERINGS RESULTAT)

## 1 SAMMENDRAG

### Rapporten

Denne rapporten dekker resultatene fra førstegangsrevisjon hos Marine Harvest AS, heretter i rapporten kalt "Organisasjonen" eller "selskapet" lokalitet 10318 Gulestø, med sikte på å sertifisere denne matfisk-lokaliteten iht. ASC Salmon Standard V1. Juni 2012.

### Revisjonen

Revisjonen ble gjennomført over tre dager. De to første dagene ved selskapets regionkontor med fokus på tekniske og juridiske tema, med relevant operasjonelt og administrativt personell til stede. Andre del av revisjonen som også omfattet anleggsbesøk på 10318 Gulestø ble gjennomført den tredje dagen for å dekke gjenværende punkter av det administrative og tekniske, samt avslutte temaer knyttet til sosialt ansvar. Revisjonen ble gjennomført som en dokumentgjennomgang (digital og papir informasjon) i tillegg til intervjuer med relevant personell, inkludert personell fra anlegget. Praktisk demonstrasjon av utstyr og prosesser relevant til sertifikat omfanget, relevant iht. ASC standard versjon 1 og tilhørende retningslinjer i revisjonsmanualen ASC Salmon Audit manual versjon 1, ble utført.

Med referanse til ASC Farm Certification og Accreditation Requirements 17.3.2 og 17.3.3; siden fisken ikke hadde nådd slaktestørrelse ved revisjonstidspunktet, ble ikke levering av slaktefisk overvært eller vurdert under revisjonen. Levering av slaktefisk er planlagt observert ved gjennomførelse av overvåkningsrevisjon.

Slakteriet, "Marine Harvest Norway Eggebøneset slakteri", med adresse Evangerveien 25, 6092 Fosnavåg, Norge, er ASC CoC sertifisert Ref. til [www.asc-aqua.org](http://www.asc-aqua.org) hvor oppdatert informasjon kan finnes.

Intervjuene vedrørende sosialt ansvar prinsippene i ASC Salmon Standard ble avholdt i adskilte lokaler. Forholdene ble tilrettelagt for å sikre uhindret tale og åpne dialoger mellom intervjuer og intervjuobjekt. Ansatte intervjuet er heller ikke navngitt i rapporten av samme grunn.

### Foreløpige resultater

Evalueringen av selskapets oppfyllelse av kravene i ASC Salmon standarden er beskrevet i detalj senere i rapporten. Funnene er dokumentert i seksjon 5 og 6 og i vedlegg 2 i denne rapporten. Videre er det henvist til alle prinsippene i ASC standarden og tilhørende kriterier og underpunkter i ASC revisjons-sjekklista for avvikene (vedlegg 2).

Prinsippene hvor det ble oppnådd fullt samsvar med krav er:

Prinsipp 1; "Samsvar med gjeldende lokale og nasjonale lover og forskrifter".

Prinsipp 5; "Håndter sykdom og parasitter på en miljømessig forsvarlig måte".

Prinsipp 7; "Være en god nabo og pliktoppfylgende borger".

Prinsipp 8; "Standard og krav til smoltleverandør".

For Prinsipp 2; "Spar og bevar naturlige habitat lokalt mangfold og økosystemfunksjon". Prinsipp 3; "Beskytte helse og integritet hos ville bestander". Prinsipp 4; "Bruke ressurser på en miljøeffektiv og ansvarlig måte". Prinsipp 6; "Utvikle og drive oppdrett på en sosialt ansvarlig måte". Ble ikke fullt samsvar med alle krav oppnådd, som følge av dette ble resultatet et begrenset antall Minor (Mindre) avvik.

**Sertifisering basert på resultatene av førstegangsrevisjon anbefales når korrigerende tiltaksplan er iverksatt og implementert av virksomheten for kartlagte avvik, samt godkjent av DNV GL**

**Endelig sertifiseringsbeslutning blir ikke tatt før avsatt periode for innspill fra interessenter er gjennomført i etterkant av publisering av foreløpig rapport.**

**Endelig beslutning vedrørende sertifisering vil bli tatt i sluttrapport.**

En tilfredsstillende respons fra søkeren for å lukke de mindre avvikene, med dokumenterte korrigerende tiltak før neste periodiske revisjon forventes. Detaljer vedrørende kriterier for innfrielse av krav finnes i sjekklista for førstegangs-revisjonen (Vedlegg 2).

## 2 OMSØKT LOKALITET

<b>Navn på lokalitet</b>	<b>10318 Gulestø</b>
<b>Beskrivelse av lokaliteten</b>	<p>10318 Gulestø er et konvensjonelt flytende merdanlegg for oppdrett av laks. De 8 produksjons merdene er 157 m i omkrets, flytekrager er av plast med bunnringnøter Sentralt på lokaliteten er en føringsflåte med sentralisert føringsssystem og UV kameraer for kontroll av føring. Alle installasjoner er sertifisert etter «NS-9415 NYTEK» standardens regler.</p> <p>Offentlige registre for detaljer om beliggenhet osv. med referanse til: <a href="http://www.Fiskeridirektoratet.no/akvakulturregisteret">www.Fiskeridirektoratet.no/akvakulturregisteret</a></p>
<b>Forventet produksjon ved utslakting</b>	5460 MTB
<b>Beskrivelse av resipienten</b>	<p>Anlegget er plassert ved Kalvåg i Bremanger kommune, resipient er Frøysjøen. Regional vannmyndighet er Sogn og Fjordane fylkeskommune. Resipienten er kategorisert som kyst-fjord, av Euhalin natur. (&gt;30 o/ooS). Økologisk kvalitet er definert som god. Kjemisk kvalitet er ifølge offentlig dokumentasjon udefinert. Detaljer finnes på <a href="http://www.vannportalen.no">www.vannportalen.no</a> Anlegget er under frivillig oppdrettssone inndeling. Det finnes også annen oppdrettsvirksomhet i fjordsystemet. Det finnes naturlig ville laksefiskbestander i området, selv om elver innfor en radius på 50km ikke har, så vidt vi vet, status som lakseførende vassdrag.</p>
<b>Andre sertifikater som anlegget og/eller selskapet innehar</b>	IFA GLOBAL GAP, ISO 9001, ISO 14001, ISO 22 000
<b>Kontaktperson</b>	Tone Harnes

## 3 OMFANG

<b>Standard</b>	<b>ASC Salmon Standard Version 1.0 June 2012</b>
<b>Aktivitet</b>	Førstegangsrevisjon
<b>Art</b>	Atlantisk laks ( <i>Salmo salar</i> )
<b>Selskapets offisielle navn</b>	Marine Harvest Norway AS
<b>Offisiell adresse</b>	Sandviksboder 77A, 5035 Bergen, Norway

<b>Lokalitetens navn</b>	10318 Gulestø
<b>Lokalitetens adresse</b>	6729 Kalvåg, Norway

## 4 REVISJONSPLAN

### 4.1 Revisjonsteam

Rolle	Navn
<b>Revisjonsleder</b>	Kim Andre Karlsen, DNV GL og Kjell Bekkevold, DNV GL.
<b>SA8000 Revisor</b>	Darius Pamakstys, DNV GL.

### 4.2 Revisjonsaktiviteter

Aktivitet	Dato
<b>Pre-revisjon dokument-gjennomgang</b>	07.01.2015 - 09.01.2015
<b>Revisjon på anlegg og kontorer</b>	23.02.2015 – 27.02.2015. Audit Scope. Principle 1, 2, 3, 4, 5 and 8 of the ASC Salmon Standard. 02.03.2015 – 04.03.2015. Audit Scope. Principle 6 and 7 of the ASC Salmon Standard.
<b>Publisering av foreløpig rapport for offentlige kommentarer</b>	Ikke avklart
<b>Publisering av endelig rapport</b>	Ikke avklart

### 4.3 Tidligere revisjoner (Ikke anvendt)

## 4.4 Personer involvert i revisjonen

Rolle	Name / affiliation
<b>Kundens representanter (Ledelse)</b>	Otto Igland, Områdeleder. Tone Harnes, Kvalitetssjef Linn Ø. Bigset, Kvalitetskoordinator Karoline Holen, Teknikker/Kvalitetskoordinator Arne Kvalvik, Miljø og Myndighetskoordinator John Ivar Sætre, Produksjonsjef FV Ingrid Moan, Fiskehelse Asgeir Hasund, Produksjonssjef SV Kathrine Larsen, HR Sjef Arve M. Husevåg, HMS Koordinator Per R. Gjerde, Regiondirektør Tone Bu, Kvalitetskoordinator. Marit Engelstad, Matsikkerhet, MH Før. Jan O. Kolseth, Førkoordinator. Sven A. Skotheim, Fiskehelse Tom Christian Tonheim, Fiskehelse Liv Birte Rønneberg, Fiskehelseleder Bjørnar Aga Larsen, Driftsleder Gulestø.
<b>Ansatte</b>	Teknisk/drifts-personell på anlegget
<b>Kontraktører</b>	Ikke anvendt
<b>Interessenter</b>	Vil bli ajourført etter publiseringsperiode for draft rapport er over. For foreløpige interessenter. Se ptk. 4.5
<b>Observatører som deltok i revisjonen</b>	NA

## 4.5 Interessenters henvendelser

Følgende interessenter, som definert av den reviderte part, ble kontaktet ifbm varsling av forestående revisjon. Ingen kommentarer er mottatt i forkant av revisjonen.

**Lokal:**

Bremanger Fiskarlag: Jan Ove Langeland  
Sandvika, 6723 Svelgen  
T: 913 09 834

Bremanger kommune: Epost: [post@bremanger.kommune.no](mailto:post@bremanger.kommune.no)  
Kommunehuset, postboks 104, 6721 Svelgen

**Nasjonal:**

Mattilsynet Epost: [postmottak@mattilsynet.no](mailto:postmottak@mattilsynet.no)  
T: 22 40 00 00

Sogn og Fjordane Fylkeskommune: Epost: [postmottak.sentraladm@sfj.no](mailto:postmottak.sentraladm@sfj.no)  
Fylkeshuset , Askedalen 2, 6863 Leikanger  
T: 57 65 61 00

Kystverket, region Vest:  
Epost: [post@kystverket.no](mailto:post@kystverket.no)  
Ålesund H-kontor, Postboks 1502, 6025 Ålesund  
T: 07847

Fylkesmannen i Sogn Og Fjordane: Epost: [fmsfpost@fylkesmannen.no](mailto:fmsfpost@fylkesmannen.no)  
Fylkeshuset , Askedalen 2, 6863 Leikanger  
T: 57 64 30 00

Fiskeridirektoratet region Vest: Epost: [postmottak.maloy@fiskeridir.no](mailto:postmottak.maloy@fiskeridir.no)  
Gt.1 nr.60 – 6700 Måløy  
T: 03495



## 5 FUNN

Følgende tabell inneholder et sammendrag av avvikene funnet i revisjonen. En full redegjørelse for avvikene finnes i seksjon 8 i denne rapporten.

### 5.1 Sammendrag av hoved avvik (ikke anvendt)

N	Standard referanse	Sammendrag av avviksbeskrivelse	Status*
NA		Ingen Major (Større avvik) registrert	

\*Å Åpent; L Lukket

### 5.2 Sammendrag mindre avvik

N	Standard referanse	Sammendrag av avviksbeskrivelse	Status*
1	2.5.5.a og b	a. Sjøfugl; to hegge, to måker, en kråke og en skarv død i løpet av siste 12 måneder. Informasjon er ikke publisert eller gjort tilgjengelig innen 30 dager. b. Det er ikke implementert et system for å gjøre informasjon lett offentlig tilgjengelig dersom dødelige hendelser inntreffer på fugler eller sjøpattedyr på anlegget.	Åpent
2	3.1.4.d and e	d. Hyppige tellinger av lakselus, med resultater gjort lett offentlig tilgjengelig innen sju dager etter telling. Resultater blir nå lagt inn i Altinn. Mattilsynet publiserer i offentlig tilgjengelige rapporter når data er prosessert. Direkte tilgang til data for det aktuelle anlegget burde etableres, som f.eks på MHNs ASC nettsider. e. Det er et krav at det opprettes direkte tilgang til data fra punkt 3.1.4.d lusetellinger for anlegget. Ingen dokumentasjon på publisering av resultater innen 7 dager etter lusetelling ble demonstrert.	Åpent
3	3.4.3.c	Kravet er at estimert uforklarlig tap av fisk er gjort offentlig tilgjengelig. Resultater er ikke gjort allment tilgjengelige. Direkte tilgang til data for det aktuelle anlegget burde etableres, som f.eks på MHNs ASC nettsider.	Åpent
4	4.1.1.C	Marine Harvest sin forproduksjon er ikke sertifisert, men i sertifiseringsprosess for GLOBALG.A.P.	Åpent
5	4.3.3 a and b	Marine Harvest sin forproduksjon er ikke sertifisert, men i sertifiseringsprosess for GLOBALG.A.P.	Åpent
6	4.4.1.c	Marine Harvest sin forproduksjon er ikke sertifisert, men i sertifiseringsprosess for GLOBALG.A.P.	Åpent
7	6.5.6.a	Evalueringer av dykker selskapene er på plass. Registreringer av dykkeaktivitet er tilgjengelig. Avvik: Kontraktene med dykkere har ikke kriteriene iht. standardens spesifikasjoner, men de nye kontraktene og erklæringer som skal gjelde for CoC er utarbeidet og bruk planlagt iverksatt fortløpende. Avvik: En dykker (Stanislav Marinov) for dykkeaktiviteter utført den 2014-09-16, har foreldet legeerklæring (utgått 2014-05-25). En dykkeleder (Simon Berlinge) for dykkeaktiviteter utført den 2014-11-13, har foreldet legeerklæring (utgått 2014-05-25).	Åpent
8	6.7.2.a	HMS revisjoner for dykker serviceselskaper gjennomføres der sjekk av anvendelsen iht. MH CoC prinsipper er inkludert. Det er planlagt å starte revisjoner inkludert sjekk mht. gjennomføring av MH CoC for alle underleverandører i midten av 2015. Kravene om å følge MH CoC er inkludert i ny revisjon av kontraktene og erklæringer mht. MH CoC er forberedt. Avvik: Kontraktene med underleverandører har ikke kriterier	Åpent

	iht. kravene i standard.	
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\*Å Åpent; L Lukket; A Korrigerende tiltak akseptert, effektivitet verifiseres nest periodiske revisjon.

### 5.3 Sammendrag observasjoner

N	Standard referanse	Observasjoner
1	5.4.2.d	Ingen UIA oppdaget eller mistenkt på anlegget. Informasjon innsendt til ASC 09.01.15. OBS: Det er ikke et system implementert for å gjøre informasjon lett offentlig tilgjengelig hvis nødvendig, henvisning til 5.4.2 pkt.3.
2	5.4.4. a and c	OBS: Intern prosedyren i TQM på praksis i henhold til OIE AHC. Obligatoriske trinn er ikke klart definert i prosedyren for å publisere (f.eks. på MHNs nettside) hvis en OIE-meldepliktig sykdom bryter ut på anlegget. Referanse til 5.4.4 pkt.4.
3	6.2.2.c	Timelister er tilgjengelig. Obs .: Det er et isolert tilfelle der ung arbeidstaker har arbeidet i løpet av natten.
4	6.7.1.a	Kontrakter tilgjengelig. Permanente kontrakter og lærlingkontrakter holdes i personalsystem og "tilkallingshjelp" kontrakter for unge arbeidere blir oppbevart på anlegget. Obs .: Arbeidskontrakt for ung arbeidstaker er signert på hovedsiden (Midtbo Lenart), men ingen dokumentasjon er tilgjengelige eller utfylt for arbeidsperioder i vedlegget til kontrakten.
5	6.7.2.b	Den interne revisjonsprosedyren har krav om å benytte MH CoC som revisjonskriterie. Punkt 5 i innkjøpsvilkårene har som krav at samtlige leverandører skal følge MH CoC. Testevaluering der det gjennomføres evalueringer for dykkerselskaper er iverksatt. Obs: Det ingen klare kriterier for evaluering av leverandører og entreprenører mot kravene i punkt 6 i standarden. Leverandørevalueringens sjekklister omhandler ikke sosial ansvarlighets kravene i MH CoC.
6	6.7.2.c	Det finnes skriftlige forpliktelser kun fra dykkerselskap. Obs: Ufullstendige registreringer av kommunikasjon med leverandører og underleverandører som er knyttet til etterlevelse av 6.7.2

## 6 BESTEMMELSE AV STARTPUNKT FOR COC

- Produktene omhandlet i omfanget av denne revisjonen og i relevant ASC sertifikat
  - Kan inngå i videre sertifisert produktflyt.
  - Har tillatelse til å bære ASC etikett.
- Bestemmelsen er basert på vurderingen av punktene beskrevet i følgende avsnitt:

Type	Vurdering
<b>Sporing, sporbarhet og segregering i oppdrettsoperasjonen.</b>	Dokumenter beskriver tilfredsstillende kontroll med innkommende produkter, fra egen ferskvannsanlegg og tilhørende dokumenter identifiserer produksjonsanlegget, leverandørliste og mottaks kontroll, både i slakteri og videreforedling. Digital informasjon håndtert i Mercatus/AquaFarmer for alle ferskvannstadier og vekstfase sjø. Etterfølgende slakting håndteres i prosess, logistikk og salgs-systemet Maritech Dette omfatter også tilstrekkelig informasjon om sporbarhet fra stamfisk og rogn til slaktefisk, innkjøp, fakturaer og leverandørregister.
<b>Bruk av brønnbåt.</b>	Brønnbåt/levendefisk-transport brukes
<b>Godkjente operatører og punkt (er) for landing.</b>	ASC CoC sertifisert slakteri
<b>Muligheten for å bytte ut sertifisert produkt med ikke sertifisert produkt innenfor sertifiseringsenheten.</b>	ASC CoC sertifisert slakteri
<b>Punkt i prosessen hvorfra Chain of Custody sertifikat er påkrevd.</b>	Produktet er autorisert til å inngå i ASC Chain of Custody sertifisering fra det punktet der fisken overflyttes fra brønnbåt og pumpes over i ventemerder.

## 7 AVGJØRELSE

<b>Søkers sertifiserings-status</b>	<p>Den endelige sertifiserings beslutning vil bli tatt etter at interessenters konsultasjons perioden er gjennomført og eventuelt nødvendige påfølgende aktiviteter / endringer er gjennomført, iht. ASC Farm sertifisering og akkreditering krav versjon 1 mars 2012.</p> <p>Organisasjonen beskrevet i kapittel 3 i denne rapporten for de aktivitetene som er beskrevet i kapittel 3 i seg selv er:</p> <p>I overensstemmelse med krav og anbefalt sertifisert når korrigerende tiltaksplan er iverksatt og implementert av virksomheten for kartlagte avvik, samt godkjent av DNV GL</p> <p>Endelig sertifiserings beslutning vil bli tatt i sluttrapporten etter at interessent perioden er gjennomført.</p> <p>Frem til endelig sertifiserings avgjørelse er tatt av DNV GL er søkeren ennå ikke sertifisert og kan ikke kreve status som ASC Salmon sertifisert.</p>
<b>Date for utstedelse av sertifikat</b>	Ikke avklart.
<b>Dato for utløp av sertifikat</b>	Ikke avklart.
<b>Sertifikatets omfang</b>	Produksjon av Atlantisk laks ( <i>Salmo salar</i> ).
<b>Startpunkt for ASC Chain of Custody Sertifikat</b>	Produktet er autorisert til å inngå i ASC Chain of Custody sertifisering fra det punktet der fisken overflyttes fra brønnbåt og pumpes over i ventemerder.

Åpne mindre avvik er oppført i relevant tabell i seksjon 5 i denne rapporten. Plan for relevante korrigerende tiltak må godkjennes og korrigerende tiltak verifiseres ved neste periodiske revisjon.

## 8 RESULTAT AV VURDERINGEN

Denne seksjonen viser resultatene av revisjonen av driften opp mot spesifikke elementer i standarden og rettledningsdokumenter, inkludert bevis fra revisjonen som viser pålitelige og reproducerbare konklusjoner. Detaljerte evalueringsresultater i Vedlegg 2.

Avvik nummer	Standard referanse	Beskrivelse av avvik	Rotårsaksanalyse	Korrigerende tiltak	Dato akseptert	Hoved (Major)	Mindre (Minor)	Obs.
1	2.5.5.a og b	a. Sjøfugl; to hegre, to måker, en kråke og en skarv død i løpet av siste 12 måneder. Informasjon er ikke publisert eller gjort tilgjengelig innen 30 dager. b. Det er ikke implementert et system for å gjøre informasjon lett offentlig tilgjengelig dersom dødelige hendelser inntreffer på fugler eller sjøpattedyr på anlegget.					Minor	
2	3.1.4.d and e	d. Hyppige tellinger av lakselus, med resultater gjort lett offentlig tilgjengelig innen sju dager etter telling. Resultater blir nå lagt inn i Altinn. Mattilsynet publiserer i offentlig tilgjengelige rapporter når data er prosessert. Direkte tilgang til data for det aktuelle anlegget burde etableres, som f.eks på MHNs ASC nettsider. e. Det er et krav at det opprettes direkte tilgang til data fra punkt 3.1.4.d lusetellinger for anlegget. Ingen dokumentasjon på publisering av resultater innen 7 dager etter lusetelling ble demonstrert.					Minor	
3	3.4.3.c	Kravet er at estimert uforklarlig tap av fisk er gjort offentlig tilgjengelig. Resultater er ikke gjort allment tilgjengelige. Direkte tilgang til data for det aktuelle anlegget burde etableres, som f.eks på MHNs ASC nettsider.					Minor	
4	4.1.1.C	Marine Harvest sin forproduksjon er ikke sertifisert, men i sertifiseringsprosess for GLOBALG.A.P.					Minor	

5	4.3.3 a and b	Marine Harvest sin förproduksjon er ikke sertifisert, men i sertifiseringsprosess for GLOBALG.A.P.					Minor	
6	4.4.1.c	Marine Harvest sin förproduksjon er ikke sertifisert, men i sertifiseringsprosess for GLOBALG.A.P.					Minor	
7	6.5.6.a	Evalueringer av dykker selskapene er på plass. Registreringer av dykkeaktivitet er tilgjengelig. Avvik: Kontraktene med dykkere har ikke kriteriene iht. standardens spesifikasjoner, men de nye kontraktene og erklæringer som skal gjelde for CoC er utarbeidet og bruk planlagt iverksatt fortløpende. Avvik: En dykker (Stanislav Marinov) for dykkeaktiviteter utført den 2014-09-16, har foreldet legeerklæring (utgått 2014-05-25). En dykkeleder (Simon Berlinge) for dykkeaktiviteter utført den 2014-11-13, har foreldet legeerklæring (utgått 2014-05-25).					Minor	
8	6.7.2.a	HMS revisjoner for dykker serviceselskaper gjennomføres der sjekk av anvendelsen iht. MH CoC prinsipper er inkludert. Det er planlagt å starte revisjoner inkludert sjekk mht. gjennomføring av MH CoC for alle underleverandører i midten av 2015. Kravene om å følge MH CoC er inkludert i ny revisjon av kontraktene og erklæringer mht. MH CoC er forberedt. Avvik: Kontraktene med underleverandører har ikke kriterier iht. kravene i standard.					Minor	
9	5.4.2.d	Ingen UIA oppdaget eller mistenkt på anlegget. Informasjon innsendt til ASC 09.01.15. OBS: Det er ikke et system implementert						OBS

		for å gjøre informasjon lett offentlig tilgjengelig hvis nødvendig, henvisning til 5.4.2 pkt.3.						
10	5.4.4. a and c	OBS: Intern prosedyren i TQM på praksis i henhold til OIE AHC. Obligatoriske trinn er ikke klart definert i prosedyren for å publisere (f.eks. på MHNs nettside) hvis en OIE-meldepliktig sykdom bryter ut på anlegget. Referanse til 5.4.4 pkt.4.						OBS
11	6.2.2.c	Timelister er tilgjengelig. Obs .: Det er et isolert tilfelle der ung arbeidstaker har arbeidet i løpet av natten.						OBS
12	6.7.1.a	Kontrakter tilgjengelig. Permanente kontrakter og lærlingkontrakter holdes i personalsystem og "tilkallingshjelp" kontrakter for unge arbeidere blir oppbevart på anlegget. Obs .: Arbeidskontrakt for ung arbeidstaker er signert på hovedsiden (Midtbo Lenart), men ingen dokumentasjon er tilgjengelige eller utfylt for arbeidsperioder i vedlegget til kontrakten.						OBS
13	6.7.2.b	Den interne revisjonsprosedyren har krav om å benytte MH CoC som revisjonskriterie. Punkt 5 i innkjøpsvilkårene har som krav at samtlige leverandører skal følge MH CoC. Testevaluering der det gjennomføres evalueringer for dykkerselskaper er iverksatt. Obs: Det ingen klare kriterier for evaluering av leverandører og entreprenører mot kravene i punkt 6 i standarden. Leverandørevalueringssjekkliste omhandler ikke sosial ansvarlighets kravene i MH CoC.						OBS
14	6.7.2.c	Det finnes skriftlige forpliktelser kun fra						OBS

		dykkerselskap. Obs: Ufullstendige registreringer av kommunikasjon med leverandører og underleverandører som er knyttet til etterlevelse av 6.7.2						
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Åpne mindre avvik oppført i ovennevnte tabell: Plan for relevante korrigerende tiltak må godkjennes, og korrigerende tiltak verifiseres ved neste periodiske revisjon.



## 9 KONFIDENSIELL KOMMERSIELT SENSITIV INFORMASJON

For å bidra til økt åpenhet har selskapet besluttet å la all informasjon være åpen og tilgjengelig.



## **APPENDIX 1: INTERESSENTERS HENVENDELSER**

Det var ingen henvendelser fra interessenter i forkant av revisjonen.



## APPENDIX 2: SJEKKLISTE (DETALJERTE EVALUERINGS RESULTATER)



## **ABOUT DNV GL**

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

AUDIT MANUAL - ASC Salmon Standard							
Created by the Salmon Aquaculture Dialogue							
Scope: species belonging to the genus <i>Salmo</i> and <i>Oncorhynchus</i>				10318 Guleste			
<b>INSTRUCTION TO FARMS/AUDITORS:</b> This audit manual was developed to accompany the version of the ASC Salmon Standard developed through the Salmon Aquaculture Dialogue, dated June 13, 2012.  <u>References in this Audit Manual to Appendices can be found in the ASC Salmon Standard document.</u>  The manual is complemented by a separate pre-audit checklist that outlines the minimum information that a client must have prior to the first audit. Prior to audit, the client and their conformity assessment body (CAB) shall reach agreement on whether the audit requires visits to both the client headquarters and the farm site, which information is held at each location, and the acceptable format of records (e.g. electronic or hard copy files).				CONFORMITY		COMMENTS	
PRINCIPLE 1: COMPLY WITH ALL APPLICABLE NATIONAL LAWS AND LOCAL REGULATIONS				CONFORMITY	Minor NC	Major NC	NA
Criterion 1.1 Compliance with all applicable local and national legal requirements and regulations							
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):				
1.1.1	<b>Indicator:</b> Presence of documents demonstrating compliance with local and national regulations and requirements on land and water use  <b>Requirement:</b> Yes  <b>Applicability:</b> All	a. Maintain digital or hard copies of applicable land and water use laws.	A. Review compliance with applicable land and water use laws.	y			Electronic copies of laws, regulations and requirements with references to Lovdata with updates and electronic links in TQM system. Governed by internal procedures in TQM.
		b. Maintain original (or legalised copies of) lease agreements, land titles, or concession permit on file as applicable.	B. Confirm client holds original (or legalised copies of) lease agreements or land titles.	y			Fylkes kommunen i Sogn og Fjordane dt 07.07.14 change of production permit. Fylkes kommunen i Sogn og Fjordane discharge permit for site dt 03.07.14 - 5460 t MTB. NFSA - local Municipality, Fisheries directorate- Approved Operation Plan dt. 19.02.14.
		c. Keep records of inspections for compliance with national and local laws and regulations (if such inspections are legally required in the country of operation).	C. Review inspection records for compliance with national and local laws and regulations (as applicable).	y			NFSA inspection dt.28.03.12, No NC's detected.
		d. Obtain permits and maps showing that the farm does not conflict with national preservation areas.	D. Verify facility does not conflict with national preservation areas and has required operational permits if sited in such an area (see 2.4.2).	y			Seen map from "Naturbase" with bird protected areas. Internal company declaration on site vs HVCAs, Fylkes kommunen i Sogn og Fjordane approval dt. 07.07.14
1.1.2	<b>Indicator:</b> Presence of documents demonstrating compliance with all tax laws  <b>Requirement:</b> Yes  <b>Applicability:</b> All	a. Maintain records of tax payments to appropriate authorities (e.g. land use tax, water use tax, revenue tax). Note that CABs will not disclose confidential tax information unless client is required to or chooses to make it public.	A. Verify client has records of tax payments to appropriate authorities. Do not disclose client tax information which is confidential. An independently audited company annual report may be used to confirm tax status.	y			Authorised auditor report/statement for organisation number 959352887, dt. 29.04.14. Ernst & Young.
		b. Maintain copies of tax laws for jurisdiction(s) where company operates.	B. Confirm client has a basic knowledge of tax requirements for farm.	y			Lovdata access to updated versions in TQM system
		c. Register with national or local authorities as an "aquaculture activity".	C. Verify client is registered with local or national authorities.	y			Fylkes kommunen i Sogn og Fjordane dt 07.07.14 change of production permit. Fylkes kommunen i Sogn og Fjordane discharge permit for site dt 03.07.14 - 5460 t MTB. NFSA - local Municipality, Fisheries directorate- Approved Operation Plan dt. 19.02.14. Brønnøysundregisteret registreret for activity - organisation number 959352887
1.1.3	<b>Indicator:</b> Presence of documents demonstrating compliance with all relevant national and local labor laws and regulations  <b>Requirement:</b> Yes  <b>Applicability:</b> All	a. Maintain copies of national labor codes and laws applicable to farm (scope is restricted to the farm sites within the unit certification.)	A. Confirm client has specified documentation.	y			Lovdata access to updated versions in TQM system
		b. Keep records of farm inspections for compliance with national labor laws and codes (only if such inspections are legally required in the country of operation).	B. Review inspection records for compliance with national labor laws and codes (as applicable).	y			No inspections nor incidents registered

1.1.4	<p><b>Indicator:</b> Presence of documents demonstrating compliance with regulations and permits concerning water quality impacts</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	a. Obtain permits for water quality impacts where applicable.	A. Verify that client obtains permits as applicable.				Fylkes kommunen i Sogn og Fjordane dt 07.07.14 change of production permit. Fylkes kommunen i Sogn og Fjordane discharge permit for site dt 03.07.14 - 5460 t MTB. NFSA - local Municipality. Fisheries directorate - Approved Operation Plan dt 19.02.14. Brønnøysundregisteret registered for activity -organisation number 959352887 MOM-B dt. 02.10.13 performed by Fiskeliv. Report nr BR1310703	
		b. Compile list of and comply with all discharge laws or regulations.	B. Review evidence of compliance with discharge laws or regulations.				As described in above permits. MOM-B dt. 02.10.13 performed by Fiskeliv. Report nr BR1310703	
		c. Maintain records of monitoring and compliance with discharge laws and regulations as required.	C. Verify that records show compliance with discharge laws and regulations.				MTB reported to government/ Altinn end of month. Seen Feb.2015 report filed in Altinn. Environmental reports and surveys reported to Altinn max 1 month after felt sampling done and results available from contractor. No indications of non compliance.	
<b>PRINCIPLE 2: CONSERVE NATURAL HABITAT, LOCAL BIODIVERSITY AND ECOSYSTEM FUNCTION</b>								
<b>Criterion 2.1 Benthic biodiversity and benthic effects [1]</b>								
		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>				
Footnote	[1] Closed production systems that can demonstrate that they collect and responsibly dispose of > 75% of solid nutrients from the production system are exempt from standards under Criterion 2.1. See Appendix VI for requirements on transparency for 2.1.1, 2.1.2 and 2.1.3.							
<b>Instruction to Clients and CABs on Criterion 2.1 - Modification of the Benthic Sampling Methodology</b>								
For farms located in a jurisdiction where specific benthic sampling locations are required under law, clients may request to modify the benthic sampling methodology prescribed in Appendix I-1 to allow for sampling at different locations and/or changes in the total number of samples. Where modifications are sought, farms shall provide a full justification to the CAB for review. Requests for modification shall be supported by mapping of differences in sampling locations. In any event, the sampling locations must at a minimum include samples from the cage edge and samples taken from inside and outside of a defined AZE.								
CABs shall evaluate client requests to modify benthic methodology based on whether there is a risk that such changes would jeopardize the intent and rigor of the ASC Salmon Standard. If the CAB determines that proposed modifications are low risk, the CAB shall ensure that details of the modified benthic sampling methodology are fully described and justified in the audit report.								
2.1.1	<p><b>Indicator:</b> Redox potential or [2] sulphide levels in sediment outside of the Allowable Zone of Effect (AZE) [3], following the sampling methodology outlined in Appendix I-1</p> <p><b>Requirement:</b> Redox potential &gt; 0 millivolts (mV) or Sulphide ≤ 1,500 microMoles / l</p> <p><b>Applicability:</b> All farms except as noted in F1</p>	Note: Under Indicator 2.1.1, farms can choose to measure redox potential (Option #1) or sulphide concentration (Option #2). Farms do not have to demonstrate that they meet both threshold values.						
		a. Prepare a map of the farm showing boundary of AZE (30 m) and GPS locations of all sediment collections stations. If the farm uses a site-specific AZE, provide justification [3] to the CAB.	A. Review map to verify appropriate siting of sampling stations (Appendix I-1) and evidence (if applicable) to justify use of a site specific AZE.					Seen Olex map MOM-C Performed by Fiskeliv, report dt 26.04.12 2 parallel form each point on fauna and chemicals. Performed at near 100% BM (max biomass). Also seen extra Environmental survey report for redox dt. 11.02.15 performed by Fiskeliv. 2 parallel chemicals. Performed at approximately 33 % BM (max biomass).
		b. If benthos throughout the full AZE is hard bottom, provide evidence to the CAB and request an exemption from 2.1.1c-f, 2.1.2 and 2.1.3.	B. Review evidence of benthic type and confirm whether to proceed to 2.1.1c.					Hard bottom/Sediments
		c. Inform the CAB whether the farm chose option #1 or option #2 to demonstrate compliance with the requirements of the Standard.	C. Record which option the client chose.					Opt# 1
		d. Collect sediment samples in accordance with the methodology in Appendix I-1 (i.e. at the time of peak cage biomass and at all required stations).	D. Review documentary evidence (notes, GPS coordinates) showing sampling time, stations, and frequency. Cross-check against farm maps and harvest records.				MOM-C Performed by Fiskeliv, report dt 26.04.12 2 parallel form each point on fauna and chemicals. Performed at near 100% BM (max biomass). Also seen extra Environmental survey report for redox dt. 11.02.15 performed by Fiskeliv. 2 parallel chemicals. Performed at approximately 33 % BM (max biomass).	

	<p><b>Applicability:</b> All farms except as noted in [1]</p>	<p>e. For option #1, measure and record redox potential (mV) in sediment samples using an appropriate, nationally or internationally recognized testing method.</p>	<p>E. Review results to verify that redox potential of sediments complies with the requirement at each sampling station outside the AZE. Confirm that the testing method used by the farm is appropriate.</p>					<p>MOM-C Performed by Fjordlab, report dt 26.04.12 Redox potential variable between stations, ranging from 10 mV to 71 mV outside AZE (ST 2 "overgangzone" pH 7.4 and 7.6" and( ST 3 "Fjærnsone" pH 7.4 and 7.5 "). Redox survey report Performed by Fiskeliv, report dt 11.02.15 Redox potential variable between stations, ranging from 49 mV to 124 mV outside AZE (ST 5 "overgangzone" pH 7.6 ) and (ST 3 "Fjærnsone" pH 7.7 "). MOM-C as per national regulations (NS 9410) ASC adapted (ISO 16665).</p>
		<p>f. For option #2, measure and record sulphide concentration (µM) using an appropriate, nationally or internationally recognized testing method.</p>	<p>F. Review results to verify that sulphide concentration in sediments complies with the Standard at each sampling station outside the AZE. Confirm that the testing method used by the farm is appropriate.</p>				NA	<p>Redox potential. National regulations (NS 9410)</p>
		<p>g. Submit test results to ASC as per Appendix VI at least once for each production cycle. If site has hard bottom and cannot complete tests, report this to ASC.</p>	<p>G. Confirm that client has submitted test results to ASC (Appendix VI).</p>					<p>Submitted to ASC 09.01.15</p>
Footnote	<p>[2] Farm sites can choose whether to use redox or sulphide. Farms do not have to demonstrate that they meet both.</p>							
Footnote	<p>[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.</p>							
2.1.2	<p><b>Indicator:</b> Faunal index score indicating good (4) to high ecological quality in sediment outside the AZE, following the sampling methodology outlined in Appendix I-1</p> <p><b>Requirement:</b> AZTI Marine Biotic Index (AMBI [5]) score <math>\leq</math> 3.3, or Shannon-Wiener Index score <math>&gt;</math> 3, or Benthic Quality Index (BQI) score <math>\geq</math> 15, or Infaunal Trophic Index (ITI) score <math>\geq</math> 25</p> <p><b>Applicability:</b> All farms except as noted in [1]</p>	<p>Notes: - Under indicator 2.1.2, farms can choose one of four measurements to show compliance with the faunal index Requirement: AMBI (Option #1); Shannon-Wiener Index (Option #2); BQI (Option #3); or ITI (Option #4). Farms do not have to demonstrate that they meet all four threshold values. - If a farm is exempt due to hard bottom benthos (see 2.1.1b), then 2.1.2 does not apply and this shall be noted in the audit report.</p>	<p>a. Prepare a map showing the AZE (30 m or site specific) and sediment collections stations (see 2.1.1).</p>	<p>A. Review map to verify appropriate siting of sampling stations (see 2.1.1).</p>				<p>Seen Olex map with MOM-C Performed by Fiskeliv, report dt 26.04.12 2 parallel form each point on fauna and chemicals. Performed at near 100% BM (max biomass). Also seen extra Environmental survey report for redox dt. 11.02.15 performed by Fiskeliv. 2 parallel chemicals. Performed at approximately 33 % BM (max biomass).</p>
		<p>b. Inform the CAB whether the farm chose option #1, #2, #3, or #4 to demonstrate compliance with the requirement.</p>	<p>B. Record which option the client chose for scoring faunal index.</p>					<p>#2 Shannon Wiener used</p>
		<p>c. Collect sediment samples in accordance with Appendix I-1 (see 2.1.1).</p>	<p>C. Confirm sample collection followed Appendix I-1 (see 2.1.1).</p>					<p>Van Veen grab used according to site specific MOM-C (NS9410)</p>
		<p>d. For option #1, measure, calculate and record AZTI Marine Biotic Index [5] score of sediment samples using the required method.</p>	<p>D. Review results (as applicable) to verify that AMBI score of sediments is <math>\leq</math> 3.3 at each sampling station outside the AZE.</p>				NA	<p>SW used</p>
		<p>e. For option #2, measure, calculate and record Shannon-Wiener Index score of sediment samples using the required method.</p>	<p>E. Review results (as applicable) to verify that Shannon Wiener score of sediments is <math>&gt;</math> 3 at each sampling station outside the AZE.</p>					<p>Shannon Wiener index score 4,16 at point ST2 and score 4,07 at point ST3 in report dt. 26.04.12. Assessments performed in period with or near max biomass or just after max biomass.</p>
		<p>f. For option #3, measure, calculate and record Benthic Quality Index (BQI) score of sediment samples using the required method.</p>	<p>F. Review results (as applicable) to verify that BQI score of sediments is <math>\geq</math> 15 at each sampling station outside the AZE.</p>				NA	<p>SW used</p>
		<p>g. For option #4, measure, calculate and record Infaunal Trophic Index (ITI) score of sediment samples using the required method.</p>	<p>G. Review results (as applicable) to verify that ITI score of sediments is <math>\geq</math> 25 at each sampling station outside the AZE.</p>				NA	<p>SW used</p>

		h. Retain documentary evidence to show how scores were obtained. If samples were analyzed and index calculated by an independent laboratory, obtain copies of results.	H. Confirm that an approved method was used or that a qualified independent laboratory performed the sampling and calculation of faunal index.					MOM-C as per national regulations (NS 9410) ASC adapted (ISO 16665 on faunal). Independent laboratory Fiskeliv performed the sampling and calculation of faunal index.
		i. Submit faunal index scores to ASC (Appendix VI) at least once for each production cycle.	I. Confirm that client submitted faunal index scores to ASC (Appendix VI).					Submitted to ASC 09.01.15
Footnote	[4] "Good" Ecological Quality Classification: The level of diversity and abundance of invertebrate taxa is slightly outside the range associated with the type-specific conditions. Most of the sensitive taxa of the type-specific communities are present.							
Footnote	[5] <a href="http://www.azti.es/en/ambi-azti-marine-biotic-index.html">http://www.azti.es/en/ambi-azti-marine-biotic-index.html</a> .							
2.1.3	<p><b>Indicator:</b> Number of macrofaunal taxa in the sediment within the AZE, following the sampling methodology outlined in Appendix I-1</p> <p><b>Requirement:</b> ≥ 2 highly abundant [6] taxa that are not pollution indicator species</p> <p><b>Applicability:</b> All farms except as noted in [1]</p>	a. Document appropriate sediment sample collection as for 2.1.1a and 2.1.1c, or exemption as per 2.1.1b.	A. Confirm appropriate sediment sample collection as for 2.1.1a and 2.1.1c or exemption as per 2.1.1b.					Seen Olex map with MOM-C Performed by Fiskeliv, report dt 26.04.12 2 parallel form each point on fauna and chemicals. Performed at near 100% BM (max biomass). Also seen extra Environmental survey report for redox dt. 11.02.15 performed by Fiskeliv. 2 parallel chemicals. Evaluated after ISO 16665 -2013
		b. For sediment samples taken within the AZE, determine abundance and taxonomic composition of macrofauna using an appropriate testing method.	B. Confirm that an appropriate method was used or that a suitably qualified independent laboratory performed the analysis.					Highly abundant taxa, Performed by Fiskeliv, report dt 26.04.12 Independent laboratory performed the sampling and calculation of faunal index.
		c. Identify all highly abundant taxa [6] and specify which ones (if any) are pollution indicator species.	C. Confirm that all samples from within the AZE have ≥ 2 highly abundant [6] taxa (exclusive of pollution indicator species).					2012 Report; Number of macrofaunal taxa in the sediment highly abundant taxa that are not pollution indicator species ST1 = 11 Assessments performed in period with or near max biomass or just after max biomass
		d. Retain documentary evidence to show how taxa were identified and how counts were obtained. If samples were analyzed by an independent lab, obtain copies of results.	D. Confirm that a suitable method was used or that a suitability qualified independent laboratory performed the scoring of faunal index.					Independent laboratory performed the sampling and calculation of faunal index. Evaluated after ISO 16665 -2013
		e. Submit counts of macrofaunal taxa to ASC (Appendix VI) at least once for each production cycle.	E. Confirm that client has submitted scores to ASC (Appendix VI).					Submitted to ASC 09.01.15
Footnote	[6] Highly abundant: Greater than 100 organisms per square meter (or equally high to reference site(s) if natural abundance is lower than this level).							
2.1.4	<p><b>Indicator:</b> Definition of a site-specific AZE based on a robust and credible [7] modeling system</p> <p><b>Requirement:</b> Yes, within three years of the publication [8] of the SAD standard (i.e. full compliance by June 13, 2015)</p> <p><b>Applicability:</b> All farms except as noted in [1]</p>	Note: Farms may define a site-specific AZE at any time before this date as long as they demonstrate full compliance by June 13, 2015.						
		a. Undertake an analysis to determine the site-specific AZE and depositional pattern before 3 years have passed since publication of the Standard on June 13, 2012.	A. Review documentation to confirm that the farm has undertaken an analysis before the required date.					Site-specific sampling regime (MOM-C hybrid - ASC adapted/NS9410 survey developed and performed by Fiskeliv AS.
		b. Maintain records to show how the analysis (in 2.1.4a) is robust and credible based on modeling using a multi-parameter approach [7].	B. Confirm that the farm used a robust and credible modeling system to define the site-specific AZE.					Site-specific sampling regime (MOM-C hybrid - ASC adapted/NS9410 survey developed and performed by Fiskeliv AS.
		c. Maintain records to show that modeling results for the site-specific AZE have been verified with > 6 months of monitoring data.	C. Confirm that farms have validated the general applicability of the site-specific AZE using monitoring data (i.e. 'ground truthing').					Site-specific sampling regime (MOM-C hybrid - ASC adapted/NS9410 survey developed and performed by Fiskeliv AS.
Footnote	[7] Robust and credible: The SEPA AUTODEPOMOD modeling system is considered to be an example of a credible and robust system. The model must include a multi-parameter approach. Monitoring must be used to ground-truth the AZE proposed through the model.							
Footnote	[8] Publication: Refers to the date when the final standards and accompanying guidelines are completed and made publicly available. This definition of publication applies throughout this document.							
<b>Criterion 2.2 Water quality in and near the site of operation [12]</b>		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>				
Footnote	[12] See Appendix VI for transparency requirements for 2.2.1, 2.2.2, 2.2.3 and 2.2.5.							



2.2.1	<p><b>Indicator:</b> Weekly average percent saturation [13] of dissolved oxygen (DO) [14] on farm, calculated following methodology in Appendix I-4</p> <p><b>Requirement:</b> ≥ 70% [15]</p> <p><b>Applicability:</b> All farms except as noted in [15]</p>	<p><b>Instruction to Clients for Indicator 2.2.1 - Monitoring Average Weekly Percent Saturation of Dissolved Oxygen</b></p> <p>Appendix I-4 presents the required methodology that farms must follow for sampling the average weekly percent saturation of dissolved oxygen (DO). Key points of the method are as follows:</p> <ul style="list-style-type: none"> <li>- measurements may be taken with a handheld oxygen meter or equivalent chemical method;</li> <li>- equipment is calibrated according to manufacturer's recommendations;</li> <li>- measurements are taken at least twice daily: once in the morning (6-9 am) and once in the afternoon (3-6 pm) as appropriate for the location and season;</li> <li>- salinity and temperature must also be measured when DO is sampled;</li> <li>- sampling should be done at 5 meters depth in water conditions that would be experienced by fish (e.g. at the downstream edge of a net pen array);</li> <li>- each week, all DO measurements are used in the calculation of a weekly average percent saturation.</li> </ul> <p>If monitoring deviates from prescribed sampling methodology, the farm shall provide the auditor with a written justification (e.g. when samples are missed due to bad weather). In limited and well-justified situations, farms may request that the CAB approve reduction of DO monitoring frequency to one sample per day.</p> <p><b>Exception (see footnote 15)</b> If a farm does not meet the minimum 70 percent weekly average saturation requirement, the farm must demonstrate the consistency of percent saturation with a reference site. The reference site shall be at least 500 meters from the edge of the net pen array, in a location that is understood to follow similar patterns in upwelling to the farm site and is not influenced by nutrient inputs from anthropogenic causes including aquaculture, agricultural runoff or nutrient releases from coastal communities. For any such exceptions, the auditor shall fully document in the audit report how the farm has demonstrated consistency with the reference site.</p> <p><b>Note 1:</b> <i>Percent saturation</i> is the amount of oxygen dissolved in the water sample compared to the maximum amount that could be present at the same temperature and salinity.</p>						
		a. Monitor and record on-farm percent saturation of DO at a minimum of twice daily using a calibrated oxygen meter or equivalent method. For first audits, farm records must cover ≥ 6 months.	A. Do not schedule audit until client provides a minimum of 6 months of DO data.	y				Oxygen curves provided and approved in presaudit docs for >6 months. Records submitted for ongoing production cycle up to date. Automatic measurements 2 times pr. day at reference station.
		b. Provide a written justification for any missed samples or deviations in sampling time.	B. Review records for completeness and conformity with methodology in Appendix I-4.	y				No missed data
		c. Calculate weekly average percent saturation based on data.	C. Review calculation and confirm all weekly averages ≥ 70%.	y				All daily calculations and weekly calculations show oxygen values above 70% saturation. Manuell measurements
		d. If any weekly average DO values are < 70%, or approaching that level, monitor and record DO at a reference site and compare to on-farm levels (see Instructions).	D. As needed, review DO data from reference site and document in the audit report (see instruction).	y				All above limit
		e. Arrange for auditor to witness DO monitoring and calibration while on site.	E. Witness DO monitoring and verify calibration while on site. On-site values should fall within range of farm data for DO. If an out of range measurement is observed, raise a nonconformity.	y				Monitoring of oksygen and calibration routines verified on site. Good knowledge, instructions from equipment producer available.
		f. Submit results from monitoring of average weekly DO as per Appendix VI to ASC at least once per year.	F. Confirm that client has submitted DO results to ASC (Appendix VI).	y				Submitted to ASC 09.01.15
Footnote	[13] Percent saturation: Percent saturation is the amount of oxygen dissolved in the water sample compared to the maximum amount that could be present at the same temperature and salinity.							
Footnote	[14] Averaged weekly from two daily measurements (proposed at 6 am and 3 pm).							
Footnote	[15] An exception to this standard shall be made for farms that can demonstrate consistency with a reference site in the same water body.							
2.2.2	<p><b>Indicator:</b> Maximum percentage of weekly samples from 2.2.1 that fall under 2 mg/liter DO</p> <p><b>Requirement:</b> 5%</p> <p><b>Applicability:</b> All</p>	a. Calculate the percentage of on-farm samples taken for 2.2.1a that fall under 2 mg/l DO.	A. Review the farm's calculation and confirm that ≤ 5% of weekly samples fall under 2 mg/l DO.	y			All above limits.	
		b. Submit results from 2.2.2a as per Appendix VI to ASC at least once per year.	B. Confirm that client has submitted results to ASC (Appendix VI).	y				Submitted to ASC 09.01.15
2.2.3	<p><b>Indicator:</b> For jurisdictions that have national or regional coastal water quality targets [16], demonstration through third-party analysis that the farm is in an area recently [17] classified as having "good" or "very good" water quality [18]</p> <p><b>Requirement:</b> Yes [19]</p> <p><b>Applicability:</b> All farms except as noted in [19]</p>	a. Inform the CAB whether relevant targets and classification systems are applicable in the jurisdiction. If applicable, proceed to "2.2.3.b". If not applicable, take action as required under 2.2.4	A. Record whether indicator is applicable.	y			EU Water Directive 2000 gives Water quality objectives for area Frøysjøen. (ref. "vannportalen.no/Sogn og fjordane") økologisk tilstand "god". Ecological conditions good.	
		b. Compile a summary of relevant national or regional water quality targets and classifications, identifying the third-party responsible for the analysis and classification.	B. Confirm that there has been a recent third-party analysis (within two years prior to the audit) to classify areas according to national or regional water quality targets.	y			EU Water Directive 2000 gives Water quality objectives for area Frøysjøen. (ref. "vannportalen.no/Sogn og fjordane") økologisk tilstand "god". Ecological conditions good.	
		c. Identify the most recent classification of water quality for the area in which the farm operates.	C. Confirm that the analysis and classification shows the farm is located in an area where the water quality complies with the requirement.	y				EU Water Directive 2000 gives Water quality objectives for area Frøysjøen. (ref. "vannportalen.no/Sogn og fjordane") økologisk tilstand "god". Ecological conditions good dt 14.12.14

Footnote	[16] Related to nutrients (e.g., N, P, chlorophyll A).						
Footnote	[17] Within the two years prior to the audit.						
Footnote	[18] Classifications of "good" and "very good" are used in the EU Water Framework Directive. Equivalent classification from other water quality monitoring systems in other jurisdictions are acceptable.						
Footnote	[19] Closed production systems that can demonstrate the collection and responsible disposal of > 75% of solid nutrients as well as > 50% of dissolved nutrients (through biofiltration, settling and/or other technologies) are exempt from standards 2.2.3 and 2.2.4.						
2.2.4	<p><b>Indicator:</b> For jurisdictions without national or regional coastal water quality targets, evidence of weekly monitoring of nitrogen and phosphorous [20] levels on farm and at a reference site, following methodology in Appendix I-5</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms except as noted in [19]</p>	<p>a. Develop, implement, and document a weekly monitoring plan for N, NH4, NO3, total P, and ortho-P in compliance with Appendix I-5, testing a minimum of once weekly in both locations. For first audits, farm records must cover ≥ 6 months.</p>	<p>A. Review the farm's monitoring plan and verify that the farm has collected monitoring data for N and P following the methodology in Appendix I-5.</p>				<p>Covered by EU Water Directive 2000 gives Water quality objectives for area Frøysjøen. (ref. "vannportalen.no/Sogn og fjordane") økologisk tilstand "god". Ecological conditions good dt 14.12.14</p> <p>NA</p>
		<p>b. Calibrate all equipment according to the manufacturer's recommendations.</p>	<p>B. Verify that client calibrates equipment as needed.</p>				<p>Covered by EU Water Directive 2000 gives Water quality objectives for area Frøysjøen. (ref. "vannportalen.no/Sogn og fjordane") økologisk tilstand "god". Ecological conditions good dt 14.12.14</p> <p>NA</p>
		<p>c. Submit data on N and P to ASC as per Appendix VI at least once per year.</p>	<p>C. Confirm that client has submitted N and P data to ASC (Appendix VI).</p>				<p>Covered by EU Water Directive 2000 gives Water quality objectives for area Frøysjøen. (ref. "vannportalen.no/Sogn og fjordane") økologisk tilstand "god". Ecological conditions good dt 14.12.14</p> <p>NA</p>
Footnote	[20] Farms shall monitor total N, NH4, NO3, total P and Ortho-P in the water column. Results shall be submitted to the ASC database. Methods such as a Hach kit are acceptable.						
2.2.5	<p><b>Indicator:</b> Demonstration of calculation of biochemical oxygen demand (BOD [21]) of the farm on a production cycle basis</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p><b>Instruction to Clients for Indicator 2.2.5 - Calculating Biochemical Oxygen Demand</b></p> <p>Biochemical Oxygen Demand (BOD) can be calculated based on cumulative inputs of N and C to the environment over the course of the production cycle.</p> $BOD = ((total\ N\ in\ feed - total\ N\ in\ fish) * 4.57) + ((total\ C\ in\ feed - total\ C\ in\ fish) * 2.67)$ <ul style="list-style-type: none"> <li>A farm may deduct N or C that is captured, filtered or absorbed through approaches such as IMTA or through direct collection of nutrient wasted. In this equation, "fish" refers to harvested fish. In this case, farm must submit breakdown of N &amp; C captured/filtered/absorbed to ASC along with method used to estimate nutrient reduction.</li> <li>Reference for calculation methodology: Boyd C. 2009. Estimating mechanical aeration requirement in shrimp ponds from the oxygen demand of feed. In: Proceedings of the World Aquaculture Society Meeting; Sept 25-29, 2009; VeraCruz, Mexico. And: Global Aquaculture Performance Index BOD calculation methodology available at <a href="http://web.uvic.ca/~gapi/explore-gapi/bod.html">http://web.uvic.ca/~gapi/explore-gapi/bod.html</a>.</li> </ul> <p>Note 1: Calculation requires a full production cycle of data and is required beginning with the production cycle first undergoing certification. If it is the first audit for the farm, the client is required to demonstrate to the CAB that data is being collected and an understanding of the calculations.</p> <p>Note 2: Farms may seek an exemption to Indicator 2.2.5 if: the farm collects BOD samples at least once every two weeks, samples are independently analyzed by an accredited laboratory, and the farm can show that BOD monitoring results do not deviate significantly from calculated annual BOD load.</p>					
		<p>a. Collect data throughout the course of the production cycle and calculate BOD according to formula in the instruction box.</p>	<p>A. Review calculation, cross-check data used with feed and harvest records.</p>				<p>Data is collected. Calculation will be available when production cycle is closed, documentation expected at next surveillance audit</p> <p>y</p>
		<p>b. Submit calculated BOD as per Appendix VI to ASC for each production cycle.</p>	<p>B. Confirm that client has submitted calculated BOD to ASC (Appendix VI).</p>				<p>Data is collected. Calculation will be available when production cycle is closed, documentation expected at next surveillance audit</p> <p>y</p>
Footnote	[21] 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 <a href="http://web.uvic.ca/~gapi/explore-gapi/bod.html">http://web.uvic.ca/~gapi/explore-gapi/bod.html</a> .						
<b>Criterion 2.3 Nutrient release from production</b>							
			<b>Compliance Criteria (Required Client Actions):</b>	<b>Auditor Evaluation (Required CAB Actions):</b>			
2.3.1	<p><b>Indicator:</b> Percentage of fines [22] in the feed at point of entry to the farm [23] (calculated following methodology in Appendix I-2)</p> <p><b>Requirement:</b> &lt; 1% by weight of the feed</p> <p><b>Applicability:</b> All farms except as noted in [23]</p>	<p>Note: The methodology given in Appendix I-2 is used to determine the fines (dust and small fragments) in finished product of fish feed which has a diameter of 3 mm or more.</p>					
		<p>a. Determine and document a schedule and location for quarterly testing of feed. If testing prior to delivery to farm site, document rationale behind not testing on site.</p>	<p>A. Review timing and location of testing. If testing off-site, verify rationale and ensure consistent with [23].</p>				<p>Percentage of fines according to requirements. Registrations and calculations score 0,54 % in Q4 2014.</p> <p>y</p>
		<p>b. If using a sieving machine, calibrate equipment according to manufacturer's recommendations.</p>	<p>B. Verify that client has appropriate testing technology on site and that, if applicable, it is calibrated as required.</p>				<p>Appropriate testing technology as per ASC</p> <p>y</p>
	<p>c. Conduct test according to detailed methodology in Appendix I-2 and record results for the pooled sample for each quarter. For first audits, farms must have test results from the last 3 months.</p>	<p>C. Review testing results and confirm that the pooled sample for each quarter has a percent fines of &lt;1%.</p>				<p>Percentage of fines according to requirements. Registrations and calculations score 0,54 % in Q4 2014.</p> <p>y</p>	
Footnote	[22] Fines: Dust and fragments in the feed. Particles that separate from feed with a diameter of 5 mm or less when sieved through a 1 mm sieve, or particles that 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	[23] To be measured every quarter or every three months. Samples that are measured shall be chosen randomly. Feed may be sampled immediately prior to delivery to farm for sites with no feed storage where it is not possible to sample on farm. Closed production systems that can demonstrate the collection and responsible disposal of > 75% of solid nutrients and > 50% of dissolved nutrients (through biofiltration, settling and/or other technologies) are exempt.						
<b>Criterion 2.4 Interaction with critical or sensitive habitats and species</b>							
		<b>Compliance Criteria (Required Client Actions):</b>	<b>Auditor Evaluation (Required CAB Actions):</b>				
2.4.1	<p><b>Indicator:</b> Evidence of an assessment of the farm's potential impacts on biodiversity and nearby ecosystems that contains at a minimum the components outlined in Appendix I-3</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>Note: If a farm has previously undertaken an independent assessment of biodiversity impact (e.g. as part of the regulatory permitting process), the farm may use such documents as evidence to demonstrate compliance with Indicator 2.4.1 as long as all components in Appendix I-3 are explicitly covered.</p>					
		<p>a. Perform (or contract to have performed) a documented assessment of the farm's potential impact on biodiversity and nearby ecosystems. The assessment must address all components outlined in Appendix I-3.</p>	<p>A. Review the assessment to confirm that it complies with all components outlined in Appendix I-3.</p>	y		<p>Impacts consequence assessment performed according to Appendix I-3 dt. 30.11.14. Marginal impacts only. Ref also license permit and assessment as part of the regulatory permitting process.</p> <p>Site has Risk Assessment with developed actions for potential environmental and biodiversity risks. Also MOM-B and MOM-C according to requirements in national legislation.</p>	
		<p>b. If the assessment (2.4.1a) identifies potential impact(s) of the farm on biodiversity or nearby critical, sensitive or protected habitats or species, prepare plan to address those potential impacts.</p>	<p>B. Verify the farm has a plan to address all potential impacts identified in the assessment.</p>	y		<p>Impacts consequence assessment performed according to Appendix I-3 dt. 30.11.14. Marginal impacts only. Ref also license permit and assessment as part of the regulatory permitting process.</p> <p>Site has Risk Assessment with developed actions for potential environmental and biodiversity risks. Also MOM-B and MOM-C according to requirements in national legislation.</p>	
		<p>c. Keep records to show how the farm implements plan(s) from 2.4.1b to minimize potential impacts to critical or sensitive habitats and species.</p>	<p>C. Verify that the farm implements the plan(s).</p>	y		<p>Impacts consequence assessment performed according to Appendix I-3 dt. 30.11.14. Marginal impacts only. Ref also license permit and assessment as part of the regulatory permitting process.</p> <p>Site has Risk Assessment with developed actions for potential environmental and biodiversity risks. Also MOM-B and MOM-C according to requirements in national legislation.</p>	
2.4.2	<p><b>Indicator:</b> Allowance for the farm to be sited in a protected area [24] or High Conservation Value Areas [25] (HCVAs)</p> <p><b>Requirement:</b> None [26]</p>	<p><b>Instruction to Clients for Indicator 2.4.2 - Exceptions to Requirements that Farms are not sited within Protected Areas or HCVAs</b></p> <p>The following exceptions shall be made for Indicator 2.4.2:</p> <p>Exception #1: For protected areas classified by the International Union for the Conservation of Nature (IUCN) as Category V or VI (these are areas preserved primarily for their landscapes or for sustainable resource management).</p> <p>Exception #2: For HCVAs if the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the HCVA designation. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the core reason an area has been identified as a HCVA.</p> <p>Exception #3: For farms located in a protected area if it was designated as such after the farm was already in operation and provided the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the protected area and it is in compliance with any relevant conditions or regulations placed on the farm as a result of the formation/designation of the protected area. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the core reason an area has been protected.</p> <p><b>Definitions</b></p> <p><u>Protected area:</u> "A clearly defined geographical space, recognized, dedicated and managed through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values."</p> <p><u>High Conservation Value Areas (HCVAs):</u> Natural habitats where conservation values are considered to be of outstanding significance or critical importance. HCVA are designated through a multi-stakeholder approach that provides a systematic basis for identifying critical conservation values—both social and environmental—and for planning ecosystem management in order to ensure that these high conservation values are maintained or enhanced</p>					

	<p>requirement: none [40]</p> <p>Applicability: All farms except as noted in [26]</p>	<p>a. Provide a map showing the location of the farm relative to nearby protected areas or High Conservation Value Areas (HCVAs) as defined above (see also 1.1.1a).</p>	<p>A. Review map and cross-check against independent information sources (e.g. 1.1.1d) to determine if the farm is sited in a protected area or HCVA.</p>					<p>DN Naturbase map with all known protected areas defined. - site is not in conflict with protected areas. HCVA or CAs. Also considered in Impacts consequence assessment performed according to Appendix I-3 dt. 30.11.14.</p>	
		<p>b. If the farm is <u>not</u> sited in a protected area or High Conservation Value Area as defined above, prepare a declaration attesting to this fact. In this case, the requirements of 2.4.2c-d do not apply.</p>	<p>B. Obtain a copy of the farm's declaration stating that the farm is not sited in a protected area or HCVA (as applicable).</p>					<p>Declaration on MH company and site policy related to HCVA dt.13.01.15</p>	
		<p>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.</p>	<p>C. Review the applicability of the exception requested by the farm together with the supporting evidence to determine if the farm is eligible. If yes, Indicator 2.4.2 is not applicable.</p>					<p>NA</p> <p>Not within HCVAs</p>	
		<p>d. If the farm is sited in a protected area or HCVA and the exceptions provided for Indicator 2.4.2 <u>do not apply</u>, then the farm does not comply with the requirement and is ineligible for ASC certification.</p>	<p>D. Review evidence to determine whether the farm is allowed to be sited in a protected area or HCVA and hence eligible for ASC certification.</p>					<p>NA</p> <p>Not within HCVAs</p>	
Footnote	[24] Protected area: "A clearly defined geographical space, recognized, dedicated and managed through legal or other effective means, to achieve the long-term conservation of 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	[25] High Conservation Value Areas (HCVA): Natural habitats where conservation values are considered to be of outstanding significance or critical importance. HCVA are designated through a multi-stakeholder approach that provides a systematic basis for identifying critical conservation values—both social and environmental—and for planning ecosystem management in order to ensure that these high conservation values are maintained or enhanced ( <a href="http://www.hcnetwork.org/">http://www.hcnetwork.org/</a> ).								
Footnote	<p>[26] The following exceptions shall be made for Standard 2.4.2:</p> <ul style="list-style-type: none"> <li>For protected areas classified by the International Union for the Conservation of Nature (IUCN) as Category V or VI (these are areas preserved primarily for their landscapes or for sustainable resource management).</li> <li>For HCVAs if the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the HCVA designation. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the core reason an area has been identified as a HCVA.</li> <li>For farms located in a protected area if it was designated as such after the farm was already in operation and provided the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the protected area and it is in compliance with any relevant conditions or regulations placed on the farm as a result of the formation/designation of the protected area. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the core reason an area has been protected.</li> </ul>								
<b>Criterion 2.5 Interaction with wildlife, including predators [27]</b>									
Footnote	[27] See Appendix VI for transparency requirements for 2.5.2, 2.5.5 and 2.5.6.								
		<b>Compliance Criteria (Required Client Actions):</b>			<b>Auditor Evaluation (Required CAB Actions):</b>				
2.5.1	<p><b>Indicator:</b> Number of days in the production cycle when acoustic deterrent devices (ADDs) or acoustic harassment devices (AHDs) were used</p> <p><b>Requirement:</b> 0, within three years of the date of publication [28] of the SAD standard (i.e. full compliance by June 13, 2015)</p> <p><b>Applicability:</b> All</p>	<p>a. Prepare a written statement affirming that the farm's management is committed to eliminate all usage of acoustic deterrent devices (ADDs) or acoustic harassment devices (AHDs) by June 13, 2015.</p> <p>b. Compile documentary evidence to show that no ADDs or AHDs were used by the farm after June 13, 2015 (applicable only after the specified date).</p>	<p>A. Confirm that farm management has prepared a written statement of commitment.</p> <p>B. Review documentary evidence (e.g. predator management policies, records of predator incidents) and cross-check against interviews with farm staff and local community members (applicable only after the date specified in 2.5.1a).</p> <p>C. During the on-site audit, inspect the farm to confirm that no ADDs or AHDs are present at the facilities (applicable only after June 13, 2015).</p>					<p>NA</p> <p>No ADDs/AHDs in use nor has been used. Ref statement 11.02.15 on deviced not used.</p> <p>NA</p> <p>No ADDs/AHDs in use nor has been used</p> <p>NA</p> <p>Verified not in use</p>	
Footnote	[28] Publication: Refers to the date when the final standards and accompanying guidelines are completed and made publicly available. This definition of publication applies throughout this document.								
2.5.2	<p><b>Indicator:</b> Prior to the achievement of 2.5.1, if ADDs or AHDs are used, maximum percentage of days [29] in the production cycle that the devices are operational</p> <p><b>Requirement:</b> ≤ 40%</p> <p><b>Applicability:</b> All, until June 13, 2015</p>	<p><b>Instruction to Clients for Indicator 2.5.2 - Percentage of Days that ADDs or AHDs were used</b>  Farms must calculate the percentage of days in the production cycle that ADDs or AHDs were operated using data from the most recent complete production cycle. For first audits, farms may be exempted from compliance with Indicator 2.5.2 for the most recent complete production cycle if the farm can satisfactorily demonstrate to the auditor that:  - the client understands how to accurately calculate percentage of days the devices were operational;  - the client maintains all information needed to accurately calculate the percentage of operational days based on &gt; 6 months of data for the current production cycle; and  - the client can show how plans for the current production cycle will ensure that the farm will meet requirements at harvest (i.e. devices in operation &lt;40% of days).</p> <p>Indicator 2.5.2 is applicable until June 13, 2015, after which the use of ADDs and AHDs is not allowed under the standard.</p>	<p>a. Maintain a log for the use of any ADDs or AHDs on farm that includes recording the number of days (24-hour cycles) during which the devices were used.</p> <p>b. Calculate the percentage of days in the production cycle that the devices were operational in the most recent complete production cycle.</p> <p>c. Confirm devices were operational ≤ 40% of the days of the production cycle.</p> <p>d. Submit data on number of days that ADDs/AHDs were used to the ASC as per Appendix VI. Data must be sent to ASC on an ongoing basis (i.e. at least once per year and for each production cycle).</p>	<p>A. Review log and cross-check with records of predator incidents.</p> <p>B. Verify calculations and cross-check against records for the duration of the production cycle.</p> <p>C. Confirm devices were operational ≤ 40% of the days of the production cycle.</p> <p>D. Confirm that client has submitted data on ADDs/AHDs to ASC (Appendix VI).</p>					<p>NA</p> <p>No ADDs/AHDs in use nor has been used. Ref statement 11.02.15 on deviced not used.</p> <p>NA</p> <p>No ADDs/AHDs in use nor has been used</p> <p>NA</p> <p>Verified not in use</p> <p>Submitted to ASC 09.01.15</p>
Footnote	[29] Day: 24-hour cycle.								
		<p>a. Prepare a list of all predator control devices and their locations.</p>	<p>A. Review list.</p>					<p>NA</p> <p>Birdnets located above the net cages are only predator control devices used.</p>	
		<p>b. Maintain a record of all predator incidents.</p>	<p>B. Review farm records of predator incidents and cross-check against relevant records (e.g. escapes).</p>					<p>NA</p> <p>No records of mortalities from site</p>	

2.5.3	<p><b>Indicator:</b> Number of mortalities [30] of endangered or red-listed [31] marine mammals or birds on the farm</p> <p><b>Requirement:</b> 0 (zero)</p> <p><b>Applicability:</b> All</p>	c. Maintain a record of all mortalities of marine mammals and birds on the farm identifying the species, date, and apparent cause of death.	C. Review records for completeness. Cross-check mortality records against interviews with farm staff and community representatives.	y			Records verified on site	
		d. Maintain an up-to-date list of endangered or red-listed marine mammals and birds in the area (see 2.4.1)	D. Review list for consistency with 2.4.1	y			Red list of endangered or red-listed marine mammals and birds in the area from "Norsk Rødtliste for arter-2010" - fra Artsdatabanken" New list 2015.	
		-	E. Compare results from (a) through (d) above to confirm that there were no mortalities of endangered or red-listed marine mammals or birds on farm.	y			No mortalities; Red list of endangered or red-listed marine mammals and birds in the area registered on site.	
Footnote	[30] Mortalities: Includes animals intentionally killed through lethal action as well as accidental deaths through entanglement or other means.							
Footnote	[31] Species listed as endangered or critically endangered by the IUCN or on a national endangered species list.							
2.5.4	<p><b>Indicator:</b> Evidence that the following steps were taken prior to lethal action [32] against a predator:</p> <ol style="list-style-type: none"> <li>All other avenues were pursued prior to using lethal action</li> <li>Approval was given from a senior manager above the farm manager</li> <li>Explicit permission was granted to take lethal action against the specific animal from the relevant regulatory authority</li> </ol> <p><b>Requirement:</b> Yes [33]</p> <p><b>Applicability:</b> All except cases where human safety is endangered as noted in [33]</p>	a. Provide a list of all lethal actions that the farm took against predators during the previous 12-month period. Note: "lethal action" is an action taken to deliberately kill an animal, including marine mammals and birds.	A. Review list of lethal actions taken by the farm and cross-check against 2.5.3b.	y			No lethal actions taken at farm. Internal records checked.	
		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.	B. Review documentation to confirm that the farm shows evidence of compliance with requirements in steps 1-3.				NA	No lethal actions taken. Internal records checked. Governed by Internal procedure id.nr. 33755 on ASC handling on predators.
		c. Provide documentary evidence that steps 1-3 above (in 2.5.4b) were taken prior to killing the animal. If human safety was endangered and urgent action necessary, provide documentary evidence as outlined in [33].	C. Review documentary evidence to verify actions, permissions, and approvals were taken prior to taking lethal action. If client requests exemption due to human safety, review evidence to verify [33].				NA	No lethal actions taken. Internal records checked. Governed by Internal procedure id.nr. 33755 on ASC handling on predators.
Footnote	[32] Lethal action: Action taken to deliberately kill an animal, including marine mammals and birds.							
Footnote	[33] Exception to these conditions may be made for a rare situation where human safety is endangered. Should this be required, post-incident approval from a senior manager should be made and relevant authorities must be informed.							
<p><b>Instruction to Clients and CABs on Indicators 2.5.5, 2.5.6, and 2.5.7 - Clarification about the ASC Definition of "Lethal Incident"</b></p> <p>The ASC Salmon Standard has defined "lethal incident" to include all lethal actions as well as entanglements or other accidental mortalities of non-salmonids [footnote 35]. For the purpose of assisting farms and auditors with understanding how to evaluate compliance with Indicators 2.5.5, 2.5.6, and 2.5.7, ASC has clarified this definition further:</p> <p>Total number of lethal Incidents = sum of all non-salmonid deaths arising from all lethal actions taken by the farm during a given time period</p> <p>There should be a 1:1 relationship between the number of animal deaths and the number of lethal incidents reported by the farm. For example, if a farm has taken one (1) lethal action in past last two years and that single lethal action resulted in killing three (3) birds, it is considered three (3) lethal incidents within a two year period.</p> <p>The term "non-salmonid" was intended to cover any predatory animals which are likely to try to feed upon farmed salmon. In practice these animals will usually be seals or birds.</p>								
2.5.5	<p><b>Indicator:</b> Evidence that information about any lethal incidents [35] on the farm has been made easily publicly available [34]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	a. For all lethal actions (see 2.5.4), keep records showing that the farm made the information available within 30 days of occurrence.	A. Check farm records for publicizing lethal actions against the actions listed in 2.5.4a to confirm that the farm made information available within 30 days.	N	X		Entanglement of seabirds; 2 heron 2 seagull and 1 crow and 1 cormorant dead during last 12 months. Not published or information available within 30 days.	
		b. Ensure that information about all lethal actions listed in 2.5.5a are made easily publicly available (e.g. on a website).	B. Verify that required information is easily publicly available.	N	X		There is not a system implemented to make information easily publicly available if any lethal incidents occurs on birds or marine mammals at the site.	
Footnote	[34] Posting results on a public website is an example of "easily publicly available." Shall be made available within 30 days of the incident and see Appendix VI for transparency requirements.							
2.5.6	<p><b>Indicator:</b> Maximum number of lethal incidents [35] on the farm over the prior two years</p> <p><b>Requirement:</b> &lt; 9 lethal incidents [36], with no more than two of the incidents being marine mammals</p> <p><b>Applicability:</b> All</p>	a. Maintain log of lethal incidents (see 2.5.4a) for a minimum of two years. For first audit, > 6 months of data are required.	A. Review log.	y			Entanglement of seabirds; 2 heron 2 seagull and 1 crow and 1 cormorant dead during last 12 months	
		b. Calculate the total number of lethal incidents and the number of incidents involving marine mammals during the previous two year period.	B. Verify that over the previous two years there were < 9 lethal incidents in total and that ≤ 2 of those incidents were marine mammal deaths.	y			Entanglement of seabirds; 2 heron 2 seagull and 1 crow and 1 cormorant dead during last 12 months	
		c. Send ASC the farm's data for all lethal incidents [35] of any species other than the salmon being farmed (e.g. lethal incidents involving predators such as birds or marine mammals). Data must be sent to ASC on an ongoing basis (i.e. at least once per year and for each production cycle).	C. Confirm that data on all lethal incidents has been submitted to ASC (Appendix VI).	y				Submitted to ASC 09.01.15
Footnote	[35] Lethal incident: Includes all lethal actions as well as entanglements or other accidental mortalities of non-salmonids.							
Footnote	[36] Standard 2.5.6 applicable to incidents related to non-endangered and non-red-listed species. This standard complements, and does not contradict, 2.5.3.							

2.5.7	<p><b>Indicator:</b> In the event of a lethal incident, evidence that an assessment of the risk of lethal incident(s) has been undertaken and demonstration of concrete steps taken by the farm to reduce the risk of future incidences</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Keep records showing that the farm undertakes an assessment of risk following each lethal incident and how those risk assessments are used to identify concrete steps the farm takes to reduce the risk of future incidents.</p>	<p>A. Review farm records to confirm that all the farm performs an appropriate risk assessment following all lethal incidents (see list 2.5.4a).</p>	y			<p>Risk assessment and procedure "Forbygging mot håndtering og avlving av predatorer" ID 33755 incident of entanglement recorded last cycle. Procedures implemented at site. Good awareness.</p>
		<p>b. Provide documentary evidence that the farm implements those steps identified in 2.5.7a to reduce the risk of future lethal incidents.</p>	<p>b. Verify that the farm implements steps to reduce risk of lethal incidents.</p>	y			<p>Risk assessment and procedure "Forbygging mot håndtering og avlving av predatorer" ID 33755 incident of entanglement recorded last cycle. Procedures implemented at site. Good awareness.</p>
<b>PRINCIPLE 3: PROTECT THE HEALTH AND GENETIC INTEGRITY OF WILD POPULATIONS</b>							
<i>Criterion 3.1 Introduced or amplified parasites and pathogens [38,39]</i>							
Footnote	<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>				
Footnote	[38] Farm sites for which there is no release of water that may contain pathogens into the natural (freshwater or marine) environment are exempt from the standards under Criterion 3.1.						
Footnote	[39] See Appendix VI for transparency requirements for 3.1.1, 3.1.3, 3.1.4, 3.1.6 and 3.1.7.						
<b>Instruction to Clients and CABs on Exemptions to Criterion 3.1</b>							
According to footnote [38], farm sites for which there is no release of water that may contain pathogens into the natural (freshwater or marine) environment are exempt from the requirements under Criterion 3.1. More specifically, farms are only eligible for exemption from Criterion 3.1 if it can be shown that either of the following holds: 1) the farm does not release any water to the natural environment; or 2) any effluent released by the farm to the natural environment has been effectively treated to kill pathogens (e.g. UV and/or chemical treatment of water with testing demonstrating efficacy).							
Auditors shall fully document the rationale for any such exemptions in the audit report.							
3.1.1	<p><b>Indicator:</b> Participation in an Area-Based Management (ABM) scheme for managing disease and resistance to treatments that includes coordination of stocking, fallowing, therapeutic treatments and information-sharing. Detailed requirements are in Appendix II-1.</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All except farms that release no water as noted in [38]</p>	<p>a. Keep record of farm's participation in an ABM scheme.</p>	<p>A. Review records of farm participation in ABM scheme. Contact other ABM participants as necessary to confirm the accuracy of client records.</p>	y			<p>Approved operation plans by Fisheries Directorate ABM a requirement in national legislation. Records and overview over ABM in zones defined by NFSA and companys in ABM. Weekly updates to Alltinn, where info is available for all farms in zone. Also regular meetings between participants where ABM issues are discussed 100% of farms included. Records from "Lusenettverket" Routines and procedures for notification included in ABM related to treatments and disease. Coordination of stocking and fallowing also issues in regular meetings and strategies.</p>
		<p>b. Submit to the CAB a description of how the ABM (3.1.1a) coordinates management of disease and resistance to treatments, including: - coordination of stocking; - fallowing; - therapeutic treatments; and - information sharing.</p>	<p>B. Review description of ABM to verify that the management activities address each of the four element from indicator 3.1.1.</p>	y			<p>Approved operation plans by Fisheries Directorate ABM a requirement in national legislation. Records and overview over ABM in zones defined by NFSA and companys in ABM. Weekly updates to Alltinn, where info is available for all farms in zone. Also regular meetings between participants where ABM issues are discussed 100% of farms included. Records from "Lusenettverket" Routines and procedures for notification included in ABM related to treatments and disease. Coordination of stocking and fallowing also issues in regular ABM meetings and strategies.</p>

		c. Provide the CAB access to documentation which is sufficient for the auditor to evaluate the ABM's compliance with all requirements in Appendix II-1, including definition of area, minimum % participation in the scheme, components, and coordination requirements.	C. Evaluate documents to confirm the ABM complies with Appendix II-1.					Approved operation plans by Fisheries Directorate ABM a requirement in national legislation. Records and overview over ABM in zones defined by NFSA and companies in ABM. Weekly updates to AItinn, where info is available for all farms in zone. Also regular meetings between participants where ABM issues are discussed 100% of farms included. Records from "Lusenettverket" Routines and procedures for notification included in ABM related to treatments and disease. Coordination of stocking and fallowing also issues in regular ABM meetings and strategies.
		d. Submit dates of following period(s) as per Appendix VI to ASC at least once per year.	D. Confirm that client has submitted dates of following periods to ASC (Appendix VI).					Overview following periods submitted to ASC dt 09.01.15
		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.						
3.1.2	Indicator: A demonstrated commitment [40] 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 [38]	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. Review evidence that the farm and/or its operating company has communicated with external groups to agree on areas of research about possible impacts on wild stocks and is tracking and responding to research requests.					1) Agreement on cooperation for development of sustainable aquaculture between WWF and Marine Harvest from Feb 2011. New agreement with WWF expected to be signed within march 2015 2) Wild salmon fish traps in Etne River. 3) pilot prosjekt i Hardanger - on survival of wild salmonids (DN, F. Dir. NFSA) 4) Vossalaugst - reestablishing the Vossa wild salmon stock. 5) Genetical studies - ova and smolt provided to project. Lakselus og lakselus overvåking i Romsdalsfjord (Seallice monitoring project). Salmon trap project in Guddalselva in Kvinherad. Reproduction in Fagrd for Sira-Kvina vassdraget. 6. MH provide fishhealth service for Elveierlaget Osen og Vestre Hyen.
		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.	B. Review how the farm and/or its operating company has provided non-financial support for research activities.					For all projects described in 3.1.2.a company has provided non-financial support for research activities.
		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.	C. As applicable, review the provided record of rejecting proposals to confirm that denials were justified and there is no consistent pattern to indicate that the farm and/or its operating company lacks a demonstrated commitment to collaborate on research activities.					NA
		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.	D. Verify that the farm's communications with researchers demonstrate a commitment to collaborate on relevant areas of research.					In FHF PD projectmail dt. 13.11.14 start of project and agreements as described in 3.1.2.a
Footnote	[40] Commitment: At a minimum, a farm and/or its operating company must demonstrate this commitment through providing farm-level data to researchers, granting researchers access to sites, or other similar non-financial support for research activities.							
		a. Keep records to show that a maximum sea lice load has been set for: - the entire ABM; and - the individual farm.	A. Review records to confirm compliance.					NFSA set limits and governmental treatment regime for ABM, reported via AItinn. Also internal procedure in TQM "Lakselus- forbygging kontroll og behandling" ID 24895 Registered on farm in AquaFarmer.c Records confirm compliance.

3.1.3	<p><b>Indicator:</b> Establishment and annual review of a maximum sea lice load for the entire ABM and for the individual farm as outlined in Appendix II-2</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All except farms that release no water as noted in [38]</p>	<p>b. Maintain evidence that the established maximum sea lice load (3.1.3a) is reviewed annually as outlined in Appendix II-2, incorporating feedback from the monitoring of wild salmon where applicable (See 3.1.6).</p>	<p>B. Confirm that sea lice load is reviewed annually and, if applicable, the review incorporates information from monitoring of wild salmon.</p>	y			<p>NFSA set limits and governmental treatment regime for ABM, reported via Altinn. Continuous review by NFSA and Luse -nettverket monthly review. Updated report for 2009 to 2014 with details. No monitoring of wild salmon allowed, governmental monitoring of wild salmon incorporated.</p>
		<p>c. Provide the CAB access to documentation which is sufficient for the auditor to evaluate whether the ABM has set (3.1.3a) and annually reviewed (3.1.3.b) maximum sea lice load in compliance with requirements in Appendix II-2.</p>	<p>C. Evaluate documents to confirm the ABM complies with requirements of Appendix II-2 for establishing and reviewing maximum sea lice loads.</p>	y			<p>NFSA set limits and governmental treatment regime for ABM, reported via Altinn. Continuous review by NFSA and Luse -nettverket monthly review. Sensitive periods for wild salmon migration considered and monitoring intensified.</p>
		<p>d. Submit the maximum sea lice load for the ABM to ASC as per Appendix VI at least once per year.</p>	<p>D. Confirm that client has submitted the ABM maximum lice load to ASC (Appendix VI).</p>	y			<p>Overview Sea Lice Load submitted to ASC dt 09.01.15</p>
3.1.4	<p><b>Indicator:</b> Frequent [41] on-farm testing for sea lice, with test results made easily publicly available [42] within seven days of testing</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All except farms that release no water as noted in [38]</p>	<p>a. Prepare an annual schedule for testing sea lice that identifies timeframes of routine testing frequency (at a minimum, monthly) and for high-frequency testing (weekly) due to sensitive periods for wild salmonids (e.g. during and immediately prior to outmigration of juveniles).</p>	<p>A. Review sea lice testing schedule to confirm that weekly testing coincides with known sensitive periods for wild salmon (e.g. during and immediately prior to outmigration of juveniles).</p>	y			<p>Weekly sampling and registrations reported to NFSA via Altinn. Sensitive periods for migration, 5. mars - 10. april for area. Spring coordinated delicing regime decided by government/ NFSA for region.</p>
		<p>b. Maintain records of results of on-farm testing for sea lice. If farm deviates from schedule due to weather [41] maintain documentation of event and rationale.</p>	<p>B. Review records to confirm that testing follows the farm's annual schedule. Review the rationale for any deviations from the schedule.</p>	y			<p>Sea lice load testing reported to Altinn/NFSA weekly. No deviations registered. (exemption for periods with temperatures below 04 degrees C - testing period 2 weeks).</p>
		<p>c. Document the methodology used for testing sea lice ('testing' includes both counting and identifying sea lice). The method must follow national or international norms, follows accepted minimum sample size, use random sampling, and record the species and life-stage of the sea lice. If farm uses a closed production system and would like to use an alternate method (i.e. video), farm shall provide the CAB with details on the method and efficacy of the method.</p>	<p>C. Review the farm's methodology for testing sea lice. If practicable, observe testing while on-site. If farm is a closed system using an alternate testing method, document the distinction and review evidence of efficacy of the method.</p>	y			<p>Weekly testing from NSFA predetermined cages, according NFSA regulation. Sealice numbers and life-stage identified and recorded. Min 10 fish /cage 50 % of cages weekly. Min 20 fish /cage 50 % of cages weekly.</p>
		<p>d. Make the testing results from 3.1.4b easily publicly available (e.g. posted to the company's website) within seven days of testing. If requested, provide stakeholders access to hardcopies of test results.</p>	<p>D. Test access from an offsite computer to confirm that results are easily publicly available. If applicable, confirm that the farm made hardcopies of test results easily available to stakeholders.</p>	N	X		<p>To Altinn / NFSA publishes in public reports when data is processed. <b>Direct access to data for actual site should be established e.g on MH ASC website.</b></p>
		<p>e. Keep records of when and where test results were made public.</p>	<p>E. Review records for the past year to confirm the farm posted test results within 7 days of each test. Cross-check against testing schedule (see 3.1.4a).</p>	N	X		<p>No records available for the past year to confirm that the farm posted test results within 7 days of each test.</p>
		<p>f. Submit test results to ASC (Appendix VI) at least once per year.</p>	<p>F. Confirm that client has submitted test results to ASC (Appendix VI).</p>	y			<p>Overview Sea Lice test/counting submitted to ASC dt 09.01.15</p>
Footnote	[41] Testing must be weekly during and immediately prior to sensitive periods for wild salmonids, such as outmigration of wild juvenile salmon. Testing must be at least monthly during the rest of the year, unless water temperature is so cold that it would jeopardize farmed fish health to test for lice (below 4 degrees C). Within closed production systems, alternative methods for monitoring sea lice, such as video monitoring, may be used.						
Footnote	[42] Posting results on a public website is an example of "easily publicly available."						



3.1.5	<p><b>Indicator:</b> In areas with wild salmonids [43], evidence of data [44] and the farm's understanding of that data, around salmonid migration routes, migration timing and stock productivity in major waterways within 50 kilometers of the farm</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms operating in areas with wild salmonids except farms that release no water as noted in [38]</p>	<p><b>Instruction to Clients for Indicator 3.1.5 - Evidence for Wild Salmonid Health and Migration</b></p> <p>In writing this indicator, the SAD Steering Committee concluded that relevant data sets on wild salmonid health and migration are publicly available in the vast majority of, if not all, jurisdictions with wild salmonids. The information is likely to come from government sources or from research institutions. Therefore farms are not responsible for conducting this research themselves. However farms must demonstrate that they are aware of this basic information in their region, as such information is needed to make management decisions related to minimizing potential impact on those wild stocks.</p> <p>This Indicator requires collection and understanding of general data for the major watersheds within approximately 50 km of the farm. A farm does not need to demonstrate that there is data for every small river or tributary or subpopulation. Information should relate to the wild fish stock level, which implies that the population is more or less isolated from other stocks of the same species and hence self-sustaining. A "conservation unit" under the Canadian Wild Salmon Policy is an example of an appropriate fish stock-level definition. However, it must be recognized that each jurisdiction may have slight differences in how a wild salmonid stock is defined in the region.</p> <p>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 [43]. Potentially affected species in these areas are salmonids (i.e. including all trout species). Where a species is not natural to a region (e.g. Atlantic or Pacific Salmon in Chile) the areas are not considered as "areas with wild salmonids" even if salmon have escaped from farms and established themselves as a reproducing species in "the wild".</p>	<p>a. Identify all salmonid species that naturally occur within 75 km of the farm through literature search or by consulting with a reputable authority. If the farm is not in an area with wild salmonids, then 3.1.5b and c do not apply.</p> <p>b. For species listed in 3.1.5a, compile best available information on migration routes, migration timing (range of months for juvenile outmigration and returning salmon), life history timing for coastal resident salmonids, and stock productivity over time in major waterways within 50 km of the farm.</p> <p>c. From data in 3.1.5b, identify any sensitive periods for wild salmonids (e.g. periods of outmigration of juveniles) within 50 km of the farm.</p> <p>-</p>	<p>A. Review salmonid species list for accuracy and cross-check source references. Confirm whether 3.1.5 b and c are applicable.</p> <p>B. Review the accuracy of the farm's information on local salmonid migratory patterns and stock productivity. Cross-check source references as necessary.</p> <p>C. Confirm accuracy of farm's understanding. Cross-check against 'sensitive periods' listed in the farm's annual schedule for testing for sea lice.</p> <p>D. Confirm the farm's understanding of this information through interviews.</p>	<p>y</p> <p>y</p> <p>y</p> <p>y</p>	<p>S. salar naturally occurring in area.</p> <p>Migratory routes as defined in web site "environmental statistics" ( miljstatustat.no) on salmonid carrying rivers, and Lakseregisteret from Miljødirektoratet. Also map from DN with rivers identified.</p> <p>Intensified sealice monitoring period defined as from 05.03 to 10.04</p> <p>Sufficient awareness and also participation in related scientific projects by MH staff.</p>
Footnote	[43] For purposes of these standards, "areas with wild salmonids" are defined as areas within 75 kilometers of a wild salmonid migration route or habitat. This definition is expected to encompass all, or nearly all, of salmon-growing areas in the northern hemisphere.					
Footnote	[44] Farms do not need to conduct research on migration routes, timing and the health of wild stocks under this standard if general information is already available. Farms must demonstrate an understanding of this information at the general level for salmonid populations in their region, as such information is needed to make management decisions related to minimizing potential impact on those stocks.					
3.1.6	<p><b>Indicator:</b> In areas of wild salmonids, monitoring of sea lice levels on wild out-migrating salmon juveniles or on coastal sea trout or Arctic char, with results made publicly available. See requirements in Appendix III-1.</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms operating in areas with wild salmonids except farms that release no water as noted in [38]</p>	<p>a. Inform the CAB if the farm operates in an area of wild salmonids. If not, then Indicator 3.1.6 does not apply.</p> <p>b. Keep records to show the farm participates in monitoring of sea lice on wild salmonids.</p> <p>c. Provide the CAB access to documentation which is sufficient for the auditor to evaluate whether the methodology used for monitoring of sea lice on wild salmonids is in compliance with the requirements in Appendix III-1.</p> <p>d. Make the results from 3.1.6b easily publicly available (e.g. posted to the company's website) within eight weeks of completion of monitoring.</p> <p>e. Submit to ASC the results from monitoring of sea lice levels on wild salmonids as per Appendix VI.</p>	<p>A. Confirm whether the farm operates in an area of wild salmonids based on results from 3.1.5a (above). If not, then Indicator 3.1.6 does not apply.</p> <p>B. Review evidence to confirm farm's participation in monitoring.</p> <p>C. Evaluate documents to confirm methodology used for monitoring of sea lice on wild salmonids complies with requirements of Appendix III-1.</p> <p>D. Confirm that results are easily publicly available and that they were posted within the required timeframe.</p> <p>E. Confirm that client has submitted monitoring results to ASC (Appendix VI).</p>	<p>y</p> <p>y</p> <p>y</p> <p>y</p> <p>y</p>	<p>IMR/NINA/NOFIMA/VI 2.2014 Risk Assessment for Norway, fish farming report 2013, where sealice issues are covered. Nearest registrations from öldenevå, stryvelva, eidsevå Sogn og Fjordane county on impact on wild stocks. Private interference with wild salmonids prohibited by law.</p> <p>IMR/NINA/NOFIMA/VI 2.2014 Risk Assessment for Norway, fish farming report 2013, where sealice issues are covered. Nearest registrations from Helvik, Rogaland county on impact on wild stocks. Private interference with wild salmonids prohibited by law.</p> <p>RA above is assembly reports based on all available information.</p> <p>IMR/NINA/NOFIMA/VI reports publicly available</p> <p>Reports from IMR/NINA/NOFIMA/VI not submitted to ASC, although information/reports regarding this issue is easily publicly available.</p>	
		<p>a. Inform the CAB if the farm operates in an area of wild salmonids. If not, then Indicator 3.1.7 does not apply.</p>	<p>A. Confirm whether the farm operates in an area of wild salmonids based on results from 3.1.5a (above). If not, then Indicator 3.1.7 does not apply.</p>	<p>y</p>	<p>S. salar naturally occurring in area.</p>	

3.1.7	<p><b>Indicator:</b> In areas of wild salmonids, maximum on-farm lice levels during sensitive periods for wild fish [45]. See detailed requirements in Appendix II, subsection 2.</p> <p><b>Requirement:</b> 0.1 mature female lice per farmed fish</p> <p><b>Applicability:</b> All farms operating in areas with wild salmonids except farms that release no water as noted in [38]</p>	<p>b. Establish the sensitive periods [45] of wild salmonids in the area where the farm operates. Sensitive periods for migrating salmonids is during juvenile outmigration and approximately one month before.</p>	<p>B. Review farm's designation of sensitive periods and cross-check against datasets presented in 3.1.4 and 3.1.5.</p>					<p>Migratory routes as defined in web site "environmental statistics" (miljøstatus.no) on salmonid carrying rivers, and Lakseregisteret from Miljødirektoratet. Also map from DN with rivers identified. Sensitive periods for migration, 05.03 to 10.04</p>	
		<p>c. Maintain detailed records of monitoring on-farm lice levels (see 3.1.4) during sensitive periods as per Appendix II-2.</p>	<p>C. Review records from the farm's sea lice monitoring program to confirm that lice levels are in compliance with the requirement based on farm-wide average lice levels per farmed fish (not values from individual net-pens).</p>					<p>Weekly testing form predetermined cages, according NFSA regulations. Sealice lifestage identified and recorded. (In aquafarmer and excel sheet for submission to NSA via Altinn) Record of weekly testing for period 2009 to 2014. Samples show &lt;0,1 mature females per salmon.</p>	
		<p>d. Provide the CAB with evidence there is a 'feedback loop' between the targets for on-farm lice levels and the results of monitoring of lice levels on wild salmonids (Appendix II-2).</p>	<p>D. Confirm that monitoring data for lice levels are used in a feedback loop as required by Appendix II-2.</p>					<p>Continuous wild fish sealice monitoring not possible, as describe above in conflict with national legislation. Monitoring done by governmental research institutes. Direct feedback loop hence impossible to obtain.</p>	
Footnote	[45] Sensitive periods for migrating salmonids is during juvenile outmigration and approximately one month before.							NA	
<b>Criterion 3.2 Introduction of non-native species</b>									
		<b>Compliance Criteria (Required Client Actions):</b>			<b>Auditor Evaluation (Required CAB Actions):</b>				
3.2.1	<p><b>Indicator:</b> If a non-native species is being produced, demonstration that the species was widely commercially produced in the area by the date of publication of the SAD standard</p> <p><b>Requirement:</b> Yes [47]</p> <p><b>Applicability:</b> All farms except as noted in [47]</p>	<p>Note: For the purposes of Indicator 3.2.1, "area" is defined as a contiguous body of water with the bio-chemical and temperature profile required to support the farmed species' life and reproduction (e.g. the Northern Atlantic Coast of the U.S. and Canada). Appendix II-1A elaborates further on this definition: "The boundaries of an area should be defined, taking into account the zone in which key cumulative impacts on wild populations may occur, water movement and other relevant aspects of ecosystem structure and function." The intent is that the area relates to the spatial extent that is likely to be put at risk from the non-native salmon. Areas will only rarely coincide with the boundaries of countries.</p>							
		<p>a. Inform the CAB if the farm produces a non-native species. If not, then Indicator 3.2.1 does not apply.</p>	<p>A. Confirm the farm does not produce a non-native species by comparing local species (results from 3.1.5a) to the species produced. Cross-check against record from smolt suppliers (e.g. 3.3.1b). If the farm only produces a native species, then Indicator 3.2.1 does not apply.</p>						<p>S. salar native to region</p>
		<p>b. Provide documentary evidence that the non-native species was widely commercially produced in the area before publication of the SAD Standard (i.e. before June 13, 2012).</p>	<p>B. Review evidence to confirm when the non-native species was first brought into wide commercial production in the area of the farm.</p>						<p>S. salar native to region</p>
		<p>c. If the farm cannot provide evidence for 3.2.1b, provide documentary evidence that the farm uses only 100% sterile fish that includes details on accuracy of sterility effectiveness.</p>	<p>C. Review evidence to confirm that the farm uses only 100% sterile fish (N.B. at the time of this writing, the SAD Steering Committee was uncertain that any existing technology could reliably deliver 100% sterile fish). Cross-check against smolt purchase records (e.g. invoices).</p>						<p>S. salar native to region</p>
		<p>d. If the farm cannot provide evidence for 3.2.1b or 3.2.1c, provide documented evidence that the production system is closed to the natural environment and for each of the following: 1) non-native species are separated from wild fish by effective physical barriers that are in place and well maintained; 2) barriers ensure there are no escapes of reared fish specimens that might survive and subsequently reproduce [47]; and 3) barriers ensure there are no escapes of biological material [47] that might survive and subsequently reproduce (e.g. UV or other effective treatment of any effluent water exiting the system to the natural environment).</p>	<p>D. Review evidence that the farm complies with each point raised in 3.2.1d and confirm by inspection during on-site audit. Cross check against related farm records for escapes (3.4.1), unexplained loss (3.4.2), and escape prevention (3.4.4).</p>						<p>S. salar native to region</p>
Footnote	[47] Exceptions shall be made for production systems that use 100 percent sterile fish or systems that demonstrate separation from the wild by effective physical barriers that are in place and well-maintained to ensure no escapes of reared specimens or biological material that might survive and subsequently reproduce.							NA	
3.2.2	<p><b>Indicator:</b> If a non-native species is being produced, evidence of scientific research [48] completed within the past five years that investigates the risk of establishment of the species within the farm's jurisdiction and these results submitted to ASC for review [49]</p> <p><b>Requirement:</b> Yes, within five years of publication of the SAD standard [50 51]</p>	<p><b>Instruction to Clients for Indicator 3.2.2 - Exceptions to Allow Production of Non-Native Species</b> Farms have five years to demonstrate compliance with this standard from the time of publication of the ASC Salmon Standard (i.e. full compliance by June 13, 2017). Farms are exempt from this standard if they are in a jurisdiction where the non-native species became established prior to farming activities in the area and the following three conditions are met: eradication would be impossible or have detrimental environmental effects; the introduction took place prior to 1993 (when the Convention on Biological Diversity (CBD) was ratified); the species is fully self-sustaining.</p> <p>Note: For the purposes of Indicator 3.2.2, "jurisdiction" is defined the same as "area" in 3.2.1.</p>							
		<p>a. Inform the ASC of the species in production (Appendix VI).</p>	<p>A. Confirm the farm has informed ASC which species is in production (Appendix VI).</p>						<p>Overview Salmo salar production submitted to ASC dt 09.01.15</p>
		<p>b. Inform the CAB if the farm produces a non-native species. If not, then Indicator 3.2.2 does not apply.</p>	<p>B. Confirm the farm does not produce a non-native species as for 3.2.1. If the farm only produces a native species, then Indicator 3.2.2 does not apply.</p>					<p>S. salar native to region</p>	

	<b>Applicability:</b> All	c. If yes to 3.2.2b, provide evidence of scientific research completed within the past five years that investigates the risk of establishment of the species within the farm's jurisdiction. Alternatively, the farm may request an exemption to 3.2.2c (see below).	C. Confirm that the scientific research included: multi-year monitoring for non-native farmed species; used credible methodologies & analyses; and underwent peer review. If the farm requests an exemption then enter "NA" and proceed to 3.2.2d.				NA	S. salar native to region
		d. If applicable, submit to the CAB a request for exemption that shows how the farm meets all three conditions specified in instruction box above.	D. As applicable, review the farm's request for exemption. Verify that the evidence shows how the farm meets all three conditions specified above.				NA	S. salar native to region
		e. Submit evidence from 3.2.2c to ASC for review.	E. Confirm the farm submits required evidence to ASC.				NA	S. salar native to region
Footnote	[48] The research must at a minimum include multi-year monitoring for non-native farmed species, use credible methodologies and analysis, and undergo peer review.							
Footnote	[49] If the review demonstrates there is increased risk, the ASC will consider prohibiting the certification of farming of non-native salmon in that jurisdiction under this standard. In the event that the risk tools demonstrate "high" risks, the SAD expects that the ASC will prohibit the certification of farming of non-native salmon in that jurisdiction.							
Footnote	[50] Farms have five years to demonstrate compliance with this standard from the time of publication of the final SAD standards and accompanying auditing guidelines.							
Footnote	[51] Farms are exempt from this standard if they are in a jurisdiction where the non-native species became established prior to farming activities in the area and the following three conditions are met: eradication would be impossible or have detrimental environmental effects; the introduction took place prior to 1993 (when the Convention on Biological Diversity (CBD) was ratified); the species is fully self-sustaining.							
3.2.3	<b>Indicator:</b> Use of non-native species for sea lice control for on-farm management purposes <b>Requirement:</b> None <b>Applicability:</b> All	a. Inform the CAB if the farm uses fish (e.g. cleaner fish or wrasse) for the control of sea lice.	A. Confirm whether the farms uses fish for sea lice control. If no, auditor response to 3.2.3A-C is "not applicable" (NA).				NA	Cleaning fish: Rognkjeks (Lumpfish), and wrasses: grønnfylte, bergylte and bergnebb are all native to region.
		b. Maintain records (e.g. invoices) to show the species name and origin of all fish used by the farm for purposes of sea lice control.	B. Review purchase records to confirm the origin and identity of all species that are used for sea lice control on farm.				NA	Cleaning fish: Rognkjeks (Lumpfish), and wrasses: grønnfylte, bergylte and bergnebb are all native to region. Cleaning fish delivered by local fishermen and form aquaculture production of cleaning fish. Invoices available in company.
		c. Collect documentary evidence or first hand accounts as evidence that the species used is not non-native to the region.	C. Review evidence for compliance with the requirement. Acceptable documentary evidence: peer-reviewed literature, government documentation confirming species is not non-native to the region. Acceptable first hand accounts: community testimonials and direct evidence for historical presence of the species in the water body captured with cast nets, trapping devices, or fishing.				NA	Cleaning fish: Rognkjeks (Lumpfish), and wrasses: grønnfylte, bergylte and bergnebb are all native to region. This is also supported by official litteratur studies and governmental documents.
<b>Criterion 3.3 Introduction of transgenic species</b>								
		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>				
3.3.1	<b>Indicator:</b> Use of transgenic [53] salmon by the farm <b>Requirement:</b> None <b>Applicability:</b> All	a. Prepare a declaration stating that the farm does not use transgenic salmon.	A. Verify declaration of no use of transgenic salmon.					Statement dt. 2013/2014, from genetics service provider Genomar on MOWI breeding stock, stating that only conventional breeding and genetics are applied.
		b. Maintain records for the origin of all cultured stocks including the supplier name, address and contact person(s) for stock purchases.	B. Review records to confirm compliance with the requirement.					Internal genetics/ova provider Tveitevågen, supported by Statement dt. 2013/2014, from genetics service provider Genomar on MOWI breeding stock
		c. Ensure purchase documents confirm that the culture stock is not transgenic.	C. If the auditor suspects that transgenic fish are being cultured, test stock identity by collecting 3 fish and sending to an ISO 17025 certified laboratory for genetic analysis.					Statement dt. 2013/2014, from genetics service provider Genomar on MOWI breeding stock, stating that only conventional breeding and genetics are applied. Information for salmon group available in invoices and fish/ova CV.
Footnote	[53] Transgenic: Containing genes altered by insertion of DNA from an unrelated organism. Taking genes from one species and inserting them into another species to get that trait expressed in the offspring ( <a href="http://www.csees.usda.gov/nea/biotech/res/biotechnology_res_glossary.html">http://www.csees.usda.gov/nea/biotech/res/biotechnology_res_glossary.html</a> ).							
<b>Criterion 3.4 Escapes [55]</b>								
		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>				
Footnote	[55] See Appendix VI for transparency requirements for 3.4.1, 3.4.2 and 3.4.3.							

3.4.1	<p><b>Indicator:</b> Maximum number of escapees [56] in the most recent production cycle</p> <p><b>Requirement:</b> 300 [57]</p> <p><b>Applicability:</b> All farms except as noted in [57]</p>	<p>a. Maintain monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapees.</p>	<p>A. Review client submission for completeness and accuracy of information. Cross-check with the estimate of unexplained loss, maintenance records for small tears in net, predator attacks, etc.</p>					<p>No escapes registered for the last three production cycles. Documented in production and recording system Aquafarmer with reports.</p> <p>Environmental company/site reports for 2013- 2014 states 0 escapes.</p> <p>Fisheries directorate reports to d.d. (www. Fishdir.no) shows no escapes from site.</p> <p>Cross-checked and verified with the estimate of unexplained loss, maintenance records for nets, site infrastructure certificate according to NYTEK/NS9415 and predator attacks</p>
		<p>b. Aggregate cumulative escapes in the most recent production cycle.</p>	<p>B. Review the calculation and confirm compliance with the requirement.</p>					<p>No escapes registered for the last three production cycles. Documented in production and recording system Aquafarmer with reports.</p> <p>Environmental company/site reports for 2013- 2014 states 0 escapes.</p>
		<p>c. Maintain the monitoring records described in 3.4.1a for at least 10 years beginning with the production cycle for which farm is first applying for certification (necessary for farms to be eligible to apply for the exception noted in [57]).</p>	<p>C. Confirm that farm documents show continuous monitoring of escapes.</p>					<p>Documented in production and recording system Aquafarmer with reports. Environmental company/site reports for 2013- 2014 states 0 escapes.</p> <p>Documents are and will be available for at least 10 years.</p>
		<p>d. If an escape episode occurs (i.e. an incident where &gt; 300 fish escaped), the farm may request a rare exception to the Standard [57]. Requests must provide a full account of the episode and must document how the farm could not have predicted the events that caused the escape episode.</p>	<p>D. Review the farm's request for a rare exception to the Standard for an escape event. Confirm no prior exceptional events were documented during the previous 10 years, or since the date of the start of the production cycle during which the farm first applied for certification. An example of an exceptional event is vandalism of the farm. Events that are not considered exceptional include failures in moorings due to bad weather, boat traffic incidents due to poor marking of the farm, human error, and predation.</p>				NA	<p>Fisheries directorate reports to d.d. (www. Fishdir.no) shows no escapes from site.</p>
		<p>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).</p>	<p>E. Confirm that client has submitted escape monitoring data to ASC (Appendix VI).</p>					<p>Overview escapes data submitted to ASC dt 09.01.15</p>
Footnote	<p>[56] Farms shall report all escapes; the total aggregate number of escapees per production cycle must be less than 300 fish. Data on date of escape episode(s), number of fish escaped and cause of escape episode shall be reported as outlined in Appendix VI.</p>							
Footnote	<p>[57] A rare exception to this standard may be made for an escape event that is clearly documented as being outside the farm's control. Only one such exceptional episode is allowed in a 10-year period for the purposes of this standard. The 10-year period starts at the beginning of the production cycle for which the farm is applying for certification. The farmer must demonstrate that there was no reasonable way to predict the events that caused the episode. See auditing guidance for additional details.</p>							
3.4.2	<p><b>Indicator:</b> Accuracy [58] of the counting technology or counting method used for calculating stocking and harvest numbers</p> <p><b>Requirement:</b> ≥ 98%</p> <p><b>Applicability:</b> All</p>	<p>a. Maintain records of accuracy of the counting technology used by the farm at times of stocking and harvest. Records include copies of spec sheets for counting machines and common estimates of error for hand-counts.</p>	<p>A. Confirm that the farm keeps records of counting accuracy for the counting technology or method used on site at stocking and harvest.</p>					<p>Counting performed at FW site, vaccination numbers used for stocking number at sea net cage, manually or Vaki and Aquascan and finale check at stocking with well boat. Aquascan. Final accurate numbers at harvest plant where individual fish is handled and registered. Statement from VAKI (WWW.VAKI.is) and Aquascan of 98-100% accuracy. Bioscan statment 99-100%</p>
		<p>b. If counting takes place off site (e.g. pre-smolt vaccination count), obtain and maintain documents from the supplier showing the accuracy of the counting method used (as above).</p>	<p>B. Verify the client obtains information from smolt suppliers (if applicable).</p>					<p>Vaccination numbers in FW used as accurate number stocked.</p>
		<p>c. During audits, arrange for the auditor to witness calibration of counting machines (if used by the farm).</p>	<p>C. Verify that the farm calibrates counting equipment as recommended by the manufacturer.</p>					<p>Live fish carrier procedure/manual on scanner calibration page 15 available. Equipment used according to requirements when stocking and any grading splitting/counting operations are performed by wellboat on site.</p>

			D. Confirm the stated accuracy of the farm's counting technology or counting method is ≥ 98% at both stocking and harvest. Stated accuracy shall be determined by the spec sheet for counting machines and through common estimates of error for any hand-counts.					Statement from VAKI (WWW.VAKI.is) and Aquascan of 98-100% accuracy. Bioscan statement 99-100%
			e. Submit counting technology accuracy to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle).	E. Confirm that client has submitted counting technology accuracy to ASC (Appendix VI).				Submitted to ASC dt 09.01.15
Footnote	[58] Accuracy shall be determined by the spec sheet for counting machines and through common estimates of error for any hand-counts.							
3.4.3	Indicator: Estimated unexplained loss [59] of farmed salmon is made publicly available Requirement: Yes Applicability: All	<p><b>Instruction to Clients for Indicator 3.4.3 - Calculation of Estimated Unexplained Loss</b> The Estimated Unexplained Loss (EUL) of fish is calculated at the end of each production cycle as follows:</p> <p>EUL = (stocking count) - (harvest count) - (mortalities) - (recorded escapes)</p> <p>Units for input variables are number of fish (i.e. counts) per production cycle. Where possible, farms should use the pre-smolt vaccination count as the stocking count. This formula is adapted from footnote 59 of the ASC Salmon Standard.</p>						
		a. Maintain detailed records for mortalities, stocking count, harvest count, and escapes (as per 3.4.1).	A. Review records for completeness.					Specific site reports and records documented and available in production and recording system Aquafarmer
		b. Calculate the estimated unexplained loss as described in the instructions (above) for the most recent full production cycle. For first audit, farm must demonstrate understanding of calculation and the requirement to disclose EUL after harvest of the current cycle.	B. Verify accuracy of farm calculations for estimated unexplained loss.					2012G : -0,14% Present cycle 2013G not established as cycle is not closed. (harvested numbers used for closing)
		c. Make the results from 3.4.3b available publicly. Keep records of when and where results were made public (e.g. date posted to a company website) for all production cycles.	C. Verify that the farm makes the information available to the public.					The requirement is "Estimated unexplained loss" of farmed salmon is to be made publicly available. Results are submitted to Atlim and NFSA publishes in public reports when data are processed, but not publicly available. Direct access to data for actual site should be established e.g on MH ASC website.
		d. Submit estimated unexplained loss to ASC as per Appendix VI for each production cycle.	D. Confirm that client has submitted estimated unexplained loss to ASC (Appendix VI).					Submitted to ASC dt 09.01.15
			E. Compare EUL values (3.4.3a) and counting accuracy (3.4.2a) to recorded escapes to check whether farm reporting is plausible. If EUL is greater than the combined margin of error related to fish counts, investigate potential sources of error as it could indicate the farm under reported mortalities or escapes.					11G result -0,14% inside stated counting error (negativ results). Evaluation mortality after stocking and miscalculation morts number plausible cause of error.
Footnote	[59] Calculated at the end of the production cycle as: Unexplained loss = Stocking count – harvest count – mortalities – other known escapes. Where possible, use of the pre-smolt vaccination count as the stocking count is preferred.							
		a. Prepare an Escape Prevention Plan and submit it to the CAB before the first audit. This plan may be part of a more comprehensive farm planning document as long as it addresses all required elements of Indicator 3.4.4.	A. Obtain and review the farm's escape prevention plan prior to scheduling the first audit.					Documented in TQM and site specific and central Risk Assessment included escape prevention section contingency plan. Internal procedure doc. id.nr 16364 with contingency plan, and operations with risk of escapes. Nets individually tagged. Nets registered in "Selstad log." demonstrated with stretch tests and certificates available for nets used at site. External training courses in escape prevention for all site staff. Escape prevention plan with details of actions and steps to be taken to alert if incident occurs posted on site. Good awareness at interview.

<p>3.4.4</p> <p><b>Indicator:</b> Evidence of escape prevention planning and related employee training, including: net strength testing; appropriate net mesh size; net traceability; system robustness; predator management; record keeping and reporting of risk events (e.g., holes, infrastructure issues, handling errors, reporting and follow up of escape events); and worker training on escape prevention and counting technologies</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>b. If the farm operates an open (net pen) system, ensure the plan (3.4.4a) covers the following areas:</p> <ul style="list-style-type: none"> <li>- net strength testing;</li> <li>- appropriate net mesh size;</li> <li>- net traceability;</li> <li>- system robustness;</li> <li>- predator management;</li> <li>- record keeping;</li> <li>- reporting risk events (e.g. holes, infrastructure issues, handling errors);</li> <li>- planning of staff training to cover all of the above areas; and</li> <li>- planning of staff training on escape prevention and counting technologies.</li> </ul>	<p>B. Confirm the farm's Escape Prevention Plan contains all required elements for open (net pen) systems as applicable.</p>	y			<p>The Escape Prevention Plan id.nr 16364 covers the following areas:</p> <ul style="list-style-type: none"> <li>- net strength testing;</li> <li>- appropriate net mesh size;</li> <li>- net traceability;</li> <li>- system robustness;</li> <li>- predator management;</li> <li>- record keeping;</li> <li>- reporting risk events (e.g. holes, infrastructure issues, handling errors);</li> <li>- planning of staff training to cover all of the above areas;</li> <li>- planning of staff training on escape prevention and counting technologies.</li> </ul> <p>Diving inspection after all net operations.</p> <p>Nets registered in "Selstad log "with certificates and services available for nets used at site.</p> <p>All structures NYTEK certified Norwegian standard NS9415. Certificate number AS021, valid 22.04.18 Aquastructure AS</p>
	<p>c. If the farm operates a closed system, ensure the plan (3.4.4a) covers the following areas:</p> <ul style="list-style-type: none"> <li>- system robustness;</li> <li>- predator management;</li> <li>- record keeping;</li> <li>- reporting risk events (e.g. holes, infrastructure issues, handling errors);</li> <li>- planning of staff training to cover all of the above areas; and</li> <li>- planning of staff training on escape prevention and counting technologies.</li> </ul>	<p>C. Confirm the farm's Escape Prevention Plan contains all required elements for closed systems as applicable.</p>			NA	<p>Open system</p>
	<p>d. Maintain records as specified in the plan.</p>	<p>D. Review documentary evidence showing implementation of the plan.</p>	y			<p>Procedures established and implemented. Records in site logs on routine checks and training activities in competency matrix. Production parameters recorded in akvafarmer. Egersund log for records and documentation of nets, site structure and construction components certified according to NS9415</p>
	<p>e. Train staff on escape prevention planning as per the farm's plan.</p>	<p>E. Review records (i.e. attendance records, meeting notes) to confirm that farm staff attend training on escape prevention planning.</p>	y			<p>Escape prevention training for sitemanagers and other members of site staff.</p>
	<p>-</p>	<p>F. Interview farm workers to confirm that the plan is implemented.</p>	y			<p>Implementation confirmed e.g net strength and net certificate for nets produced by Selstad net documented in Selstad</p>
<p><b>PRINCIPLE 4: USE RESOURCES IN AN ENVIRONMENTALLY EFFICIENT AND RESPONSIBLE MANNER</b></p>						
<p><i>Criterion 4.1 Traceability of raw materials in feed</i></p>						
	<p><b>Compliance Criteria (Required Client Actions):</b></p>		<p><b>Auditor Evaluation (Required CAB Actions):</b></p>			
<p><b>Instruction to Clients for Indicators 4.1.1 through 4.4.2 - Sourcing of Responsibly Produced Salmon Feeds</b></p> <p>Farms must show that all feeds used by the farm are produced in compliance with the requirements of Indicators 4.1.1 through 4.4.4. To do so, farms must obtain documentary evidence that the feed producers (see note 1) are audited at regular intervals by an independent auditing firm or a conformity assessment body against a recognized standard which substantially incorporate requirements for traceability. Acceptable certification schemes include GlobalGAP or other schemes that have been acknowledged by the ASC (see 4.1.1c below). Results from these audits shall demonstrate that feed producers have robust information systems and information handling processes to allow the feed producers to be able to bring forward accurate information about their production and supply chains. Declarations from the feed producer that are provided to the farm to demonstrate compliance with these indicators must be supported by the audits. Farms must also show that all of their feed producers are duly informed of the requirements of the ASC Salmon Standard relating to sourcing of responsibly produced salmon feed (see 4.1.1b below).</p> <p>In addition to the above, farms must also show that their feed suppliers comply with the more detailed requirements for traceability and ingredient sourcing that are specified under indicators 4.1.1 through 4.4.2. The ASC Salmon Standard allows farms to use one of two different methods to demonstrate compliance of feed producers:</p> <p>Method #1: Farms may choose to source feed from feed producers who used only those ingredients allowed under the ASC Salmon Standards during the production of a given batch of feed. For example, the farm may request its feed supplier to produce a batch of feed according to farm specifications. Audits of the feed producer will independently verify that manufacturing processes are in compliance with ASC requirements.</p> <p>Method #2: Farms may choose to source feed from feed producers who demonstrate compliance using a "mass-balance" method. In this method, feed producers show that the balance of all ingredients (both amount and type) used during a given feed production period meets ASC requirements. However, mixing of ingredients into the general silos and production lines is allowed during manufacturing. Audits of the feed producer will independently verify that manufacturing processes are in compliance with ASC requirements. The mass balance method can be applied, for example, to integrated feed production companies that handle all steps of feed manufacturing (purchasing of raw materials, processing to finished feed, and sales) under the management of a single legal entity.</p> <p>Note 1: The term "feed producer" is used here to identify the organization that produces the fish feed (i.e. it is the "feed manufacturer"). In most cases, the organization supplying feed to a farm (i.e. the feed supplier) will be the same organization that produced the feed, but there may be instances where feed suppliers are not directly responsible for feed production. Regardless of whether the farm sources feeds directly from a feed producer or indirectly through an intermediary organization, it remains the farm's obligation to show evidence that all feeds used are in compliance with requirements.</p>						

4.1.1	<p>Indicator: Evidence of traceability, demonstrated by the feed producer, of feed ingredients that make up more than 1% of the feed [62].</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	a. Maintain detailed records of all feed suppliers and purchases including contact information and purchase and delivery records.	A. Review feed records for completeness and confirm the number of feed suppliers to the client.					Feed suppliers: Marine Harvest and Biomar. Records of purchase: Marine Harvest: 2 262 831 kg Biomar: 584 032 kg Total purchased: 2 846 863 kg used recorded in AlkvaFarmer for period 01.04.14 to 18.12.14
		b. Inform each feed supplier in writing of ASC requirements pertaining to production of salmon feeds and send them a copy of the ASC Salmon Standard.	B. Review farm records to verify that the farm has informed all of its feed suppliers of relevant ASC requirements for feed production.					Feed suppliers informed of relevant ASC requirements in mail to Biomar and Marine Harvest dt 25.11.14 from Marine Harvest.
		c. For each feed producer used by the farm, confirm that an audit of the producer was recently done by an audit firm or CAB against an ASC-acknowledged certification scheme. Obtain a copy of the most recent audit report for each feed producer.	C. Verify that the farm obtains current audit reports from all relevant feed producers, that these audits were performed by an audit firm or CAB against an ASC-acknowledged certification scheme, and that audit results demonstrate compliance with requirements.					Biomar Report from BV form audit 17-19.06.14 on GGCoC. Certificate # 40 503738100300 BV valid to 20.08.15. GGN 40503738100300 Marine Harvest feed production plant not yet certified, but in certification process for GLOBALG.A.P.
		d. For each feed producer, determine whether the farm will use method #1 or method #2 (see instructions above) to show compliance of feed producers. Inform the CAB in writing.	D. Review which method the farm will use and confirm that independent audit results (4.1.1c) show compliance of feed producers.					Method #2
		e. Obtain declaration from feed supplier(s) stating that the company can assure traceability of all feed ingredients that make up more than 1% of the feed to a level of detail required by the ASC Salmon Standard [62].	E. Review declaration from each feed supplier to confirm the company assures traceability to the level of detail required by Standard.					Statement from Biomar Norway on complete traceability dt. 09.09.14 Statement from Marine Harvest on complete traceability from nov. 14.
		-	F. Cross-check the declarations against results from audits of feed suppliers (4.1.1c) to verify evidence of required levels of traceability.					Statement and certificate verified.
Footnote	[62] Traceability shall be at a level of detail that permits the feed producer to demonstrate compliance with the standards in this document (i.e., marine raw ingredients must be traced back to the fishery, soy to the region grown, etc.). Feed manufacturers will need to supply the farm with third-party documentation of the ingredients covered under this standard.							
Criterion 4.2 Use of wild fish for feed [63]								
		Compliance Criteria (Required Client Actions):			Auditor Evaluation (Required CAB Actions):			
Footnote	[63] See Appendix VI for transparency requirements for 4.2.1 and 4.2.2.							
4.2.1	<p>Indicator: Fishmeal Forage Fish Dependency Ratio (FFDRm) for grow-out (calculated using formulas in Appendix IV-1)</p> <p>Requirement: &lt; 1.35</p> <p>Applicability: All</p>	<p><b>Instruction to Clients for Indicator 4.2.1 - Calculation of FFDRm</b></p> <p>Farms must calculate the Fishmeal Forage Fish Dependency Ratio (FFDRm) according to formula presented in Appendix IV-1 using data from the most recent complete production cycle. Farms must also show that they have maintained sufficient information in order to make an accurate calculation of FFDRm as outlined below. For first audits, farms may be exempted from compliance with Indicator 4.2.1 for the most recent complete production cycle (i.e. if the FFDRm of the most recent crop was &gt; 1.35) if the farm can satisfactorily demonstrate to the auditor that:</p> <ul style="list-style-type: none"> <li>- the client understands how to accurately calculate FFDRm;</li> <li>- the client maintains all information needed to accurately calculate FFDRm (i.e. all feed specs for &gt; 6 months) for the current production cycle; and</li> <li>- the client can show how feed used for the current production cycle will ensure that the farm will meet requirements at harvest (i.e. FFDRm &lt; 1.35).</li> </ul>						
		a. Maintain a detailed inventory of the feed used including: - 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. Verify completeness of records and that values are stated in a declaration from the feed manufacturer.					Records of feed usage: 2 846 863 kg used recorded in AlkvaFarmer for period 01.04.14 to 18.12.14 and Biomar report: Eco-efficiency assesment dt 25.11.14
		b. For FFDRm calculation, exclude fishmeal derived from rendering of seafood by-products (e.g. the "trimmings" from a human consumption fishery).	B. Verify that the client excludes from the FFDRm calculation any fishmeal rendered from seafood by-products.					Biomar report: Eco- efficiency assesment dt 25.11.14 for Gulestø. Trimmings 6,0 % of FM. Marine Harvest Q reporting rolling Trimmings 4,84%
		c. Calculate eFCR using formula in Appendix IV-1 (use this calculation also in 4.2.2 option #1).	C. Verify that eFCR calculation was done correctly.					In AquaFarmer control system eFCR: Biomar period eFCR:1,007 Marine Harvest period eFCR:1,033
		d. Calculate FFDRm using formulas in Appendix IV-1.	D. Verify that FFDRm calculations were done correctly and confirm the value complies with the requirement.					Biomar period FFDRm: 1,93 Marine Harvest period FFDRm:0,89 Total FFDRm: 1,161
		e. Submit FFDRm to ASC as per Appendix VI for each production cycle.	E. Confirm that client has submitted FFDRm to ASC (Appendix VI).					Submitted to ASC dt 09.01.14
	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.							

4.2.2	<p><b>Indicator:</b> Fish Oil Forage Fish Dependency Ratio (FFDRo) for grow-out (calculated using formulas in Appendix IV-1), OR Maximum amount of EPA and DHA from direct marine sources [64] (calculated according to Appendix IV-2)</p> <p><b>Requirement:</b> FFDRo &lt; 2.95 or (EPA + DHA) &lt; 30 g/kg feed</p> <p><b>Applicability:</b> All</p>	a. Maintain a detailed inventory of the feed used as specified in 4.2.1a.	A. Verify completeness of feed records as in 4.2.1A.				Records of feed usage: 2 846 863 kg used recorded in Akvafarmer for period 01.04.14 to 18.12.14 and Biomar report Eco-efficiency assesment dt 25.11.14	
		b. For FFDRo and EPA+DHA calculations (either option #1 or option #2), exclude fish oil derived from rendering of seafood by-products (e.g. the "trimmings" from a human consumption fishery).	B. Verify client excludes fish oil rendered from byproducts from the FFDRo or (EPA + DHA) calculation.					Biomar report Eco-efficiency assesment dt 25.11.14 for Gulesta. Trimmings 27 % of FO Marine Harvest Q reporting rolling Trimmings 4,84%
		c. Inform the CAB whether the farm chose option #1 or option #2 to demonstrate compliance with the requirements of the Standard.	C. Record which option the client chose.					Option 1
		d. For option #1, calculate FFDRo using formulas in Appendix IV-1 and using the eFCR calculated under 4.2.1c.	D. Verify that FFDRo calculations were done correctly and confirm the value complies with the standard.					Biomar period FFDRo: 1,33 Marine Harvest period FFDRo: 1,37
		e. For option #2, calculate amount of EPA + DHA using formulas in Appendix IV-2.	E. Verify that (EPA+DHA) calculations were done correctly and confirm the value complies with the standard.				NA	Opt 1
		f. Submit FFDRo or EPA & DHA to ASC as per Appendix VI for each production cycle.	F. Confirm that client has submitted FFDRo or EPA & DHA to ASC (Appendix VI)				NA	Submitted to ASC dt 09.01.14
Footnote	[64] Calculation excludes DHA and EPA derived from fisheries by-products and trimmings. Trimmings are defined as by-products when fish are processed for human consumption or if whole fish is rejected for use of human consumption because the quality at the time of landing does not meet official regulations with regard to fish suitable for human consumption. Fishmeal and fish oil that are produced from trimmings can be excluded from the calculation as long as the origin of the trimmings is not any species that are classified as critically endangered, endangered or vulnerable in the IUCN Red List of Threatened Species ( <a href="http://www.iucnredlist.org">http://www.iucnredlist.org</a> ).							
<b>Criterion 4.3 Source of marine raw materials</b>								
		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>				
4.3.1	<p><b>Indicator:</b> Timeframe for all fishmeal and fish oil used in feed to come from fisheries [65] certified under a scheme that is an ISEAL member [66] and has guidelines that specifically promote responsible environmental management of small pelagic fisheries</p> <p><b>Requirement:</b> &lt; 5 years after the date of publication [67] of the SAD standards (i.e. full compliance by June 13, 2017)</p> <p><b>Applicability:</b> All</p>	Note: Indicator 4.3.1 applies to fishmeal and oil from forage fisheries, pelagic fisheries, or fisheries where the catch is directly reduced (including krill) and not to by-products or trimmings used in feed.						
		a. Prepare a policy stating the company's support of efforts to shift feed manufacturers purchases of fishmeal and fish oil to fisheries certified under a scheme that is an ISEAL member and has guidelines that specifically promote responsible environmental management of small pelagic fisheries.	A. Verify that the client's policy supports responsible feed sourcing (e.g. programs at <a href="http://www.isealliance.org/portrait/full%20member">http://www.isealliance.org/portrait/full%20member</a> ).					Marine Harvest Policy of Sustainable Salmon Feed 2014 dt.05.05.14.
		b. Prepare a letter stating the farm's intent to source feed containing fishmeal and fish oil originating from fisheries certified under the type of certification scheme noted in 4.3.1a	B. Obtain a copy of the client's letter of intent.					Marine Harvest Policy of Sustainable Salmon Feed 2014 dt.05.05.14.
		c. Starting on or before June 13, 2017, use feed inventory and feed supplier declarations in 4.2.1a to develop a list of the origin of all fish products used as feed ingredients.	C. As of June 13, 2017, confirm that the farm has sufficient evidence for the origin of all fish products in feed to demonstrate compliance with indicator 4.3.1. Prior to June 13, 2017, 4.3.1c does not apply.				NA	2017
	d. Starting on or before June 13, 2017, provide evidence that fishmeal and fish oil used in feed come from fisheries [65] certified under a scheme that is an ISEAL member [66] and has guidelines that specifically promote responsible environmental management of small pelagic fisheries.	D. As of June 13, 2017, review evidence and confirm compliance. Prior to June 13, 2017, 4.3.1d does not apply.				NA	2017	
Footnote	[65] This standard and standard 4.3.2 applies to fishmeal and oil from forage fisheries, pelagic fisheries, or fisheries where the catch is directly reduced (including krill) and not to by-products or trimmings used in feed.							
Footnote	[66] Meets ISEAL guidelines as demonstrated through full membership in the ISEAL Alliance, or equivalent as determined by the Technical Advisory Group of the ASC.							
Footnote	[67] Publication: Refers to the date when the final standards and accompanying guidelines are completed and made publicly available. This definition of publication applies throughout this document.							
4.3.2	<p><b>Indicator:</b> Prior to achieving 4.3.1, the FishSource score [68] for the fishery(ies) from which all marine raw material in feed is derived</p> <p><b>Requirement:</b> All individual scores ≥ 6, and biomass score ≥ 8</p> <p><b>Applicability:</b> All, until June 13, 2017</p>	<p><b>Instruction to Clients for Indicator 4.3.2 - FishSource Score of Fish Used in Feed</b> To determine FishSource scores of the fish species used as feed ingredients, do the following: -go to <a href="http://www.fishsource.org/">http://www.fishsource.org/</a> -select "Species" drop down tab to the left and select the relevant species -confirm that the search identifies the correct species, then select the top tab that reads "Scores"</p> <p>For first audits, farms must have scoring records that cover all feeds purchased during the previous 6-month period.</p> <p>Note: indicator 4.3.2 applies to fishmeal and oil from forage fisheries, pelagic fisheries, or fisheries where the catch is directly reduced (including krill) and not to by-products or trimmings used in feed.</p>						
		a. Record FishSource score for each species from which fishmeal or fish oil was derived and used as a feed ingredient (all species listed in 4.2.1a).	A. Cross-check against 4.2.1a to confirm that client recorded a score for each species used in feed.					Fish source score verified in Biomar report Eco-efficiency assesment dt 25.11.14 for Gulesta. and found above limits of 8. Marine Harvest Q reporting rolling 2014.
	b. Confirm that each individual score ≥ 6 and the biomass score is ≥ 8.	B. Cross-check a sample of the farm's scores against the FishSource website to verify that no individual score is < 6 and no biomass score is < 8.					Correspondence verified. Individual score >6 and Biomass score >8.	



		c. If the species is not on the website it means that a FishSource assessment is not available. Client can then take one or both of the following actions: 1. Contact FishSource via Sustainable Fisheries Partnerships to identify the species as a priority for assessment. 2. Contract a qualified independent third party to conduct the assessment using the FishSource methodology and provide the assessment and details on the third party qualifications to the CAB for review.	C. If the client provides an independent assessment, review the assessment and the qualifications of the independent third party to verify that the assessment was done in accordance with the FishSource methodology.					NA	No independent assessment
		-	D. If the species does not have a FishSource score then the fish feed does not comply with the requirement.					NA	All have scores
Footnote	[68] Or equivalent score using the same methodology. See Appendix IV-3 for explanation of FishSource scoring.								
4.3.3	<p><b>Indicator:</b> Prior to achieving 4.3.1, demonstration of third-party verified chain of custody and traceability for the batches of fishmeal and fish oil which are in compliance with 4.3.2.</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All, until June 13, 2017</p>	<p><b>Instruction to Clients for Indicator 4.3.3 - Third-Party Verification of Traceability</b> Indicator 4.3.3 requires that farms show that their feed producers can demonstrate chain of custody and traceability as verified through third-party audits. Farms may submit reports from audits of feed producers (see 4.1.1c) as evidence that traceability systems are in compliance. Alternatively, farms may show that their feed producers comply with traceability requirements of Indicator 4.3.3 by submitting evidence that suppliers, and the batches of fishmeal and oil, are certified to the International Fishmeal and Fish Oil Organization's Global Standard for Responsible Supply or to the Marine Stewardship Council Chain of Custody Standard.</p> <p>For the first audit, a minimum of 6 months of data on feed is required and evidence shall relate to species used in said dataset.</p>							
		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.	A. Review evidence and confirm that a third party verified chain of custody or traceability program was used for the fishmeal and fish oil.	N	X				Biomar Report from BV form audit 17-19.06.14 on GGCoC. Certificate # 40 503738100300 BV valid to 20.08.15. GGN 40503738100300 Marine Harvest feed production plant not yet certified, but in certification process for GLOBALG.A.P.
		b. Ensure evidence covers all the species used (as consistent with 4.3.2a, 4.2.1a, and 4.2.2a).	B. Verify that demonstration of third-party verified chain-of-custody is in place for all species used.	N	X				Biomar Report from BV form audit 17-19.06.14 on GGCoC. Certificate # 40 503738100300 BV valid to 20.08.15. GGN 40503738100300 Marine Harvest feed production plant not yet certified, but in certification process for GLOBALG.A.P.
4.3.4	<p><b>Indicator:</b> Feed containing fishmeal and/or fish oil originating from by-products [69] or trimmings from IUU [70] catch or from fish species that are categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species [71]</p> <p><b>Requirement:</b> None [72]</p> <p><b>Applicability:</b> All except as noted in [72]</p>	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. Review list and confirm consistent with 4.2.1a, 4.2.2a, 4.3.3b.	Y					Biomar report. Eco-efficiency assessment dt 25.11.14 for Gulestø. Trimmings 27 % of FO Marine Harvest Q reporting rolling Trimmings 4,84%
		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.	B. Verify that the farm obtains declarations from feed suppliers.	Y					In Biomar raw materials statement dt. 09.09.14. Biomar statement "krav til bærekraftige råvarer dt. 09.19.14 Marine Harvest Policy of Sustainable Salmon Feed 2014 dt.05.05.14.
		c. Obtain from the feed supplier declaration that the meal or oil did not originate from a species categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species [71] and explaining how they are able to demonstrate this (i.e. through other certification scheme or through their independent audit).	C. Review declaration to confirm compliance. The International Fishmeal and Fish Oil Organization's Global Standard for Responsible Supply and the Marine Stewardship Council standards are two options for demonstrating compliance with Indicator 4.3.4c	Y					In Biomar raw materials statement dt. 09.09.14. Biomar statement "krav til bærekraftige råvarer dt. 09.19.14 Marine Harvest Policy of Sustainable Salmon Feed 2014 dt.05.05.14.
		d. If meal or oil originated from a species listed as "vulnerable" by IUCN, obtain documentary evidence to support the exception as outlined in [72].	D. Review evidence to support exception (if applicable).	Y					Not from vulnerable fisheries
Footnote	[69] Trimmings are defined as by-products when fish are processed for human consumption or if whole fish is rejected for use of human consumption because the quality at the time of landing does not meet official regulations with regard to fish suitable for human consumption.								
Footnote	[70] IUU: Illegal, Unregulated and Unreported.								
Footnote	[71] The International Union for the Conservation of Nature reference can be found at <a href="http://www.iucnredlist.org/static/introduction">http://www.iucnredlist.org/static/introduction</a> .								
Footnote	[72] For species listed as "vulnerable" by IUCN, an exception is made if a regional population of the species has been assessed to be not vulnerable in a National Red List process that is managed explicitly in the same science-based way as IUCN. In cases where a National Red List doesn't exist or isn't managed in accordance with IUCN guidelines, an exception is allowed when an assessment is conducted using IUCN's methodology and demonstrates that the population is not vulnerable.								
<b>Criterion 4.4 Source of non-marine raw materials in feed</b>									
		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>					
4.4.1	<p><b>Indicator:</b> Presence and evidence of a responsible sourcing policy for the feed manufacturer for feed ingredients that comply with recognized crop moratoriums [75] and local laws [76]</p> <p><b>Requirement:</b> Yes</p>	a. Compile and maintain a list of all feed suppliers with contact information. (See also 4.1.1a)	A. Review feed supplier list and cross-check against feed purchases. (See also 4.1.1a)	Y					Regular commercial contact info and websites for Biomar and Marine Harvest
		b. Obtain from each feed manufacturer a copy of the manufacturer's responsible sourcing policy for feed ingredients showing how the company complies with recognized crop moratoriums and local laws.	B. Review policies from each feed supplier to confirm required sourcing policy is in place.	Y					In Biomar raw materials statement dt. 09.09.14. Biomar statement "krav til bærekraftige råvarer dt. 09.19.14 Marine Harvest Policy of Sustainable Salmon Feed 2014 dt.05.05.14.

	<p><b>Applicability:</b> All</p>	<p>c. Confirm that third party audits of feed suppliers (4.1.1c) show evidence that supplier's responsible sourcing policies are implemented.</p>	<p>C. Verify that the scope of third-party audits of feed suppliers includes review of policies and evidence of implementation.</p>	N	X					<p>Biomar Report from BV form audit 17-19.06.14 on SG CoC. Certificate # 40 503738100300 BV valid to 20.08.15. GGN 4050373810030 Marine Harvest feed production plant not yet certified, but in certification process for GLOBALG.A.P.</p>
Footnote	<p>[75] Moratorium: A period of time in which there is a suspension of a specific activity until future events warrant a removal of the suspension or issues regarding the activity have been resolved. In this context, moratoriums may refer to suspension of the growth of defined agricultural crops in defined geographical regions.</p>									
Footnote	<p>[76] Specifically, the policy shall include that vegetable ingredients, or products derived from vegetable ingredients, must not come from areas of the Amazon Biome that were deforested after July 24, 2006, as geographically defined by the Brazilian Soy Moratorium. Should the Brazilian Soy Moratorium be lifted, this specific requirement shall be reconsidered.</p>									
4.4.2	<p><b>Indicator:</b> Percentage of soya or soya-derived ingredients in the feed that are certified by the Roundtable for Responsible Soy (RTRS) or equivalent [77]</p> <p><b>Requirement:</b> 100%, within five years of the publication [78] of the SAD standards</p> <p><b>Applicability:</b> All, after June 13, 2017</p>	<p>a. Prepare a policy stating the company's support of efforts to shift feed manufacturers' purchases of soya to soya certified under the Roundtable for Responsible Soy (RTRS) or equivalent.</p>	<p>A. Verify that the client's policy supports responsible sourcing of soya or soya-derived feed ingredients.</p>	y						<p>Marine Harvest Policy of Sustainable Salmon Feed 2014 dt.05.05.14.</p>
		<p>b. Prepare a letter stating the farm's intent to source feed containing soya certified under the RTRS (or equivalent)</p>	<p>B. Obtain a copy of the client's letter of intent.</p>	y						<p>Marine Harvest Policy of Sustainable Salmon Feed 2014 dt.05.05.14.</p>
		<p>c. Notify feed suppliers of the farm's intent (4.4.2b).</p>	<p>C. Verify that farm notifies feed suppliers.</p>	y						<p>In mail 19.12.14</p>
		<p>d. Obtain and maintain declaration from feed supplier(s) detailing the origin of soya in the feed.</p>	<p>D. Confirm that the farm has sufficient and supportive evidence for the origin of soya products in feed to demonstrate compliance with indicator 4.4.2</p>	y						<p>Certificates from suppliers and Biomar statements dt.09.09.14 Marine Harvest Policy of Sustainable Salmon Feed 2014 dt.05.05.14.</p>
		<p>e. Starting on or before June 13, 2017, provide evidence that soya used in feed is certified by the Roundtable for Responsible Soy (RTRS) or equivalent [77]</p>	<p>E. As of June 13, 2017, review evidence and confirm compliance. Prior to June 13, 2017, 4.4.2e does not apply.</p>						NA	2017
Footnote	<p>[77] Any alternate certification scheme would have to be approved as equivalent by the Technical Advisory Group of the ASC.</p>									
Footnote	<p>[78] Publication: Refers to the date when the final standards and accompanying guidelines are completed and made publicly available. This definition of publication applies throughout this document.</p>									
4.4.3	<p><b>Indicator:</b> Evidence of disclosure to the buyer [79] of the salmon of inclusion of transgenic [80] plant raw material, or raw materials derived from transgenic plants, in the feed</p> <p><b>Requirement:</b> Yes, for each individual raw material containing &gt; 1% transgenic content [81]</p> <p><b>Applicability:</b> All</p>	<p>a. Obtain from feed supplier(s) a declaration detailing the content of soya and other plant raw materials in feed and whether it is transgenic.</p>	<p>A. Review feed supplier declaration and ensure declarations from all suppliers are present (see also 4.4.1A).</p>	y						<p>In Biomar raw materials statement dt. 09.09.14. Biomar statement "krav til bærekraftige råvarer dt. 09.19.14 Marine Harvest Policy of Sustainable Salmon Feed 2014 dt.05.05.14.</p>
		<p>b. Disclose to the buyer(s) a list of any transgenic plant raw material in the feed and maintain documentary evidence of this disclosure. For first audits, farm records of disclosures must cover &gt; 6 months.</p>	<p>B. Verify evidence of disclosure to all buyers, cross-checking with plant material list (4.4.3a) to see that all transgenic plant ingredients were disclosed</p>	y						<p>MH statement on GMO non acceptance and statement. Biomar stating &lt;0.9% GMO in soy/plant materias in feed.</p>
		<p>c. Inform ASC whether feed contains transgenic ingredients (yes or no) as per Appendix VI for each production cycle.</p>	<p>C. Confirm that the farm has informed ASC whether feeds containing transgenic ingredients are used on farm (Appendix VI).</p>	y						<p>Submitted ASC in mail dt.09.01.15</p>
Footnote	<p>[79] The company or entity to which the farm or the producing company is directly selling its product. This standard requires disclosure by the feed company to the farm and by the farm to the buyer of their salmon.</p>									
Footnote	<p>[80] Transgenic: Containing genes altered by insertion of DNA from an unrelated organism. Taking genes from one species and inserting them into another species to get that trait expressed in the offspring.</p>									
Footnote	<p>[81] See Appendix VI for transparency requirement for 4.4.3.</p>									
<p><b>Criterion 4.5 Non-biological waste from production</b></p>										
		<p><b>Compliance Criteria (Required Client Actions):</b></p>			<p><b>Auditor Evaluation (Required CAB Actions):</b></p>					
4.5.1	<p><b>Indicator:</b> Presence and evidence of a functioning policy for proper and responsible [83] treatment of non-biological waste from production (e.g., disposal and recycling)</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Prepare a policy stating the farm's commitment to proper and responsible treatment of non-biological waste from production. It must explain how the farm's policy is consistent with best practice in the area of operation.</p>	<p>A. Review policy to verify the farm's commitment to proper and responsible treatment of non-biological waste from production in a manner consistent with best practice in the area.</p>	y						<p>In MH Waste plan Gulestø id.nr 34835. Policy is in General procedure on waste handling ID: 30346</p>
		<p>b. Prepare a declaration that the farm does not dump non-biological waste into the ocean.</p>	<p>B. Verify the client makes a declaration.</p>	y						<p>In MH Plan for handling of waste. Source grading specified incl. special wastes. Approved service/receiver of waste required in plan. Policy and statments relevant for site also in MH central environmental and sustainability corporate policy and documents ex "The Blue Revolution".</p>
		<p>c. Provide a description of the most common production waste materials and how the farm ensures these waste materials are properly disposed of.</p>	<p>C. During the on-site inspection look for evidence of proper waste disposal.</p>	y						<p>Common production waste materials with proper waste disposal: Ex. Weoden pallets, residual/domestic waste, decomm. Moorings equipment.</p>

		d. Provide a description of the types of waste materials that are recycled by the farm.	D. During the on-site inspection look for evidence of recycling of waste materials as described by client.				Decommissioned Feed pipes and moorings equipment. Receipt /invoice from Nordford Miljøverk IKS, declaration nr: 9334834 dt. 08.07.14 on various types of waste received from farm base with refs to declaration codes.
Footnote	[83] Proper and responsible disposal will vary based on facilities available in the region and remoteness of farm sites. Disposal of non-biological waste shall be done in a manner consistent with best practice in the area. Dumping of non-biological waste into the ocean does not represent "proper and responsible" disposal.						
4.5.2	<b>Indicator:</b> Evidence that non-biological waste (including net pens) from grow-out site is either disposed of properly or recycled <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Provide a description of the most common production waste materials and how the farm ensures these waste materials are properly disposed of. (see also 4.5.1c)	A. During the on-site inspection look for evidence of proper waste disposal. (See also 4.5.1C)				Decomm. feedpipes and decomm. nets by net provider Selstad AS, overview/report record from Selstadlog
		b. Provide a description of the types of waste materials that are recycled by the farm. (See also 4.5.1d)	B. During the on-site inspection look for evidence of recycling of waste materials as described by client. (See also 4.5.1D)				Decomm. feedpipes and decomm. nets by net provider Selstad AS, overview/report record from Selstadlog
		c. Inform the CAB of any infractions or fines for improper waste disposal received during the previous 12 months and corrective actions taken..	C. Review infractions and corrective actions.				No infractions identified.
		d. Maintain records of disposal of waste materials including old nets and cage equipment.	D. Review records to verify waste disposal and/or recycling is consistent with client description and policy.				Nets disposal by Selstad AS in overview: example: net disposal invoice nr: 142653 dt.09.12.13. Feed pipes and cage equipment disposal by waste contractor.
<b>Criterion 4.6 Energy consumption and greenhouse gas emissions on farms [84]</b>							
		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>			
Footnote	[84] See Appendix VI for transparency requirements for 4.6.1, 4.6.2 and 4.6.3.						
4.6.1	<b>Indicator:</b> Presence of an energy use assessment verifying the energy consumption on the farm and representing the whole life cycle at sea, as outlined in Appendix V-1 <b>Requirement:</b> Yes, measured in kilojoule/mt fish/production cycle <b>Applicability:</b> All	<b>Instruction to Clients for Indicator 4.6.1 - Energy Use Assessment</b> Indicator 4.6.1 requires that farms must have an assessment to verify energy consumption. The scope of this requirement is restricted to operational energy use for the farm site(s) that is applying for certification. Boundaries for operational energy use should correspond to the sources of Scope 1 and Scope 2 emissions (see Appendix V-1). Energy use corresponding to Scope 3 emissions (i.e. the energy used to fabricate materials that are purchased by the farm) is not required. However the SAD Steering Committee encourages companies to integrate energy use assessments across the board in the company.  For the purposes of calculating energy consumption, the duration of the production cycle is the entire life cycle "at sea" - it does not include freshwater smolt production stages. Farms that have integrated smolt rearing should break out the grow-out stage portion of energy consumption if possible. Quantities of energy (fuel and electricity) are converted to kilojoules. Verification is done by internal or external assessment following either the GHG Protocol Corporate Standard or ISO 14064-1 (see Appendix V-1 for more details).					
		a. Maintain records for energy consumption by source (fuel, electricity) on the farm throughout each production cycle.	A. Verify that the farm maintains records for energy consumption.				Records OK
		b. Calculate the farm's total energy consumption in kilojoules (kJ) during the last production cycle.	B. Review the farm's calculations for completeness and accuracy.				5243804280 kJ
		c. Calculate the total weight of fish in metric tons (mt) produced during the last production cycle.	C. Confirm that the farm accurately reports total weight of fish harvested per production cycle. Cross-check against other farm datasets (e.g. harvest counts, escapes, and mortalities).				9059 Kg biomass produced
		d. Using results from 4.6.1b and 4.6.1c, calculate energy consumption on the farm as required, reported as kilojoule/mt fish/production cycle.	D. Review the farm's calculations for completeness and accuracy.				578 850 kJ/mt
		e. Submit results of energy use calculations (4.6.1d) to ASC as per Appendix VI for each production cycle.	E. Confirm that client has submitted energy use calculations to ASC (Appendix VI).				Submitted to ASC 09.01.15
		f. Ensure that the farm has undergone an energy use assessment that was done in compliance with requirements of Appendix V-1.	F. Confirm that the farm has undergone an energy use assessment verifying the farm's energy consumption.				Scope 1 (Diesel) and Scope 2 purchased el used. Assed and comparnd between sites and production forms.
	<b>Instruction to Clients for Indicator 4.6.2 - Annual GHG Assessment</b> Indicator 4.6.2 requires that farms must have an annual Greenhouse Gas (GHG) assessment. Detailed instructions are presented in Appendix V-1 and references therein. The scope of this requirement is restricted to operational boundaries for the farm site(s) that is applying for certification. However the SAD Steering Committee encourages companies to integrate GHG accounting practices across the board in the company. Verification may be done by internal or external assessment following either the GHG Protocol Corporate Standard or ISO 14064-1 (see Appendix V-1 for more details).  Note: For the purposes of this standard, GHGs are defined as the six gases listed in the Kyoto Protocol: carbon dioxide (CO <sub>2</sub> ); methane (CH <sub>4</sub> ); nitrous oxide (N <sub>2</sub> O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF <sub>6</sub> ).						
		a. Maintain records of greenhouse gas emissions on the farm.	A. Verify that the farm maintains records of GHG emissions.				Records OK

4.6.2	<p><b>Indicator:</b> Records of greenhouse gas (GHG [85]) emissions [86] on farm and evidence of an annual GHG assessment, as outlined in Appendix V-1</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>b. At least annually, calculate all scope 1 and scope 2 GHG emissions in compliance with Appendix V-1.</p> <p>c. For GHG calculations, select the emission factors which are best suited to the farm's operation. Document the source of those emissions factors.</p> <p>d. For GHG calculations involving conversion of non-CO<sub>2</sub> gases to CO<sub>2</sub> equivalents, specify the Global Warming Potential (GWP) used and its source.</p> <p>e. Submit results of GHG calculations (4.6.2d) to ASC as per Appendix VI at least once per year.</p> <p>f. Ensure that the farm undergoes a GHG assessment as outlined in Appendix V-1 at least annually.</p>	<p>B. Confirm that calculations are done annually and in compliance with Appendix V-1.</p> <p>C. Verify that the farm records all emissions factors used and their sources.</p> <p>D. Verify that the farm records all GWPs used and their sources.</p> <p>E. Confirm that the farm has submitted GHG calculations to ASC (Appendix VI).</p> <p>F. Confirm that the farm undergoes a GHG assessments annually and that the methods used comply with requirements of Appendix V-1.</p>	<p>y</p> <p>y</p> <p></p> <p>y</p> <p>y</p>	<p></p> <p></p> <p>NA</p> <p></p> <p></p>	<p>12G scope 1+2: 447819 kg Co<sub>2</sub>, Scope 2:163640 Scope 1:284180,</p> <p>Scope 1 diesel from diesel workboat, truck, generator and scope 2 is purchased electricity and purchased service boat diesel consumption.</p> <p>CO2 used</p> <p>Submitted to ASC 09.01.15</p> <p>Calculations and assessment provided. Data conversion: Data from NVE, BP, Statoil and Energilink.</p>
Footnote	[85] For the purposes of this standard, GHGs are defined as the six gases listed in the Kyoto Protocol: carbon dioxide (CO <sub>2</sub> ); methane (CH <sub>4</sub> ); nitrous oxide (N <sub>2</sub> O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF <sub>6</sub> ).					
Footnote	[86] GHG emissions must be recorded using recognized methods, standards and records as outlined in Appendix V.					
4.6.3	<p><b>Indicator:</b> Documentation of GHG emissions of the feed [87] used during the previous production cycle, as outlined in Appendix V, subsection 2</p> <p><b>Requirement:</b> Yes, within three years of the publication [88] of the SAD standards (i.e. by June 13, 2015)</p> <p><b>Applicability:</b> All, after June 13, 2015</p>	<p><b>Instruction to Clients for Indicator 4.6.3 - GHG Emissions of Feed</b> Indicator 4.6.3 requires that farms document the greenhouse gas emissions (GHG) associated with any feeds used during salmon production. Farms will need to obtain this information from their feed supplier(s) and thereafter maintain a continuous record of Feed GHG emissions throughout all production cycles. This requirement takes effect on June 13, 2015 and it will apply across the entire previous production cycle. Therefore the SAD Steering Committee advises farms to inform their feed supplier(s) about this requirement long before the effective date. Specifically, the SC recommends that...</p> <ul style="list-style-type: none"> <li>- the farm provides its feed suppliers with detailed information about the requirements including a copy of the methodology outlined in Appendix V, subsection 2;</li> <li>- the farm explain what analyses must be done by feed suppliers; and</li> <li>- the farm explains to feed suppliers what documentary evidence will be required by the farm to demonstrate compliance.</li> </ul> <p>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.</p> <p>Note2: Feed supplier's calculations must include Scope 1, Scope 2, and Scope 3 GHG emissions as specified in Appendix V, subsection 2.</p>	<p>A. Verify declaration from feed supplier(s) and confirm client has declarations from all feed suppliers.</p> <p>B. Verify calculations cross-checking with feed purchase and use records.</p> <p>C. Verify calculations.</p> <p>D. Confirm that the farm has submitted GHG calculations for feed to ASC (Appendix VI).</p>	<p></p> <p></p> <p></p> <p></p>	<p>NA</p> <p>NA</p> <p>NA</p> <p>NA</p>	<p>NA before June 13, 2015</p> <p>NA before June 13, 2015</p> <p>NA before June 13, 2015</p> <p>NA before June 13, 2015</p>
Footnote	[87] GHG emissions from feed can be given based on the average raw material composition used to produce the salmon (by weight) and not as documentation 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.					
Footnote	[88] Publication: Refers to the date when the final standards and accompanying guidelines are completed and made publicly available. This definition of publication applies throughout this document.					
<b>Criterion 4.7 Non-therapeutic chemical inputs [89,90]</b>						
		<b>Compliance Criteria (Required Client Actions):</b>	<b>Auditor Evaluation (Required CAB Actions):</b>			
Footnote	[89] Closed production systems that do not use nets and do not use antifoulants shall be considered exempt from standards under Criterion 4.7.					
Footnote	[90] See Appendix VI for transparency requirements for 4.7.1, 4.7.3 and 4.7.4.					
4.7.1	<p><b>Indicator:</b> For farms that use copper-treated nets [91], evidence that nets are not cleaned [92] or treated in situ in the marine environment</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms except as noted in [89]</p>	<p>a. Prepare a farm procedure for net cleaning and treatment that describes techniques, technologies, use of off-site facilities, and record keeping.</p> <p>b. Maintain records of antifoulants and other chemical treatments used on nets.</p> <p>c. Declare to the CAB whether copper-based treatments are used on nets.</p>	<p>A. Review procedure for completeness.</p> <p>B. Review documentary evidence and records for completeness, including traceability records of the nets where available.</p> <p>C. Verify whether copper-based treatments are used. If no, Indicator 4.7.1d does not apply to the client. If yes, proceed to 4.7.1d.</p>	<p>y</p> <p>y</p> <p>y</p>	<p></p> <p></p> <p></p>	<p>Farm procedure for net cleaning and treatment that describes techniques, technologies, use of off-site facilities, and record keeping "vasking av not ved ASC-godkjenning id.nr 33227.</p> <p>Netpolish NP 30. Classification according to EU directive 67/548/EEC 99/45/EC &amp; 2001/58/EC (DSD/DPD) also classified according to directive 1272/2008 (CLP)</p> <p>CB informed on use of Cu. Farm procedure for net cleaning and treatment that describes techniques, technologies, use of off-site facilities, and record keeping "vasking av not ved ASC-godkjenning id.nr 33227.</p>

		d. If copper-based treatments are used, maintain documentary evidence (see 4.7.1b) that farm policy and practice does not allow for heavy cleaning of copper-treated nets in situ.	D. Review evidence and interview farm manager to confirm that farm does not do any heavy cleaning of copper-treated nets in situ.					Farm procedure for net cleaning and treatment that describes techniques, technologies, use of off-site facilities, and record keeping "vasking av not ved ASC-godkjenning id nr 33227" Awareness verified at staff interviews
		e. Inform ASC whether copper antifoulants are used on farm (yes or no) as per Appendix VI for each production cycle.	E. Confirm that the farm has informed ASC whether copper antifoulants are used on farm (Appendix VI).	y				Submitted to ASC 24.02.15
Footnote		[91] Under the SAD, "copper-treated net" is defined as a net that has been treated with any copper-containing substance (such as a copper-based antifoulant) during the previous 18 months, or has not undergone thorough cleaning at a land-based facility since the last treatment. Farms that use nets that have, at some point prior in their lifespan, been treated with copper may still consider nets as untreated so long as sufficient time and cleaning has elapsed as in this definition. This will allow farms to move away from use of copper without immediately having to purchase all new nets.						
Footnote		[92] Light cleaning of nets is allowed. Intent of the standard is that, for example, the high-pressure underwater washers could not be used on copper treated nets under this standard because of the risk of copper flaking off during this type of heavy or more thorough cleaning.						
4.7.2		a. Declare to the CAB whether nets are cleaned on-land.  <b>Indicator:</b> For any farm that cleans nets at on-land sites, evidence that net-cleaning sites have effluent treatment [93] <b>Requirement:</b> Yes <b>Applicability:</b> All farms except as noted in [89]	A. Review declaration and cross-check with records from 4.7.1b. If nets are not cleaned on land, Indicator 4.7.2 does not apply. If nets are cleaned on land, proceed to 4.7.2B.	y				Nets are cleaned on land by net producer and contractor Selstad AS.
		b. If nets are cleaned on-land, obtain documentary evidence from each net-cleaning facility that effluent treatment is in place.	B. Review documentary evidence to confirm that each net-cleaning facility has effluent treatment in place.	y				Selstad AS Net's net treatment plant approved by KLF. (pollution /discharge-authorities) . All Cu collected and plant under sampling regime by authorities. No emissions from plant.
		c. If yes to 4.7.2b, obtain evidence that effluent treatment used at the cleaning site is an appropriate technology to capture of copper in effluents.	C. If applicable, review documentary evidence to confirm that land-based cleaning sites have appropriate technologies in place to capture copper in effluents and that they function as intended.	y				Plant treatment plan reviewed. System approved by authorities for no Cu emission/capture.
Footnote		[93] Treatment must have appropriate technologies in place to capture copper if the farm uses copper-treated nets.						
4.7.3		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.	A. Review declaration and cross-check against declaration from 4.7.1c. Record whether Indicator 4.7.3 is applicable to the client.	y				Confirmed no use of CU treated nets
		b. If "yes" in 4.7.3a, measure and record copper in sediment samples from the reference stations specified in 2.1.1d and 2.1.2c which lie outside the AZE.	B. As applicable, verify the farm tested sediment samples for copper from the reference stations specified in 2.1.1d and 2.1.2c which lie outside the AZE.					CU treated nets not used in this cycle "Net coating"/Netpolish NP 30 used on nets.
		c. If "yes" in 4.7.3a, maintain records of testing methods, equipment, and laboratories used to test copper level in sediments from 4.7.3b.	C. Verify the measurements were taken using appropriate equipment and testing methods.					CU treated nets not used in this cycle "Net coating"/Netpolish NP 30 used on nets.
4.7.4		a. Inform the CAB whether: 1) farm is exempt from Indicator 4.7.4 (as per 4.7.3a), or 2) Farm has conducted testing of copper levels in sediment.	A. Document and verify applicability of 4.7.4 to client (see also 4.7.3A)					CU treated nets not used in this cycle "Net coating"/Netpolish NP 30 used on nets.
		b. Provide evidence from measurements taken in 4.7.3b that copper levels 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	B. Verify that copper levels are < 34 mg Cu/kg sediment. If no, proceed to 4.7.4C.					CU treated nets not used in this cycle "Net coating"/Netpolish NP 30 used on nets.
		c. If copper levels in 4.7.4b are ≥ 34 mg Cu/kg dry sediment weight, provide evidence the farm tested copper levels in sediments from reference sites as described in Appendix I-1 (also see Indicators 2.1.1 and 2.1.2).	C. If applicable, review evidence to confirm that farm followed Appendix I-1 for testing copper levels at reference sites.					CU treated nets not used in this cycle "Net coating"/Netpolish NP 30 used on nets.
		d. Analyze results from 4.7.4c to show the background copper concentrations as measured at three reference sites in the water body.	D. As applicable, review data to confirm that copper levels fall within the range of background concentrations as measured at reference sites.					CU treated nets not used in this cycle "Net coating"/Netpolish NP 30 used on nets.
		e. Submit data on copper levels in sediments to ASC as per Appendix VI for each production cycle.	E. Confirm that farm has submitted to ASC data on copper levels in sediment (Appendix VI).					CU treated nets not used in this cycle "Net coating"/Netpolish NP 30 used on nets.
Footnote		[94] According to testing required under 4.7.3. The standards related to testing of copper are only applicable to farms that use copper-based nets or copper-treated nets.						

4.7.5	<p><b>Indicator:</b> Evidence that the type of biocides used in net antifouling are approved according to legislation in the European Union, or the United States, or Australia</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms except as noted in [89]</p>	<p>a. Identify all biocides used by the farm in net antifouling.</p>	<p>A. Review list of biocides and cross-check against treatment records (see 4.7.2b) and purchase records.</p>	y			Netpolish NP 30 not CU based. No biocides used by the farm in net antifouling.
		<p>b. Compile documentary evidence to show that each chemical used in 4.7.5a is approved according to legislation in one or more of the following jurisdictions: the European Union, the United States, or Australia.</p>	<p>B. Review documentary evidence to confirm compliance.</p>	y			Netpolish NP 30. Classification according to EU directive 67/548/EEC 99/45/EC & 2001/58/EC (DSD/DPD) also classified according to directive 1272/2008 (CLP)
<b>PRINCIPLE 5: MANAGE DISEASE AND PARASITES IN AN ENVIRONMENTALLY RESPONSIBLE MANNER</b>							
<b>Criterion 5.1 Survival and health of farmed fish [95]</b>							
Footnote	[95] See Appendix VI for transparency requirements for 5.1.4, 5.1.5 and 5.1.6.		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>		
5.1.1	<p><b>Indicator:</b> Evidence of a fish health management plan for the identification and monitoring of fish diseases and parasites</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Prepare a fish health management plan that incorporates components related to identification and monitoring of fish disease and parasites. This plan may be part of a more comprehensive farm planning document.</p>	<p>A. Obtain and review the farm's fish health management plan.</p>	y			Regional Fish Health Plan ID 35626and Local Fish Health id.nr 31063 Plan covers all aspect of relevant diseases and parasite diagnostics and control measures. Internal veterinary services, responsible veterinarian. Approved and signed by veterinarian dt 20.02.15 Liv Birte Rønneberg and Tom K. Tonheim.
		<p>b. Ensure that the farm's current fish health management plan was reviewed and approved by the farm's designated veterinarian [96].</p>	<p>B. Verify there is evidence to show that the farm's designated veterinarian [96] reviewed and approved the current version of the plan.</p>	y			Approved and signed by veterinarian dt 20.02.15 Liv Birte Rønneberg and Tom K. Tonheim.
5.1.2	<p><b>Indicator:</b> Site visits by a designated veterinarian [96] at least four times a year, and by a fish health manager [97] at least once a month</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Maintain records of visits by the designated veterinarian [96] and fish health managers [97]. If schedule cannot be met, a risk assessment must be provided.</p>	<p>A. Review documentary evidence of site visits to confirm a minimum number of visits as outlined in 5.1.2. Or review risk assessment.</p>	y			Minimum 6 Vet visits annually. FH manager is site manager hence hands on on daily issues. System for weekly scheduled meetings covering a.a. FH issues. Verified in vet.log 16.06.14-14.11.14 for site. 7 visits with documented reports.
		<p>b. Maintain a current list of personnel who are employed as the farm's designated veterinarian(s) [96] and fish health manager(s) [97].</p>	<p>B. Confirm visits in 5.1.2a were performed by the farm's designated health professionals.</p>	y			Fish health manager Bjørnar Larsen and Veterinarian Tom K. Tonheim.
		<p>c. Maintain records of the qualifications of persons identified in 5.1.2b.</p>	<p>C. Review evidence for qualifications of the farm's health professionals.</p>	y			Seen CV s for relevant personell documented in Personec system. Authorization id Vet T.K.N 9412034
Footnote	[96] A designated veterinarian is the professional responsible for health management on the farm who has the legal authority to diagnose disease and prescribe medication. In some countries such as Norway, a fish health biologist or other professional has equivalent professional qualifications and is equivalent to a veterinarian for purposes of these standards. This definition applies to all references to a veterinarian throughout the standards document.						
Footnote	[97] A fish health manager is someone with professional expertise in managing fish health, who may work for a farming company or for a veterinarian, but who does not necessarily have the authority to prescribe medicine.						
5.1.3	<p><b>Indicator:</b> Percentage of dead fish removed and disposed of in a responsible manner</p> <p><b>Requirement:</b> 100% [98]</p> <p><b>Applicability:</b> All</p>	<p>a. Maintain records of mortality removals to show that dead fish are removed regularly and disposed of in a responsible manner.</p>	<p>A. Review records of mortality removals to confirm completeness and accuracy. Cross-check against 5.1.4 and calculations of escapes and unexplained loss.</p>	y			Daily registrations in AquaFarmer reports for daily retrieval. All mortalities to ensilage. Scanbio on ensilage collection. Contract signed dt 08.03.13 after internal procedure "Mortality handling" in TOM system. Example is Scanbio Invoice nr 26542 on retrieval of 21000 kg ensilage dt. 19.11.14. Invoice of last retrieval not arrived.
		<p>b. Collect documentation to show that disposal methods are in line with practices recommended by fish health managers and/or relevant legal authorities.</p>	<p>B. Review client submission. Inspect the farm's system for mortality removals and disposals during the on site audit.</p>	y			System established for handling and documentation according to requirements in national legislation handled by NFSA. Seen Handelsdocument nr. 013844
		<p>c. For any exceptional mortality event where dead fish were not collected for post-mortem analysis, keep a written justification.</p>	<p>C. Review the farm's justification for any exceptional mortality event where dead fish were not collected for post-mortem analysis (this situation should be a rare occurrence).</p>				No exceptional mortalities.
Footnote	[98] The SAD recognizes that not all mortality events will result in dead fish present for collection and removal. However, such situations are considered the exception rather than the norm.						

		Note: Farms are required to maintain mortality records from the current and two previous production cycles. For first audit, records for the current and prior production cycle are required. It is recommended that farms maintain a compiled set of records to demonstrate compliance with 5.1.3 - 5.1.6.					
5.1.4	<p><b>Indicator:</b> Percentage of mortalities that are recorded, classified and receive a post-mortem analysis</p> <p><b>Requirement:</b> 100% [99]</p> <p><b>Applicability:</b> All</p>	<p>a. Maintain detailed records for all mortalities and post-mortem analyses including:</p> <ul style="list-style-type: none"> <li>- date of mortality and date of post-mortem analysis;</li> <li>- total number of mortalities and number receiving post-mortem analysis;</li> <li>- name of the person or lab conducting the post-mortem analysis;</li> <li>- qualifications of the individual (e.g. veterinarian [96], fish health manager [97]);</li> <li>- cause of mortality (specify disease or pathogen) where known; and</li> <li>- classification as 'unexplained' when cause of mortality is unknown (see 5.1.6).</li> </ul>	A. Review records of mortalities to verify completeness and to confirm that post-mortem analyses were done by qualified individuals or labs.	y			100% offMortality categorised for 09G-14G, from AquaFarmer: 14G present cycle>Total mortality 3.1 % d.d (Virus+Unspecified 1,73%) . 12G; Total mortality 5,4 % (Virus+Unspecified 3,47%) ..
		b. For each mortality event, ensure that post-mortem analyses are done on a statistically relevant number of fish and keep a record of the results.	B. Review records to confirm the farm had post-mortem analysis done for each mortality event and that a statistically relevant number of fish were analyzed from each mortality event.	y			All mortalities are diagnosed and post-mortem analyses are done on a statistically relevant number of fish (ref unspecified numbers above). Lab analyses routinely.
		c. If on-site diagnosis is inconclusive and disease is suspected or results are inconclusive over a 1-2 week period, ensure that fish are sent to an off-site laboratory for diagnosis and keep a record of the results (5.1.4a).	C. Review records to confirm that any inconclusive on-site diagnoses were sent to an off-site laboratory for further testing.	y			Ex Veterinary Instituttt (VI) report dt. 22.08.14 and Vet visit reports. Sampling IPNV.
		d. Using results from 5.1.3a-c, classify each mortality event and keep a record of those classifications.	D. Review mortality events to confirm the farm's classification was consistent with results from post-mortem analyses. Where cause was not determined verify that classification was plausible given available info.	y			Record are available and documented in AquaFarmer, all mortalities are categorised.
		e. Provide additional evidence to show how farm records in 5.1.4a-d cover all mortalities from the current and previous two production cycles (as needed).	E. Review evidence to confirm compliance with requirements.	y			Record are available and documented in AquaFarmer, all mortalities are categorised.
		f. Submit data on numbers and causes of mortalities to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle).	F. Confirm that client has submitted data from post-mortem analyses and cause and number of mortalities to ASC (Appendix VI).	y			Submitted to ASC 09.01.15
Footnote	[99] If on-site diagnosis is inconclusive, this standard requires off-site laboratory diagnosis. A qualified professional must conduct all diagnosis. One hundred percent of mortality events shall receive a post-mortem analysis, not necessarily every fish. A statistically relevant number of fish from the mortality event shall be analyzed.						
5.1.5	<p><b>Indicator:</b> Maximum viral disease-related mortality [100] on farm during the most recent production cycle</p> <p><b>Requirement:</b> ≤ 10%</p> <p><b>Applicability:</b> All</p>	<p>a. Calculate the total number of mortalities that were diagnosed (see 5.1.4) as being related to viral disease.</p>	A. Review and confirm the calculated number of viral disease-related mortalities.	y			Mortality categorised for 09G - 14G, from AquaFarmer: 14G present cycle>Total mortality 3,1 % d.d (Virus+Unspecified 1,73%) . 12G; Total mortality 5,4 % (Virus+Unspecified 3,47%) .
		b. Combine the results from 5.1.5a with the total number of unspecified and unexplained mortalities from the most recent complete production cycle. Divide this by the total number of fish produced in the production cycle (x100) to calculate percent maximum viral disease-related mortality.	B. Verify that the sum of confirmed viral disease-related mortalities plus unspecified & unexplained mortalities is ≤ 10% of the total number of fish produced during the most recent production cycle.	y			Mortality categorised for 09G - 14G, from AquaFarmer: 14G present cycle>Total mortality 3,1 % d.d (Virus+Unspecified 1,73%) . 12G; Total mortality 5,4 % (Virus+Unspecified 3,47%) . Viral disease-related mortalities plus unspecified & unexplained mortalities is ≤ 10% of the total number of fish produced during the most recent production cycle.
		c. Submit data on total mortality and viral disease-related mortality to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle).	C. Confirm that client has submitted data on mortality to ASC (Appendix VI).	y			Submitted to ASC 09.01.15
Footnote	[100] Viral disease-related mortality count shall include unspecified and unexplained mortality as it could be related to viral disease.						
5.1.6	<p><b>Indicator:</b> Maximum unexplained mortality rate from each of the previous two production cycles, for farms with total mortality &gt; 6%</p> <p><b>Requirement:</b> ≤ 40% of total mortalities</p> <p><b>Applicability:</b> All farms with &gt; 6% total mortality in the most recent complete production cycle.</p>	<p>a. Use records in 5.1.4a to calculate the unexplained mortality rate (%) for the most recent full production cycle. If rate was ≤ 6%, then the requirement of 5.1.6 does not apply. If total mortality rate was &gt; 6%, proceed to 5.1.6b.</p>	A. Review, confirm, and document whether 5.1.6 is applicable to the client. If applicable, proceed to 5.1.6b.				Below 6%.
		b. Calculate the unexplained mortality rate (%) for each of the two production cycles immediately prior to the current cycle. For first audit, calculation must cover one full production cycle immediately prior to the current cycle.	B. Review and confirm that ≤ 40% of total mortalities were from unexplained causes for each of the two previous production cycles				As above
		c. Submit data on maximum unexplained mortality to ASC as per Appendix VI for each production cycle.	C. Confirm that client has submitted data on unexplained mortality to ASC (Appendix VI).	y			Submitted to ASC 21.11.14
	Note: Farms have the option to integrate their farm-specific mortality reduction program into the farm's fish health management plan (5.1.1).						

5.1.7	<p><b>Indicator:</b> A farm-specific mortalities reduction program that includes defined annual targets for reductions in mortalities and reductions in unexplained mortalities</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Use records in 5.1.4a to assemble a time-series dataset on farm-specific mortalities rates and unexplained mortality rates.</p>	<p>A. Confirm that the farm used mortalities records to assemble a detailed dataset on mortality rates which covers the required timeframe (see 5.1.4).</p>	y				Mortality rate reduction programme (Corporate level on <5% morts). Specified in FHMP, on site level with concrete objectives for actions to reduce to less than 5%.
		<p>b. Use the data in 5.1.7a and advice from the veterinarian and/or fish health manager to develop a mortalities-reduction program that defines annual targets for reductions in total mortality and unexplained mortality.</p>	<p>B. Review program to confirm that targets for mortality reduction are reasonable and based on historical data.</p>	y				Mortality rate reduction programme (Corporate level on <5% morts). Specified in FHMP, on site level with concrete objectives for actions to reduce to less than 5%.
		<p>c. Ensure that farm management communicates with the veterinarian, fish health manager, and staff about annual targets and planned actions to meet targets.</p>	<p>C. Interview workers to confirm their understanding of mortalities recording, classification, and annual targets for reduction (see also 5.1.1, 5.1.3).</p>	y				Confirmed during interviews
<b>Criterion 5.2 Therapeutic treatments [101]</b>								
Footnote	[101] See Appendix VI for transparency requirements for 5.2.1, 5.2.5, 5.2.6 and 5.2.10.							
<b>Instruction to Clients and CABs for Criterion 5.2 - Records Related to Therapeutic Treatments</b>								
Indicator 5.2.1 requires that farms maintain detailed record of all chemical and therapeutant use. Those records maintained for compliance with 5.2.1, if all consolidated into a single place, can be used to demonstrate performance against subsequent indicators (5.2.1 through 5.2.10) under Criterion 5.2.								
5.2.1	<p><b>Indicator:</b> On-farm documentation that includes, at a minimum, detailed information on all chemicals [102] and therapeutants used during the most recent production cycle, the amounts used (including grams per ton of fish produced), the dates used, which group of fish were treated and against which diseases, proof of proper dosing, and all disease and pathogens detected on the site</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Maintain a detailed record of all chemical and therapeutant use that includes:</p> <ul style="list-style-type: none"> <li>- name of the veterinarian prescribing treatment;</li> <li>- product name and chemical name;</li> <li>- reason for use (specific disease)</li> <li>- date(s) of treatment;</li> <li>- amount (g) of product used;</li> <li>- dosage;</li> <li>- mt of fish treated;</li> <li>- the WHO classification of antibiotics (also see note under 5.2.8); and</li> <li>- the supplier of the chemical or therapeutant.</li> </ul>	<p>A. Review records of chemical and therapeutant use. Verify accuracy through cross-check with purchase orders and sales records, inventories, documentation from feed manufacturer for any in-feed treatment, and veterinary records.</p>	y				Allowed usage defined in FHP. No Antibiotics used. Treatments done are anaesthetics all under responsible veterinarian prescriptions. Registered in akvafarmer/fish CV. Dates for usage, quantity and dosage, withdrawal periods defined and registered in akvafarmer. e.g anaesthetic treatment on prescription Tricaine# resp.nr 304829 T.K.N batch nr.081316 ,dt 13.10.14 Net cage 2, 3, 6 and7 on FH resp. T.K.N
		<p>b. If not already available, assemble records of chemical and therapeutant use to address all points in 5.2.1a for the previous two production cycles. For first audits, available records must cover one full production cycle immediately prior to the current cycle.</p>	<p>B. Confirm that farm has detailed records for chemical and therapeutant use that covers the previous two production cycles.</p>	y				Allowed usage defined in FHP. No Antibiotics used. Treatments done are anaesthetics all under responsible veterinarian prescriptions. Registered in akvafarmer/fish CV. Dates for usage, quantity and dosage, withdrawal periods defined and registered in akvafarmer.
		<p>c. Submit information on therapeutant use (data from 5.2.1a) to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle).</p>	<p>C. Confirm that client has submitted therapeutant information to ASC (Appendix VI).</p>	y				Submitted to ASC 09.01.15
Footnote	[102] Chemicals used for the treatment of fish.							
5.2.2	<p><b>Indicator:</b> Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [103] in any of the primary salmon producing or importing countries [104]</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All</p>	<p>a. Prepare a list of therapeutants, including antibiotics and chemicals, that are proactively banned for use in food fish for the primary salmon producing and importing countries listed in [104].</p>	<p>A. Review list and supporting evidence. If ASC has agreed to maintain a list of relevant therapeutants, farm can demonstrate that they have this list.</p>	y				Marine Harvest Positive list (allowed and banned substances) from TQM dt.30.06.14 with market acceptance status and levels defined.
		<p>b. Maintain records of voluntary and/or mandatory chemical residue testing conducted or commissioned by the farm from the prior and current production cycles.</p>	<p>B. Verify records.</p>	y				NESA mandatory testing by NIFES on site and/or at harvest line. Results published in yearly NIFES report from OK programme. Also voluntary MRL testing from 2009-2014. Reference to procedure ID 35060 of food safety involving ASC requirements.
			<p>C. Cross-check records of therapeutant use (5.2.1a) against the list of banned therapeutants to verify compliance with requirements.</p>	y				Compliance verified and in accordance with requirements and also in accordance with reports and usage.
Footnote	[103] "Banned" means proactively prohibited by a government entity because of concerns around the substance. A substance banned in any of the primary salmon-producing or importing countries, as defined here, cannot be used in any salmon farm certified under the SAD, regardless of country of production or destination of the product. The SAD recommends that ASC maintain a list of a banned therapeutants.							
Footnote	[104] For purposes of this standard, those countries are Norway, the UK, Canada, Chile, the United States, Japan and France.							



5.2.3	<b>Indicator:</b> Percentage of medication events that are prescribed by a veterinarian <b>Requirement:</b> 100% <b>Applicability:</b> All	a. Obtain prescription for all therapeutic use in advance of application from the farm veterinarian (or equivalent, see [96] for definition of veterinarian).	A. Review documentary evidence (on-farm records, veterinary records, and prescriptions) to confirm all therapeutants were prescribed by a qualified individual. See [96] for definition of veterinarian.	y			Verified for anaesthetic treatment on prescription Tricaine# resp.t.nr 304829 T.K.N batch nr.081316 .dt 13.10.14 Net cage 2, 3, 6 and 7 on FH resp. T.K.N	
		b. Maintain copies of all prescriptions and records of veterinarian responsible for all medication events. Records can be kept in conjunction with those for 5.2.1 and should be kept for the current and two prior production cycles.	B. Cross-check with results from chemical residue testing provided under 5.2.2b.	y			100% of treatment events are prescribed by a veterinarian Original prescription in site folder and registered in AquaFarmer with withholding periods defined in prescription and in AquaFarmer.	
5.2.4	<b>Indicator:</b> Compliance with all withholding periods after treatments <b>Requirement:</b> Yes <b>Applicability:</b> All	a. Incorporate withholding periods into the farm's fish health management plan (see 5.1.1a).	A. Review the farm's fish health management plan to confirm inclusion of withholding periods and interview farm staff to verify implementation.	y			In AquaFarmer, automatically notified/blocked according to degreedays withholdingtime stated in prescription. According to FHMP/VHP on withholding periods defined in AquaFarmer and specific prescription.	
		b. Compile and maintain documentation on legally-required withholding periods for all treatments used on-farm. Withholding period is the time interval after the withdrawal of a drug from the treatment of the salmon before the salmon can be harvested for use as food.	B. Review documentation for completeness and accuracy. Compare to records of therapeutant use (5.2.1a).	y			Documented in AquaFarmer, automatically notified/blocked according to degreedays withholdingtime stated in prescription.	
		c. Show compliance with all withholding periods by providing treatment records (see 5.2.1a) and harvest dates for the most recent production cycle.	C. Review documentary evidence and, if applicable, results from chemical residue testing (5.2.2b), to confirm legal withholding periods were met for the most recent production cycle and harvest.	y			In Fish CV, where treatment dates are specified and compared to harvest dates. According to FHMP/VHP on withholding periods defined. Ex CV Net cage 10 Harvesting/slaughtering date week 48, 2013. last treatment with finquel 26.10.13. Withholding period for Finquel defined as 21 days.	
5.2.5	<b>Indicator:</b> Maximum farm level cumulative parasiticide treatment index (PTI) score as calculated according to the formula in Appendix VII <b>Requirement:</b> PTI score ≤ 13 <b>Applicability:</b> 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.	A. Review the farm's calculations to verify that the PTI score was calculated correctly and that the scores are accurate. Cross-check with records of parasiticide use.	y			Calculations verified. No treatments other than H2O2 against AGD performed on present cycle. PTI Score 0	
		b. Provide the auditor with access to records showing how the farm calculated the PTI score.	B. Verify that the farm level cumulative PTI score ≤ 13.	y			PTI Score 0	
		c. Submit data on farm level cumulative PTI score to ASC as per Appendix VI for each production cycle.	C. Confirm that client has submitted data on cumulative PTI score to ASC (Appendix VI).	y			Submitted to ASC 09.01.15	
5.2.6	<b>Indicator:</b> For farms with a cumulative PTI ≥ 6 in the most recent production cycle, demonstration that parasiticide load [105] is at least 15% less than that of the average of the two previous production cycles <b>Requirement:</b> Yes, within five years of the publication of the SAD standard (i.e. by June 13, 2017) <b>Applicability:</b> All farms with a cumulative PTI ≥ 6 in the most recent production cycle	Note: Indicator 5.2.6 does not take effect until June 13, 2017. Nonetheless farms should start collecting data on parasiticide load beforehand in case farms have to demonstrate compliance with indicator 5.2.6 at some point in the future using data from the two previous production cycles.						
		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.	A. Review farm's cumulative PTI score to determine if indicator 5.2.6 is applicable.				NA	Below 6 - 2017
		b. Using results from 5.2.5 and the weight of fish treated (kg), calculate parasiticide load in the most recent production cycle [105].	B. Review the farm's calculation of parasiticide load to verify accuracy.				NA	Below 6 - 2017
		c. Calculate parasiticide load in the two previous production cycles as above (5.2.6b) and compute the average. Calculate the percent difference in parasiticide load between current cycle and average of two previous cycles. For first audit, calculation must cover one full production cycle immediately prior to the current cycle.	C. Review farm's calculations to verify that parasiticide load for the most recent production cycle is at least 15% less than that of the two previous cycles.				NA	Below 6 - 2017
		d. As applicable, submit data to ASC on parasiticide load for the most recent production cycle and the two previous production cycles (Appendix VI).	D. Confirm that client has submitted data on parasiticide load to ASC (Appendix VI) as applicable.				NA	Below 6 - 2017
Footnote	[105] Parasiticide load = Sum (kg of fish treated x PTI). Reduction in load required regardless of whether production increases on the site. Farms that consolidate production across multiple sites within an ABM can calculate reduction based on the combined parasiticide load of the consolidated sites.							
5.2.7	<b>Indicator:</b> Allowance for prophylactic use of antimicrobial treatments [106] <b>Requirement:</b> None <b>Applicability:</b> All	a. Maintain records for all purchases of antibiotics (invoices, prescriptions) for the current and prior production cycles.	A. Review purchase records and calculate total amount procured by client. Inspect storage areas to verify quantities on-site.				NA No ABs used the recent cycles	
		b. Maintain a detailed log of all medication-related events (see also 5.2.1a and 5.2.3)	B. Review log of medication events to verify that the quantity of antibiotic applied by the client does not suggest prophylactic use.				NA No ABs used the recent cycles	
		c. Calculate the total amount (g) and treatments (#) of antibiotics used during the current and prior production cycles (see also 5.2.9).	C. Verify that the total amount of antibiotics used in the current production cycle is equal to the total amount prescribed.				NA No ABs used the recent cycles	
Footnote	[106] The designated veterinarian must certify that a pathogen or disease is present before prescribing medication.							

5.2.8	<p><b>Indicator:</b> Allowance for use of antibiotics listed as critically important for human medicine by the World Health Organization (WHO [107])</p> <p><b>Requirement:</b> None [108]</p> <p><b>Applicability:</b> All</p>	<p>Note 1: Farms have the option to certify only a portion of the fish or farm site when WHO-listed [107] antibiotics have been used at the production facility (see 5.2.8d). To pursue this option, farms must request an exemption from the CAB in advance of the audit and provide sufficient records giving details on which pens were treated and traceability of those treated fish.</p> <p>Note 2: It is recommended that the farm veterinarian review the WHO list [see 107] 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.</p>						
		<p>a. Maintain a current version of the WHO list of antimicrobials critically and highly important for human health [107].</p>	<p>A. Confirm that the farm has the current copy of the WHO list of antibiotics.</p>	y			List presented v3, no ABs used	
		<p>b. If the farm has <u>not</u> used any antibiotics listed as critically important (5.2.8a) in the current production cycle, inform the CAB and proceed to schedule the audit.</p>	<p>B. During the on-site audit, verify that no antibiotics listed as "critically important" have been used on the farm through cross-check of records for 5.2.1 and 5.2.7.</p>	y			List presented, no ABs used	
		<p>c. If the farm <u>has</u> used antibiotics listed as critically important (5.2.8a) to treat any fish during the current production cycle, inform the CAB prior to scheduling audit.</p>	<p>C. Make note of the farm's antibiotic usage and do not schedule an on-site audit until the client provides additional information as specified in 5.2.8d.</p>	y			List presented, no ABs used	
		<p>d. If yes to 5.2.8c, request an exemption from the CAB to certify only a portion of the farm. Prior to the audit, provide the CAB with records sufficient to establish details of treatment, which pens were treated, and how the farm will ensure full traceability and separation of treated fish through and post-harvest.</p>	<p>D. Review the farm's exemption request and supporting documents to verify that the farm can satisfactorily demonstrate traceability [108] to merit an exemption.</p>	y			List presented, no ABs used	
Footnote		[107] The third edition of the WHO list of critically and highly important antimicrobials was released in 2009 and is available at: <a href="http://www.who.int/foodborne_disease/resistance/CIA_3.pdf">http://www.who.int/foodborne_disease/resistance/CIA_3.pdf</a> .						
Footnote		[108] If the antibiotic treatment is applied to only a portion of the pens on a farm site, fish from pens that did not receive treatment are still eligible for certification.						
5.2.9	<p><b>Indicator:</b> Number of treatments [109] of antibiotics over the most recent production cycle</p> <p><b>Requirement:</b> ≤ 3</p> <p><b>Applicability:</b> All</p>	<p>Note: for the purposes of Indicator 5.2.9, "treatment" means a single course of medication given to address a specific disease issue and that may last a number of days and be applied in one or more pens (or cages).</p>						
		<p>a. Maintain records of all treatments of antibiotics (see 5.2.1a). For first audits, farm records must cover the current and immediately prior production cycles in a verifiable statement.</p>	<p>A. Review documents to confirm that the client maintains a record of all treatments of antibiotics. Cross-check against records of on-farm chemical &amp; therapeutic use (5.2.1a), medication events (5.2.3a), and prescription records (5.2.3b).</p>				NA	No ABs used
		<p>b. Calculate the total number of treatments of antibiotics over the most recent production cycle and supply a verifiable statement of this calculation.</p>	<p>B. Confirm that the client used ≤ 3 treatments of antibiotics over the most recent production cycle.</p>				NA	No ABs used
Footnote		[109] A treatment is a single course medication given to address a specific disease issue and that may last a number of days.						
5.2.10	<p><b>Indicator:</b> If more than one antibiotic treatment is used in the most recent production cycle, demonstration that the antibiotic load [110] is at least 15% less than that of the average of the two previous production cycles</p> <p><b>Requirement:</b> Yes [111], within five years of the publication of the SAD standard (i.e. full compliance by June 13, 2017)</p> <p><b>Applicability:</b> All</p>	<p>Note: Indicator 5.2.10 requires that farms must demonstrate a reduction in load required, regardless of whether production increases on the site. Farms that consolidate production across multiple sites within an ABM can calculate reduction based on the combined antibiotic load of the consolidated sites.</p> <p>Indicator 5.2.10 does not take effect until June 13, 2017. Nonetheless farms should start collecting data on antibiotic load beforehand in case farms have to demonstrate compliance with Indicator 5.2.10 at some point in the future using data from the two previous production cycles.</p>						
		<p>a. Use results from 5.2.9b to show whether more than one antibiotic treatment was used in the most recent production cycle. If not, then the requirement of 5.2.10 does not apply. If yes, then proceed to 5.2.10b.</p>	<p>A. Review results to confirm whether 5.2.10 is applicable to the client. Record the results and, if applicable, proceed to 5.2.10B.</p>				NA	AB not used
		<p>b. Calculate antibiotic load (antibiotic load = the sum of the total amount of active ingredient of antibiotic used in kg) for most recent production cycle and for the two previous production cycles. For first audit, calculation must cover one full production cycle immediately prior to the current cycle.</p>	<p>B. Review farm's calculations for accuracy and completeness of coverage. Cross-check against treatment records (5.2.1a).</p>				NA	AB not used
		<p>c. Provide the auditor with calculations showing that the antibiotic load of the most recent production cycle is at least 15% less than that of the average of the two previous production cycles.</p>	<p>C. Review evidence to verify that farm complies with requirement.</p>				NA	AB not used
		<p>d. Submit data on antibiotic load to ASC as per Appendix VI (if applicable) for each production cycle.</p>	<p>D. Confirm that client has submitted data on antibiotic load to ASC (Appendix VI) as applicable.</p>	y			Submitted to ASC 09.01.15	
Footnote		[110] Antibiotic load = the sum of the total amount of active ingredient of antibiotics used (kg).						
Footnote		[111] Reduction in load required, regardless of whether production increases on the site. Farms that consolidate production across multiple sites within an ABM can calculate reduction based on the combined antibiotic load of the consolidated sites.						
5.2.11	<p><b>Indicator:</b> Presence of documents demonstrating that the farm has provided buyers [112] of its salmon a list of all therapeutants used in production</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Prepare a procedure which outlines how the farm provides buyers [112] of its salmon with a list of all therapeutants used in production (see 4.4.3b).</p>	<p>A. Review the farm's procedure and confirm implementation based on relevant documentary evidence (e.g. sales records, invoices).</p>	y			In "Oppsett på produkt fra MOVEX" Internal Procedure in TQM. Fish CV follows fish automatically through to customer.	
		<p>b. Maintain records showing the farm has informed all buyers of its salmon about all therapeutants used in production.</p>	<p>B. Review sales records for completeness and cross-check against treatment records (5.2.1a) to verify that buyers were adequately informed about therapeutants used in production.</p>	y			In "Oppsett på produkt fra MOVEX" Internal Procedure in TQM. Fish CV follows fish automatically through to customer. Example is Delivery nr 00003218668, 10.10.13 with tracking back to farm and cage 3	
Footnote		[112] 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								
		<b>Compliance Criteria (Required Client Actions):</b>	<b>Auditor Evaluation (Required CAB Actions):</b>					

5.3.1	<p><b>Indicator:</b> Bio-assay analysis to determine resistance when two applications of a treatment have not produced the expected effect</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p><b>Instruction to Clients for Indicator 5.3.1 - Identifying the 'Expected Effect' of Medicinal Treatment</b></p> <p>Indicator 5.3.1 requires that farms identify treatments that have not produced the expected effect. The SAD Steering Committee recognizes that the "expected effect" will vary with health condition and type of medicinal treatment. Therefore farms and auditors will need to review the pre- and post-treatment condition of fish in order to understand and evaluate the impact of treatment.</p> <p><u>Example: sea lice treatment with emamectin benzoate</u></p> <p>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 &lt; 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.</p> <p>Note: If field-based bio-assays for determining resistance are ineffective or unavailable, the farm shall have samples analyzed by an independent laboratory to determine resistance formation. The auditor shall record in the audit report why field-based bio-assays were deemed ineffective and shall include results from the laboratory analyses of resistance formation.</p>						
		<p>a. In addition to recording all therapeutic treatments (5.2.1a), keep a record of all cases where the farm uses two successive medicinal treatments.</p>	A. Review farm records to confirm recording of all successive medicinal treatments.				NA	No treatments done in present cycle.
		<p>b. Whenever the farm uses two successive treatments, keep records showing how the farm evaluates the observed effect of treatment against the expected effect of treatment.</p>	B. If applicable, review how the farm evaluates the observed effect of treatment against the expected effect of treatment.				NA	No treatments done in present cycle.
		<p>c. For any result of 5.3.1b that did not produce the expected effect, ensure that a bio-assay analysis of resistance is conducted.</p>	C. Review farm records to confirm that bio-assays were done in every case where successive treatments did not produce the expected effect. Confirm that bio-assays were performed by a qualified independent laboratory.				NA	No treatments done in present cycle.
		<p>d. Keep a record of all results arising from 5.3.1c.</p>	D. Verify that farm maintains records from bio-assays (as applicable).				NA	No treatments done in present cycle.
5.3.2	<p><b>Indicator:</b> When bio-assay tests determine resistance is forming, use of an alternative, permitted treatment, or an immediate harvest of all fish on the site</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Review results of bio-assay tests (5.3.1d) for evidence that resistance has formed. If yes, proceed to 5.3.2b. If no, then Indicator 5.3.2 is not applicable.</p> <p>b. When bio-assay tests show evidence that resistance has formed, keep records showing that the farm took one of two actions:  - used an alternative treatment (if permitted in the area of operation); or  - immediately harvested all fish on site.</p>	<p>A. Review evidence from bio-assay tests to determine whether Indicator 5.3.2 is applicable.</p> <p>B. If applicable, review records to verify that the farm either used an alternative treatment that is permitted in the area of operation or else harvested all fish on site.</p>				NA	No treatments done in present cycle.
							NA	No treatments done in present cycle.
<b>Criterion 5.4 Biosecurity management [113]</b>								
<b>Footnote</b>		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>				
<b>Footnote</b>		[113] See Appendix VI for transparency requirements for 5.4.2 and 5.4.4.						
5.4.1	<p><b>Indicator:</b> Evidence that all salmon on the site are a single-year class [114]</p> <p><b>Requirement:</b> 100% [115]</p> <p><b>Applicability:</b> All farms except as noted in [115]</p>	<p>a. Keep records of the start and end dates of periods when the site is fully fallow after harvest.</p> <p>b. Provide evidence of stocking dates (purchase receipts, delivery records) to show that there were no gaps &gt; 6 months for smolt inputs for the current production cycle.</p>	<p>A. Review records and verify fallow periods by cross-checking during interviews with farm staff and community representatives.</p> <p>B. Review evidence to confirm there were no gaps in smolt inputs &gt; 6 months. Inspect pens during the on-site audit to see if fish size (which may be variable) is consistent with the production of a single-year class.</p> <p>C. Verify that the available evidence shows that salmon on the site are from a single-year class.</p>					<p>Fisherie directorate- Approved Operation Plan dt 19.02.14.  Last harvest date 12G 08.12.13, First stocking date 14G 22.04.14.</p> <p>Smolt CVs for site with ova /stripping/startfeeding dates.  Defined first stocking date 22.04.14  Defined last stocking date 24.06.14</p> <p>Smolt CVs for site with ova /stripping/startfeeding dates.  Defined first stocking date 22.04.14  Defined last stocking date 24.06.14  Smolt from Sygna yearclass 2014.  Smolt from Haukå yearclass 2014.</p>
	<b>Footnote</b>	[114] Gaps of up to six months between inputs of smolts derived from the same stripping are acceptable as long as there remains a period of time when the site is fully fallow after harvest.						
	<b>Footnote</b>	[115] Exception is allowed for: 1) farm sites that have closed, contained production units where there is complete separation of water between units and no sharing of filtration systems or other systems that could spread disease, or 2) farm sites that have ≥95% water recirculation, a pre-entry disease screening protocol, dedicated quarantine capability and biosecurity measures for waste to ensure there is no discharge of live biological material to the natural environment (e.g. UV or other effective treatment of effluent) .						
		<p>a. For mortality events logged in 5.1.4a, show evidence that the farm promptly evaluated each to determine whether it was a statistically significant increase over background mortality rate on a monthly basis [116]. The accepted level of significance (for example, p &lt; 0.05) should be agreed between farm and CAB.</p>	<p>A. Review evidence to confirm that the farm evaluated mortality events for statistically significant increases relative to background mortality rates (compare to farm's time-series dataset in 5.1.7a).</p>					<p>Continuous evaluation. No events of UIA category mortality categorised nor suspected for the last 3 production cycles 10G-14G 6, from AquaFarmer. No UIA detected nor suspected at farm. Ref to indicator 5.1.4a for details of monitoring.</p>

5.4.2	<p><b>Indicator:</b> Evidence that if the farm suspects an unidentified transmissible agent, or if the farm experiences unexplained increased mortality, [116] the farm has:</p> <ol style="list-style-type: none"> <li>1. Reported the issue to the ABM and to the appropriate regulatory authority</li> <li>2. Increased monitoring and surveillance [117] on the farm and within the ABM</li> <li>3. Promptly [118] made findings publicly available</li> </ol> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>b. For mortality events logged in 5.1.4a, record whether the farm did or did not suspect (yes or no) an unidentified transmissible agent.</p>	<p>B. Determine if the farm suspected any unidentified transmissible agents associated with mortality events during the most recent production cycle. An abrupt increase in unexplained mortality should be cause for suspicion.</p>					Continuous evaluation. No events of UIA category mortality categorised nor suspected for the last 3 production cycles 10G-14G 6, from AquaFarmer. No UIA detected nor suspected at farm. Ref to indicator 5.1.4a for details of monitoring.
		<p>c. Proceed to 5.4.2d if, during the most recent production cycle, either: - results from 5.4.2a showed a statistically significant increase in unexplained mortalities; or - the answer to 5.4.2b was 'yes'. Otherwise, Indicator 5.4.2 is not applicable.</p>	<p>C. Confirm that the farm took the correct action based on results from 5.4.2a and 5.4.2b and whether 5.4.2d is applicable to the farm.</p>				NA	No UIA detected nor suspected at farm. Ref to indicator 5.1.4a for details of monitoring.
		<p>d. If required, ensure that the farm takes and records the following steps: 1) Report the issue to the ABM and to the appropriate regulatory authority; 2) Increase monitoring and surveillance [117] on the farm and within the ABM; and 3) Promptly (within one month) make findings publicly available.</p>	<p>D. If applicable, verify that the farm keeps records to show how each of the required steps was completed.</p>					No UIA detected nor suspected at farm. Submitted to ASC 09.01.14 OBS: There is not a system implemented to make information easily publicly available if needed, reference to 5.4.2 pkt.3.
		<p>e. As applicable, submit data to ASC as per Appendix VI about unidentified transmissible agents or unexplained increases in mortality. If applicable, then data are to be sent to ASC on an ongoing basis (i.e. at least once per year and for each production cycle).</p>	<p>E. Confirm that client submits data to ASC (Appendix VI) about unidentified transmissible agents or unexplained increases in mortality as applicable.</p>					No UIA detected nor suspected at farm. Submitted to ASC 09.01.15
		Footnote	[116] Increased mortality: A statistically significant increase over background rate on a monthly basis.					
Footnote	[117] Primary aim of monitoring and surveillance is to investigate whether a new or adapted disease is present in the area.							
Footnote	[118] Within one month.							
5.4.3	<p><b>Indicator:</b> Evidence of compliance [119] with the OIE Aquatic Animal Health Code [120]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p><b>Instruction to Clients for Indicator 5.4.3 - Compliance with the OIE Aquatic Animal Health Code</b> Indicator 5.4.3 requires that farms show evidence of compliance with the OIE Aquatic Animal Health Code (see <a href="http://www.oie.int/index.php?id=171">http://www.oie.int/index.php?id=171</a>). Compliance is defined as farm practices consistent with the intentions of the Code. For purposes of the ASC Salmon Standard, this means that the farm must have written procedures stating how the farm will initiate an aggressive response to detection of an exotic OIE-notifiable disease on the farm ['exotic' = not previously found in the area or had been fully eradicated (area declared free of the pathogen)]. An aggressive response will involve, at a minimum, the following actions: - depopulation of the infected site; - implementation of quarantine zones (see note below) in accordance with guidelines from OIE for the specific pathogen; and - additional actions as required under Indicator 5.4.4.</p> <p>To demonstrate compliance with Indicator 5.4.3, clients have the option to describe how farm practices are consistent with the intentions of the OIE Aquatic Animal Health Code by developing relevant policies and procedures and integrating them into the farm's fish health management plan.</p> <p>Note: The Steering Committee recognizes that establishment of quarantine zones will likely incorporate mandatory depopulation of sites close to the infected site and affect some, though not necessarily all, of the ABM.</p>						
		<p>a. Maintain a current version of the OIE Aquatic Animal Health Code on site or ensure staff have access to the most current version.</p>	<p>A. Verify that farm management is aware of practices described in the most current version of the code during interviews.</p>				Current version of list presented (Updated 2014) - new update 2015 - valid from 01.Jan following year if changes.	
		<p>b. Develop policies and procedures as needed to ensure that farm practices remain consistent with the OIE Aquatic Animal Health Code (5.4.3a) and with actions required under indicator 5.4.4.</p>	<p>B. Review farm policies and procedures to verify that the farm has documented how its practices are consistent with the OIE Aquatic Animal Health Code and Indicator 5.4.4.</p>				Internal procedure in TQM on practices in accordance with OIE AHC" Beredskapsplan MH" page 12, Notification of diseases. ID 27017.	
		-	<p>C. During the on-site inspection look for evidence that policies and procedures in 5.4.3a are implemented. Cross-check in interviews with staff.</p>				Confirmed during interviews	
Footnote	[119] Compliance is defined as farm practices consistent with the intentions of the Code, to be further outlined in auditing guidance. For purposes of this standard, this includes an aggressive response to detection of an exotic OIE-notifiable disease on the farm, which includes depopulating the infected site and implementation of quarantine zones in accordance with guidelines from OIE for the specific pathogen. Quarantine zones will likely incorporate mandatory depopulation of sites close to the infected site and affect some, though not necessarily all, of the ABM. Exotic signifies not previously found in the area or had been fully eradicated (area declared free of the pathogen).							
Footnote	[120] OIE 2011. Aquatic Animal Health Code. <a href="http://www.oie.int/index.php?id=171">http://www.oie.int/index.php?id=171</a> .							
	<p>a. Ensure that farm policies and procedures in 5.4.3a describe the four actions required under Indicator 5.4.4 in response to an OIE-notifiable disease on the farm.</p>	<p>A. Review farm policies and procedures (see 5.4.3A) to verify that the farm has documented actions in response to an OIE-notifiable disease.</p>					OBS: Internal procedure in TQM on practices in accordance with OIE AHC" Beredskapsplan MH" page 12. Required steps not clearly defined in procedure to publish in e.g. MHN web site for ASC issues if an OIE-notifiable disease is confirmed on the farm. Reference to 5.4.4 pkt.4.	

5.4.4	<p><b>Indicator:</b> If an OIE-notifiable disease [121] is confirmed on the farm, evidence that:</p> <ol style="list-style-type: none"> <li>the farm has, at a minimum, immediately culled the pen(s) in which the disease was detected</li> <li>the farm immediately notified the other farms in the ABM [122]</li> <li>the farm and the ABM enhanced monitoring and conducted rigorous testing for the disease</li> <li>the farm promptly [123] made findings publicly available</li> </ol> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>b. Inform the CAB if an OIE-notifiable disease has been confirmed on the farm during the current production cycle or the two previous production cycles. If yes, proceed to 5.4.4c. If no, then 5.4.4c and 5.4.4d do not apply.</p>	B. Record whether there were any OIE-notifiable diseases confirmed on the farm during the current or two previous production cycles.				NA	No occurrence of OIE-notifiable diseases.	
		<p>c. If an OIE-notifiable disease was confirmed on the farm (see 5.4.4b), then retain documentary evidence to show that the farm:</p> <ol style="list-style-type: none"> <li>immediately culled the pen(s) in which the disease was detected;</li> <li>immediately notified the other farms in the ABM [122]</li> <li>enhanced monitoring and conducted rigorous testing for the disease; and</li> <li>promptly (within one month) made findings publicly available.</li> </ol>	C. If applicable, review documentary evidence to verify the farm's response complied with the four actions required under Indicator 5.4.4.						No occurrence of OIE-notifiable diseases. OBS: Internal procedure in TQM on practices in accordance with OIE AHC "Beredskapsplan MH" page 12. Required steps not clearly defined in procedure to publish in e.g MHN web site for ASC issues. If an OIE-notifiable disease is confirmed on the farm. Reference to 5.4.4 ppt.4.
		<p>d. As applicable, submit data to ASC as per Appendix VI about any OIE-notifiable disease that was confirmed on the farm. If applicable, then data are to be sent to ASC on an ongoing basis (i.e. at least once per year and for each production cycle).</p>	D. Confirm that client submits data to ASC (Appendix VI) about any OIE-notifiable disease that was confirmed on the farm (as applicable).					NA	No occurrence of OIE-notifiable diseases.
			E. If an OIE-notifiable disease was confirmed on the farm, verify that notifications were made to regulatory bodies required under law and the OIE Aquatic Animal Health Code (122).					NA	No occurrence of OIE-notifiable diseases.
Footnote	[121] At the time of publication of the final draft standards, OIE-notifiable diseases relevant to salmon aquaculture were: Epizootic haematopoietic necrosis, Infectious haematopoietic necrosis (IHN), Infectious salmon anemia (ISA), Viral hemorrhagic septicemia (VHS) and Gyrodactylosis (Gyrodactylus salaris).								
Footnote	[122] This is in addition to any notifications to regulatory bodies required under law and the OIE Aquatic Animal Health Code.								
Footnote	[123] Within one month.								
<b>Social requirements in the standards shall be audited by an individual who is a lead auditor in conformity with SAAS Procedure 200 section 3.1.</b>									
<b>PRINCIPLE 6: DEVELOP AND OPERATE FARMS IN A SOCIALLY RESPONSIBLE MANNER</b>									
<b>6.1 Freedom of association and collective bargaining [124]</b>									
<b>Compliance Criteria</b>									
Footnote	[124] Bargain collectively: A voluntary negotiation between employers and organizations of workers in order to establish the terms and conditions of employment by means of collective (written) agreements.								
6.1.1	<p><b>Indicator:</b> Evidence that workers have access to trade unions (if they exist) and union representative(s) chosen by themselves without managerial interference</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	a. Workers have the freedom to join any trade union, free of any form of interference from employers or competing organizations set up or backed by the employer. Farms shall prepare documentation to demonstrate to the auditor that domestic regulation fully meets these criteria.	y					The information is presented in Code of conduct (last revision 2014-11) and personal handbook. Workers aware of their right.	
		b. Union representatives (or worker representatives) are chosen by workers without managerial interference. ILO specifically prohibits "acts which are designated to promote the establishment of worker organizations or to support worker organizations under the control of employers or employers' organizations."	y					Election of Trade union representative was conducted at annual TU members meeting (2015-02). No interference from management.	
		c. Trade union representatives (or worker representatives) have access to their members in the workplace at reasonable times on the premises.	y					Main communication is done via phone and e-mail and in meetings. TU representative state that access to members is good.	
		d. Be advised that workers and union representatives (if they exist) will be interviewed to confirm the above.	y					Interview confirms information above	
6.1.2	<p><b>Indicator:</b> Evidence that workers are free to form organizations, including unions, to advocate for and protect their rights</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	a. Employment contract explicitly states the worker's right of freedom of association.	y				The contract has link to Code of conduct of the Company.		
		b. Employer communicates that workers are free to form organizations to advocate for and protect work rights (e.g. farm policies on Freedom of Association; see 6.12.1).	y				The right to organise is communicated via training of Code of Conduct with following test. Latest training (2014-12)		
		c. Be advised that workers will be interviewed to confirm the above.	y				Interview confirms information above.		
6.1.3	<p><b>Indicator:</b> Evidence that workers are free and able to bargain collectively for their rights</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	a. Local trade union, or where none exists a reputable civil-society organization, confirms no outstanding cases against the farm site management for violations of employees' freedom of association and collective bargaining rights.	y				No outstanding cases what are in conflict with standard requirements.		
		b. Employer has explicitly communicated a commitment to ensure the collective bargaining rights of all workers.	y				Collective bargaining agreement in place as tariff agreement.		
		c. There is documentary evidence that workers are free and able to bargain collectively (e.g. collective bargaining agreements, meeting minutes, or complaint resolutions).	y				Collective bargaining agreement in place as tariff agreement.		
<b>Criterion 6.2 Child labor</b>									
<b>Compliance Criteria</b>									

6.2.1	<p><b>Indicator:</b> Number of incidences of child [125] labor [126]</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All except as noted in [125]</p>	<p>a. In most countries, the law states that minimum age for employment is 15 years. There are two possible exceptions:  - in developing countries where the legal minimum age may be set to 14 years (see footnote 125); or  - in countries where the legal minimum age is set higher than 15 years, in which case the legal minimum age of the country is followed.  If the farm operates in a country where the legal minimum ages is not 15, then the employer shall maintain documentation attesting to this fact.</p>	y			No children are involved. Standard requirements apply.
		b. Minimum age of permanent workers is 15 or older (except in countries as noted above).	y			16 years old.
		c. Employer maintains age records for employees that are sufficient to demonstrate compliance.	y			Records are in place.
Footnote	[125] Child: Any person under 15 years of age. A higher age would apply if the minimum age law of an area stipulates a higher age for work or mandatory schooling. Minimum age may be 14 if the country allows it under the developing country exceptions in ILO convention 138.					
Footnote	[126] Child Labor: Any work by a child younger than the age specified in the definition of a child.					
6.2.2	<p><b>Indicator:</b> Percentage of young workers [127] that are protected [128]</p> <p><b>Requirement:</b> 100%</p> <p><b>Applicability:</b> All</p>	a. Young workers are appropriately identified in company policies & training programs, and job descriptions are available for all young workers at the site.	y			General procedure for employees under 18 years old (approved 2014-04-01) with risk assessment is applied at each site.
		b. All young workers (from age 15 to less than 18) are identified and their ages are confirmed with copies of IDs.	y			The young workers could be identified by IDs. Young workers are employed "on call" background.
		c. Daily records of working hours (i.e. timesheets) are available for all young workers.	y			Timesheets are available on site. Obs.: There is isolated case When young worker has worked during night time.
		d. For young workers, the combined daily transportation time and school time and work time does not exceed 10 hours.	y			The site has young workers for "on call" works at no schooling time.
		e. Young workers are not exposed to hazards [129] and do not perform hazardous work [130]. Work on floating cages in poor weather conditions shall be considered hazardous.	y			The general hazards that should be avoided are listed in procedure for employees under 18 years old.
		f. Be advised that the site will be inspected and young workers will be interviewed to confirm compliance.				N/A They were not present during audit
Footnote	[127] Young Worker: Any worker between the age of a child, as defined above, and under the age of 18.					
Footnote	[128] Protected: Workers between 15 and 18 years of age will not be exposed to hazardous health and safety conditions; working hours shall not interfere with their education and the combined daily transportation time and school time, and work time shall not exceed 10 hours.					
Footnote	[129] Hazard: The inherent potential to cause injury or damage to a person's health (e.g., unequipped to handle heavy machinery safely, and unprotected exposure to harmful chemicals).					
Footnote	[130] Hazardous work: Work that, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of workers (e.g., heavy lifting disproportionate to a person's body size, operating heavy machinery, exposure to toxic chemicals).					
<b>Criterion 6.3 Forced, bonded or compulsory labor</b>		<b>Compliance Criteria</b>				
6.3.1	<p><b>Indicator:</b> Number of incidences of forced, [131] bonded [132] or compulsory labor</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All</p>	a. Contracts are clearly stated and understood by employees. Contracts do not lead to workers being indebted (i.e. no 'pay to work' schemes through labor contractors or training credit programs).	y			The contract has link to Code of conduct of the Company.
		b. Employees are free to leave workplace and manage their own time.	y			Confirmed by interview.
		c. Employer does not withhold employee's original identity documents.	y			No cases identified
		d. Employer does not withhold any part of workers' salaries, benefits, property or documents in order to oblige them to continue working for employer.	y			No cases identified
		e. Employees are not to be obligated to stay in job to repay debt.	y			No cases identified
		f. Maintain payroll records and be advised that workers will be interviewed to confirm the above.	y			Payroll records are available. The interviews has confirmed above information.
Footnote	[131] Forced (Compulsory) labor: All work or service that is extracted from any person under the menace of any penalty for which a person has not offered himself/herself voluntarily or for which such work or service is demanded as a repayment of debt. "Penalty" can imply monetary sanctions, physical punishment, or the loss of rights and privileges or restriction of movement (e.g., withholding of identity documents).					
Footnote	[132] Bonded labor: When a person is forced by the employer or creditor to work to repay a financial debt to the crediting agency.					
<b>Criterion 6.4 Discrimination [133]</b>		<b>Compliance Criteria</b>				
Footnote	[133] Discrimination: Any distinction, exclusion or preference that has the effect of nullifying or impairing equality of opportunity or treatment. Not every distinction, exclusion or preference constitutes discrimination. For instance, a merit- or performance-based pay increase or bonus is not by itself discriminatory. Positive discrimination in favor of people from certain underrepresented groups may be legal in some countries.					
6.4.1	<p><b>Indicator:</b> Evidence of comprehensive [134] and proactive anti-discrimination policies, procedures and practices</p> <p><b>Requirement:</b> Yes</p>	a. Employer has written anti-discrimination policy in place, stating that the company does not engage in or support discrimination in hiring, remuneration, access to training, promotion, termination or retirement based on race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation, age or any other condition that may give rise to discrimination.	y			The anti-discrimination policy is presented in Code of conduct.
		b. Employer has clear and transparent company procedures that outline how to raise, file, and respond to discrimination complaints.	y			Whistle blowing procedure is in place (last revision 2014-11). The reports are provided to third party, communication information provided in MH Web page.

	Applicability: All	c. Employer respects the principle of equal pay for equal work and equal access to job opportunities, promotions and raises.	y			The tariff agreement is the base of equal pay.
		d. All managers and supervisors receive training on diversity and non-discrimination. All personnel receive non-discrimination training. Internal or external training acceptable if proven effective.	y			Dedicated training for site manager was conducted (2015-02-17). Employees have received non-discrimination training via Code of Conduct trainings. Last training 2014-12.
Footnote	[134] Employers shall have written anti-discrimination policies stating that the company does not engage in or support discrimination in hiring, remuneration, access to training, promotion, termination or retirement based on race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation, age or any other condition that may give rise to discrimination.					
6.4.2	Indicator: Number of incidences of discrimination Requirement: None Applicability: All	a. Employer maintains a record of all discrimination complaints. These records do not show evidence for discrimination.	y			No cases identified.
		b. Be advised that worker testimonies will be used to confirm that the company does not interfere with the rights of personnel to observe tenets or practices, or to meet needs related to race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation or any other condition that may give rise to discrimination.	y			Interview has confirmed absence of discrimination cases.
<b>Criterion 6.5 Work environment health and safety</b>						
<b>Compliance Criteria</b>						
6.5.1	Indicator: Percentage of workers trained in health and safety practices, procedures (135) and policies on a yearly basis Requirement: 100% Applicability: All	a. Employer has documented practices, procedures (including emergency response procedures) and policies to protect employees from workplace hazards and to minimize risk of accident or injury. The information shall be available to employees.	y			The documented procedures are in place with relation to H&S risk assessment. The forms for assessments are prepared. The smart phone apps are used for risk evaluation just before job. The paper forms are used as well and stored on site.
		b. Employees know and understand emergency response procedures.	y			Employees understand the procedures.
		c. Employer conducts health and safety training for all employees on a regular basis (once a year and immediately for all new employees), including training on potential hazards and risk minimization, Occupational Safety and Health (OSH) and effective use of PPE.	y			The initial trainings are conducted and repeated every 5 year. Onsite training is repeated annually. "Brain safe" course is conducted at the start of the job. The reminders goes monthly via fact sheets.
Footnote	[135] Health and safety training shall include emergency response procedures and practices.					
6.5.2	Indicator: Evidence that workers use Personal Protective Equipment (PPE) effectively Requirement: Yes Applicability: All	a. Employer maintains a list of all health and safety hazards (e.g. chemicals).	y			The register of H&S hazards is maintained. Last assessment at 2014-05-19. Some Risks are not evaluated properly for probability.
		b. Employer provides workers with PPE that is appropriate to known health and safety hazards.	y			PPE is provided
		c. Employees receive annual training in the proper use of PPE (see 6.5.1c). For workers who participated in the initial training(s) previously an annual refreshment training may suffice, unless new PPE has been put to use.	y			Dedicated procedure and forms for PPE use are in place. Training is done together with H&S training non annually, the risk assessment is done annually and training at the same time as reminder. Safety representatives receive special training annually (40 hours)
		d. Be advised that workers will be interviewed to confirm the above.	y			The interviews has confirmed above information.
6.5.3	Indicator: Presence of a health and safety risk assessment and evidence of preventive actions taken Requirement: Yes Applicability: All	a. Employer makes regular assessments of hazards and risks in the workplace. Risk assessments are reviewed and updated at least annually (see also 6.5.1a).	y			Risk assessment is conducted annually. Last 2014-05-19
		b. Employees are trained in how to identify and prevent known hazards and risks (see also 6.5.1c).	y			Annual risk assessment scheme is used. Via Brain Safe training. Monthly reminders are sent to sites with topics for discussion. The summary of H&S accidents are sent to sites every month.
		c. Health and safety procedures are adapted based on results from risk assessments (above) and changes are implemented to help prevent accidents.	y			The procedures are adapted in relation to risk assessment and H&S accidents investigation results. Employees are trained during risk assessment before each activities what involve high risks.
		a. Employer records all health- and safety-related accidents.	y			H&S accidents are reported in TQM system database is used.

6.5.4	<p><b>Indicator:</b> Evidence that all health- and safety-related accidents and violations are recorded and corrective actions are taken when necessary</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>b. Employer maintains complete documentation for all occupational health and safety violations and investigations.</p> <p>c. Employer implements corrective action plans in response to any accidents that occur. Plans are documented and they include an analysis of root cause, actions to address root cause, actions to remediate, and actions to prevent future accidents of similar nature.</p> <p>d. Employees working in departments where accidents have occurred can explain what analysis has been done and what steps were taken or improvements made.</p>	y				H&S violations and investigations are reported in TQM system database.
6.5.5	<p><b>Indicator:</b> Evidence of employer responsibility and/or proof of insurance (accident or injury) for 100% of worker costs in a job-related accident or injury when not covered under national law</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Employer maintains documentation to confirm that all personnel are provided sufficient insurance to cover costs related to occupational accidents or injuries (if not covered under national law). Equal insurance coverage must include temporary, migrant or foreign workers. Written contract of employer responsibility to cover accident costs is acceptable evidence in place of insurance.</p>	y				Insurance is provided.
6.5.6	<p><b>Indicator:</b> Evidence that all diving operations are conducted by divers who are certified</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>Note: If the farm outsources its diving operations to an independent company, the farm shall ensure that auditors have access to specified information sufficient to demonstrate compliance with Indicator 6.5.6. It is the farm's responsibility to obtain copies of relevant documentation (e.g. certificates) from the dive company.</p> <p>a. Employer keeps records of farm diving operations and a list of all personnel involved. In case an external service provider was hired, a statement that provider conformed to all relevant criteria must be made available to the auditor by this provider.</p> <p>b. Employer maintains evidence of diver certification (e.g. copies of certificates) for each person involved in diving operations. Divers shall be certified through an accredited national or international organization for diver certification.</p>	N	X			<p>Evaluations of Diver companies are in place. The records of diving activities maintained.</p> <p>NC. The contracts of divers do not have criteria of standard, while the new contracts and declarations to apply CoC prepared and planned to be applied in 2015.</p> <p>NC. One diver (Stanislav Marinov) was used for diving activities 2014-09-16, his medical certificate was outdated (ended at 2014-05-25). One diving leader (Simon Børlinge) for diving activities at 2014-11-13 has outdated medical certificate (ended at 2014-05-25).</p>
<b>Criterion 6.6 Wages</b>							
<b>Compliance Criteria</b>							
6.6.1	<p><b>Indicator:</b> The percentage of workers whose basic wage [136] (before overtime and bonuses) is below the minimum wage [137]</p> <p><b>Requirement:</b> 0 (None)</p> <p><b>Applicability:</b> All</p>	<p>a. Employer keeps documents to show the legal minimum wage in the country of operation. If there is no legal minimum wage in the country, the employer keeps documents to show the industry-standard minimum wage.</p> <p>b. Employer's records (e.g. payroll) confirm that worker's wages for a standard work week (≤ 48 hours) always meet or exceed the legal minimum wage. If there is no legal minimum wage, the employer's records must show how the current wage meets or exceeds industry standard. If wages are based on piece-rate or pay-per-production, the employer's records must show how workers can reasonably attain (within regular working hours) wages that meet or exceed the legal minimum wage.</p> <p>c. Maintain documentary evidence (e.g. payroll, timesheets, punch cards, production records, and/or utility records) and be advised that workers will be interviewed to confirm the above.</p>	y				Salaries are defined in protocols of collective bargaining agreements with TU. Tariff agreement 2014-08-28.
Footnote	[136] Basic wage: The wages paid for a standard working week (no more than 48 hours).		y				
Footnote	[137] If there is no legal minimum wage in a country, basic wages must meet the industry-standard minimum wage.		y				
6.6.2	<p><b>Indicator:</b> Evidence that the employer is working toward the payment of basic needs wage [138]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Proof of employer engagement with workers and their representative organizations, and the use of cost of living assessments from credible sources to assess basic needs wages. Includes review of any national basic needs wage recommendations from credible sources such as national universities or government.</p> <p>b. Employer has calculated the basic needs wage for farm workers and has compared it to the basic (i.e. current) wage for their farm workers.</p> <p>c. Employer demonstrates how they have taken steps toward paying a basic needs wage to their workers.</p>	y				The Basic needs wage calculation is based on statistical data.
Footnote	[138] Basic needs wage: A wage that covers the basic needs of an individual or family, including housing, food and transport. This concept differs from a minimum wage, which is set by law and may or may not cover the basic needs of workers.		y				
6.6.3	<p><b>Indicator:</b> Evidence of transparency in wage-setting and rendering [139]</p>	<p>a. Wages and benefits are clearly articulated to workers and documented in contracts.</p>	y				The contracts refer to internal MH documents about bonuses. New bonus system is approved in 2015-02. The objectives related to Bonuses are not developed yet. Monthly monitoring of objectives achievement is introduced.



	<p>requirement: res</p> <p>Applicability: All</p>	<p>b. The method for setting wages is clearly stated and understood by workers.</p>	y				Interview confirms that method for setting wages is understood by workers.
		<p>c. Employer renders wages and benefits in a way that is convenient for the worker (e.g. cash, check, or electronic payment methods). Workers do not have to travel to collect benefits nor do they receive promissory notes, coupons or merchandise in lieu of payment.</p>	y				Payments are made into personal bank accounts.
		<p>d. Be advised that workers will be interviewed to confirm the above.</p>	y				The interviews has confirmed above information.
Footnote							
[139] Payments shall be rendered to workers in a convenient manner.							
Criterion 6.7 Contracts (labor) including subcontracting							
<b>Compliance Criteria</b>							
6.7.1	<p>Indicator: Percentage of workers who have contracts [141]</p> <p>Requirement: 100%</p> <p>Applicability: All</p>	<p>a. Employer maintains a record of all employment contracts.</p>	y				Contracts are maintained. Permanent contracts and apprentice contracts are kept in personnel system and "on call" contracts for young workers are kept on site. Obs.: The Labour contract for young worker (Midtbo Lenart) is signed on main page , but no records are available for periods of employment in appendix of contract.
		<p>b. There is no evidence for labor-only contracting relationships or false apprenticeship schemes.</p>	y				No evidences of labour-only contracting.
		<p>c. Be advised that workers will be interviewed to confirm the above.</p>	y				The interviews has confirmed above information.
Footnote							
[141] Labor-only contracting relationships or false apprenticeship schemes are not acceptable. This includes revolving/consecutive labor contracts to deny benefit accrual or equitable remuneration. False Apprenticeship Scheme: The practice of hiring workers under apprenticeship terms without stipulating terms of the apprenticeship or wages under contract. It is a "false" apprenticeship if its purpose is to underpay people, avoid legal obligations or employ underage workers. Labor-only contracting arrangement: The practice of hiring workers without establishing a formal employment relationship for the purpose of avoiding payment of regular wages or the provision of legally required benefits, such as health and safety protections.							
6.7.2	<p>Indicator: Evidence of a policy to ensure social compliance of its suppliers and contractors</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Farm has a policy to ensure that all companies contracted to provide supplies or services (e.g. divers, cleaning, maintenance) have socially responsible practices and policies.</p>	N		X		Second party H&S audits for Diver service companies are applied where check of application of MH CoC principles included. There are plans in middle of 2015 to start audits including check of implementation of CoC for all subcontractors. The requirements to follow MH CoC is included in new revision of the contracts and declarations to apply CoC are prepared. NC: The contracts of subcontractors/suppliers do not have criteria of standard.
		<p>b. Producing company has criteria for evaluating its suppliers and contractors. The company keeps a list of approved suppliers and contractors.</p>	y				The internal audit procedure has requirement to use CoC as criteria. The clause 5 in Purchase conditions has the requirements that all suppliers should follow the MH CoC. The pilot evaluations are conducted for diver companies. Obs: There no clear criteria for evaluation of suppliers and contractors against requirements in clause 6 of the standard. The supplier evaluation checklist does not address Social accountability requirements of the CoC.
		<p>c. Producing company keeps records of communications with suppliers and subcontractors that relate to compliance with 6.7.2.</p>	y				There are written commitments from diver companies only. Obs: Incomplete records of communications with suppliers and subcontractors that relate to compliance with 6.7.2.
Criterion 6.8 Conflict resolution							
<b>Compliance Criteria</b>							
	<p>Indicator: Evidence of worker access to effective, fair and confidential grievance procedures</p>	<p>a. Employer has a clear labor conflict resolution policy for the presentation, treatment, and resolution of worker grievances in a confidential manner.</p>	y				Conflict resolution is managed in the same way as concerns and defined in CoC.

6.8.1	<p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>b. Workers are familiar with the company's labor conflict policies and procedures. There is evidence that workers have fair access.</p>	y			Workers demonstrate good understanding of conflict resolution.
		<p>c. Maintain documentary evidence (e.g. complaint or grievance filings, minutes from review meetings) and be advised that workers will be interviewed to confirm the above.</p>	y			No conflict cases identified.
6.8.2	<p><b>Indicator:</b> Percentage of grievances handled that are addressed [142] within a 90-day timeframe</p> <p><b>Requirement:</b> 100%</p> <p><b>Applicability:</b> All</p>	<p>a. Employer maintains a record of all grievances, complaints and labor conflicts that are raised.</p>	y			No records, as were no cases.
		<p>b. Employer keeps a record of follow-up (i.e. corrective actions) and timeframe in which grievances are addressed.</p>	y			No records, as were no cases.
		<p>c. Maintain documentary evidence and be advised that workers will be interviewed to confirm that grievances are addressed within a 90-day timeframe.</p>	y			No records, as were no cases. Interview confirms no cases fact.
Footnote	[142] Addressed. Acknowledged and received, moving through the company's process for grievances, corrective action taken when necessary.					
<b>Criterion 6.9 Disciplinary practices</b>						
<b>Compliance criteria</b>						
6.9.1	<p><b>Indicator:</b> Incidences of excessive or abusive disciplinary actions</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All</p>	<p>a. Employer does not use threatening, humiliating or punishing disciplinary practices that negatively impact a worker's physical and mental health or dignity.</p>	y			No evidences of incorrect behaviour.
		<p>b. Allegations of corporeal punishment, mental abuse [144], physical coercion, or verbal abuse will be investigated by auditors.</p>	y			No cases identified.
		<p>c. Be advised that workers will be interviewed to confirm there is no evidence for excessive or abusive disciplinary actions.</p>	y			The interviews has confirmed above information.
Footnote	[144] Mental Abuse: Characterized by the intentional use of power, including verbal abuse, isolation, sexual or racial harassment, intimidation or threat of physical force.					
6.9.2	<p><b>Indicator:</b> Evidence of a functioning disciplinary action policy whose aim is to improve the worker [143]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Employer has written policy for disciplinary action which explicitly states that its aim is to improve the worker [143].</p>	y			The policy is present in Code of conduct
		<p>b. Maintain documentary evidence (e.g. worker evaluation reports) and be advised that workers will be interviewed to confirm that the disciplinary action policy is fair and effective.</p>	y			The interviews has confirmed fair and effective disciplinary policy.
Footnote	[143] If disciplinary action is required, progressive verbal and written warnings shall be engaged. The aim shall always be to improve the worker; dismissal shall be the last resort. Policies for bonuses, incentives, access to training and promotions are clearly stated and understood, and not used arbitrarily. Fines or basic wage deductions shall not be acceptable disciplinary practices.					
<b>Criterion 6.10 Working hours and overtime</b>						
<b>Compliance criteria</b>						
6.10.1	<p><b>Indicator:</b> Incidences, violations or abuse of working hours and overtime laws [145]</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All</p>	<p>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 (<a href="http://www.ilo.org">www.ilo.org</a>).</p> <p>a. Employer has documentation showing the legal requirements for working hours and overtime in the region where the farm operates. If local legislation allows workers to exceed internationally accepted recommendations (48 regular hours, 12 hours overtime) then requirements of the international standards apply.</p>	y			The scheme 12-9 is used as agreed with Trade unions.
		<p>b. Records (e.g. time sheets and payroll) show that farm workers do not exceed the number of working hours allowed under the law.</p>	y			The working time is managed within legal requirements.
		<p>c. If an employer requires employees to work shifts at the farm (e.g. 10 days on and six days off), the employer compensates workers with an equivalent time off in the calendar month and there is evidence that employees have agreed to this schedule (e.g. in the hiring contract).</p>	y			The scheme 12-9 is used as agreed with Trade unions.
		<p>d. Be advised that workers will be interviewed to confirm there is no abuse of working hours and overtime laws.</p>	y			The interviews has confirmed above information.
Footnote	[145] In cases where local legislation on working hours and overtime exceed internationally accepted recommendations (48 regular hours, 12 hours overtime), the international standards will apply.					
6.10.2	<p><b>Indicator:</b> Overtime is limited, voluntary [146], paid at a premium rate and restricted to exceptional circumstances</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All except as noted in [146]</p>	<p>a. Payment records (e.g. payslips) show that workers are paid a premium rate for overtime hours.</p>	y			Overtime is paid at premium rate
		<p>b. Overtime is limited and occurs in exceptional circumstances as evidenced by farm records (e.g. production records, time sheets, and other records of working hours).</p>	y			Overtime is limited to exceptional circumstances. The overtime occurrence risk analysis was conducted.
		<p>c. Be advised that workers will be interviewed to confirm that all overtime is voluntary except where there is a collective bargaining agreement which specifically allows for compulsory overtime.</p>	y			The interviews has confirmed voluntary overtime, the special cases agreed in collective bargaining agreement.
Footnote	[146] Compulsory overtime is permitted if previously agreed to under a collective bargaining agreement.					
Footnote	[147] Premium rate: A rate of pay higher than the regular work week rate. Must comply with national laws/regulations and/or industry standards.					
<b>Criterion 6.11 Education and training</b>						
<b>Compliance criteria</b>						
6.11.1	<p><b>Indicator:</b> Evidence that the company encourages and sometimes supports education initiatives for all workers (e.g., courses, certificates and degrees)</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Company has written policies related to continuing education of workers. Company provides incentives (e.g. subsidies for tuition or textbooks, time off prior to exams, flexibility in work schedule) that encourage workers to participate in educational initiatives. Note that such offers may be contingent on workers committing to stay with the company for a pre-arranged time.</p>	y			Policy in place. The financial support for training is given.
		<p>b. Employer maintains records of worker participation in educational opportunities as evidenced by course documentation (e.g. list of courses, curricula, certificates, degrees).</p>	y			Records available in personal files.
		<p>c. Be advised that workers will be interviewed to confirm that educational initiatives are encouraged and supported by the company.</p>	y			The interviews has confirmed education encouraging by managers.
<b>Criterion 6.12 Corporate policies for social responsibility</b>						
<b>Compliance criteria</b>						
6.12.1	<p><b>Indicator:</b> Demonstration of company-level [148] policies in line with the standards under 6.1 to 6.11 above</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. Company-level policies are in line with all social and labor requirements presented in 6.1 through 6.11.</p>	y			Company level policies in place.
		<p>b. Company-level policies (see 6.12.1a) are approved by the company headquarters in the region where the site applying for certification is located.</p>	y			Approved.
		<p>c. The scope of corporate policies (see 6.12.1a) covers all company operations relating to salmonid production in the region (i.e. all smolt production facilities, grow-out facilities and processing plants).</p>	y			Applied in whole company.

	Applicability: All	d. The site that is applying for certification provides auditors with access to all company-level policies and procedures as are needed to verify compliance with 6.12.1a (above).	y				Access is provided, policies verified.
Footnote	[148] Applies to the headquarters of the company in a region or country where the site applying for certification is located. The policy shall relate to all of the company's operations in the region or country, including grow-out, smolt production and processing facilities.						
<b>Social requirements in the standards shall be audited by an individual who is a lead auditor in conformity with SAAS Procedure 200 section 3.1.</b>							
<b>PRINCIPLE 7: BE A GOOD NEIGHBOR AND CONSCIENTIOUS CITIZEN</b>							
<b>Criterion 7.1 Community engagement</b>							
<b>Compliance Criteria</b>							
7.1.1	<p><b>Indicator:</b> Evidence of regular and meaningful [149] consultation and engagement with community representatives and organizations</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	a. The farm pro-actively arranges for consultations with the local community at least twice every year (bi-annually).	y				Meeting was organised in 2014-12 but was cancelled because of weather. The low interest of interested parties is met. No new date for meeting set yet.
		b. Consultations are meaningful. OPTIONAL: the farm may choose to use participatory Social Impact Assessment (pSIA) or an equivalent method for consultations.				N/A	No meeting took place
		c. Consultations include participation by representatives from the local community who were asked to contribute to the agenda.	y				The participation of representatives was assured via invitation. No respond for agenda change was received.
		d. Consultations include communication about, or discussion of, the potential health risks of therapeutic treatments (see indicator 7.1.3).	y			N/A	No meeting took place
		e. Maintain records and documentary evidence (e.g. meeting agenda, minutes, report) to demonstrate that consultations comply with the above.	y				Agenda for meeting is available
		f. Be advised that representatives from the local community and organizations may be interviewed to confirm the above.				N/A	No interview were used with stakeholders.
Footnote	[149] Regular and meaningful: Meetings shall be held at least bi-annually with elected representatives of affected communities. The agenda for the meetings should in part be set by the community representatives. Participatory Social Impact Assessment methods may be one option to consider here.						
7.1.2	<p><b>Indicator:</b> Presence and evidence of an effective [150] policy and mechanism for the presentation, treatment and resolution of complaints by community stakeholders and organizations</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	a. Farm policy provides a mechanism for presentation, treatment and resolution of complaints lodged by stakeholders, community members, and organizations.	y				TQM Procedure is developed for presentation, treatment and resolution of complaints lodged by stakeholders.
		b. The farm follows its policy for handling stakeholder complaints as evidenced by farm documentation (e.g. follow-up communications with stakeholders, reports to stakeholder describing corrective actions).	y				No complains received.
		c. The farm's mechanism for handling complaints is effective based on resolution of stakeholder complaints (e.g. follow-up correspondence from stakeholders).	y				No complains received.
		d. Be advised that representatives from the local community, including complainants where applicable, may be interviewed to confirm the above.				N/A	No interview were used with stakeholders
Footnote	[150] Effective: In order to demonstrate that the mechanism is effective, evidence of resolutions of complaints can be given.						
7.1.3	<p><b>Indicator:</b> Evidence that the farm has posted visible notice [151] at the farm during times of therapeutic treatments and has, as part of consultation with communities under 7.1.1, communicated about potential health risks from treatments</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	a. Farm has a system for posting notifications at the farm during periods of therapeutic treatment. (use of anaesthetic baths is not regarded a therapeutant)	y				Company has system for posting the notifications at the sites during the therapeutic treatments. No application of signs is needed as no therapeutic treatment is applied. But company applies the signs during de-licing and anaesthetic treatment.
		b. Notices (above) are posted where they will be visible to affected stakeholders (e.g. posted on waterways for fishermen who pass by the farm).	y				The de-licing was conducted during the audit and signs were posted.
		c. Farm communicates about the potential health risks from treatments during community consultations (see 7.1.1)				N/A	No meeting was organised.
		d. Be advised that members of the local community may be interviewed to confirm the above.				N/A	No interview were used with stakeholders
Footnote	[151] Signage shall be visible to mariners and, for example, to fishermen passing by the farm.						
<b>Criterion 7.2 Respect for indigenous and aboriginal cultures and traditional territories</b>							
<b>Compliance Criteria</b>							
<b>Instruction to Clients and CABs on Criterion 7.2 - Traditional Territories of Indigenous Groups</b>							
The ASC Salmon Standard requires that farms must be respectful of the traditional territories of indigenous groups. The Indicators listed under Criterion 7.2 were designed to fulfill this purpose in a manner consistent with the United Nations Declaration on the Rights of Indigenous Peoples. In many locales, the territorial boundaries of indigenous groups have a defined legal status according to local or national law. In such cases, it is straightforward to know whether a farm is operating in close proximity to indigenous people. However, when boundaries of indigenous territories are undefined or unknown, there is no simple way to establish whether the farm is operating in close proximity to indigenous groups. Here ASC provides the following guidance.							
The intent behind the ASC Salmon Standard is that the farm will identify all neighboring groups who are potentially negatively impacted by the farm's activities. The actual physical distance between the farm and an indigenous group is less important than understanding whether the farm is having a detrimental impact upon its neighbors. Effective community consultations are one of the best ways to identify such impacts to neighbor groups. Through a transparent process of consultation, indigenous groups who are put under "stress" by the farm will identify themselves and voice their concerns about the nature of the farm's impacts. Continued consultations between farm and neighbors should create a forum where any key issue can be discussed and resolved.							
	<p><b>Indicator:</b> Evidence that indigenous groups were consulted as required by relevant local and/or national laws and regulations</p>	a. Documentary evidence establishes that the farm does or does not operate in an indigenous territory (to include farms that operate in proximity to indigenous or aboriginal people [152]). If not then the requirements of 7.2.1 do not apply.				N/A	No traditional and indigenous groups are involved. It is communicated during the application processing to start the sites.

7.2.1	<p>Required by relevant local and/or national laws and regulations</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [152]</p>	<p>b. Farm management demonstrates an understanding of relevant local and/or national laws and regulations that pertain to consultations with indigenous groups.</p> <p>c. As required by law in the jurisdiction: - farm consults with indigenous groups and retains documentary evidence (e.g. meeting minutes, summaries) to show how the process complies with 7.2.1b; OR - farm confirms that government-to-government consultation occurred and obtains documentary evidence.</p> <p>d. Be advised that representatives from indigenous groups may be interviewed to confirm the above.</p>					N/A					
7.2.2	<p><b>Indicator:</b> Evidence that the farm has undertaken proactive consultation with indigenous communities</p> <p><b>Requirement:</b> Yes [152]</p> <p><b>Applicability:</b> All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [152]</p>	<p>a. See results of 7.2.1a (above) to determine whether the requirements of 7.2.2 apply to the farm.</p> <p>b. Be advised that representatives from indigenous communities may be interviewed to confirm that the farm has undertaken proactive consultations.</p>					N/A					
Footnote	[152] All standards related to indigenous rights only apply where relevant, based on proximity of indigenous territories.											
7.2.3	<p><b>Indicator:</b> Evidence of a protocol agreement, or an active process [153] to establish a protocol agreement, with indigenous communities</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [152]</p>	<p>a. See results of 7.2.1a (above) to determine whether the requirements of 7.2.3 apply to the farm.</p> <p>b. Maintain evidence to show that the farm has either: 1) reached a protocol agreement with the indigenous community and this fact is documented; or 2) continued engagement in an active process [153] to reach a protocol agreement with the indigenous community.</p> <p>c. Be advised that representatives from indigenous communities may be interviewed to confirm either 7.2.3b1 or b2 (above) as applicable.</p>					N/A					
Footnote	[153] To demonstrate an active process, a farm must show ongoing efforts to communicate with indigenous communities, an understanding of key community concerns and responsiveness to key community concerns through adaptive farm management and other actions.											
<b>Criterion 7.3 Access to resources</b>			<b>Compliance Criteria</b>									
7.3.1	<p><b>Indicator:</b> Changes undertaken restricting access to vital community resources [154] without community approval</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All</p>	<p>a. Resources that are vital [155] to the community have been documented and are known by the farm (i.e. through the assessment process required under Indicator 7.3.2).</p> <p>b. The farm seeks and obtains community approval before undertaking changes that restrict access to vital community resources. Approvals are documented.</p> <p>c. Be advised that representatives from the community may be interviewed to confirm that the farm has not restricted access to vital resources without prior community approval.</p>	y					It is communicated during the application processing to start the sites.				
Footnote	[154] Vital community resources can include freshwater, land or other natural resources that communities rely on for their livelihood. If a farm site were to block, for example, a community's sole access point to a needed freshwater resource, this would be unacceptable under the Dialogue standard.											
7.3.2	<p><b>Indicator:</b> Evidence of assessments of company's impact on access to resources</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All</p>	<p>a. There is a documented assessment of the farm's impact upon access to resources. Can be completed as part of community consultations under 7.1.1.</p> <p>b. Be advised that representatives from the community may be interviewed to generally corroborate the accuracy of conclusions presented in 7.3.2a.</p>	y					It is communicated during the application processing to start the sites.				
Footnote	[155] The SAD SC proposes this approach to addressing environmental and social performance during the smolt phase of production. In the medium term, the SC anticipates a system to audit smolt production facilities on site. In the meantime, farms will need to work with their smolt suppliers to generate the necessary documentation to demonstrate compliance with the standards. The documentation will be reviewed as part of the audit at the grow-out facility.											
<b>INDICATORS AND STANDARDS FOR SMOLT PRODUCTION</b>												
A farm seeking certification must have documentation from all of its smolt suppliers to demonstrate compliance with the following standards. The requirements are, in general, a subset of the standards in Principles 1 through 7, focusing on the impacts that are most relevant for smolt facilities. In addition, specific standards are applied to open systems (net pens), and to closed and semi-closed systems (recirculation and flow-through).												
Footnote	[155] The SAD SC proposes this approach to addressing environmental and social performance during the smolt phase of production. In the medium term, the SC anticipates a system to audit smolt production facilities on site. In the meantime, farms will need to work with their smolt suppliers to generate the necessary documentation to demonstrate compliance with the standards. The documentation will be reviewed as part of the audit at the grow-out facility.											
<b>SECTION 8: STANDARDS FOR SUPPLIERS OF SMOLT</b>							CONFORMITY	Minor NC	Major NC	NA	Comments 13486 Hauka (Gulesto)	Comments 12165 Sygna (Gulesto)
<b>Standards related to Principle 1</b>												
<b>Compliance Criteria (Required Client Actions):</b>			<b>Auditor Evaluation (Required CAB Actions):</b>									
		a. Identify all of the farm's smolt suppliers. For each supplier, identify the type of smolt production system used (e.g. open, semi or closed systems) and submit this information to ASC (Appendix VI).	A. Review the farm's list of smolt suppliers. Confirm that the client submitted to ASC information on the type of production system used by smolt suppliers (Appendix VI).	y					Semi-closed system. Submitted ASC. Confirmed by ASC in mail 09.01.15	Semi-closed system. Submitted ASC. Confirmed by ASC in mail 09.01.15		

8.1	<p><b>Indicator:</b> Compliance with local and national regulations on water use and discharge, specifically providing permits related to water quality</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>b. Where legal authorisation related to water quality are required, obtain copies of smolt suppliers' permits.</p>	<p>B. Verify that client obtains copies of legal authorisation from smolt suppliers (if applicable).</p>					<p>Sogn og Fjordane Fylkeskommune dt. 24.06.13 for Haukå Location id.nr 13486 for 7,5 mill smolt. Max 780t MT - 300 MTB. No additional cleaning requirements for discharge water. NVE permit on abstraction, dt. 20.12.11 - Max water use 20 000 l/min. Summer 100 l/s and 50 l/s minimum residual. NfSA permit dt. 16.04.13. Fylkesmannen Sogn og Fjordane discharge permit dt. 28.02.12. Max feed use 940 MT and max 611 MTB. 70% reduction of SS and 60% organic.</p>	<p>Sogn og Fjordane Fylkeskommune farming permit dt. 05.10.10 for Signa Location Max 300 MT id.nr 12165. for 2,5 mill smolt. No additional cleaning requirements for discharge water. NVE permit on abstraction, dt. 19.07.2010 - Max water use 20 000 l/min 10 000 l/min minimum residual. NfSA permit dt. 24.05.2013. Fylkesmannen I Sogn og Fjordane discharge permit dt. 24.09.10. Max 300 MT production, 50% reduction of SS and 20% organic.</p>
		<p>c. Obtain records from smolt suppliers showing monitoring and compliance with discharge laws, regulations, and permit requirements as required.</p>	<p>C. Verify that farm obtains records from smolt suppliers to show compliance with discharge laws, regulations, and permit requirements.</p>					<p>NfSA inspection report dt. 01.04.14, all issues closed and CA approved 29.01.15 NC system documents in TQM. Records show no registration of NC given from authorize inspections.</p>	<p>NfSA inspection report dt. 18.09.14, all issues closed and CA approval timeline 03.03.15 NC system documents in TQM. Records show no registration of NC given from authorize inspections.</p>
		-	<p>D. Verify that farm keeps records to show how smolt suppliers comply with regulations on discharge and applicable permitting requirements related to water quality.</p>					<p>Records show no indication of noncompliance</p>	<p>Records show no indication of noncompliance</p>
8.2	<p><b>Indicator:</b> Compliance with labor laws and regulations</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Obtain declarations from smolt suppliers affirming compliance with labor laws and regulations.</p>	<p>A. Verify farm obtains declaration from smolt suppliers.</p>					<p>Internal statement presented (Code of conduct) an "Personalguiden" internal handbook (online) on labor issues. With internal rules and public regulations. MH mob. Phone app. for reporting/communicating e.g OHAS issues. Internal OHAS inspections performed twice a year, included elected employee representative.</p>	<p>Internal statement presented (Code of conduct) an "Personalguiden" internal handbook (online) on labor issues. With internal rules and public regulations. MH mob. Phone app. for reporting/communicating e.g OHAS issues. Internal OHAS inspections performed twice a year, included elected employee representative.</p>
		<p>b. Keep records of supplier inspections for compliance with national labor laws and codes (only if such inspections are legally required in the country of operation; see 1.1.3a)</p>	<p>B. Verify that farm obtains inspection records from suppliers (as applicable).</p>					<p>MH OHAS coordinator states no inspections relating to labour conditions/issues has been held by authorities.</p>	<p>MH OHAS coordinator states no inspections relating to labour conditions/issues has been held by authorities.</p>
Standards related to Principle 2		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>					
<p>Note: If the smolt facility has previously undertaken an independent assessment of biodiversity impact (e.g. as part of the regulatory permitting process), the farm may obtain and use such documents as evidence to demonstrate compliance with Indicator 8.3 as long as all components are covered.</p>									

<p>8.3</p> <p><b>Indicator:</b> Evidence of an assessment of the farm's potential impacts on biodiversity and nearby ecosystems that contains the same components as the assessment for grow-out facilities under 2.4.1</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>		<p>a. Obtain from the smolt supplier(s) a documented assessment of the smolt site's potential impact on biodiversity and nearby ecosystems. The assessment must address all components outlined in Appendix I-3.</p>	<p>A. Review the assessment to confirm that it complies with all components outlined in Appendix I-3.</p>				<p>Miljøovervåking - resipient survey report nr 1513 dt. 24.02.12 performed by Rådgivende Biologer (www.radgivende-biologer.no) result good. Internal Risk Analysis. Site RA ID 34942 consider Environmental risks with contingency plans and references to relevant public regulations and national legislation.</p>	<p>Miljøovervåking - survey resipient survey report nr 1654-13 dt. 04.04.14 performed by Fishguard result very good. Internal Risk Analysis. Rådgivende Biologer environmental assessment/konsekvensutredning report nr. 1217 dt.15.07.09 Site RA ID 34942 consider Environmental risks with contingency plans and references to relevant public regulations and national legislation.</p>
		<p>b. Obtain from the smolt supplier(s) a declaration confirming they have developed and are implementing a plan to address potential impacts identified in the assessment.</p>	<p>B. Review declaration.</p>				<p>Miljøovervåking - resipient survey report nr 1513 dt. 24.02.12 performed by Rådgivende Biologer (www.radgivende-biologer.no) result good. Internal Risk Analysis. Site RA ID consider Environmental risks with contingency plans and references to relevant public regulations and national legislation.</p>	<p>Miljøovervåking - survey resipient survey report nr 1654-13 dt. 04.04.14 performed by Fishguard result very good. Internal Risk Analysis. Rådgivende Biologer environmental assessment/konsekvensutredning report nr. 1217 dt.15.07.09 Site RA ID consider Environmental risks with contingency plans and references to relevant public regulations and national legislation.</p>
<p>8.4</p> <p><b>Indicator:</b> Maximum total amount of phosphorus released into the environment per metric ton (mt) of fish produced over a 12-month period (see Appendix VIII-1)</p> <p><b>Requirement:</b> 5 kg/mt of fish produced over a 12-month period; within three years of publication of the SAD standards, 4 kg/mt of fish produced over a 12-month period</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p><b>Instruction to Clients for Indicator 8.4 - Calculating Total Phosphorus Released per Ton of Fish Produced</b> Farms must confirm that each of their smolt suppliers complies with the requirement of indicator 8.4. This specifies the maximum amount of phosphorus that a smolt production facility can release into the environment per metric ton (mt) of fish produced over a 12-month period. The requirement is set at 5 kg/mt for the first three years from date of publication of the ASC Salmon Standard (i.e. from June 13, 2012 until June 12, 2015), dropping to 4 kg/mt thereafter. The calculation of total phosphorus released is made using a "mass balance" approach. Detailed instructions and formulas are given in Appendix VIII-1.</p> <p>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.</p>	<p>a. Obtain records from smolt suppliers showing amount and type of feeds used for smolt production during the past 12 months.</p>	<p>A. Verify that farm has records for feeds used by smolt suppliers over the relevant time period.</p>				<p>2013 MHN Miljørapport: 328 068kg feed for calendar yr 2013.</p>	<p>2013 MHN Miljørapport: 148 877 kg feed for calendar yr 2013.</p>
		<p>b. For all feeds used by the smolt suppliers (result from 8.4a), keep records showing phosphorus content as determined by chemical analysis or based on feed supplier declaration (Appendix VIII-1).</p>	<p>B. Verify that farm has records showing that smolt supplier determined phosphorus content in feeds.</p>				<p>Declaration per feed type and particle size from feed supplier. (Values for different feed types ranging from 1,25% to 1,50 % phosphorus content</p>	<p>Declaration per feed type and particle size from feed supplier. (Values for different feed types ranging from 1,25% to 1,50 % phosphorus content</p>
		<p>c. Using the equation from Appendix VIII-1 and results from 8.4a and b, calculate the total amount of phosphorus added as feed during the last 12 months of smolt production.</p>	<p>C. Confirm that calculations are done according to Appendix VIII-1.</p>				<p>Calculated: 4724 kg total amount of phosphorus added as feed.</p>	<p>Calculated: 2143 kg total amount of phosphorus added as feed.</p>

		d. Obtain from smolt suppliers records for stocking, harvest and mortality which are sufficient to calculate the amount of biomass produced (formula in Appendix VIII-1) during the past 12 months.	D. Verify that farm obtained from the smolt supplier all records needed to calculate the amount of biomass produced during the past 12 months.					Records for stocking, harvest and mortality which are sufficient to calculate the amount of biomass produced are available. 275 935 kg biomass production.	Records for stocking, harvest and mortality which are sufficient to calculate the amount of biomass produced are available. 164 494 kg biomass production.	
		e. Calculate the amount of phosphorus in fish biomass produced (result from 8.4d) using the formula in Appendix VIII-1.	E. Confirm that calculations are done according to Appendix VIII-1.					1187 kg phosphorus in fish biomass produced. Calculations are correct.	707 kg phosphorus in fish biomass produced. Calculations are correct.	
		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.	F. As applicable, verify farm has records showing that smolt supplier determined the amount of phosphorus removed from the system as sludge.					No sludge produced.	No sludge produced.	
		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.	G. Review calculations to confirm that the farm's smolt supplier(s) do not exceed requirements for release of phosphorus.					3537 kg phosphorus released Calculated: 12,86 kg P / mt VR accepted by ASC 09.14	1436 kg phosphorus released Calculated: 8,75 kg P / mt VR accepted by ASC 09.14	
Standards related to Principle 3										
		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>						
8.5	<p><b>Indicator:</b> If a non-native species is being produced, the species shall have been widely commercially produced in the area prior to the publication [156] of the SAD standards</p> <p><b>Requirement:</b> Yes [157]</p> <p><b>Applicability:</b> All Smolt Producers except as noted in [157]</p>	a. Obtain written evidence showing whether the smolt supplier produces a non-native species or not. If not, then indicator 8.5 does not apply.	A. Verify that the farm has evidence that their smolt suppliers do not produce non-native species. If the farm can show that smolt suppliers produce only native species, then indicator 8.5 does not apply.					S. salar native to region.	S. salar native to region.	
		b. Provide the farm with documentary evidence that the non-native species was widely commercially produced in the area before publication of the SAD Standard. (See definition of area under 3.2.1.).	B. If applicable, verify the farm has evidence from smolt suppliers confirming when the non-native species was first brought into wide commercial production in the area where production is occurring now.						S. salar native to region.	S. salar native to region.
		c. If the smolt supplier cannot provide the farm with evidence for 8.5b, provide documentary evidence that the farm uses only 100% sterile fish.	C. Review evidence to confirm that smolt suppliers use only 100% sterile fish.						S. salar native to region.	S. salar native to region.
		d. If the smolt supplier cannot provide the farm with evidence for 8.5b or 8.5c, provide documented evidence for each of the following: 1) non-native species are separated from wild fish by effective physical barriers that are in place and well maintained; 2) barriers ensure there are no escapes of reared fish specimens that might survive and subsequently reproduce; and 3) barriers ensure there are no escapes of biological material that might survive and subsequently reproduce.	D. Review evidence that the farm's smolt suppliers comply with each point raised in 8.5d.						S. salar native to region.	S. salar native to region.
		e. Retain evidence as described in 8.5a-d necessary to show compliance of each facility supplying smolt to the farm.	E. Verify that farm retains evidence of compliance by all smolt suppliers.						S. salar native to region.	S. salar native to region.
Footnote	[156] Publication: Refers to the date when the final standards and accompanying guidelines are completed and made publicly available. This definition of publication applies throughout this document.									
Footnote	[157] Exceptions shall be made for production systems that use 100 percent sterile fish or systems that demonstrate separation from the wild by effective physical barriers that are in place and well-maintained to ensure no escapes of reared specimens or biological material that might survive and subsequently reproduce.									
8.6	<p><b>Indicator:</b> Maximum number of escapees [158] in the most recent production cycle</p> <p><b>Requirement:</b> 300 fish [159]</p> <p><b>Applicability:</b> All Smolt Producers except as noted in [159]</p>	a. Obtain documentary evidence to show that smolt suppliers maintained monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapees.	A. Review the farm's records for escape monitoring by the smolt supplier to confirm completeness and accuracy of information.					Internal Risk Assessment with instruction for registration and reporting. No incident reported. Verified by Fisheries Directorate escape incidents overview (www.F.Dir.no)	Internal Risk Assessment with instruction for registration and reporting. No incident reported. Verified by Fisheries Directorate escape incidents overview (www.F.Dir.no)	
		b. Using smolt supplier records from 8.6a, determine the total number of fish that escaped. Verify that there were fewer than 300 escapees from the smolt production facility in the most recent production cycle.	B. Review the farm's calculation and confirm that the smolt supplier complied with the requirement.						No incident reported. Verified by Fisheries Directorate escape incidents overview (www.F.Dir.no)	No incident reported. Verified by Fisheries Directorate escape incidents overview (www.F.Dir.no)
		c. Inform smolt suppliers in writing that monitoring records described in 8.6a must be maintained for at least 10 years beginning with the production cycle for which the farm is first applying for certification (necessary for farms to be eligible to apply for the exception noted in [159]).	C. Confirm that the farm informs their smolt suppliers that they must maintain records for escape monitoring for > 10 years.						Internal smolt supplier. Common QM system. All records in akvaformer	Internal smolt supplier. Common QM system. All records in akvaformer
		d. If an escape episode occurs at the smolt production facility (i.e. an incident where > 300 fish escaped), the farm may request a rare exception to the Standard [159]. Requests must provide a full account of the episode and must document how the smolt producer could not have predicted the events that caused the escape episode.	D. Review the farm's request for a rare exception to the Standard for an escape event at the smolt production site. Confirm no prior exceptional events were documented during the previous 10 years, or since the date of the start of the production cycle during which the farm first applied for certification. An example of an exceptional event is vandalization of the farm. Events that are not considered exceptional include failures in moorings due to bad weather and boat traffic incidents due to poor marking of the smolt production facility.						Internal Risk Assessment with instruction for registration and reporting. No incident reported. Verified by Fisheries Directorate escape incidents overview (www.F.Dir.no)	Internal Risk Assessment with instruction for registration and reporting. No incident reported. Verified by Fisheries Directorate escape incidents overview (www.F.Dir.no)
Footnote	[158] Farms shall report all escapes; the total aggregated number of escapees per production cycle must be less than 300 fish.									
Footnote	[159] A rare exception to this standard may be made for an escape event that is clearly documented as being outside of the farm's control. Only one such exceptional episode is allowed in a 10-year period for the purposes of this standard. The 10-year period starts at the beginning of the production cycle for which the farm is applying for certification. The farmer must demonstrate that there was no reasonable way to predict the events that caused the episode. Extreme weather (e.g., 100-year storms) or accidents caused by farms located near high-traffic waterways are not intended to be covered under this exception.									

8.7	<p><b>Indicator:</b> Accuracy [160] of the counting technology or counting method used for calculating the number of fish</p> <p><b>Requirement:</b> ≥98%</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Obtain records showing the accuracy of the counting technology used by smolt suppliers. Records must include copies of spec sheets for counting machines and common estimates of error for hand-counts.</p>	<p>A. Confirm that the farm keeps records of counting accuracy for the counting technology or method used on site at stocking and harvest.</p>					VAKI Macro stating 99% accuracy. Verified by provider specifications	Bioscan electronic counting/registration system documents presented stating 99-100% accuracy. Verified by provider specifications.	
		<p>B. Review records to verify that accuracy of the smolt supplier's counting technology or counting method is ≥ 98%.</p>	<p>B. Verify that farm has records showing that the accuracy of the smolt supplier's counting technology or counting method is ≥ 98%.</p>						VAKI Macro stating 99% accuracy. Verified by provider specifications	Bioscan electronic counting/registration system documents presented stating 99-100% accuracy. Verified by provider specifications
Footnote		[160] Accuracy shall be determined by the spec sheet for counting machines and through common estimates of error for any hand counts.								
Standards related to Principle 4										
		<b>Compliance Criteria (Required Client Actions):</b>			<b>Auditor Evaluation (Required CAB Actions):</b>					
8.8	<p><b>Indicator:</b> Evidence of a functioning policy for proper and responsible treatment of non-biological waste from production (e.g., disposal and recycling)</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. From each smolt supplier obtain a policy which states the supplier's commitment to proper and responsible treatment of non-biological waste from production. It must explain how the supplier's policy is consistent with best practice in the area of operation.</p>	<p>A. Confirm that the farm has relevant policies on file from each smolt supplier and review those policies to verify the farm's suppliers are in compliance with the requirement.</p>					MH internal document "Avfallsplan Haukås" with authorised service provider SAR defined, type of waste defined, domestic, special waste/chemicals, for recycling etc. Overview over produced waste in annual Environmental Report (Miljørapport 2013). Internal Procedure ID 33341 on waste policies.	MH internal document "Avfallsplan Sygna" with authorised service provider Simas defined, type of waste defined, domestic, special waste/chemicals, for recycling etc. Overview over produced waste in annual Environmental Report (Miljørapport 2013). Internal Procedure ID 33434 on waste policies.	
8.9	<p><b>Indicator:</b> Presence of an energy-use assessment verifying the energy consumption at the smolt production facility (see Appendix V subsection 1 for guidance and required components of the records and assessment)</p> <p><b>Requirement:</b> Yes, measured in kilojoule/mt fish/production cycle</p> <p><b>Applicability:</b> All Smolt Producers</p>	Note: see instructions for Indicator 4.6.1.								
		<p>a. Obtain records from the smolt supplier for energy consumption by source (fuel, electricity) at the supplier's facility throughout each year.</p>	<p>A. Verify that the farm obtains records for energy consumption from smolt suppliers.</p>						Records OK	Records OK
		<p>b. Confirm that the smolt supplier calculates total energy consumption in kilojoules (kj) during the last year.</p>	<p>B. Verify that the farm has reviewed the supplier's calculations for completeness and accuracy.</p>					5 763 974 kj/purchased electricity and 935 541 kj Oil 6 669 515 kj(scope 1&2)	2 722 698 kj/purchased electricity and 27 360 kj Oil 2 750 058kj(scope 1&2)	
		<p>c. Obtain records to show the smolt supplier calculated the total weight of fish in metric tons (mt) produced during the last year.</p>	<p>C. Verify that the farm has supplier records for total weight of fish produced during the last year.</p>					275,935 MT BM produced	164,494 MT BM produced	
		<p>d. Confirm that the smolt supplier used results from 8.9b and 8.9c to calculate energy consumption on the supplier's facility as required and that the units are reported as kilojoule/mt fish/production cycle.</p>	<p>D. Verify that the farm has records to show that the smolt supplier's calculations are complete and accurate.</p>					24 279 kj/MT BM produced	16 718 kj/MT BM produced	
<p>e. Obtain evidence to show that smolt supplier has undergone an energy use assessment in compliance with requirements of Appendix V-1. Can take the form of a declaration detailing a-e.</p>	<p>E. Verify that the farm has evidence that its smolt supplier(s) has undergone an energy use assessment verifying the supplier's energy consumption.</p>					Internal Environmental Report 2013 from Haukå	Internal Environmental Report 2013 from Ytre standal			
	<p><b>Indicator:</b> Records of greenhouse gas (GHG [161]) emissions [162]</p>	Note: see instructions for Indicator 4.6.2.								
		<p>a. Obtain records of greenhouse gas emissions from the smolt supplier's facility.</p>	<p>A. Verify that the farm obtains records of GHG emissions from smolt suppliers.</p>					Records OK	Records OK	
		<p>b. Confirm that, on at least an annual basis, the smolt supplier calculates all scope 1 and scope 2 GHG emissions in compliance with Appendix V-1.</p>	<p>B. Verify that the farm confirms that calculations by smolt suppliers are done annually and in compliance with Appendix V-1.</p>					Scope 1 on farm generated energy= 75 500 Kg CO 2 (conv.factor is 2.76) Scope 2 emission (conv.factor 0,42) = 672 464 kg CO2. Total Scope 1+2 = 747 963 Kg CO2	Scope 1 on farm generated energy= 2308 Kg CO 2 (conv.factor is 2,76) Scope 2 emission (conv.factor 0,42) = 317 648 kg CO2. Total Scope 1+2 = 319 856 Kg CO2	



8.10	<p>at the smolt production facility and evidence of an annual GHG assessment (See Appendix V, subsection 1)</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>c. For GHG calculations, confirm that the smolt supplier selects the emission factors which are best suited to the supplier's operation. Confirm that the supplier documents the source of the emissions factors.</p>	<p>C. Verify that the farm has records from smolt suppliers for all emissions factors used and their sources.</p>					<p>Scope 1 on farm generated energy= 75 500 Kg CO<sub>2</sub> (conv.factor is 2,76) Scope 2 emission (conv.factor 0,42) = 672 464 kg CO<sub>2</sub>. Total Scope 1+2 = 747 963 Kg CO<sub>2</sub></p>	<p>Scope 1 on farm generated energy= 2208 Kg CO<sub>2</sub> (conv.factor is 2,76) Scope 2 emission (conv.factor 0,42) = 317 648 kg CO<sub>2</sub>. Total Scope 1+2 = 319 856 Kg CO<sub>2</sub></p>
		<p>d. For GHG calculations involving conversion of non-CO<sub>2</sub> gases to CO<sub>2</sub> equivalents, confirm that the smolt suppliers specify the Global Warming Potential (GWP) used and its source.</p>	<p>D. Verify that the farm has records from smolt suppliers for all GWPs used and their sources.</p>				NA	CO <sub>2</sub> used	CO <sub>2</sub> used
		<p>e. Obtain evidence to show that the smolt supplier has undergone a GHG assessment in compliance with requirements Appendix V-1 at least annually.</p>	<p>E. Verify that the farm has evidence that smolt suppliers undergo a GHG assessment annually and that the methods used are in compliance with requirements of Appendix V-1.</p>				NA	Calculations and assessment provided. Data conversion: Data from NVE, BP and Statoil EnergiLink.	Calculations and assessment provided. Data conversion: Data from NVE, BP and Statoil EnergiLink.
Footnote	[161] For the purposes of this standard, GHGs are defined as the six gases listed in the Kyoto Protocol: carbon dioxide (CO <sub>2</sub> ); methane (CH <sub>4</sub> ); nitrous oxide (N <sub>2</sub> O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF <sub>6</sub> ).								
Footnote	[162] GHG emissions must be recorded using recognized methods, standards and records as outlined in Appendix V.								
<b>Standards related to Principle 5</b>									
		<b>Compliance Criteria (Required Client Actions):</b>	<b>Auditor Evaluation (Required CAB Actions):</b>						
8.11	<p><b>Indicator:</b> Evidence of a fish health management plan, approved by the designated veterinarian, for the identification and monitoring of fish diseases and parasites</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Obtain a copy of the supplier's fish health management plan for the identification and monitoring of fish disease and parasites.</p>	<p>A. Verify that the farm obtains copies of fish health management plans from smolt suppliers.</p>					<p>Regional Fish Health Plan ID 24886 and Local Fish Health. Plan covers all aspect of relevant diseases and parasite diagnostics and control measures. Internal veterinary services, responsible veterinarian, Approved and signed by veterinarian dt 21.01.15 Sven Amund Skotheim</p>	<p>Regional Fish Health Plan ID 24886 and Local Fish Health. Plan covers all aspect of relevant diseases and parasite diagnostics and control measures. Internal veterinary services, responsible veterinarian, Approved and signed by veterinarian dt 20.01.15 Sven Amund Skotheim</p>
		<p>b. Keep documentary evidence to show that the smolt supplier's health plans were approved by the supplier's designated veterinarian.</p>	<p>B. Verify that farm has evidence that supplier's fish health management plan was approved by designated veterinarian.</p>					<p>Regional Fish Health Plan ID 24886 and Local Fish Health. Plan covers all aspect of relevant diseases and parasite diagnostics and control measures. Internal veterinary services, responsible veterinarian, Approved and signed by veterinarian dt 21.01.15 Sven Amund Skotheim</p>	<p>Regional Fish Health Plan ID 24886 and Local Fish Health. Plan covers all aspect of relevant diseases and parasite diagnostics and control measures. Internal veterinary services, responsible veterinarian, Approved and signed by veterinarian dt 20.01.15 Sven Amund Skotheim</p>
	<p><b>Indicator:</b> Percentage of fish that are vaccinated for selected diseases that are known to present a significant risk in the region and for which an effective vaccine exists [163]</p>	<p>a. Maintain a list of diseases that are known to present a significant risk in the region, developed by farm veterinarian and supported by scientific evidence.</p>	<p>A. Review list and the supporting analysis.</p>					<p>In FHMP/VHP (Regional and Local/Site) type of disease and control monitoring strategies, vaccines/pathogens type/product name.</p>	<p>In FHMP/VHP (Regional and Local/Site) type of disease and control monitoring strategies, vaccines/pathogens type/product name.</p>
		<p>b. Maintain a list of diseases for which effective vaccines exist for the region, developed by the farm veterinarian and supported by scientific evidence.</p>	<p>B. Review list and the supporting analysis.</p>					<p>In FHMP/VHP (Regional and Local/Site) type of disease and control monitoring strategies, vaccines/pathogens type/product name.</p>	<p>In FHMP/VHP (Regional and Local/Site) type of disease and control monitoring strategies, vaccines/pathogens type/product name.</p>
		<p>c. Obtain from the smolt supplier(s) a declaration detailing the vaccines the fish received.</p>	<p>C. Verify client has the list from the smolt supplier(s).</p>					<p>In smolt CV and Akvafarmer with dates and type for smolts for site, 100% vaccination is also a legal requirement controlled by NFSA.</p>	<p>In smolt CV and Akvafarmer with dates and type for smolts for site, 100% vaccination is also a legal requirement controlled by NFSA.</p>

8.12	<p><b>Requirement:</b> 100%</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>d. Demonstrate, using the lists from 8.12a-c above, that all salmon on the farm received vaccination against all selected diseases known to present a significant risk in the regions for which an effective vaccine exists.</p>	<p>D. Cross-check lists to verify that all required vaccines were received by all batches of smolt received by the farm during the current production cycle.</p>					<p>100% vaccinated according to national legislation. Verified in smolt CV and Akvafarmer. Verified towards registrations in FHP / CV / Akvafarmer. Internal supplier: All fish vaccinated with vaccine type AJ-micro-6 and Novrax compact PD, Norwax Yersiniois</p>	<p>100% vaccinated according to national legislation. Verified in smolt CV and Akvafarmer. Verified towards registrations in FHP / CV / Akvafarmer. Internal supplier: All fish vaccinated with vaccine type AJ-micro-6 and Norwax compact PD</p>
Footnote	<p>[163] The farm's designated veterinarian is responsible for undertaking and providing written documentation of the analysis of the diseases that pose a risk in the region and the vaccines that are effective. The veterinarian shall determine which vaccinations to use and demonstrate to the auditor that this decision is consistent with the analysis.</p>								
8.13	<p><b>Indicator:</b> Percentage of smolt groups [164] tested for select diseases of regional concern prior to entering the grow-out phase on farm</p> <p><b>Requirement:</b> 100%</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p><b>Instruction to Clients for Indicator 8.13-- Testing of Smolt for Select Diseases</b> The farm is responsible for developing and maintaining a list of diseases of regional concern for which each smolt group should be tested. The list of diseases shall include diseases that originate in freshwater and are proven or suspected to occur in seawater (and for which seawater fish-to-fish transmission is a concern).</p> <p>The designated veterinarian <u>to the smolt supplier</u> is required to evaluate, based on scientific criteria and publicly available information, which diseases should be tested for. This analysis shall include an evaluation of whether clinical disease or a pathogen carrier state in fresh water is deemed to have a negative impact on the grow-out phase, thereby disqualifying a smolt group from being transferred. The analysis must be available to the CAB upon request.</p> <p>Note: A "smolt group" is defined as a population that shares disease risk, including environment, husbandry, and host factors that might contribute to sharing disease agents for each group.</p>	<p>a. Obtain from the smolt supplier a list of diseases of regional concern for which smolt should be tested. List shall be supported by scientific analysis as described in the Instruction above.</p>	<p>A. Review list. If auditor has questions about the list, request and review supporting analysis.</p>				<p>VHP and Veterinary visits: lists and documented according to local VHP predetermined sampling and visits regime defined in VHP plan.</p>	<p>VHP and Veterinary visits: lists and documented according to local VHP predetermined sampling and visits regime defined in VHP plan.</p>
		<p>b. Obtain from the smolt supplier(s) a declaration and records confirming that each smolt group received by the farm has been tested for the diseases in the list (8.13a).</p>	<p>B. Verify records show that each smolt group was tested prior to entering the water at the farm (the grow-out site).</p>					<p>Veterinary visits according to VHP. Smolt group health certificate dt 07.02.14 Veterinarian Sven Amund Skotheim. VHI Report, dt.30.04.14 Screening HSS signed Vet. Hege Helberg</p>	<p>Veterinary visits according to VHP. Smolt group health certificate dt 23.04.14 Veterinarian Sven Amund Skotheim. VHI Report, dt.03.02.14 Histopatolog analyse signed Vet. Hanne Nilsen</p>
Footnote	<p>[164] A smolt group is any population that shares disease risk, including environment, husbandry and host factors that might contribute to sharing disease agents for each group. Only diseases that are proven, or suspected, as occurring in seawater (and for which seawater fish-to-fish transmission is a concern) but originating in freshwater should be on the list of diseases tested. The designated veterinarian to the smolt farm is required to evaluate, based on scientific criteria and publicly available information, which diseases should be tested for. This analysis shall include an evaluation of whether clinical disease or a pathogen carrier state in fresh water is deemed to have a negative impact on the grow-out phase, thereby disqualifying a smolt group from being transferred. A written analysis must be available to the certifier on demand.</p>								
8.14	<p><b>Indicator:</b> Detailed information, provided by the designated veterinarian, of all chemicals and therapeutants used during the smolt production cycle, the amounts used (including grams per ton of fish produced), the dates used, which group of fish were treated and against which diseases, proof of proper dosing and all disease and pathogens detected on the site</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Obtain from the smolt supplier(s) a detailed record of all chemical and therapeutant use for the fish sold to the farm that is signed by their veterinarian and includes: - name of the veterinarian prescribing treatment; - product name and chemical name; - reason for use (specific disease) - date(s) of treatment; - amount (g) of product used; - dosage; - mt of fish treated; - the WHO classification of antibiotics (also see note under 5.2.8); and - the supplier of the chemical or therapeutant.</p>	<p>A. Review records of chemical and therapeutant use for completeness and confirm the records were signed by a qualified veterinarian.</p>					<p>Therapeutant used, verified in fish CV last updated 24.04.14 also documented in Akvafarmer according to FHP - type, producer and batch. Prescription signed by responsible veterinary ref.: FHB/ Vaccines produced by Pharmaq and Novax. Therapeutant used and documented on fishgroup. Formalin, Buffodine, Finquel.</p>	<p>Therapeutant used, verified in fish CV last updated 23.04.14 also documented in Akvafarmer according to FHP - type, producer and batch. Prescription signed by responsible veterinary ref.: FHB/ Vaccines produced by Pharmaq and Novax. Therapeutant used and documented on fishgroup. Formalin, Buffodine, Finquel.</p>
		<p>a. Provide to the smolt supplier the list (see 5.2.2a) of therapeutants, including antibiotics and chemicals, that are proactively banned for use in food fish for the primary salmon producing and importing countries listed in [166].</p>	<p>A. Verify list has been provided and is consistent with the list in 5.2.2a.</p>					<p>MH Positive list (allowed and banned substances) from TQM with marked acceptance status and levels defined.</p>	<p>MH Positive list (allowed and banned substances) from TQM with marked acceptance status and levels defined.</p>

8.15	<p><b>Indicator:</b> Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [165] in any of the primary salmon producing or importing countries [166]</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>b. Inform smolt supplier that the treatments on the list cannot be used on fish sold to a farm with ASC certification.</p>	<p>B. Verify that the farm informed the smolt supplier.</p>					<p>MH Positive list (allowed and banned substances) from TQM with market acceptance status and levels defined. Internal smolt supplier. Internal MH document also available for internal smolt producers. Smolt suppliers informed.</p>	<p>MH Positive list (allowed and banned substances) from TQM with market acceptance status and levels defined. Internal smolt supplier. Internal MH document also available for internal smolt producers. Smolt suppliers informed.</p>
		<p>c. Compare therapeutant records from smolt supplier (8.14) to the list (8.15a) and confirm that no therapeutants appearing on the list (8.15a) were used on the smolt purchased by the farm.</p>	<p>C. Review farm's comparison to verify accuracy.</p>					<p>Vaccines in fish CV and AquaFarmer - type and producer and batch. Anesthetics and antiparasite treatment formilin, ok according to list.</p>	<p>Vaccines in fish CV and AquaFarmer - type and producer and batch. Anesthetics and antiparasite treatment formilin, ok according to list.</p>
Footnote	[165] "Banned" means proactively prohibited by a government entity because of concerns around the substance.								
Footnote	[166] For purposes of this standard, those countries are Norway, the UK, Canada, Chile, the United States, Japan and France.								
8.16	<p><b>Indicator:</b> Number of treatments of antibiotics over the most recent production cycle</p> <p><b>Requirement:</b> ≤ 3</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Obtain from the smolt supplier records of all treatments of antibiotics (see 8.14a).</p>	<p>A. Verify farm obtains treatment records from smolt supplier (See also 8.14A).</p>					<p>NO AB used. Seen fish CV with all treatments identified.</p>	<p>NO AB used. Seen fish CV with all treatments identified.</p>
		<p>b. Calculate the total number of treatments of antibiotics from their most recent production cycle.</p>	<p>B. Confirm that the smolt supplier used ≤ 3 treatments of antibiotics over the most recent production cycle.</p>					<p>NO AB used. Seen fish CV with all treatments identified.</p>	<p>NO AB used. Seen fish CV with all treatments identified.</p>
8.17	<p><b>Indicator:</b> Allowance for use of antibiotics listed as critically important for human medicine by the WHO [167]</p> <p><b>Requirement:</b> None [168]</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>a. Provide to smolt supplier(s) a current version of the WHO list of antimicrobials critically and highly important for human health [167].</p>	<p>A. Confirm that the farm provided smolt supplier with the current copy of the WHO list of antibiotics.</p>					<p>MH Positive list (allowed and banned substances - strictest marked requirements used) from TQM with marked acceptance status and levels defined.; against WHO critical list.</p>	<p>MH Positive list (allowed and banned substances - strictest marked requirements used) from TQM with marked acceptance status and levels defined.; against WHO critical list.</p>
		<p>b. Inform smolt supplier that the antibiotics on the WHO list (8.17a) cannot be used on fish sold to a farm with ASC certification.</p>	<p>B. Verify that the farm informed the smolt supplier.</p>					<p>MH Positive list (allowed and banned substances) from TQM with market acceptance status and levels defined. Internal MH document also available for internal smolt producers. Smolt suppliers informed.</p>	<p>MH Positive list (allowed and banned substances) from TQM with market acceptance status and levels defined. Internal MH document also available for internal smolt producers. Smolt suppliers informed.</p>
		<p>c. Compare smolt supplier's records for antibiotic usage (8.14, 8.15a) with the WHO list (8.17a) to confirm that no antibiotics listed as critically important for human medicine by the WHO were used on fish purchased by the farm.</p>	<p>C. Review farm's comparison to verify accuracy.</p>					<p>NO AB used. Seen fish CV with all treatments identified and compared to WHO critical list.</p>	<p>NO AB used. Seen fish CV with all treatments identified and compared to WHO critical list.</p>
Footnote	[167] The 3rd edition of the WHO list of critically and highly important antimicrobials was released in 2009 and is available at: <a href="http://www.who.int/foodborne_disease/resistance/CIA_3.pdf">http://www.who.int/foodborne_disease/resistance/CIA_3.pdf</a> .								
Footnote	[168] If the antibiotic treatment is applied to only a portion of the pens on a farm site, fish from pens that did not receive treatment are still eligible for certification.								
8.18	<p><b>Indicator:</b> Evidence of compliance [169] with the OIE Aquatic Animal Health Code (or inform the supplier how to access it from the internet).</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>Note: see instructions for Indicator 5.4.3 regarding evidence of compliance with the OIE Aquatic Animal Health Code.</p>							
		<p>a. Provide the smolt supplier with a current version of the OIE Aquatic Animal Health Code (or inform the supplier how to access it from the internet).</p>	<p>A. Verify that farm has provided the smolt supplier with copies of (or access to) the OIE Aquatic Animal Health Code.</p>					<p>OIE list in internal MH system. Procedures and instructions in common MH system.</p>	<p>OIE list in internal MH system. Procedures and instructions in common MH system.</p>
		<p>b. Inform the supplier that an ASC certified farm can only source smolt from a facility with policies and procedures that ensure that its smolt production practices are compliant with the OIE Aquatic Animal Health Code.</p>	<p>B. Confirm that the farm informed its smolt supplier(s) that any supplier to an ASC certified farm must show compliance with the OIE Aquatic Animal Health Code.</p>					<p>OIE list in internal MH system. Procedures and instructions in common MH system.</p>	<p>OIE list in internal MH system. Procedures and instructions in common MH system.</p>
		<p>c. Obtain a declaration from the supplier stating their intent to comply with the OIE code and copies of the smolt suppliers policies and procedures that are relevant to demonstrate compliance with the OIE Aquatic Animal Health Code.</p>	<p>C. Review the smolt supplier's declaration and supporting policies and procedures to verify compliance with the OIE Aquatic Animal Health Code.</p>					<p>OIE list in internal MH system. Procedures and instructions in common MH system.</p>	<p>OIE list in internal MH system. Procedures and instructions in common MH system.</p>
Footnote	[169] Compliance is defined as farm practices consistent with the intentions of the Code, to be further outlined in auditing guidance. For purposes of this standard, this includes an aggressive response to detection of an exotic OIE-notifiable disease on the farm, which includes depopulating the infected site and implementation of quarantine zones in accordance with guidelines from OIE for the specific pathogen. Exotic signifies not previously found in the area or had been fully eradicated (area declared free of the pathogen).								
Footnote	[170] OIE 2011. Aquatic Animal Health Code. <a href="http://www.oie.int/index.php?id=171">http://www.oie.int/index.php?id=171</a> .								
Standards related to Principle 6									
		<b>Compliance Criteria (Required Client Actions):</b>			<b>Auditor Evaluation (Required CAB Actions):</b>				
8.19	<p><b>Indicator:</b> Evidence of company-level policies and procedures in line with the labor standards under 6.1 to 6.11</p>	<p>a. Obtain copies of smolt supplier's company-level policies and procedures and a declaration of compliance with the labor standards under 6.1 to 6.11.</p>	<p>A. Verify that farm obtains copies of company-level policies and procedures from all of its smolt suppliers and a declaration of compliance.</p>					<p>Company documents apply; the internal Smolt supplier used.</p>	<p>Company documents apply; the internal Smolt supplier used.</p>

	<p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p>b. Review the documentation and declaration from 8.19a to verify that smolt supplier's policies and procedures are in compliance with the requirements of labor standards under 6.1 to 6.11.</p>	<p>B. Review supplier documents provided by the farm to verify compliance of the smolt supplier's policies and procedures with labor requirements.</p>	Y				Company documents apply; the internal Smolt supplier used.	Company documents apply; the internal Smolt supplier used.
<b>Standards related to Principle 7</b>									
		<b>Compliance Criteria (Required Client Actions):</b>		<b>Auditor Evaluation (Required CAB Actions):</b>					
8.20	<p><b>Indicator:</b> Evidence of regular consultation and engagement with community representatives and organizations</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	<p><b>Instruction to Clients for Indicator 8.20 - Consultation and Engagement with Community Representatives</b>  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.</p>							
		a. From each smolt supplier obtain documentary evidence of consultations and engagement with the community.	A. Verify that farm obtains required information from each smolt supplier.	Y				Meeting was organised 2015-01-20. Invitations and Minutes of meeting are provided.	Meeting was organised 2015-01-19. Invitations and Minutes of meeting are provided.
		b. Review documentation from 8.20a to verify that the smolt supplier's consultations and community engagement complied with requirements.	B. Review evidence for compliance.	Y				The documents were reviewed.	The documents were reviewed.
8.21	<p><b>Indicator:</b> Evidence of a policy for the presentation, treatment and resolution of complaints by community stakeholders and organizations</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	a. Obtain a copy of the smolt supplier's policy for presentation, treatment and resolution of complaints by community stakeholders and organizations.	A. Verify that farm obtains copies of supplier's complaints procedures from each of its smolt suppliers.	Y				Internal Smolt supplier used. Company procedures are used. See Principle 7.1.2.	Internal Smolt supplier used. Company procedures are used. See Principle 7.1.2.
8.22	<p><b>Indicator:</b> Where relevant, evidence that indigenous groups were consulted as required by relevant local and/or national laws and regulations</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	a. Obtain documentary evidence showing that the smolt supplier does or does not operate in an indigenous territory (to include farms that operate in proximity to indigenous or aboriginal people (see Indicator 7.2.1). If not then the requirements of 8.22 do not apply.	A. Review evidence to determine whether Indicator 8.22 is applicable to the farm's smolt supplier(s).	Y				It is communicated during the application processing to start the sites. No indigenous groups or aboriginal people are present in neighbourhood.	It is communicated during the application processing to start the sites. No indigenous groups or aboriginal people are present in neighbourhood.
		b. Obtain documentation to demonstrate that, as required by law in the jurisdiction: smolt supplier consulted with indigenous groups and retains documentary evidence (e.g. meeting minutes, summaries) to show how the process complies with 7.2.1b; OR smolt supplier confirms that government-to-government consultation occurred and obtains documentary evidence.	B. Verify that the smolt supplier complies with relevant requirements.					N/A	
8.23	<p><b>Indicator:</b> Where relevant, evidence that the farm has undertaken proactive consultation with indigenous communities</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers</p>	a. See results of 8.22a (above) to determine whether the requirements of 8.23 apply to the smolt supplier.	A. Review evidence to determine whether Indicator 8.23 is applicable to the farm's smolt supplier(s).					N/A	
		b. Where relevant, obtain documentary evidence that smolt suppliers undertake proactive consultations with indigenous communities.	B. Review documentary evidence to confirm that the smolt supplier has undertaken proactive consultations.					N/A	
<p align="center"><b>ADDITIONAL REQUIREMENTS FOR OPEN (NET-PEN) PRODUCTION OF SMOLT</b>  In addition to the requirements above, if the smolt is produced in an open system, evidence shall be provided that the following are met:</p>									
								NA	Indicators 8.24 through 8.31 Not Applicable
<p><b>Instruction to Clients for Indicators 8.24 through 8.31 - Requirements for Smolt Produced in Open Systems</b>  Client shall provide documentary evidence to the CAB about the production system(s) from which they source smolt. If smolt used by the farm are produced, for part or all of the growth phase from alevin to smolt, in open (net-pen) systems, indicators 8.24 - 8.31 are applicable.</p>									
								NA	Indicators 8.24 through 8.31 Not Applicable
8.24	<p><b>Indicator:</b> Allowance for producing or holding smolt in net pens in water bodies with native salmonids</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All Smolt Producers Using Open Systems</p>	<p><b>Scope of Exemption Allowed Under Indicator 8.24:</b>  For the first audit, farms that were stocked prior to the publication of the standard on June 13, 2012 may request an exemption, applicable for that production cycle, to the requirement under 8.24. A farm that sourced smolt that were produced in an open system (net pen) in a water body with native salmonids may request this exemption if:  1. the farm was stocked prior to June 13, 2012; and  2. the farm demonstrates through supporting evidence (e.g. purchasing agreement) that they will source smolt from a semi-closed or closed production system for their next production cycle.  If the CAB determines that the farm has fulfilled the above criteria, then an exemption may be granted and the farm may be awarded certification. However, no salmon products originating from a farm which utilizes this exemption shall be eligible to bear the ASC logo or otherwise claim to be an ASC-certified product until the farm can demonstrate that smolt were sourced in full compliance with Indicator 8.24. The CAB shall fully document the exemption in the audit report and explain how the farm has addressed any risks that may be associated with non-certified products entering into further certified chains of custody.  Native: native to the area and with a history of naturally occurring and also if intentionally stocked for restorative purposes. Areas with a combination of wild native and enhanced native populations are included.</p>							
		a. Obtain a declaration from the farm's smolt supplier stating whether the supplier operates in water bodies with native salmonids.	A. Verify that the farm obtains relevant declarations from its smolt supplier(s).						
		b. Request smolt suppliers to identify all water bodies in which they operate net pens for producing smolt and from which facilities they sell to the client.	B. Confirm that the farm obtains information on the water bodies in which its suppliers are operating net pens for smolt production.						
		c. For any water body identified in 8.24b as a source of smolt for the farm, determine if native salmonids are present by doing a literature search or by consulting with a reputable authority. Retain evidence of search results.	C. Review search results and cross-check against the other lines of evidence for salmonid distribution in the region (e.g. results from 3.1.5a).						
8.25	<p><b>Indicator:</b> Allowance for producing or holding smolt in net pens in any water body</p> <p><b>Requirement:</b> Permitted until five years from publication of the</p>	a. Take steps to ensure that by June 13, 2017 the farm does not source smolt that was	A. Prior to the effective date, confirm that the client understands the requirement of Indicator 8.25. After the effective date, confirm that the farm is in full compliance with the						

8.23	<p><b>Requirement:</b> Performed within five years from publication of the SAD standards (i.e. full compliance by June 13, 2017)</p> <p><b>Applicability:</b> All Smolt Producers Using Open Systems</p>	produced or held in net pens.	Indicator 8.23. After the effective date, confirm that the farm is in full compliance with the requirement.						
8.26	<p><b>Indicator:</b> Evidence that carrying capacity (assimilative capacity) of the freshwater body has been established by a reliable entity [171] within the past five years [172], and total biomass in the water body is within the limits established by that study (see Appendix VIII-5 for minimum requirements)</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers Using Open Systems</p>	<p>a. For the water body(s) where the supplier produces smolt for the client (see 8.24b), obtain a copy of the most recent assessment of assimilative capacity.</p> <p>b. Identify which entity was responsible for conducting the assessment (8.26a) and obtain evidence for their reliability.</p> <p>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.</p> <p>d. Review information to confirm that the total biomass in the water body is within the limits established in the assessment (8.26a).</p> <p>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.</p>	<p>A. Verify that the farm obtains copies of assimilative capacity assessments as are relevant to the water bodies in which its smolt supplier(s) operate.</p> <p>B. Verify that the assessment was done by a reliable entity (e.g. government body or academic institution).</p> <p>C. Verify that the assessment report is in compliance with requirements.</p> <p>D. Verify that the farm confirms that total biomass in the water body does not exceed carrying capacity.</p> <p>E. Verify that the farm requests an updated assessment (&lt; 2 years old) if there was a significant increase in nutrient inputs to the water body.</p>						
Footnote	[171] E.g., Government body or academic institution.								
Footnote	[172] If the study is older than two years, and there has been a significant increase in nutrient input to the water body since the completion of the study, a more recent assessment is required.								
8.27	<p><b>Indicator:</b> Maximum baseline total phosphorus concentration of the water body (see Appendix VIII-6)</p> <p><b>Requirement:</b> <math>\leq 20 \mu\text{g/l}</math> [174]</p> <p><b>Applicability:</b> All Smolt Producers Using Open Systems</p>	<p><b>Instruction to Clients for Indicator 8.27 and 8.28 - Monitoring TP and DO in Receiving Water for Open Smolt Systems</b></p> <p>Farms must confirm that any smolt supplier using an open (net-pen) system is also engaged in monitoring of water quality of receiving waters. Requirements for the supplier's water quality monitoring program are presented in detail in Appendix VIII-6 and only re-stated briefly here. Monitoring shall sample total phosphorus (TP) and dissolved oxygen (DO). TP is measured in water samples taken from a representative composite sample through the water column to a depth of the bottom of the cages. Samples are submitted to an accredited laboratory for analysis of TP to a method detection limit of &lt; 0.002 mg/L. DO measurements will be taken at 50 centimeters from the bottom sediment.</p> <p>The required sampling regime is as follows:</p> <ul style="list-style-type: none"> <li>- all stations are identified with GPS coordinates on a map of the farm and/or available satellite imagery;</li> <li>- stations are at the limit of the farm management zone on each side of the farm, roughly 50 meters from the edge of enclosures;</li> <li>- the spatial arrangement of stations is shown in the table in Appendix VIII-6;</li> <li>- sampling is done at least quarterly (1X per 3 months) during periods without ice, including peak biomass; and</li> <li>- samples are also collected at two reference stations located ~ 1-2 km upcurrent and downcurrent from the farm.</li> </ul> <p>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.</p>							
		<p>a. Obtain documentary evidence to show that smolt suppliers conducted water quality monitoring in compliance with the requirements of Appendix VIII-6.</p> <p>b. Obtain from smolt suppliers a map with GPS coordinates showing the sampling locations.</p> <p>c. Obtain from smolt suppliers the TP monitoring results for the past 12 months and calculate the average value at each sampling station.</p> <p>d. Compare results to the baseline TP concentration established below (see 8.29) or determined by a regulatory body.</p> <p>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.</p>	<p>A. Verify that the farm obtains copies of the smolt supplier's monitoring records (datasets, protocols, reports).</p> <p>B. Review and confirm that the spatial arrangement of sampling stations complies with requirements of Appendix VIII-6.</p> <p>C. Review TP monitoring results.</p> <p>D. Repeat comparison.</p> <p>E. Verify that TP <math>\leq 20 \mu\text{g/l}</math> in the receiving water body.</p>						
Footnote	[173] This concentration is equivalent to the upper limit of the Mesotrophic Trophic Status classification as described in Appendix VIII-7.								
8.28	<p><b>Indicator:</b> Minimum percent oxygen saturation of water 50 centimeters above bottom sediment (at all oxygen monitoring locations described in Appendix VIII-6)</p> <p><b>Requirement:</b> <math>\geq 50\%</math></p> <p><b>Applicability:</b> All Smolt Producers Using Open Systems</p>	<p>Note: see instructions for Indicator 8.27.</p> <p>a. Obtain evidence that smolt supplier conducted water quality monitoring in compliance with the requirements (see 8.27a).</p> <p>b. Obtain from smolt suppliers the DO monitoring results from all monitoring stations for the past 12 months.</p> <p>c. Review results (8.28b) to confirm that no values were below the minimum percent oxygen saturation.</p>		<p>A. Verify as above (see 8.27A).</p> <p>B. Verify that farm has copies of supplier's DO monitoring results.</p> <p>C. Review the supplier's monitoring results to verify compliance with requirements.</p>					
8.29	<p><b>Indicator:</b> Trophic status classification of water body remains unchanged from baseline (see Appendix VIII-7)</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers Using Open Systems</p>	<p>a. Obtain documentary evidence from the supplier stating the trophic status of water body if previously set by a regulator body (if applicable).</p> <p>b. If the trophic status of the waterbody has not been classified (see 8.29a), obtain evidence from the supplier to show how the supplier determined trophic status based on the concentration of TP.</p> <p>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.</p> <p>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.</p>		<p>A. Verify that farm obtains evidence from suppliers (as applicable).</p> <p>B. Review how supplier determined trophic status (as applicable).</p> <p>C. Verify that the farm conducts a review of the supplier's results and conclusions regarding trophic status of the water body.</p> <p>D. Review the farm's conclusion to verify compliance with the requirement.</p>					

8.30	<p><b>Indicator:</b> Maximum allowed increase in total phosphorus concentration in lake from baseline (see Appendix VIII-7)</p> <p><b>Requirement:</b> 25%</p> <p><b>Applicability:</b> All Smolt Producers Using Open Systems</p>	<p>a. Determine the baseline value for TP concentration in the water body using results from either 8.29a or 8.29b as applicable.</p> <p>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).</p> <p>c. Verify that the average observed TP concentration did not increase by more than 25% from baseline TP concentration.</p>	<p>A. Verify that farm has supplier's records for baseline TP concentrations in the water body.</p> <p>B. Repeat comparison.</p> <p>C. Repeat calculation to verify compliance with the requirement.</p>															
8.31	<p><b>Indicator:</b> Allowance for use of aeration systems or other technological means to increase oxygen levels in the water body</p> <p><b>Requirement:</b> None</p> <p><b>Applicability:</b> All Smolt Producers Using Open Systems</p>	<p>a. Obtain a declaration from the farm's smolt supplier stating that the supplier does not use aeration systems or other technological means to increase oxygen levels in the water bodies where the supplier operates.</p>	<p>A. Verify that the farm obtains relevant declarations from its smolt supplier(s).</p>															
<p><b>ADDITIONAL REQUIREMENTS FOR SEMI-CLOSED AND CLOSED PRODUCTION OF SMOLTS</b>          Additionally, if the smolt is produced in a closed or semi-closed system (flow through or recirculation) that discharges into freshwater, evidence shall be provided that the following are met (177):</p>																		
<p><b>Instructions to Client for indicators 8.32-8.35 - Requirement for smolts produced in open systems</b>          Client shall provide documentary evidence to the CAB about the production system(s) from which they source smolt.          If smolt used by the farm are not produced, for part or all of the growth phase from 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 (176). For such an exemption, farms must provide documentary evidence to the CAB. Auditors shall fully document their rationale for awarding exemptions in the audit report.</p>																		
Footnote	[176] Production systems that don't discharge into fresh water are exempt from these standards.																	
8.32	<p><b>Indicator:</b> Water quality monitoring matrix completed and submitted to ASC (see Appendix VIII-2)</p> <p><b>Requirement:</b> Yes [177]</p> <p><b>Applicability:</b> All Smolt Producers Using Semi-Closed or Closed Production Systems</p>	<p>a. Obtain records from smolt suppliers showing that water quality monitoring was conducted at least quarterly (i.e. once every 3 months) over the last 12 months.</p> <p>b. Obtain water quality monitoring matrix from smolt suppliers and review for completeness.</p> <p>c. Submit the smolt supplier's water quality monitoring matrix to ASC as per Appendix VIII-2 and Appendix VI at least once per year.</p>	<p>A. Verify that farm has records to show smolt suppliers conducted water quality monitoring at the required frequency and duration.</p> <p>B. Confirm that smolt supplier's water quality monitoring program covers sampling of all parameters given in Appendix VIII-2 (i.e. TP, TN, BOD, TSS).</p> <p>C. Confirm that client has submitted to ASC the smolt supplier's water quality monitoring matrix for the last 12 month period.</p>															
Footnote	[177] See Appendix VI for transparency requirements for 8.32.																	
8.33	<p><b>Indicator:</b> Minimum oxygen saturation in the outflow (methodology in Appendix VIII-2)</p> <p><b>Requirement:</b> 60% [178,179]</p> <p><b>Applicability:</b> All Smolt Producers Using Semi-Closed or Closed Production Systems</p>	<p>a. Obtain the water quality monitoring matrix from each smolt supplier (see 8.32b).</p> <p>b. Review the results (8.33a) for percentage dissolved oxygen saturation in the effluent to confirm that no measurements fell below 60% saturation.</p> <p>c. If a single DO reading (as reported in 8.33a) fell below 60%, obtain evidence that the smolt supplier performed daily continuous monitoring with an electronic probe and recorder for at least a week demonstrating a minimum 60% saturation at all times (Appendix VIII-2).</p>	<p>A. Verify that the farm obtains water quality monitoring records from its smolt supplier(s).</p> <p>B. Review the supplier's monitoring results to verify compliance with requirements.</p> <p>C. Verify that the farm obtained evidence for enhanced DO monitoring by the smolt supplier (as applicable).</p>															
Footnote	[178] A single oxygen reading below 60 percent would require daily continuous monitoring with an electronic probe and recorder for at least a week demonstrating a minimum 60 percent saturation at all times.																	
Footnote	[179] See Appendix VI for transparency requirements for 8.33.																	
8.34	<p><b>Indicator:</b> Macro-invertebrate surveys downstream from the farm's effluent discharge demonstrate benthic health that is similar or better than surveys upstream from the discharge (methodology in Appendix VIII-3)</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers Using Semi-Closed or Closed Production Systems</p>	<p>a. Obtain documentation from smolt supplier(s) showing the results of macro-invertebrate surveys.</p> <p>b. Review supplier documents (8.34a) to confirm that the surveys followed the prescribed methodology (Appendix VIII-3).</p> <p>c. Review supplier documents (8.34a) to confirm the survey results show that benthic health is similar to or better than upstream of the supplier's discharge.</p>	<p>A. Verify that the farm has documentation of macro-invertebrate benthic surveys from its smolt supplier(s).</p> <p>B. Review documents from the farm's smolt supplier to verify the surveys were conducted as required in Appendix III-3.</p> <p>C. Review documents to verify that survey results demonstrate compliance with requirements.</p>															
8.35	<p><b>Indicator:</b> Evidence of implementation of biosolids (sludge) Best Management Practices (BMPs) (Appendix VIII-4)</p> <p><b>Requirement:</b> Yes</p> <p><b>Applicability:</b> All Smolt Producers Using Semi-Closed or Closed Production Systems</p>	<p>a. Maintain a copy of smolt supplier's biosolids (sludge) management plan and confirm that the plan addresses all requirements in Appendix VIII-2.</p> <p>b. Obtain from smolt suppliers a process flow diagram (detailed in Appendix VIII-2) showing how the farm is dealing with biosolids responsibly.</p> <p>c. Obtain a declaration from smolt supplier stating that no biosolids were discharged into natural water bodies in the past 12 months.</p> <p>d. Obtain records from smolt suppliers showing monitoring of biosolid (sludge) cleaning maintenance, and disposal as described in Appendix VIII-2.</p>	<p>A. Review the supplier's biosolids management plan for compliance with Appendix VIII-2.</p> <p>B. Review the supplier's biosolids process flow diagram for compliance with Appendix VII-2.</p> <p>C. Confirm that farm obtains declarations from smolt suppliers.</p> <p>D. Review the farm's records from smolt suppliers to verify there is evidence of implementation of biosolids management as required in Appendix VIII-2.</p>															