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17th April 2017,

Stakeholder Submission RE: Initial Full Assessment Report, Cermaq Canada's Westside farm, by SAI Global Assurances Services (Public comment period 27th March – 17th April 2017)

Upon review of the draft Aquaculture Stewardship Council (ASC) audit for Cermaq Canada's Westside farm, conducted by SAI Global, the below-noted stakeholders have deep concerns about the robustness of the audit and believe that approving ASC certification of this farm would severely undermine the salmon standard established by the ASC.

We find the draft audit report to be insufficient in evidence to demonstrate the farm successfully met the salmon standard criteria. We submit this is due to SAI Global failing to meet the requirements of the ASC Certification and Accreditation Requirements (CAR).

While SAI Global has recently voiced their dissatisfaction that some of our submission comments are duplicative, we will continue to raise concerns where we respectfully disagree that SAI has successfully resolved them.

Our comments and concerns are provided in detail below. We look forward to hearing how the SAI Global will address these outstanding concerns.

Sincerely,

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I. Process Requirements and Audit Timing

a) Exclusion of harvest activities from initial audit

The ASC CAR V2.0 requires that "*The CAB's initial audit should include harvesting activities of the principle product to be audited*." (Audit Timing 17.4.2).

> *17.4.6 If the CAB determines that it is not possible to conduct the initial audit as specified in 17.4.2, the CAB shall:*
>
> *17.4.6.1 Record this determination in the audit report.*
>
> *17.4.6.2 Provide a justification for the alternative timing.*

There is no record in the draft report that states it was not possible to witness harvest as required by the CAR (17.4.6.1). Likewise, there is no justification, as required in the CAR (17.4.6.2), provided in the draft audit report for conducting the audit earlier and not witnessing the harvest of the principle product.

The justification provided in the previous ASC audit report for Cermaq's Raza Island farm stated: "*The fish on site are not yet ready for harvest and therefore the first audit and harvest did not correspond*". We submit this is an inadequate justification for not witnessing harvest, as it does not address the reason why the CAB decided to conduct the audit at an earlier time.

b) Inability to verify the Chain of Custody

The CAR V2.0 states under 17.6 Determining the start of the chain of custody:

> *17.6.6 Based on the results found from 17.6.1 -17.6.5 above, the CAB shall determine whether:*
>
> *17.6.6.1 The traceability and segregation systems in the operation are sufficient to ensure all products identified and sold as certified by the operation originate from the unit of certification, or*
>
> *17.6.6.2 The traceability and segregation systems are not sufficient and a separate chain of custody certification is required for the operation before products can be sold as ASC-certified or can be eligible to carry the ASC logo.*

Without the auditor witnessing the harvest and therefore, the principle product entering the chain of custody, the auditor is unable to verify that the traceability and segregation is indeed "sufficient". While the farm may well have a system in place on paper that appears to provide for the necessary elements, the purpose of an on-site audit is to prove that implementation of policies and procedures takes place—that is the essence of the determination of "sufficiency". For example, the draft audit report states: "Cermaq harvesting, transport and storage activities preclude the risk of substitution" (Page 89). We question how this claim can be made without witnessing the harvest.

c) Insufficient records and evidence

A number of salmon standard indicators are listed in the audit report as "conforming" despite insufficient records or evidence due to the audit taking place before the harvest. The ASC Certification and Accreditation Requirements (CAR) Version 2.0 has the following stated Process Requirements (17):

> ***17.1 Unit of Certification***
> *17.1.2.1 All clients seeking certification shall have available records of performance data covering the periods of time specified in the standard(s) against which the audit(s) is to be conducted;* and
>
> ***17.4 Audit Timing***
> *17.4.5 Audits shall not be conducted until sufficient records/evidence are available for all applicable standard requirements as the minimum.*

With the audit taking place before harvest, the records and evidence for the applicable standard requirements are simply not available.

The full assessment audit failed to meet CARv2.0 17.4.5 requirements, as the data and sufficient records/evidence covering the periods of time specified and required in the salmon standard were not yet available. Specifically, the audit took place before sufficient and complete records/evidence were available to assess:

- 2.1.1 *Redox potential or sulphide levels*
- 2.1.2 *Faunal index score*
- 2.1.3 *Number of macrofaunal taxa*
- 2.2.5 *Demonstration of calculation of biochemical oxygen demand…*
- 3.4.1 *Maximum number of escapees in the most recent production cycle*
- 3.4.3 *Estimated Unexplained loss*
- 4.2.1 *Fishmeal Forage Fish Dependency Ratio*
- 4.2.2 *Fish Oil Forage Fish Dependency Ratio*
- 4.7.3 *Evidence of testing for copper level in the sediment…*
- 4.7.4 *Evidence that copper levels are < 34mg…*
- 5.1.5 *Maximum viral disease-related morality*
- 5.1.6 *Maximum unexplained morality rate*
- 5.2.1 *On farm documentation… chemicals and therapeutants used…*
- 5.2.5 *Maximum farm level cumulative parasiticide treatment index (PTI) score*
- 5.2.7 *Allowance for prophylactic use of antimicrobial treatments*
- 5.2.8 *Allowance for use of antibiotics listed as critically important…WHO*
- 5.2.9 *Number of treatments of antibiotics*
- 5.4.4 *If an OIE-notifiable disease is confirmed…*

With the exceptions of 2.1.1; 2.1.2; 2.1.3, 4.7.3, 4.7.4; **the indicators above are listed as "conforming" - despite not having available any of the records and evidence required.**

The CAR requires sufficient records and evidence for the initial full assessment audit, requiring a complete production cycle in order to confirm conformance with all applicable salmon standard indicators. An incomplete production cycle equates to incomplete evidence and records.

Insufficient evidence and records remain a concern we have highlighted in other audit reviews. On review, the limited evidence and records that are provided in the audit reports are either based on data from the current production cycle *at the time of the early audit* or the *previous* production cycle. Therefore, the reports fail to provide a full production cycle of data for the most recent cohort of fish.

Listing indicators that require a full production cycle of data as 'conforming' - despite approximately four to six months' worth of production cycle data yet to be completed - allows for the potential for non-conforming product to be certified and enter the market with the ASC logo. The Marsh Bay early audit is a prime example of this potential becoming a reality, where an early audit resulted in missing the unfortunate marine mammal deaths which occurred later in the full production cycle (after the audit). The early audit and certification of Marsh Bay allowed for non-conforming product to enter the market place with the ASC logo. As long as early auditing continues, the potential for non-conformance remains. At the very least, non-conformance should be raised for the indicators for which a full production cycle worth of data is needed. The non-conformance should be closed before certification is granted.

Consequently, we find the CAB failed to meet their obligations under the ASC's CAR.

d) **Insufficient records and evidence; Early audit, sampling and closure of Major NCs 2.1.1, 2.1.2, 2.1.3 & Minor NCs 4.7.3, 4.7.4**

The draft report fails to declare the anticipated peak biomass (or harvest) date. Based on the farm's production cycle timeline, which begun on 23rd November 2015, we assume peak biomass is due to occur approximately around June 2017. Benthic sampling is required at peak biomass as per the Salmon Standard. A Major Non-conformity was raised on 18th January, 2017 for Indicators 2.1.1; 2.1.2 and 2.1.3 (NC01) as the early audit made it impossible for peak biomass sampling to have occurred, let alone provide the results for sufficient records and evidence of compliance (as per CARv2.0 17.4.5). Likewise, a Minor Non-conformity was also raised for indicators 4.7.3 and 4.7.4 (NC04) – which also rely on peak biomass benthic sampling.

Under CARv2.0 both Major and Minor non-conformities are required to be closed within 3-months (17.10.1.2; 17.10.1.1). Therefore, both NC01 (Major NCs) and NC04 (Minor NCs) need be closed by 18th April, 2017.

The report provides no expected dates for when the benthic sampling will occur. The NC01 Nonconformity Report Form for the raised majors, states:

"Require peak biomass sediment sampling according to ASC Salmon Standard Appendix I-1 to be undertaken at the first opportunity after a farm is identified for certification to the Standard. Certified farms are currently required to undertake peak biomass sampling according to the standard".

Firstly, this implies sampling for Westside farm will occur once certified. Secondly, we find the second statement erroneous. Farms under assessment are also required to undertake peak biomass sampling per the standard (i.e. not only certified farms). Thirdly, based on the assumed peak biomass date of June 2017, it would be impossible for the sampling to occur within the required three-month period (i.e. by 18th, April 2017).

The CARv2.0 states the following:

17.10.1.2 Major non-conformities
a) The CAB shall require that major non-conformities shall be satisfactorily addressed by an applicant:
i. Prior to certification being granted; and

7.3 Decision on Certification
7.3.2 The CAB shall not issue or re-issue a certificate if there are outstanding major non-conformities.

Westside farm is required to sample and provide the results as evidence of complying with the salmon standards and to close the Major and Minor non-conformities raised. The draft report does not provide sufficient details on how Cermaq will be able to close the NCs, particularly within the 3-month period given that peak-biomass is likely in June.

In addition, we note NC04 (4.7.3;4.7.4 copper sampling) is marked as 'closed' in the report findings (page. 90) and the non-conformity report states the closure date as 25th January, 2017 (page. 15). Given the copper sampling needs to occur at the same time as the peak biomass benthic sampling, we fail to understand how this NC could be closed. With the peak biomass benthic sampling yet to occur, the CAB is not meeting their obligations under the CAR for the following:

17.3 Audit methodology
17.3.1 The ASC audit shall use the ASC Audit Manual as guidance for the standard(s) for which the client is being audited.; and

17.9 Audit Evidence
17.9.1 Audit evidence relevant to the audit objectives, scope and criteria, including information relating to interfaces between functions, activities and processes shall be collected by appropriate sampling and shall be verified.

By closing non-conformitites *before* sampling and results are verified, the CAB has failed to follow the ASC audit methodology (i.e. the ASC Audit Manual) and consequently has also fail to provide adequate evidence.

By prematurely closing the minor-nonconformity, SAI Global have also failed to meet the CAR closure requirements:

> **17.10.1.1 A minor non-conformity**…
>
> *iii. Within (3) three months the CAB shall:*
> *A. Confirm receipt of objective evidence that demonstrates that a satisfactory corrective action plan has been finalized.*
> *B. Confirm receipt of objective evidence that demonstrates that the corrective action plan has been implemented.*
> *C. <u>Close the minor non conformity once it can confirm receipt of objective evidence that demonstrates conformity.</u>*

Therefore, SAI Global did not meet the CARv2.0 requirements to close NC04. It is also unclear whether both the Major non-conformities (NC01) and Minor non-conformities will be adequately closed and within the required timeline, given peak biomass will likely occur after the 3-month deadline. Consequently, we request SAI Global provide clarity on the dates for the peak biomass sampling and sufficient evidence for addressing both NC01 and NC04.

e) Grouping of Major Non-conformities under one form

We observe it has been common practice for CABs to group a number of non-conformities under the one report. Under the updated CARv2.0 (17.10 Audit Findings) this is not allowed:

> *17.10.3 The CAB shall not include evidence of more than one non-conformity into a single documented non-conformity report unless they apply to the same ASC requirement.*

This means non-conformities relating to an indicator's compliance criteria (e.g. 2.1.1a; 2.1.1b; 2.1.1c etc.) can be grouped together under a single non-conformity report. However, each non-conformity pertaining to an indicator requirement should be listed in separate non-conformity report (i.e. Indicator 2.1.1's *Requirement: Redox potential > 0 millivolts (mV)orSulphide ≤ 1,500 microMoles / l* should be listed separately from Indicator 2.1.2's *Requirement: AZTI Marine Biotic Index (AMBI [5]) score ≤ 3.3, orShannon-Wiener Index score > 3, orBenthic Quality Index (BQI) score ≥ 15, orInfaunal Trophic Index (ITI) score ≥ 25*).

We find the CAB grouped three Major non-conformities under non-conformity report NC01: Indicators 2.1.1; 2.1.2 and 2.1.3. Likewise, Minor non-conformities for indicators 4.7.3 and 4.7.4 have been lumped under non-conformity report NC04.

As each *indicator* has a distinct *requirement*, each of the above, should be listed separately.

Consequently, the "summary of major findings" should also be updated to reflect the true number of non-conformities. Currently, it states: "One major and six [minor] non-[con]formities were identified". In reality, three major and seven minor non-conformities were identified.

II. Salmon Standard Requirements

For the Salmon Standard indicators below, we submit the CAB did not conform to the following CARv2.0 requirement:

> ***17.3 Audit methodology***
> *17.3.1 The ASC audit shall use the ASC Audit Manual as guidance for the standard(s) for which the client is being audited.*

Further details to our reasoning are provided below.

a) Indicator 2.4.2 Allowance for the farm to be sited in a protected area or High Conservation Value Areas. Requirement: None

Westside farm is located within a Rockfish Conservation Area (RCA). The CAB has allowed for an exemption to indicator 2.2.4 by applying Exception 2: *"For HCVAs if the farm <u>can demonstrate</u> that its environmental impacts are compatible with the conservation objectives of the HCVA designation. The <u>burden of proof would be placed on the farm to demonstrate</u> that it is not negatively impacting the core reason an area has been identified as a HCVA*."

The ASC Audit Manual states:

"*C. Review the applicability of the exception requested by the farm together with <u>the supporting evidence</u> to determine if the farm is eligible. If yes, Indicator 2.4.2 is not applicable.*"

The draft audit report states: "*Although the farm is situated in a Rockfish Protected Area, due to the depth of water in which it lies, it is not deemed to have a negative effect on rockfish spawning. The Marine Finfish Aquaculture Licence for the site is issued by DFO which is the same agency responsible for the Rockfish Protected Area*."

There is no evidence provided to demonstrate Cermaq have conducted annual rockfish surveys, as required by the farm's licence conditions. There is no citation provided for the 'supporting evidence' that concludes no negative effect. It should also be noted salmon aquaculture in B.C. is classified as a 'fishery' following the Hinkson Decision. Salmon aquaculture is not listed as a permitted fishing activity within RCAs.[1]

[1] http://www.pac.dfo-mpo.gc.ca/fm-gp/maps-cartes/rca-acs/index-eng.html

Finally, suggesting the overlap in the management authority is 'supporting evidence' does not demonstrate the salmon farming activities are compatible with the RCA's conservation objectives. We submit the draft audit has failed to provide sufficient supporting evidence that addresses the burden of proof required of Cermaq.

b) Indicator 2.5.6 Maximum number of lethal incidents on the farm over the prior two years. Requirement: <9 lethal incidents, with no more than two of the incidents being marine mammals.

The draft audit report states no lethal incidents have occurred over the last two-year period. The draft audit report fails to mention:

1) The 741 Pacific herring (*Clupea pallasii*) reported by Cermaq to Fisheries and Oceans Canada as "incidental catch" on 22 May 2015[2] during harvest; and
2) The 1 Chinook salmon (*Oncorhynchus tshawytscha*) reported by Cermaq to Fisheries and Oceans Canada as "incidental catch" on 22 May 2015[3] during harvest.

The ASC Salmon Standard Audit Manual states the following instructions:

> ***"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"***
> *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:*
>
> *Total number of lethal Incidents = sum of all non-salmonid deaths arising from all lethal actions taken by the farm during a given time period*
>
> *There should be a 1:1 relationship between the number of animal deaths and the number of lethal incidents reported by the farm. For example, if a farm has taken one (1) lethal action in past last two years and that single lethal action resulted in killing three (3) birds, it is considered three (3) lethal incidents within a two year period.*
>
> *The term "non-salmonid" was intended to cover any predatory animals which are likely to try to feed upon farmed salmon. In practice these animals will usually be seals or birds."*

[2] http://www.pac.dfo-mpo.gc.ca/od-ds/aquaculture/incidental-accidentel-2011-2015-rpt-pac-dfo-mpo-aquaculture-eng.csv
[3] http://www.pac.dfo-mpo.gc.ca/od-ds/aquaculture/incidental-accidentel-2011-2015-rpt-pac-dfo-mpo-aquaculture-eng.csv

The Pacific herring is a non-salmonid. According to Fisheries and Oceans Canada "wild fish are identified as "incidental catch" if they are caught and killed along with farmed fish".[4] This was accordingly a "lethal incident" within the meaning of Indicator 2.5.6. According to the definition, the farm has now experienced a potential[5] total number of 744 lethal incidents (including the two seals and one heron)[6], violating the requirement of <9 as per Indicator 2.5.6. This should disqualify the farm from certification.

c) Indicator 3.1.7 In areas of wild salmonids, maximum on-farm lice levels during sensitive periods for wild fish and Compliance with the Variance

The Westside draft audit report cites Variance Request 88 from another farm, Doyle Island. Likewise, another Variance Request (VR 141) was submitted for the Monday Rock farm for identical reasons – to defer to the Pacific Aquaculture Regulations' (PAR) 3 motile threshold instead of the ASC salmon standard's requirement of 0.1 mature female lice/per fish. For example, SAI Global stated the following in variance 141:

> *"Therefore, we recommend that Monday Rocks farm to be certified with a higher sea lice trigger based on the legal definition of 3 motile lice per fish within the context of clause PI 3.1.7"*

In both variances approvals, ASC provided the following comment:

> *"Canadian regulations differ from the ASC standard in that up to 3 mature female sea lice per fish are allowed before treatment is triggered. Only one chemical treatment is allowed.*[7]
>
> *Marine Harvest Canada states that it was its intent of the farm to meet the ASC Standard - protection of wild salmonid populations during outmigration – and that the Pacific Aquaculture Regulation sea lice monitoring requirements, thresholds and management actions work best for Canadian environmental conditions.*
>
> *While it is not sufficient for a farm to only attempt to meet the intent of the ASC Salmon Standard, the data presented in this variance request clearly sets out the challenges linked to the*

[4] http://www.pac.dfo-mpo.gc.ca/aquaculture/reporting-rapports/incidental-accidentel-eng.html

[5] DFO public reporting is aggregated and does not show the number of pieces of incidental catch that are "released" or "mortalities" as reported by the farm to DFO under Appendix VII of the Marine Finfish Aquaculture Licence: http://www.pac.dfo-mpo.gc.ca/aquaculture/licence-permis/docs/licence-cond-permis-mar/append-annexe-VII-eng.html

[6] The 1 Chinook salmon was not included due to being a 'salmonid'

[7] It is important to note that the quoted statement by ASC is erroneous. The PAR trigger for management action is 3 *motile* lice per fish; and B.C. salmon farmers have access to two therapeutants, SLICE and hydrogen peroxide, with the ability to treat as often as required ***to control lice within the threshold***. **In any event, the conclusion from the Variance Request was to defer to the PAR requirement of 3 motile lice vs. the Salmon Standard of 0.1 adult females /fish.**

variability in sea lice abundance and the need for the right conditions to be present before treatment can be successful. Both of these challenges are environmentally driven.
This information establishes that the farm took all available steps to be in compliance with the ASC Salmon Standard, and the ASC therefore approves this variance request".

Based on the referenced approved variance, it can be expected that the Westside farm would need to demonstrate meeting the PAR requirements of 3 motile lice per fish in order to be conforming to 3.1.7 of the ASC Salmon Standard.

The Westside farm's sea lice count during the sensitive period was 5.3 motile/per fish in May 2016.[8] Despite this, the draft audit report states the farm is "compliant". This action to convert the metric standard intended by 3.1.7 to a management objective, results in no upper limit on lice per fish, and therefore, no compliance consequence or barrier to certification. That is, the CAB has effectively applied the variance *as an exemption* for indicator 3.1.7.

We submit such an interpretation is contrary to the evidence supplied in support of the Variance Request and would effectively destroy the intent of the standard, which is to protect migrating juvenile salmon from farm-generated increased lice abundance.

Therefore, we submit SAI Global has misapplied the variance resulting in a failure to raise a major non-conformity against Westside farm.

d) Indicator 8.3 Evidence of an assessment of the farm's potential impacts on biodiversity and nearby ecosystems

The draft audit report cites a Biodiversity Impact Assessments (BIA) report for the Oceans hatchery which recommended "*improve the effluent discharge directly into the ponds via an injection well*".

8.3b. requires: "*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*."

The ASC Audit Manual requires the CAB to "B. Review declaration". Therefore, it would be expected that the farm would be required to provide evidence on how it is addressing BIA's recommendation.

The draft auditor notes for 8.3b state: "*The current stock at the farm were supplied by Cermaq Canada's Boot Lagoon and Ocean Farms hatcheries*" and lists the farm as 'compliant'. We find the auditor notes fail to follow the ASC Auditor Manual, nor provide evidence that Cermaq have developed and are implementing a plan to address the BIA recommendation for Oceans hatchery.

[8] http://www.pac.dfo-mpo.gc.ca/od-ds/aquaculture/lice-count-dens-pou-2016-rpt-pac-dfo-mpo-aquaculture-eng.csv

e) Indicator 8.4 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)

A Minor non-conformance was raised for Indicator 8.4 due to a questionable phosphorus result using the required calculation (as per Appendix VIII-1). The corrective action proposed by Cermaq in the NC report states, "There will be two Corrective Actions for this NC: 1) Implement a project to improve the accuracy of measuring the sludge P value of the sludge being removed and; 2) Implement a program to measure influent and effluent water phosphorus levels. If effective, the results of this program will be used to apply to ASC asking for a Variance Request to use an alternative method of calculating Total Phosphorus discharged per ton of smolt produced". The NC was 'closed' on 25th January, 2017. However, on review of the audit report and the ASC variance request webpage - no relevant variance request could be found. Therefore, we are unable to identify how the NC was appropriately closed. We also find it inappropriate for the CAB to allow Cermaq to deviate from the salmon standard sampling requirements (i.e. Appendix VIII-1) in the absence of an approved variance from the ASC.