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23<sup>rd</sup> March 2017,

**Stakeholder Submission RE: Initial Full Assessment Report, Marine Harvest Canada's Phillips Arm farm, by SAI Global Assurances Services (Public comment period 2<sup>nd</sup> to 23<sup>rd</sup> March 2017)**

Upon review of the draft Aquaculture Stewardship Council (ASC) audit for Marine Harvest Canada's Phillips Arm 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 V1.0 requires that *“The CAB’s initial audit shall include harvesting activities of the principle product to be included for certification.”* (Audit Timing 17.4.2).

There is no justification, as required in the CAR (17.4.6.1/17.4.6.2), provided in the draft audit report for conducting the audit earlier and not witnessing the harvest of the principle product.

Where a justification has been provided in previous ASC audit reports, the rationale has been tied quick ASC market access for the company (example from Monday Rock audit: “to have certified product on the market when they harvest”). However, recent communication received from another Conformity Assessment Body states MHC currently finds no market demand for their ASC products and has taken the decision, at least on one occasion, to not identify ASC certified fish with the logo. Consequently, there appears to be no practical justification for conducting an early audit and not witnessing harvest.

### **b) Inability to verify the Chain of Custody**

17.5.1 of the CAR V1.0 states “The CAB shall determine if the system of tracking, tracing and segregation in the aquaculture operation is sufficient to make sure all aquaculture products identified and sold as certified by the operation originate from the certified unit of certification...”

Without the auditor witnessing the harvest and therefore, the principle product entering the chain of custody, the auditor is unable to verify that the tracking, tracing 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”.

Verifying the farm’s Chain of Custody is particularly important for the Phillips Arm site, given three pens (PA-0001, PA-0002 and PA-0003) are not included in the draft audit for certification. Table C1 of Annex C of the CAR requires the CAB to describe the consideration taken for the “Determination of the start of the CoC”. The draft audit report states: “MHC will not harvest certified and non-certified fish at the Phillips Arm site on the same day” (Page 81). 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. CARv1.0 Audit Timing (17.4) states:

*17.4.2.3 Audits should be conducted when all control points and sufficient records/evidence are available*

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 CARv1.0 17.4.2.3/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*
- 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*
- 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; **the indicators above are listed as “conforming” - despite not having available the complete 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 to 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 and sampling for Major NC 2.1.1, 2.1.2, 2.1.3**

The report states peak biomass is due to occur in February 2017. Benthic sampling is required at peak biomass as per the Salmon Standard. A Major Non-conformity was raised on 14<sup>th</sup> December, 2016 for Indicators 2.1.1; 2.1.2 and 2.1.3 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 CARv1.0 17.4.2.3/CARv2.0 17.4.5).

In order to close the Major NC within the three-month period and *before* granting certification, as per the CAR, it appears the CAB has allowed for sampling to occur prematurely at 70 percent peak biomass. The premature sampling was conducted in early November 2016 and the Major NC was 'closed' 21<sup>st</sup> February 2017. However, the draft audit report fails to provide any sampling results or metrics, as required. Secondly, there is no mention that MHC will also be required to sample the site at peak biomass. This goes against the salmon standard requirements for indicators 2.1.1, 2.1.2 and 2.1.3; as well as contrary to the draft audit for Chancellor Channel which stated, "MHC will be sampling the site in January 2017 **and at peak biomass.**" DFO licensing conditions simply require sulphide sampling at peak biomass (i.e. Indicator 2.1.1); there are no biotic requirements by DFO, therefore the farm would need to again conduct biotic sampling at peak biomass to fulfill the requirements for salmon standard indicators 2.1.2 and 2.1.3.

By this process, the CAB is allowing for the granting of certification without waiting for the salmon standard's required peak biomass sampling and results. By relying solely on the premature 70 percent peak sampling and its results to close out the Major NC and allow for certification, the CAB is creating the potential for non-conforming product to be sold with the logo.

In the circumstance where a Major NC is warranted due to peak biomass biotic results, this fact would not be identified until the surveillance audit, by which time the non-conforming product has already been harvested and entered the market with the ASC logo.

Therefore, by breaching the obligations of CARv1.0 17.4.2.3/CARv2.0 17.4.5 that require sufficient records and evidence to demonstrate compliance, the CAB is allowing the potential for non-conforming product to be certified and go to market as such.

**e) Unit of Certification: Intermediary farm**

The CARv1.0 *Annex A – The ASC Vocabulary* states the following definition for the term ‘Unit of Certification’:

*“The aquaculture operation that is covered by a certificate. It includes the receiving water body and all production operations up to the point where the product enters the chain of custody.”*

Additionally, the updated CARv2.0 *Annex A – The ASC Vocabulary* states the following definition for the term ‘Unit of Certification’:

*“The operation that is covered by a certificate. It includes all production and processing sites including the receiving water bodies, any harvest sites such as production ponds, and all storage or processing operations (including subcontracted operations) up to the point where the product enters further chain of custody.”*

As a production site and a stage of the production operations that occurs before the product enters the chain of custody, intermediary stages meet both CAR ‘unit of certification’ definitions.

The draft ASC audit report notes Upper Retreat and Port Elizabeth as the intermediary farms for Phillips Arm. Therefore, it would be expected that the salmon standard criteria must be applied to this part of the production cycle. For example, see Indicators 2.5.6 and 5.2.5 below.

When applicable salmon standard criteria are not correctly applied to all production sites as per the Unit of Certification CAR definition, non-compliance is likely to be missed or omitted. Therefore, all production operations and sites in the unit of certification should be included to ensure compliance with the ASC salmon standard indicators and integrity of the chain of custody.

## **II. Salmon Standard Requirements**

**a) Indicator 2.2.3 For Jurisdictions that have national or regional coastal water targets...**

The audit evidence references variance request 198 and seeks to apply the variance to MHC’s Phillips Arm farm. In VR 198, SAI Global state,

*“Chile and Canada are amongst the salmon production regions which do not have such a national classification and therefore they are bound by indicator 2.2.4.”*

The VR then provides a recommendation for 2.2.4 sampling to occur quarterly, instead of weekly. The ASC approved the VR stating the following interpretation:

*“Water quality monitoring is an important aspect of the ASC Salmon Standard. It ensures that farms continue to operate in good quality water. In areas without national or regional coastal water quality targets, farms must conduct weekly water quality measurements at the farm and the reference site. The documents and analysis submitted with the Variance Requests 197 (Multiexport, Chile) and 198 (Cermaq, Canada) provides ample evidence that supports the position that quarterly water quality monitoring, as opposed to weekly monitoring, will not lead to a reduced ability to determine the farm’s impact on water quality.*

*Future sampling locations should either; 1) Remain consistent with the 50M and reference sampling locations described in Appendix I-5 or; 2) For farm sites using a site-specific AZE, be taken at the edge of the AZE as well as the reference site with duplicates of each sample each quarter. Depths of samples will remain consistent with the description in Appendix I-5.*

*The Requirement now requires that: the average annual N and P concentrations between samples at 50m station or, in the case of a site-specific AZE the edge of the AZE, should not be significantly higher than those at the reference site.*

*The sampling minimum should therefore be confined to the reference site and at the edge of the AZE or 50m from the edge of the array where an irregular site specific AZE is used, with duplicates of each sampled each quarter.*

*Analysis to be confined to NO<sub>3</sub>, PO<sub>4</sub> and TN and TP since other forms, eg NH<sub>4</sub>, are too labile to be good indicators of longer term effects.*

*Based on this, ASC approves this VR. **It will be required for the CAB/client to develop a water monitoring protocol that is identical to Appendix I-5, with the caveat that monitoring frequency will be on a consistent quarterly basis.***

***This protocol must be incorporated in the final report.”***

This interpretation has not been appropriately applied to Phillips Arm. We detail four departures from the reasoning above and/or the text of the variance request itself, that appear in the draft audit report:

1. In VR 198, SAI Global states that Canada has no national water quality targets, yet in the draft Phillips Arm audit report, SAI Global appears to suggest that the Canadian Council of Ministers of the Environment (CCME) guidelines for water quality might meet the definition of “national or regional water quality targets”. The ASC standard identifies nitrate, phosphorus and chlorophyll A (footnote 16) as the related nutrients for water quality targets. CCME guidelines only measure nitrate. We are accordingly of the view that SAI Global correctly identified the situation in VR198, but failed to apply the same analysis to the Phillips Arm audit.

2. Similarly, while the VR recognizes that Canadian farms “are bound by indicator 2.2.4”, the draft audit report states “N/A” for Indicator 2.2.4.
3. While MHC may be conducting water sampling on a quarterly basis (as is Cermaq), the draft report states water quality verification was against the CCME guidelines, not the salmon standard (Appendix I-5 and Indicator 2.2.4 as per the variance).
4. In approving VR198, ASC required that “...the CAB/client to develop a water monitoring protocol... this protocol must be incorporated in the final report”. No protocol has been incorporated in the audit draft for Phillips Arm.

Therefore, we submit that the variance has not been appropriately applied.

In addition, criterion 2.2.3c states “Identify the most recent classification of water quality for the area in which the farm operates”. The CAB evaluates this criterion as “compliant”, however the audit evidence suggests otherwise: “The water data classification has not been determined. MHC has submitted data to third party analyst and is awaiting report.” Again, without a national water quality target (as per VR198) nor a water data classification, the Phillips Arm farm is unable to comply with indicator 2.2.3. Thus compliance with indicator 2.2.4 is required.

- 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 1,167 Pacific herring (*Clupea pallasii*) reported by MHC to Fisheries and Oceans Canada as “incidental catch” on 8<sup>th</sup> June 2016<sup>1</sup> during the transfer from Upper Retreat (interim farm) to Phillips Arm (and other MHC sites);
- 2) The 8,300 Pacific herring (*Clupea pallasii*) reported by MHC to Fisheries and Oceans Canada as “incidental catch” in 2015<sup>2</sup> at Port Elizabeth farm; and
- 3) The 1 Pacific herring (*Clupea pallasii*) reported by MHC to Fisheries and Oceans Canada as “incidental catch” in 2015<sup>3</sup> at Phillips Arm farm.

The ASC Salmon Standard Audit Manual states the following instructions:

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<sup>1</sup> <http://open.canada.ca/data/en/dataset/0bf04c4e-d2b0-4188-9053-08dc4a7a2b03>

<sup>2</sup> <http://www.pac.dfo-mpo.gc.ca/od-ds/aquaculture/incidental-accidentel-2011-2015-rpt-pac-dfo-mpo-aquaculture-eng.csv>

<sup>3</sup> <http://www.pac.dfo-mpo.gc.ca/od-ds/aquaculture/incidental-accidentel-2011-2015-rpt-pac-dfo-mpo-aquaculture-eng.csv>

***“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.”*

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”.<sup>4</sup> This was accordingly a “lethal incident” within the meaning of Indicator 2.5.6. According to the definition, the farm has now experienced a total number of 9,468 lethal incidents, violating the requirement of <9 as per Indicator 2.5.6. This should disqualify the farm from certification.

**c) Indicator 5.2.5 Maximum farm level cumulative parasiticide treatment index (PTI) score...**

The PTI score of 3.2 in the draft audit report does not include a SLICE treatment at the Port Elizabeth farm on 16<sup>th</sup> February, 2016 (see Unit of Certification above). We submit that the PTI score should be reflective of all treatments within the full production cycle, and therefore the current PTI score should be 9.6.

**d) Indicator 5.4.1 Evidence that all salmon on the site are a single-year class**

Audit evidence for 5.4.1 does not address the three pens (PA-0001, PA-0002 and PA-0003) that originated from Georgie Lake. The salmon standard indicator requires “...no gaps in smolt inputs > 6 months” and that all fish are single-year class. The salmon standard Biosecurity Management criterion explicitly states, “these requirements aim to minimize effect of disease transmission and retransmission”. The requirement for all fish “on the site” to be of a single-year class is intended to reduce the risk of disease transmission between farmed and wild fish. The Biosecurity Management criterion becomes pointless if certain pens are ‘exempt’ from meeting the requirements. To correctly apply the requirements and the intent of the criterion, Indicator 5.4.1 should be applied to the whole

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<sup>4</sup> <http://www.pac.dfo-mpo.gc.ca/aquaculture/reporting-rapports/incidental-accidentel-eng.html>



site, regardless of 'exempted' pens. Therefore, audit evidence needs to demonstrate that the fish originating from Georgie Lake indeed meet indicator 5.4.1 requirements.

**e) Indicator 8.1 Compliance with local and national regulations on water use and discharge...**

Indicator 8.1 is marked "compliant" despite the fact the Dalrymple Creek hatchery "frequently fails to comply with Ministry of Environment (MOE) requirements for TSS and total phosphorus". Numerous audit reports (including Marsh Bay, Bull Harbour, Duncan Island, Goat Cove, Glacier Falls and Monday Rock) refer to a 2014 letter by MOE deciding not to press enforcement, so long as progress is made by MHC with the installation of advanced treatment systems at the hatchery. However, the non-compliance with the ASC salmon standard indicator 8.1 remains, and is in fact confirmed by the letter, which only defers enforcement of the breach. The draft report evidence states MHC continues to submit monitoring data, as legally required, and no advanced treatment system has been installed.

Firstly, we submit the CAB is inappropriately applying the provincial enforcement thresholds, rather than the ASC standard requirement. Secondly, the intent of the ASC Indicator 8.1 is that companies **must demonstrate compliance** with water use and discharge regulations, not merely *respond with plans* to remediate identified non-compliance. Therefore, we submit Dalrymple Creek hatchery ought to have a Major Non-conformance raised.

**f) 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 MHC in the NC report states, "Variance request to be submitted to ASC to calculate phosphorus based on effluent levels, which are monitored more regularly and will result in a more accurate calculation". The NC was 'closed' on 21<sup>st</sup> December, 2016. 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 MHC to deviate from the salmon standard sampling requirements (i.e. Appendix VIII-1) in the absence of an approved variance from the ASC.