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19th September, 2016


Upon review of the draft Aquaculture Stewardship Council (ASC) audit for Marine Harvest Canada’s (MHC) Bull Harbour farm, conducted by Acoura Marine Ltd., the below-noted stakeholders have serious concerns regarding the omissions and lack of available evidence within the report. We believe that approving ASC certification of this farm would severely undermine the salmon standard established by the ASC.

The ASC Certification and Accreditation Requirements (CAR V2.0) stipulates the availability of sufficient records/evidence are needed in order to conduct an audit. Due to the facts that the very first production cycle of Bull Harbour is yet to be completed and the audit timing was before the harvest, we find the draft audit report consequently does not provide sufficient evidence that demonstrates the farm has successfully met the salmon standard criteria, simply because the data is incomplete.

We believe it would be irresponsible for Acoura Marine Ltd to grant ASC certification to a farm that is yet to complete its first production cycle. Doing so would undermine the credibility of ASC, the salmon standard and Acoura Marine Ltd.

Our comments and concerns are provided in detail below. We look forward to hearing how the Acoura Marine Ltd will address these serious concerns.

Sincerely,

Kelly Roebuck     John Werring
Living Oceans Society    David Suzuki Foundation
Stan Proboszcz     Colleen Turlo
Watershed Watch Salmon Society  Ecology Action Centre
1. CARv2.0 Process Requirements: Audit Timing

We note the audit was conducted under Version 2.0 of the ASC Certification and Accreditation Requirements, as per the footer of the draft audit report. 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.

The audit failed to meet these CARv2.0 process requirements, as the audit data and sufficient records/evidence covering the periods of time specified in the salmon standard were not yet available.

The issue is compounded by the fact that Bull Harbour is a new farm that is yet to complete its first production cycle. The following further details our concerns.

a) Salmon Standard requirements: Current production cycle data

Being a new farm, Bull Harbour is yet to complete a full production cycle worth of data. Without the completion of a full production cycle and the audit taking place before harvest, the records and evidence for the applicable standard requirements are simply not available.

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 exception of 2.1.1, all of the indicators above are listed as “conforming” - despite not having available all the sufficient records and evidence required.

For example, since the audit was conducted, a SLICE treatment was administered at Bull Harbour on 16 July 2016. This evidence is not reflected in the draft audit report for public review. While this particular example may not affect the farm meeting indicator 5.2.5, it does demonstrate that incorrect audit timing can result in insufficient records and evidence. Therefore, there is a high risk and the likely potential to miss evidence that may affect certification, as an incomplete production cycle equates to incomplete evidence.

b) Salmon Standard requirements: Previous production cycle data

In addition to the lack of a full production cycle worth of sufficient records and evidence, no previous production cycle data is available for the Bull Harbour farm as it is currently conducting its first cycle.

The following indicators require records and evidence from previous production cycles:

- 2.5.6 Maximum number of lethal incidents
  (“Maximum number of lethal incidents on the farm over the prior two years”)
- 5.1.4 Percentage of mortalities that are recorded...
  (“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”)
- 5.1.6 Maximum unexplained mortality rate...
  (“...from each of the previous two production cycles, for farms with total mortality > 6%”)
- 5.2.1 On-farm documentation... chemicals and therapeutants used
  (“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”)
- 5.2.3 Percentage of medication events that are prescribed by a veterinarian
  (“Records can be kept in conjunction with those for 5.2.1 and should be kept for the current and two prior production cycles”)
- 5.2.7 Allowance for prophylactic use of antimicrobial treatments
  (“Maintain records for all purchases of antibiotics (invoices, prescriptions) for the current and prior production cycles”)
- 5.2.9 Number of treatments of antibiotics
  (“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.”

All of the indicators above are listed as “conforming” - despite not having available all the sufficient records and evidence required.
c) Incomplete Production Cycle Data – Intermediary Stage

It is common practice in British Columbia for salmon farming production cycles to include an intermediary stage (such as nursery, transfer or early grow-out pens). For the primary product being assessed, all stages of the production cycle should be included to ensure compliance to the ASC salmon standard indicators and the chain of custody.

There is no mention of an intermediary stage in the draft audit report. However, we understand Marine Harvest’s well boat, Roy Kristian, made two trips from Shelter Bay to Bull Harbour on September 25th, 2015. We request clarification on whether there was a split of fish at Shelter Bay and confirmation if the Shelter Bay farm was used as an intermediary stage for the current Bull Harbour production cycle. If so, the records and evidence from the intermediary farm should be included in the audit report to demonstrate compliance. Evidence should include the drowning of 6 California sea lions at Shelter Bay in July 2014 (see Indicator 2.5.6 below).

d) 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).

Again, by conducting the audit before the harvest and completion of the farm’s maiden production cycle, there is incomplete evidence to conclude the farm is conforming to the salmon standard indicators. The indicators listed above in 1a) are not able to be assessed until sufficient records and evidence from the completed production cycle are available.

While we acknowledge the audit report meets CAR 17.4.6 requirement of listing and providing an alternative timing, we submit the justification of “…intending to have certified product on the market…” compromises the integrity and rigour of the ASC and salmon standard.

For reasons detailed in 1a)-d), we submit the CAB failed to meet their obligations under 17.4 of the CAR. Similarly, MHC failed to meet their client obligations listed under CAR 17.1 (Unit of Certification).
2. Non Conformities

Indicators 2.1.1 – 2.1.3 (Benthic Monitoring)

Due to the audit being conducted prior to harvest and peak biomass, indicators 2.1.1-2.1.3 did not have sufficient evidence for compliance (as required by the CAR 17.4.5). We note a Minor Non-Conformity has been raised for indicator 2.1.1 and is listed as “Open” with a deadline of 12 months.

It should be noted that the text within Nonconformity Report Form for NC1 was incomplete, as the text was cut off, making it difficult for review. Nevertheless, the NC1 states:

“A minor NC has been raised. The audit has been scheduled prior to the farm reaching peak biomass. Compliance cannot be assessed for 2.1.1, 2.1.2 or 2.1.3. The farm has demonstrated an understanding of the requirements and an intention to sample at the appropriate point in the production cycle”

Given the inability to assess compliance for all three indicators, we question why indicators 2.1.2 and 2.1.3 are listed as “compliant” in the audit report.

Indicator 2.2.3 For jurisdictions that have national or regional coastal water quality targets, demonstration through third-party analysis that the farm is in an area recently class

The salmon standard indicates jurisdiction water quality targets should include nutrients N, P, chlorophyll A. The Canadian Councils of Ministers of the Environment (CCME) guidelines require only nitrate concentration and therefore should be deemed inadequate. 2.2.3b references The ‘Nutrient release for net cage culture’ by GlobalAquafood Development Corporation April 2014. Another ASC audit report (Duncan Island) also references this report and notes it as a literature review by Dr. Stephen F Cross (Founder of GlobalAquafood) of papers dating from 1982-2005. Footnote 17 requires evidence to be from within the last 2 years prior to the audit. Given the report relies on data 11 years and older, we submit this report to be inadequate. Additionally, the analysis report is required to be from a third-party. We query the third-party impartiality of the analysis report given that GlobalAquafood and the author appear to be in a conflict of interest given their strong support for the BC aquaculture industry.

Therefore, compliance to 2.2.4 should be required.

Indicator 2.5.6 Maximum number of lethal incidents on the farm over the prior two years

As mentioned in 1c) above, if another MHC farm, Shelter Bay, was indeed used as an intermediary farm before being transferred to Bull Harbour, then the evidence that 6 California sea lions drowned at Shelter Bay in July 2014\(^2\) would result in non-compliance for 2.5.6. This event occurred within the two-year period immediately prior to the Bull Harbour audit.

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 draft audit report cites Variance Request 141 for Bull Harbour’s compliance under indicator 3.1.7. In VR 141, the CAB recommended:

> “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”

The Variance Request was approved by the ASC, with a reference to deferring to the Pacific Aquaculture Regulations (PAR):

> “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”.

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 BC 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.

Based on the referenced approved variance, it can be expected that the Bull Harbour 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.

Bull Harbour breached the PAR threshold in June 2016 (4.5 *motile* lice per fish) and July 2016 (5.21 *motile* lice per fish)\(^3\). **Therefore, compliance to the variance of the PAR threshold was not met.**

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**Indicator 8.4 Maximum total amount of phosphorus released**

The draft audit report only provides a calculation for the Ocean Falls hatchery. Please provide the Dalrymple site calculation to demonstrate transparency and robustness.

**Indicators 8.15-8.23 Smolt Production; 8.32-8.33 Additional Requirements for Smolt Producers**

These indicators are not appropriately assessed as it simply refers to all being “internal” in nature (8.15-8.23). Whether the smolt producer is MHC or ‘internal’, the ASC salmon standard indicators are still required to be completed (e.g. antibiotics used, amount, etc) to demonstrate compliance. Likewise, the audit report fails to demonstrate compliance with indicators 8.32-8.33, which are listed as “As included in the ASC submission”.

**Indicator 8.34 Macro-invertebrate surveys downstream**

The CAB listing of indicator 8.34 as “compliant”, appears in contradiction of the comment: “2015 results showed some downstream impact at Dalrymple...”. The audit draft notes updated reports are expected in November 2016. We question why a non-conformance was not raised.