LIST OF ORIGINAL COMMENTS ON OPERATIONAL REVIEW TOR

Name of the standard: ASC Salmon Standard v1.0

Published date: 2012

| Stakeholder group | Organisation | Method of commenting | Principle/ criterion/ indicator/ requirement | Comment in detail | Rationale | Stakeholder proposal | Also applies to: |
|------------------------------|--|----------------------|---|---|---|--|---------------------|
| Industry | GSI | Email | 1 | (FAQ as additional comment) Do all documents need to be available at the farm site, including tax laws and financial audit records? | | | |
| Non industry | WWF | Email | 2.1 | Clarity on protocols to identify and characterize human populations around AZE. | | | |
| Industry and Non industry | Living Oceans Society, David Suzuki Foundation, Watershed Watch Pacific Salmon Foundation, Ecology Action | Email | 2.1.1 | The effectiveness of the ASC Salmon Standard benthic biodiversity and benthic effect indicators is questionable and should be included in the standard review. | After reviewing the audit reports from the 40 currently certified farms, it is clear that Principle 2 presents the largest challenge to farms with 78 minor non-conformities and 9 unsatisfactorily closed major nonconformities. Just over or nearly half of all farms were unable to meet the requirements for 2.1.1 (21 farms), 2.1.2 (18 farms) and 2.1.3 (18 farms), including major non-conformities being improperly downgraded to minor nonconformities. As the farms were still considered suitable for certification, it does not appear that current indicators (or the performance being accepted) are adequate to prevent negative impacts on benthic biodiversity. | No specific change is proposed with regards to the benthic biodiversity indicators or limits other than the inclusion of Criterion 2.1 indicators in the review process. The performance of certified farms must be included in this review and the level of performance that is currently being accepted by CABs. It may be necessary to wait for surveillance audits of the initial farms to determine whether or not the non- compliances have been closed, but inclusion in this review is important to highlight potential problems with this certian of the standard | 2.1.2 2.1.3 |
| Industry | Marine Harvest ASA | Email | 2.1.2 | New technology that has already been validated for the purposes of environmental monitoring such as NGS metabarcoding is not included as an accepted technique to measure benthic biodiversity and effects in the ASC Salmon Standard | Current knowledge on the ecological niches of the recorded species. The main limitations of this traditional approach are related to the morphological identification of sorted specimens, which is time-consuming and requires an excellent taxonomic expertise. The lack of trained taxonomists causes important delays in the analysis of rapidly growing number of samples, seriously limiting the efficiency of benthic monitoring. Moreover, the traditional approach overlooks the morphologically indistinguishable juvenile and life-cycle stages of macrofauna and small-sized organisms (meiofauna, protists), reducing the accuracy of the assessment of benthic communities. Recent development of Next-Generation Sequencing (NGS) technologies offers the possibility to use environmental DNA or RNA to explore benthic diversity. The NGS-based approach, also called metabarcoding, has been proposed as a cost effective way to overcome the limitations of morphological identification in routine biomonitoring, allowing the processing of large numbers of samples for increasingly efficient and reliable surveys (Baird and Hajibabaei 2012, Taberlet et al. 2012, Bourlat et al. 2013, Bohmann et al. 2014). This technique has been validated to measure benthic biodiversity and benthic effects in association with salmon farming (Pawlowski et al. 2014; Lejzerowicz et al. subm., Pawlowski et al. in prep.). validation studies have been performed in several countries such as New Zealand, Scotland and Norway and show that NGS can be used to comply with indicator 2.1.2 (see report attached) | Add in Appendix I-1 of the ASC salmon standard a note/sentence stating the acceptance of molecular techniques such as metabarcoding to comply with indicator 2.1.2 | |
| Industry | Tassal operations | Email | 2.1.3 | New technology that has already been validated for the purposes of environmental monitoring such as NGS metabarcoding is not included as an accepted technique to measure benthic biodiversity and effects in the ASC Salmon Standard | NGS technique is based on a very limited amount of material (usually 2-10g) and the macrofauna, especially large sized species, are not well represented in the NGS data. Moreover, the abundance inferred from sequence data is not directly related to the number of specimens. Therefore, to take into account the specificity of NGS approach, the detection of non-pollution indicator species should be based either on their presence/absence or on the relative abundance of their sequences | When using NGS technology compliance with 2.1.3 is verified by demonstrating the presence of non-pollution indicators among the abundant species. | |
| Industry | Dansk Akvakultur | Email | 2.2.3 | Water quality: It is not possible to certify a Danish sea cage farm to the ASC Salmon Standard. | According to the Danish Environmental Ministry, all water around Denmark is classified as moderate or Poor in the Water Basin Management. Yet sea farms are not the obstacle of achieving the high water classification in Danish waters. In addition, Danish authorities have prepared water management plans aiming to bring the water up to good quality. | It should not prevent Danish sea farms from obtaining an ASC certification. | |
| Non industry | New England Aquarium | Email | 2.2.5 | Comment on BOD data | Data collected with regard to BOD and nutrient levels shall be reviewed, and the setting of a threshold related to nutrient loads should be seriously considered when the ASC Salmon Standard is updated. | Review BOD data collected from audited farms to date to determine if there is sufficient data to set BOD performance thresholds. | |
| Industry and Non industry | Living Oceans Society, David Suzuki Foundation, Watershed Watch Pacific Salmon Foundation, Ecology Action | Email | 2.5 | Marine mammals are currently included in the scope of the review, but this should be expanded to include all indicators of Criterion 2.5. | Interactions with wildlife- including predators- has resulted in minor nonconformities mostly due to farms not making lethal incident data publicly available (indicator 2.5.5: 15 out of 40 farms). However, several farms have been certified despite exceeding the lethal incident limits (both bird and marine mammals). There is no way for corrective action by a farm to undo lethal interactions and if a farm that reports 61 bird deaths and 3 seal deaths over a two year period is still certifiable, the indicator requirements do not appear to be protective to wildlife populations. | The requirements set in Criterion 2.5 were intended as hard thresholds, but this doesn't appear to have been upheld. The review should evaluate how the certified farms have complied with the indicators as of certification, whether or not any have closed noncompliance since certification, as well as any other issues/mistakes with lethal incident reporting. The results of the review should clarify why farms exhibiting over-limit marine mammal interactions are being certified and what the actual cut-off limit is. For example, Marsh Bay (a certified farm site in Canada) has reported 4 sea lions death in February 2015. Currently, there is no defined recourse for this noncompliance. | |
| Non industry | WWF | Email | 2.5.1 | Comment on the use of ADD's | | Reduce restrictions on use so that deterrents can be used to reduce the need for lethal control where applicable. | |
| Non industry | New England Aquarium | Email | 2.5.1 | Comment on ADDs or ADH use | The ASC Salmon Standard (Version 1.0) will be more than 3 years old by the time the proposed revised standard is released. | Review and change requirement for 2.5.1 to simply 0 (no qualifying text) | |
| INOT INCUSTRY | Aquarium | Email | 2.3.2 | maximum percentage of days in the production cycle | | | |
| | New England Aquarium | Email | 2.5.5 | Comment on how to share information about any lethal incidents on farm | the nature of the salmon industry, most, if not all, salmon producers, have websites; and, arguably, most other means of making the information available (e.g., available on request) are not "easy." | Consider making posting on a website a requirement, rather than just an example of "easily publicly available." | |
| Industry | Tassal operations | Email | 2.5.6 | Accidental mortalities of nonsalmonid species (bycatch) should be an additional criterion and not combined with lethal wildlife incidents | At present this number is difficult to quantify. Proposed changes would align with the intent of the standard and allow for understanding of the scope of interactions internationally. | Set realistic criteria independent to other wildlife interactions, with intent to show progress and drive improvement. | |
| Industry | Tassal operations | Email | 2.5.6 | Total number of lethal incidents with no more than two being marine mammals | While our goal is to achieve zero lethal incidents and we are committed to not euthanising seals, interactions are increasing and consideration must be given to worker health and safety and fish welfare | Number achievable but needs to be flexible regarding accidental deaths. | |

| Stakeholder group | Organisation | Method of commenting | Principle/ criterion/ indicator/ requirement | Comment in detail | Rationale | Stakeholder proposal | Also applies to |
|----------------------|--------------|----------------------|---|--|-----------|----------------------|--------------------|
| ndustry | GSI | Email | 2 | (FAQ as additional comment) There may be very limited capacity in terms of service providers for benthic analysis in some GSI locations to cover additional benthic analysis required by compliance to ASC, how can this be overcome? Standard states: "Number of macrofaunal taxa in the sediment within the AZE, following the sampling methodology outlined in Appendix I-1 Requirement: ≥ 2 highly abundant taxa that are not pollution indicators". If this applies to 'all samples' including cage edge, it over-rules purpose of having an 'allowable zone of effect'. The wording 'all samples', comes from the ASC audit manual 2.1.3c. Could compliance with UK National regulations for siting farm sites, which include an EIA and consultation SNH be sufficient to cover the requirements for a Biodiversity Impact Assessment 2.4.1? | | | |
| Industry | GSI | Email | 2 | (FAQ as additional comment) • Could you clarify the meaning of 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 classified as having "good" or "very good" water quality. Requirement: Yes; Applicability: All farms except sealed recirculation. If producers carry long historical data sets for monitoring N and P in the waters around farms which can be analysed to show seasonal variations but no impact of farms, might this be taken as evidence of longstanding compliance rather than the prescriptive sampling in the standard? For example a case in Ireland a long term data set for Nitrogen and Phosphorous monitoring around sea farm sites. Will ASC review this requirement? | | | |
| Industry | GSI | Email | 2 | (FAQ as additional comment) Does feed dust (fines) analysis have to be carried out at farm? Remote sites will have difficulty using micro-balances at sea? The standard states that any farms with more than 2 lethal incidents involving marine mammals in the preceding two years we would be denied certification, however on review of some certification reports this has been marked as a non-conformity – please advise | | | |
| ndustry | GSI | Email | 3 | (FAQ as additional comment) If national or local regulations prohibit the handling of wild salmonids how are farms expected to comply with Indicator 3.1.6 (monitoring of sea lice levels on wild out-migrating salmon juveniles or on coastal sea trout or Artic char)? If no monitoring of lice levels occurs on wild salmonids then there will be no data to use in 3.1.3 Audit should coincide with harvest period but may be before end of harvest so won't have complete estimates of 'unexplained losses'. Can this be done post hoc or estimated as a percentage up to time of audit? | | | |
| ndustry | GSI | Email | 3 | (FAQ as additional comment) What constitutes a "rare exemption" for this clause of the standard, specifically, do matters within the management control of the farm such as improving pen and net design constitute a rare exemption? Also what does it means to have only one rare exemption in a ten year period, i.e., if there is another significant escape event within the next ten years what would be the certification outcome; a minor non-conformance, major non- conformance or denial of certification? As you are aware these schemes are not in place in southeast Tasmania where companies operate adjacent to | | | |

| | | conformance or does it preclude | | |
|--|--|---------------------------------|--|--|
| | | certification? | | |
| | | | | |
| | | | | |
| | | | | |

| Stakeholder group | Organisation | Method of commenting | Principle/ criterion/ indicator/ requirement | Comment in detail | Rationale | Stakeholder proposal | Also applies to: |
|------------------------------|--|----------------------|---|--|---|--|---------------------|
| Industry and Non industry | Living Oceans Society, David Suzuki Foundation, Watershed Watch Pacific Salmon Foundation, Ecology Action | Email | 3.1 | The "Introduced or amplified parasites and pathogens" criterion should be opened for review to evaluate whether certified farms are legitimately meeting the requirements. Currently, the audit report evidence available publicly is insufficient to assess how effectively many of the indicators for this criterion are being implemented. | Management), 3.1.3 (maximum sealice load) and 3.1.6 (wild salmonid monitoring) all involve compliance with detailed requirements in the Salmon Standard appendices. Most audit reports include very little information by which to evaluate how rigorously or consistently the requirements are being applied, with some simply stating "Appropriate evidence was supplied". These extended requirements are critical to ensure the primary aim of Principle 3: to guarantee that certified farms do not harm the health of wild fish populations. These requirements were one of the most important elements of the standard for conservation organizations and the existing requirements already represent a significant compromise. Further to this, 16 of the 40 currently certified farms have been assessed minor non-compliances for indicator 3.1.4 either due to insufficient on-farm lice testing or public reporting of the test results. It is concerning that nondisclosure of required data might be indicative of more extensive noncompliance | The standard review should include both an assessment of how well currently certified farms have met/are meeting the detailed requirements of 3.1 indicators as well as related data transparency in Appendix VI (Transparency of Farm-Level Performance Data). As evidence to support farm claims of compliance should be available to CABs/the ASC, the review can determine if the requirements and current actions being taken are truly adequate to protect the health of wild fish populations. With regards to public transparency, sufficient raw data should be made available in future audit reports such that public evaluation of compliance with criterion 3.1 indicators is possible at least during the public comment period of the certification process. | |
| Industry and Non industry | Living Oceans Society, David Suzuki Foundation, Watershed Watch Pacific Salmon Foundation, Ecology Action | Email | 3.1 | The "Introduced or amplified parasites and pathogens" criterion should be opened for review to evaluate whether certified farms are legitimately meeting the requirements. Currently, the audit report evidence available publicly is insufficient to assess how effectively many of the indicators for this criterion are being implemented. | Indicators 3.1.1 (Area Based Management), 3.1.3 (maximum sealice load) and 3.1.6 (wild salmonid monitoring) all involve compliance with detailed requirements in the Salmon Standard appendices. Most audit reports include very little information by which to evaluate how rigorously or consistently the requirements are being applied, with some simply stating "Appropriate evidence was supplied". These extended requirements are critical to ensure the primary aim of Principle 3: to guarantee that certified farms do not harm the health of wild fish populations. These requirements were one of the most important elements of the standard for conservation organizations and the existing requirements already represent a significant compromise. Further to this, 16 of the 40 currently certified farms have been assessed minor non-compliances for indicator 3.1.4 either due to insufficient on-farm lice testing or public reporting of the test results. It is concerning that nondisclosure of required data might be indicative of more extensive noncompliance. | | |
| Non industry | New England Aquarium | Email | 3.1.2 | Comment on a demonstrated commitment to collaboration with NGOs, academics and government for research on wild stock | Need to asses whether it is stringent or necessary. | Review this criterion. Consider revising footnote 40 to read: "At a minimum, a farm and/or its operating company must demonstrate this commitment through providing farm-level data to researchers, or granting researchers access to sites, when such data or access is requested, or though other similar nonfinancial support for research activities. | |
| Industry | The New Zealand King Salmon Co. limited | Email | 3.1.4 | Comment on on-farm testing for sea lice | Not relevant to the NZ situation because sea lice do not occur on Kind Salmon. | Remove from assessments from NZ King | |
| Non industry | New England Aquarium | Email | 3.2.2 | Comment on introduction of non-native species | | Clarify that "within five years of publication of the ASC Salmon Standard" pertains to the publication of Version 1.0 of the standard (i.e., June 2012). | |
| Industry | The New Zealand King Salmon Co. limited | Email | 3.4.1 | Escapes do not appear to be relevant to the NZ situation | The same stock occurs naturally in the wild and has been supplemented over the years by many release from hatcheries | Reduce the importance of escapes as compared to Atlantic Salmon | 8.6 |
| Industry | The New Zealand King Salmon Co. limited | Email | 3.4.2 | Difficult to achieve with current technology accuracy | would challenge any fish farmers to be within 2% when dealing with large numbers | Make 2% the target but not penalize until accuracy is reasonably achievable in NZ situation | 8.7 |
| Non industry | New England Aquarium | Email | 3.4.4 | Comment on escape prevention planning | | Need more clarification. we suggest explicitly stating that nets and all other infrastructure are to be regularly inspected (perhaps include a minimum schedule), including underwater inspections. | |
| Industry | GSI | Email | 4 | Where copper (Cu) treated nets are in use some monitoring of copper levels in the sediment is required. There is some confusion regarding situations in Cu-rich areas where the background reference levels of copper exceed the upper requirement of 34mgCu/Kg dried sediment and where consequently so do the levels in the sediment within the AZE The standard requires that the FishSource score for each species from which fish meal or oil was derived is greater than or equal to 6. FCI advised us that if this was not the case then certification would be denied, but in some cases auditors are marking it as a non-conformance. Please confirm that is the case. | | | |
| Industry | The New Zealand King Salmon Co. limited | Email | 4.2.1 | FFDR do not set appropriately for King Salmon | Standard has been set without considering characteristics of NZ King - higher energy output | Induce an allowance for a species/strain difference of that of Atlantic salmon. | 4.2.2 |
| Non industry | WWF | Email | 4.2.1 | FFDR in salmon std is not challenging enough to represent good practice, this is an example of where technology/ innovation and improvement has happened and now FFDR could be tightened. | | | 4.2.2 |
| Non industry | New England Aquarium | Email | 4.2.1 | Comment on FFDRm and FFDRo requirement | the advances in FCR and other aspects that have affected fishmeal and fish oil use efficiencies since the publication of the standard. | Review and reassess FFDRm and FFDRo requirements to determine if they are still sufficiently stringent. | 4.2.2 |
| Non industry | WWF | Email | 4.4.2 | For shrimp standard there is an interim requirement that 80% of fishmeal has to meet certain fishsource scores for biomass and others, for salmon its 100% of the fishmeal scores. Although this was supposed to be an interim requirement until MSC became available, this is unlikely to happen in the near future | | Change to IFFO RS or FIP it would be good. Perhaps change to reflect early the likely requirements of the feed standard. | |
| Industry | Dansk Akvakultur | Email | 4.3.1 | Comment on fishmeal | Fishmeal and fish oil come from fisheries certified under ISEAL within 5 years after publication of the standard is impossible to fulfill. | Include IF-RS certified fishmeal and fish oil. | |
| Non industry | New England Aquarium | Email | 4.3.1 | Comment on source of marine raw materials | It is not clear how many reduction fisheries are currently certified under a scheme that is an ISEAL member, and how many are likely to be certified by 2017. | Reassess feasibility. | |

| Stakeholder group | Organisation | Method of commenting | Principle/ criterion/ indicator/ requirement | Comment in detail | Rationale | Stakeholder proposal | Also applies to: |
|------------------------------|--|----------------------|---|--|---|---|---------------------|
| Industry | Dansk Akvakultur | Email | 4.3.2 | Comment on fishsource database Refer to fishsource database is not good solution | Fishsource database is complex and outdated data. (This has previously been mentioned to ASC directly and it was said that the new ASC feed standard will consider this.) | | |
| Non industry | New England Aquarium | Email | 4.4.1 | Comment on source of non-marine raw material in feed | in light of the projected lifting of the Brazilian Soy Moratorium in 2006. | Reassess the criterion Are additional requirements needed? | |
| Non industry | New England Aquarium | Email | 4.4.2 | Comment on % of soya or soya derived ingredients in the feed | It is not sure what is the current volume of RTRS-certified soya. Do you envision that there will be a sufficient volume in2017? | Reassess feasibility. | |
| Non industry | New England Aquarium | Email | 4.4.3 | Comment on the buyer of the salmon of inclusion of transgenic plant | | Consider expanding scope to include disclosure of any transgenic, non-marine feed ingredients (e.g., GMO yeast), not just plant- | |
| Non industry | New England Aquarium | Email | 4.6.1 | Comment on energy use and GHG emission data | | based. Review energy use and GHG emissions data collected from audited farms to date to determine if there is sufficient data to add numeric performance thresholds for energy use and GHG emissions. | 4.6.2 4.6.3 |
| Non industry | New England Aquarium | Email | 4.6.3 | Comment on documentation of GHG emission of the feed | The ASC Salmon Standard (Version 1.0) will be more than 3 years old by the time the proposed revised standard is released. | Change requirement to simply "Yes" (no qualifying text). | |
| Non industry | New England Aquarium | Email | 5.1.7 | Comment on a farm specific mortalities reduction program | The information collected on mortalities will be useful for future revisions of the requirements. | Review data collected on mortalities from audited farms to date to determine if any changes to this or other related criteria are appropriate. | |
| Industry | GSI | Email | 5.2.5 | Initiate review of PTI (Parasiticide Treatment Index) criterion | New data available analyzing effectiveness of criterion, see data report. | Revision to PTI | 5.2.6 3.1.7 |
| Industry and Non industry | Living Oceans Society, David Suzuki Foundation, Watershed Watch Pacific Salmon Foundation, Ecology Action | Email | 5.2.5 | The maximum farm level cumulative parasiticide treatment index (PTI) score should be opened for review; This review should focus on the possibility of eliminating parasiticide use altogether under the ASC standard | A survey of the first 40 certified farms indicates that meeting the set PTI score has not been an obstacle at all. No farms have demonstrated difficulty with (via Variance Requests) or nonconformity (minor or major)regarding PTI scores. Nearly half of certified farms (19 including several cluster certifications) did not use any parasiticides during the production cycle. Six reports did not include a PTI score, but three of those list single treatments that result in a score of ≤6. Of the remaining farms, only four exceeded a PTI score of 6 (3 farms = 6.4,1farm =7.2). | As stated on page 2 of the ASC Salmon Standard "The requirements are intended to be a starting point for continuous improvement and to be periodically updated to reflect the data collected during the certification of farms to the requirements". In keeping with this goal, the PTI limit should be lowered from 13. Audit evidence demonstrates zero-use is feasible, but if a 0 limit cannot be implemented immediately, it should be phased in (over the next 3 years) starting with a lowered limit of ≤7. Only one farm of the 40 certified would be ineligible under these conditions and would likely be able to meet the limit by the next surveillance audit. | |
| Non industry | WWF | Email | 5.2.5 | parasiticide treatment index (PTI) in Chile and elsewhere needs updating to reflect reality | | | |
| Non industry | New England Aquarium | Email | 5.2.6 | Comment on farms with a cumulative PTI>6 in the most recent production | It is not clear how to work for newer farmers that do not have two previous production cycles. | Clarify how these criteria will work. | 5.2.10 |
| Non industry | New England Aquarium | Email | 5.2.10 | Is antibiotic load an effective metric if different antibiotics were used in the previous production cycles? | Presumably the different drugs would have different dose requirements, and if these differences are sufficiently large, load comparisons may not be meaningful. | Reassess the criterion. | |
| Industry | Dansk Akvakultur | Email | 5.2.10 | (Additional comment from email) Indicator: 'If more than one antibiotic treatment is used in the most recent production cycle, demonstrate that the antibiotic load is at least 15% less than the average of the two previous production cycles' "If we understand that correct, is the consequence that if two cycles pass without the use of any antibiotic is it impossible to use antibiotics in the future. That cannot be the intension" | | | |
| Industry | The New Zealand King Salmon Co. limited | Email | 5.4.1 | Single year class does not appear necessary after 30 yrs. of farming in NZ | Single year class is not current practices and given shortage of space - and unlikely in the near future. Single year class is likely to reduce production by 50% | Allow mixed year class conditional on: a) King species b) New Zealand c)As appropriate for local disease conditions | |
| Industry | GSI | Email | 5 | (FAQ as additional comment) Indicator suggests 'designated vet' should be a named individual but often services are provided by a team from a group practice since so many sites to visit. How to deal with this? The frequency of mortality reports is not indicated. How frequently must they be submitted to ASC? Within the PTI rationale there is no consideration of how to calculate PTI if only a single pen in an array is treated rather than the whole unit. Is it one complete treatment? | | | |
| Non industry | WWF | Email | 7.1 | Clarity on consultation and participation tools (formal process required by the ASC Standard). | | | |
| Industry | Tassal operations | Email | 7.2 | Indigenous and Aboriginal Engagement | Aboriginal engagement is not a 'one size fits all' process and cannot follow one model. A qualitative & interpretive review of criterion 7.2 is required. | Cultural and heritage sensitivity and limited capacity of indigenous groups to engage may exist in some regions and needs to be considered as far as the evaluation against this criterion | |
| Non industry | WWF | Email | 8.1 | Clarity on parameters and thresholds of monitoring practices for water quality | | | |

| Stakeholder group | Organisation | Method of commenting | Principle/ criterion/ indicator/ requirement | Comment in detail | Rationale | Stakeholder proposal | Also applies to: |
|----------------------|---|----------------------|---|---|---|---|---------------------|
| Industry | Marine Harvest | Email | 8.24 | Comment on production of smolts | Following documents with new information on production of smolt argue that in Scotland the production of smolts in open net pens can be done sustainably. The current ban on smolt production in open net pens in freshwater acts in Scotland as a total barrier to entry to the ASC for many producers in Scotland. <u>References: (saved under G:\Overdracht ASC\CERTIFICATION\OPERATIONAL REVIEW 2015\Public comments\Marin Harvest)</u> -Marine Harvest's report with a proposal of a Gold Starndard for a sustainable production of smolts in open-pens in Scotland -An independent study produced by Homarus and commissioned by Marine Scotland in 2012 | Incorporate the proposed Gold Standard criteria into the requirements of the ASC standard for salmon production in freshwater. | |
| | | | | | -A report from the University of Stirling | | |
| Non industry | New England Aquarium | Email | 8.25 | We recommend that this requirement be retained Norwegian apply for a Variance request | Option 1: Change the standard so that the 5 kg of P released into | | |
| Non industry | Bureau Veritas | Email | 8.4 | concerning 8.4. The rationale is that the smolt producer discharge into the marine environment. But the standard is clear i.e the maximum total amount P released into the environment is 5 kg/ mt produced. | the environment applies only to smolt producers which discharge into freshwater; or 2 stop approving the variance request concerning 8.4. | | |
| Non industry | Bureau Veritas | Email | 8.4 | Other open comment(s): Norwegian smolt producers discharge beyond 5 kg P per kg fish produced (requirement 8.4) The % P in the smolt feed is too high (around 1.3-1.5%) and the FCR is too high (around 1.2-1.3) and the smolt producers do not treat the outlet water. The smolt producers and their CABs apply therefore for a variance request concerning 8.4. This is in effect rewriting the standard. This practice is making the standard less strict from an environmental perspective without including stakeholders. ASC certified Freshwater trout producers have all invested in water treatment systems to reduce the discharge of P and the farmers focus on the FCR to comply with the strict ASC requirements. The trout feed producers use expensive fish meal with a low % of ash and P. | The Norwegian smolt producers can also comply with the requirement concerning discharge of 5 kg P per tons of fish produced, but not without some extra costs. How come the Norwegian smolt producers and the CABs in practice are allowed to rewrite the ASC salmon standard, just because they do not want to comply with the requirement in 8.4? | | |
| Industry | PHARMAQ AS | Email | N/A | (Referring to the email from 07.08.2014) Regarding previously expressed concerns about the justification of the assignment of the persistence factors for the different treatment compound in the PTI of the salmon standards. Additional comment: No residues and no indication for ALPHA MAX accumulating in the sediments from sediment monitoring in Norway | Previously provided (from PHARMAQ to the ASC) experimental data on sediment degradation for deltamethrin and compounds from an extensive literature review convince that this information is sufficient to justify lowering the persistence index of deltamethrin to the same level as for cypermethrin. | index of deltamethrin to the same level as for cypermethrin. | |
| Non industry | WWF | Email | N/A | Some ASC stds have a regional/ component that looks at cumulative impacts (ABM), Eg ABM in salmon std should be extended to include cumulative water quality impacts and regional requirements added into all | | Increased area based requirement. | |
| Non industry | WWF | Email | N/A | Comment on minor NC vs. major NC on partial audits | | Improving consistency in ASC's guidance around things and general weakness in logic on partial audits. | |
| Non industry | WWF | Email | N/A | Comment on impact monitoring | | Needs adding to the requirements so that data is collected and recorded and transparent so that it can be used to measure impacts over time. | |
| Non industry | WWF | Email | N/A | MSC ingredients as food source (how to link standards) | | | |
| Non industry | WWF | Email | N/A | Strict requirements on salmon farming excluded from FW ecosystems | | | |
| Non industry | Monterey Bay Aquarium The New Zealand King | Email | N/A | Our intention is to work within the review process to improve these ASC standards to at least a "Good Alternative" level (Seafood Watch)so that we may recommend them to our buying partners. <u>Current ASC status in the Seafood</u> <u>Wacth</u> : Pangasius (Yellow:good alternative), Salmon (Red: Avoid) and Tilapia (Red: Avoid) (Other comments) A review is well overdue in order to | Element rated as 'Red' -Salmon: Feed/ Escapes -Tilapia:Chemical/Escapes -Pangasius:Habitat | Improve Salmon and Tilapia standards from being in Red list to at least Yellow | |
| | Salmon Co. | | | enable NZ salmon producers to achieve the standard. In general we agree on TOR, however, if NZ is to participate, changes need to be made | | | |

| Stakeholder group | Organisation | Method of commenting | Principle/ criterion/ indicator/ requirement | Comment in detail | Rationale | Stakeholder proposal | Also applies to: |
|----------------------|--------------|----------------------|---|--|---|--|---------------------|
| industry | operations | Email | | 1. Progressive approach, accept regional differences and already developed science. Variance requests, flexibility within criteria promotes participation and drives best practice. Technical committee have made sound decisions based on science and this should be congratulated and communicated 2. Suggest ASC set up a flexible working arrangement with regards to royalty payments specific to different countries. ASC awareness differs in different countries globally and royalty fees scales provided are very high compared with potential sales gain via logo usage to end consumers. Significant investment is needed in some countries eg. Australia, to raise these awareness levels and educate end consumers in the benefits of choosing ASC accredited products. Suggest agreements set up where company investments in advertising and communications program at driving awareness levels are set against proposed royalty fees | Suggest ASC set up a Technical Working Group to look at broad scale management and cumulative impacts, as a path to integrate criteria into Principle 2 of the Salmon standard Further guidance to auditors required on conduct of stakeholder meeting. Provision of a consistent and thorough stakeholder engagement and stakeholder meeting structure across audits will ensure equity in stakeholder feedback between farming regions and between companies. Provide clear guidance to auditors on stakeholder engagement and conduct of stakeholder meetings | | |
| Non industry | FishWise | Email | N/A | Farmed salmon and Tilapia does not meet our retailers' responsible sourcing policies | ASC standards benchmark to a Seafood Watch Yellow rating. | Revise the current standards for salmon and tilapia. | |