Report for Tassal Operations Pty Ltd:

Tasman Region, MF 190 Creeses Mistake

Full Assessment
Against Aquaculture Stewardship Council (ASC)
Salmon Standard V1.0

Tassal Operations Pty Ltd
Level 9, 1 Franklin Wharf, Hobart 7000,
Australia

USING: ASC Salmon Standard V1.0 June 2012
AUDITORS: Juan Aguirre, James McNaughton and Dr. Sabine Daume
ONSITE DATES: 29th May and 2nd June 2014
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Acronyms

ABM	Area Based Management
ABN	Australian Business Number
ACN	Australian Company Number
ADAS	Australian Diver Accreditation Scheme
ADD	Acoustic Deterrent Device
AHD	Acoustic Harassment Device
AGD	Amoebic Gill Disease
AMA	Area Management Agreement
AMAMG	Area Management Agreement Management Group
AMBI	AZTI Marine Biotic Index
ANZECC	Australian and New Zealand Environment and Conservation Council
APC	Australian Packaging Covenant
APVMA	Australian Pesticides and Veterinary Medicines Authority
ARV	Aquareovirus
ASC	Aquaculture Stewardship Council
ASI	Accreditation Services International
ASX	Australian Stock Exchange
ATO	Australian Taxation Office
AWU	Australian Workers' Union
AZE	Allowable Zone of Effect
BAP	Best Aquaculture Practices
BEMP	Broadscale Environmental Monitoring Plan
BET	Bigeye Tuna
BOD	biochemical oxygen demand
BQI	Benthic Quality Index
CAB	Conformity Assessment Body
CoC	Chain of Custody
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DHA	Docosahexaenoic Acid
DNA	Deoxyribonucleic Acids
DO	Dissolved Oxygen
DOM	Dive Operations Manual
DPEMP	Development Proposal and Environmental Management Plan
DPIPWE	Department of Primary Industry, Parks, Water and Environment
eFCR	Economic Feed Conversion Ratio
EHN	Epizootic haematopoietic necrosis
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EMPCA	Environmental Management and Pollution Control Act 1994
EPA	Environmental Protection Authority
EPN	Environment Protection Notice
EPO	Eastern Pacific Ocean
ERM	Enteric Redmouth Disease
EUL	Estimated Unexplained Losses
FCR	Feed Conversion Rates
FFDRo	Fish Oil Forage Fish Dependency Ratio

FFDRm	Fishmeal Forage Fish Dependency Ratio
FHMP	Fish Health Management Plan
FHU	Fish Health Unit
FIP	Fisheries Improvement Project
FM	Fish Meal
FO	Fish Oil
FRDC	Fisheries Research & Development Corporation
FY	Financial Year
GHG	Green House Gas
GJ	Gigajoule
GMO	Genetically Modified Organism
GWP	Global Warming Potential
HAC	Huon Aquaculture Company
HAG	Huon Aquaculture Group
HO	Head Office
HOG	Head On Gutted
HoS	Head of Sustainability
HPLC	High-performance liquid chromatography
IALA	International Association of Marine Aids to Navigation and Lighthouse Authorities
IFFO RS	The International Fishmeal and Fish Oil Organisation - Responsible Supply
IFS	Inland Fisheries Service
IHN	Infectious haematopoietic necrosis
BKN	Bacterial kidney disease
IMAS	Institute of Marine & Antarctic Studies, University of Tasmania
IMS	Integrated Management System
IPN	Infectious pancreatic necrosis
ISA	Infectious salmon anaemia
ISEAL	International Social and Environmental Accreditation and Labeling Alliance
ISO	International Organization for Standardization
IUCN	International Union for Conservation of Nature
IUU	Illegal, Unregulated, and Unreported
JSA	Job Safety Analysis
kWh	Kilowatt Hour
LCA	Life Cycle Analysis/Assessment
LOI	Loss on Ignition
LPG	Liquid Petroleum Gas
MDS	multidimensional scaling
MF	Marine Farm
MFDP	Marine Farm Development Plan
MOP	Marine Operations Protocol
MSC	Marine Stewardship Council
MSDS	Material Safety Data Sheets
MT	Metric Ton
mWh	Megawatt Hour
NC	Non-conformity
NES	National Employment Standards
NGER	National Greenhouse and Energy Reporting
NRM	Natural Resource Management

NWB	North West Bay
OH&S	Occupational Health and Safety
OIE	World Organization for Animal Health
OTC	Oxytetracycline
PD	Pancreas Disease
PPE	Personal Protective Equipment
pSIA	participatory Social Impact Assessment
QA	Quality Assurance
RCD	Residue Current Device
RLO	Rickettsia
RM	Regional Manager
ROV	Remotely Operated Vehicle
RTRS	Roundtable for Responsible Soy
SAD	Salmon Aquaculture Dialogue
SAI	Social Accountability International
SARDI	South Australian Research and Development Institute
SCAT	Southern Coastcare Association of Tasmania
SHWG	Salmonid Health Working Group
SOMV	Salmon Orthomyxovirus
SOP	Standard Operating Procedure
SPC	Soy Protein Concentrate
SPP	Special Plumbing Permit
SRAC	Sustainability Report Advisory Committee
SROI	Social Return on Investment
TAFI	Tasmanian Aquaculture and Fisheries Institute
TARFISH	Tasmanian Association for Recreational Fishing
TASI	Tasmanian Aboriginal Site Index
TCT	Tasmanian Conservation Trust
TFDA	Tasmania Fisheries Development Authority
TIMS	Tassal's integrated Management System
TPDNO	Total Permitted Dissolved Nitrogen Output
TRCI	Tasmanian River Condition Index
TSGA	Tasmanian Salmonid Growers Association
TSIC	Tasmanian Seafood Industry Council
USA	United States of America
VDA	Van Diemen Aqua
WDP	Waste Disposal Plan
WHS	Work Health and Safety
WHO	World health Organization
WIP	Wildlife Interaction Plan
WPA	Workplace Partnerships Agreement

1 Summary

The Tassal Operations Pty Ltd.'s (Tassal) salmon culturing site within the scope of this full-assessment, marine farm (MF) 190 Creeses Mistake, Tasman, showed excellent overall compliance to the Aquaculture Stewardship Council (ASC) salmon standard. The assessment team evaluated the operations against the ASC Salmon Standard V. 1.0 June 2012.

Overall, there are 11 non-conformities (NCs) identified during the full assessment of the Tasman farm sites, which equated to 93% of compliance against the 152 compliance criteria of the ASC salmon standard v 1.0; a proportion of these are in the not applicable (n/a) category (17%).

None of the non-conformities (NC) identified are graded as "Major". A major NC would have precluded award of certification until such time that it could be closed. Since no major NCs were identified and the farm sites conform to the ASC requirements, certification is recommended by the team. The client has provided a root cause analysis and an action plan to address each minor non-conformity (see Table 1 and 3). Progress against the action plan will be assessed at the first surveillance audit.

We identified one NC in Principle 1 (Comply with all applicable national laws and local regulations) related to health and safety regulations and four in Principle 2 (Conserve natural habitat, local biodiversity and ecosystem function), one related to the frequency of nitrogen and phosphorus levels on measurements at the farm, one about feed testing, one about access to information by the public, one about marine mammal mortality. There is one NC in Principle 4 (Use resources in an environmentally efficient and responsible manner) related to the feed ingredients used at the farming sites. There are two NCs in Principle 5 (Manage disease and parasites in an environmentally responsible manner). The first one relates to the frequency of farm site visits by the company vet, the other one to the estimated percentage of unexplained mortality to overall mortality at the farm site. Two NCs have been identified in Principle 7 (Be a good neighbor and conscientious citizen), the first one related to informing the community regarding antibiotics treatments and potential health risks is associated with two compliance criteria, the second one is about consultations with aboriginal groups. One NC has been identified in Section 8 (Requirements for suppliers of smolt). The NC is about dissolved oxygen (DO) measurements in effluent of the semi-open hatchery system at Russell Falls.

Table 1. Summary of ASC criteria where a non-conformance was identified, the general aspect of the standard that the criteria relate to and the designation of whether the non-conformity was identified as a minor or a major non-conformity.

Criterion	Related to	Rating
1.1.1.a	equipment in line with legislative WHS requirement	minor
2.2.4	monitoring of the nitrogen and phosphorus levels around the farm site	minor

2.3.1.a, c	feed testing	minor
2.5.5.b	lethal incident reporting (animal)	minor
2.5.6.c	marine mammal lethal incidents	minor
4.3.2.b	FishSource score for feed material	minor
5.1.2.a	quarterly veterinarian visits	minor
5.1.6.b	Unexplained mortalities	minor
7.1.1.d and 7.1.3.c	meaningful community consultations	minor
7.2.2.a, b	informing the public during therapeutic treatment periods	minor
7.22ab	consultations with aboriginal groups	minor
8.33b	dissolved oxygen levels for effluent at hatchery	minor

2 Historical Background of Farm and Farming Area

Tassal is the largest salmon aquaculture company in Australia, employing over 850 people. A vertically integrated company, Tassal operates two salmon hatcheries, three processing facilities, two retail outlets and marine farms in six regions throughout the state. Tassal is producing salmon predominately for the Australian market, and has a retail presence in over 2,000 outlets around Australia. Tassal Group Pty Ltd is an ASX 200 public company listed on the Australian Securities Exchange. Including Tasman, it has six regional farming sites.

The Tassal site assessed during this full-assessment, the MF 190 Creeses Mistake, is located within Zone 14A of the Tasman Peninsula and Norfolk Bay Marine Farming Plan area, in Wedge Bay (Figure 1). Boundaries of this zone are defined in the Tasman Peninsula and Norfolk Bay Marine Farming Development Plan (MFDP). The size of the zone is approximately 55.81 hectares with a Maximum Leasable Area (MLA) of 25.00 hectares. Tassal is permitted to farm finfish in this zone as per provisions of the marine farming licence. The Creeses Mistake lease has been operating for 16 years and currently holds 22 available pen bay positions.

Tassal farms Atlantic salmon (*Salmo salar*) in open net cage farming systems. At the site, polar circle pens, 120m in circumference, are used with densities of 15 kg/m^3 maximum following internal Tassal policies. The fallowing time is based on feed input from the preceding 12 months and benthic survey (see below environmental monitoring for more details). During the most recent harvest cycle 15 of the 22 units were stocked and harvested.

Tassal holds Best Aquaculture Practices (BAP) salmon certificates for the Tasman Cresses Mistake farm site as well as for their processing facility in Dover.

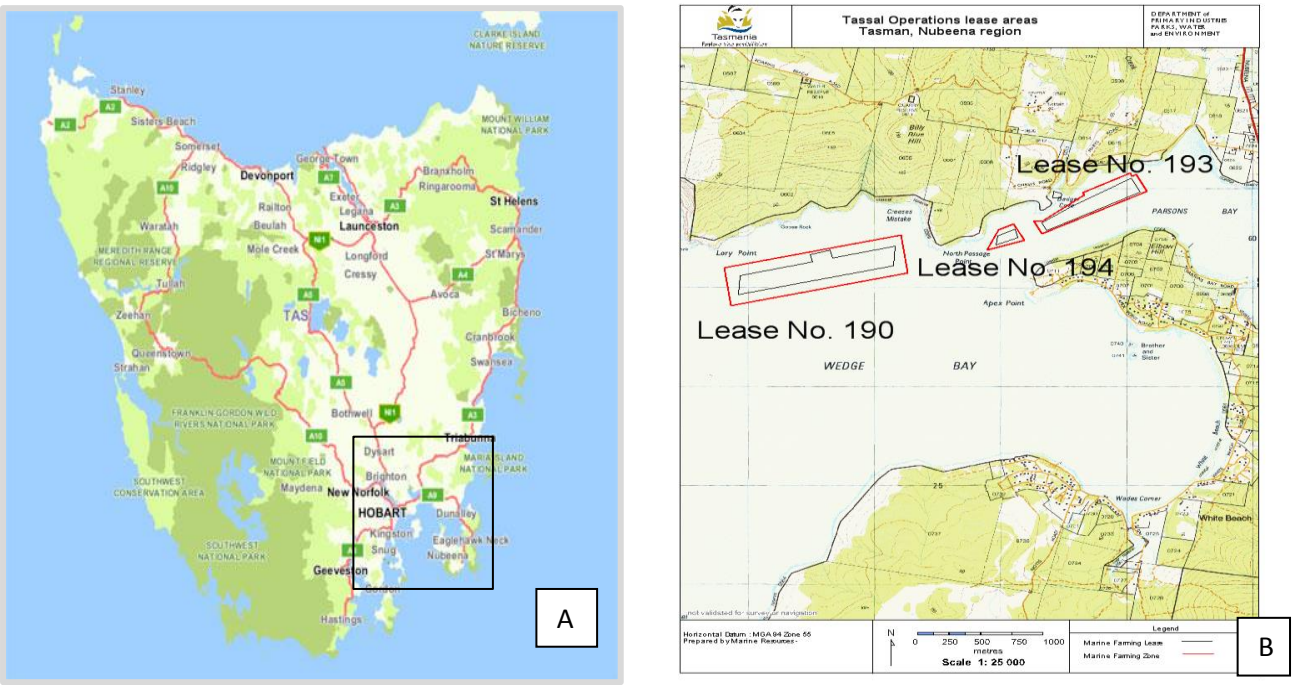

Figure 1. Map A: Tasmania, Australia, area that contains the sites (MF 190) is off the Tasman Peninsula indicated by black box. Map B: Close-up location of the lease sites (MF 190). Other sites are not included in unit of certification and not used for grow-out.

Environmental Monitoring

Environmental monitoring requirements for each farm by the Tasmanian Government are specified in the marine farm licence which is renewed annually. In the Huon and Channel growing areas this monitoring is separated into i) on and near the farm and ii) broadscale across the waterway.

On and near the farm: All salmon farms in Tasmania must conduct an annual video survey of the seabed in and near their lease to assess that the farm is not having an unacceptable impact on the local benthic environment. Details of the filming procedure for the video monitoring are specified in Schedule 3 of Marine Farming License conditions. Spot dives, generally six in total, are conducted at compliance sites as specified by DPIPWE; these sites are mostly at 35 m from the boundary of the lease area and in the down current direction. Six video surveys are also conducted inside the lease area which must include sites that have been subjected to the heaviest stocking pressure (highest feed input prior to fallowing or in previous 12 months) and are filmed from the edge to the centre of the cage. The license specifies significant visual impacts which must not occur within the lease area– excessive feed, bacterial mats or spontaneous gas bubbling from the sediment; and beyond the boundary of the lease area - presence of feed pellets, bacterial mats, gas bubbling, or numerous opportunistic polychaetes on the sediment surface. If a significant visual impact is detected, then additional environmental monitoring is likely to be triggered.

Broadscale Environmental Monitoring program (BEMP): All license holders in the D'Entrecasteaux Channel and Huon River and Port Esperance MFDP areas must participate in the BEMP, which is investigating the cumulative impact of all salmon farms in the waterway. Fifteen sites spread throughout the region are monitored for water and sediment quality. Sediments are sampled every March (autumn) for redox, sulphide, organic content (LOI) particle size, benthic infauna and stable isotopes, although infauna and stable isotope samples were only fully analysed in the first year, and placed in storage for subsequent years. Full analysis is recommended every 4-5 years unless results indicate more frequent analysis is required. Water column parameters - ammonia, nitrate, nitrite, phosphate, silicate, Total Nitrogen, Total Phosphorous, Dissolved Oxygen, temperature, salinity, and phytoplankton biomass and community composition (chlorophyll *a* , HPLC pigments and cell counts) are sampled 15 times per year; monthly from May-Jan and fortnightly from Feb-April. Schedule 3BEMP of the license provides a detailed description of sampling procedures, processing, analysis and reporting for each environmental variable.

Although not part of regulatory license conditions, Tassal has recently commenced monthly monitoring of water quality in the Tasman region, similar to the BEMP water quality monitoring, with four sites at each of Nubeena and Port Arthur.

3 Scope

Reference Standard & Guidance	ASC Salmon Standard V1.0 June 2010 Audit Manual, ASC Salmon Standard V1.0
Scheme Documents	ASC Certification and Accreditation Requirements V1.0
Species Produced	(Atlantic salmon - *Salmo salar*)
Audit Scope	Marine farm-level production at MF 190 Creeses Mistake, single site assessment
Receiving Water Body	Wedge Bay and Parsons Bay, into Storm Bay, Tasmania, Australia

4 Audit Plan

4.1 Previous Audits

A pre-assessment of Tassal Operations Pty Ltd's (Tassal) Macquarie Harbour farming region (Lease 214 – Middle Harbour and Lease 219 – Gordon) was conducted in July through August 2013 as a desktop audit only. After the pre-assessment, the applicants for certification authorized the formal, full assessment of the two Macquarie Harbour leases and one North West Bay leases (MF 94 Sheppards). Tassal received ASC certification for the Macquarie Harbour farming region on April 4th 2014 and the North West Bay farming region on June 10th, 2014. There have been no previous audits for the farm site that is the subject of this report (MF 190 Creeses Mistake).

All aspects of the assessment process were carried out under the auspices of SCS Global Services (SCS), an Accreditation Services International (ASI) -accredited conformity assessment body (CAB), and in direct accordance with ASC requirements.

4.2 Auditors

The following auditors comprised the assessment team: Dr. Sabine Daume, Juan Aguirre and James McNaughton.

Dr. Sabine Daume, SCS Global Services – MSC and ASC lead auditor

Dr. Daume is responsible for leading SCS's Sustainable Seafood Certification program, which includes aquaculture, fishery and chain of custody certification under the auspices of both the nascent Aquaculture Stewardship Council and the Marine Stewardship Council (MSC). She has been part of the global steering committee for the Abalone Dialogue to develop the Abalone standard for ASC and sits on the Technical Advisory Group for the Aquaculture Stewardship Council. Prior to joining SCS Dr. Daume worked as a Senior Research Scientist at the Research Division of the Department of Fisheries in Western Australia and at Deakin University in Victoria, Australia.

Past research conducted by Dr. Daume has focused on invertebrate aquaculture and fisheries. She has led several nationally FRDC funded, multi-year research grants on abalone broodstock conditioning and improvements to hatchery and nursery production as well as fisheries enhancement. Dr. Daume is a certified lead auditor under the ISO 9001:2008 and SAI's training for SA 8000 (social accountability) and trained to conduct ASC audits against the salmon and abalone standards. She has led numerous pre- and full- MSC assessments of various size and scale, including many fisheries in Australia. She also has experience working with diverse stakeholder groups, often in remote marine environments. Sabine has published in the peer-reviewed scientific literature (e.g. *Aquaculture Research, Journal of Shellfish Research*) as well as produced research reports and produced interactive training materials for the industry and led industry workshops.

Juan Aguirre, SCS Global Services- Technical Expert

Juan is a project manager for Aquaculture at SCS Global Services. He received his BS and Masters' degree from the University of Texas at Austin. He is a certified lead auditor in SCS's Sustainable Seafood Certification program, which includes both aquaculture and chain of custody certification for the Aquaculture Stewardship Council (ASC). With over 20 years of experience in the fields of commercial aquaculture, and an academic background in ecology and biological oceanography, he has developed significant expertise in sustainable seafood production and certification. Juan is qualified to conduct audits for the ASC Salmon, Shrimp and Bivalves standards and for the ASC and MSC chain of custody certifications.

Juan has extensive experience with invertebrate and tropical fish aquaculture as well as technical and managerial knowledge of hatcheries, nurseries, grow-out systems, recirculation and water treatment systems, aquatic feeds and feed mills, and other aspects of commercial aquaculture.

James McNaughton, SCS Global Services – Fair Trade USA Auditor

James McNaughton is an Associate at SCS Global Services, specializing in social auditing and auditor training. He is a Fair Trade USA auditor, with a focus on audit projects in Latin America and Asia-Pacific. James leads Fair Trade USA auditor trainings, both remotely and onsite in Latin America and Asia-Pacific. He also works as a social auditor within the Aquaculture Stewardship Council program, and is a certification decision maker within the Food and Agriculture Division at SCS Global Services. James' background is in the development of social responsibility standards, contributing to the Fair Trade USA agricultural standards, and the Fair Labor Practices and Community Benefits standard. James is a certified ISO 9001 lead auditor. He graduated from the University of Adelaide with a Bachelor of International Studies. James was the social auditor on the team and responsible for Principle 6 and 7 as well as stakeholder engagement.

4.3 Audit Plan as Implemented

The general steps followed were:

Announcement of the intention for Tassal's Creeses Mistake farm site to undergo a full assessment (22nd April, 2014)

At this first step of the assessment process, SCS provided the ASC thorough information about the planned assessment, including the species produced, the unit of certification, the standard to be assessed against, the planned assessment dates, and the team selected for the assessment, including short bios of their background using ASC public disclosure form that was posted on the ASC website. SCS also informed identified stakeholders that the company intended to undergo a full ASC assessment directly through email.

Onsite Audit and Meetings with the company staff and stakeholders (29th May and 2nd June, 2014)

SCS planned for and conducted meetings in Hobart, Tasmania, Australia as well as the actual lease sites and land based sites relevant to the unit of certification. The assessment team set aside time for stakeholder meetings from 6-8 pm on May 29th at the Nubeena RSL, Nubeena.

Gathering of evidence (May-June, 2014)

Evidence in the form of documents, reports and internal protocols and procedures were received before the audit starting in May. Further evidence was submitted during and after the audit. The audit was closed when the last documents were submitted to SCS, on June 19th, 2014.

Drafting the report (June-July, 2014)

The assessment team drafted the report in accordance with ASC required process and layout.

Review of the report (July, 2014)

The complete draft report was submitted to the client for review. The draft report included a list of identified non-conformities. The client was requested to include a root cause analyses as well as action plan to close out the minor non-conformities. The client was instructed if major non-conformities were identified, these need to be closed out before a certification decision could be made. The draft report was also reviewed internally at SCS by a technical expert. The team revised the report, taking client's and technical expert's comments into account.

Release of Draft Report (11 August, 2014)

SCS released the Draft Report for a 10-day stakeholder comment period. Stakeholders were informed through posting on the ASC website and direct email to known stakeholders.

- Certification decision (15th September, 2014)

  The certification decision board met and determined that the Tasman site (Creeses Mistake) of Tassal Operations Pty Ltd should be certified.

- Release of Final Report with certification decision (16th September, 2014)

  SCS released the final report with the certification decision within 10 days of the close of comment period.

4.4 Staff Interviews

The Table below summarizes the staff interviews that were conducted at Tassal HO and at the land based office for the Tasman full assessment audit.

Table 1: Summary of Worker and Management Interviews
Linda Sams, Head of Sustainability
Heidi Hansen, Environmental Certification Officer
Fiona Ewing, Community Engagement Officer
Alistair Brown, Carlos Zarza, Fish Health Staff Members
Human Resources department representative
Regional Manager
Systems Team Leader
Operation Manager
Team Leader 1
Team Leader 2
Dive Team Member 1
Dive Team Member 2
Farm Attendant 1
Farm Attendant 2
Farm Attendant 3
Farm Attendant 4

4.5 Stakeholders

In order to ensure a thorough and robust assessment process, and a process in which all interested stakeholders could and would participate, SCS sought comment from the public through direct mailing and posting advisories on the ASC website and was available for comments during the onsite visit and

after the onsite visit. The assessment team set aside time for stakeholder meetings and advised interested stakeholders of venue and time by direct email. Meetings related to the farm sites under assessment occurred on May 29th, 2014. See Appendix 1 for attendees and comments received during the meeting.

Written submissions were also received. The submissions and the Conformity Assessment Body (CAB) responses can also be found in Appendix 1 of this report. The following organizations were identified as potential interested stakeholders during the pre-assessment process of Tassal. These organizations were notified of planned audit activities and milestones, invited to attend onsite meetings and solicited for comments on the assessment via email.

- Australian Conservation Foundation
- Australian Network of Environmental Defenders Offices
- Australian Wildlife Conservancy
- Banksia Environmental Foundation
- Birds Australia
- Blue Wedges
- Clean Ocean Foundation
- Environment Victoria
- Environment Tasmania
- Foundation for National Parks & Wildlife
- Greening Australia
- Landcare Australia
- Local yachting and boating clubs
- Local Government councils
- Southern Coastcare Association of Tasmania
- Tasmanian Conservation Trust
- Tasmanian Aquaculture Reform Alliance
- Tasmanian Seafood Industry Council
- Tasmanian Association for Recreational Fishing
- Tasmanian NRM Cradle Coast & NRM South
- The Wilderness Society (Australia)
- Wildlife Watch Australia
- WWF Australia

5 Findings

Overall, there were 11 minor non-conformities (NCs) identified during the full assessment of the Tasman farm site. Any outstanding findings and their respective action plans and root cause analyses are listed in

Table 2 of Section 9 below. No certificate has been issued at this time. The certification decision will occur after the submission of this draft report for a 10-day stakeholder comment period.

Findings have been graded following the ASC requirements:

Major Non-conformity:

Any non-conformity that has one or more of the following:

- *The absence or total breakdown of a system that is likely to result in a failure to achieve the objective of the relevant ASC Criteria or another applicable certification requirement.*
- *Would result in the probable shipment of product that does not conform to ASC requirements.*
- *Is likely to result in a failure of the system or materially reduce the ability of the client to assure the integrity of the certified product.*
- *Is shown to continue over a long period of time*
- *Is repeated*
- *Is systematic or is the result of the absence or a total breakdown of a system*
- *Affects a wide area and/or causes significant damage*
- *Is not corrected or adequately responded to by the client once identified.*
- *Where two (2) or more minor non-conformities may together meet any of the above criteria.*

Minor Non-conformity

Any non-conformity in which the client does not comply with the standard and those non-conformities do not jeopardise the integrity of the certified product. This includes:

- *Where failure to comply with a requirement which is not likely to result in the breakdown of a system to meet an ASC requirement.*
- *Where the failure is a single observed lapse or isolated incident.*
- *Where there is no systemic failure to conform to ASC requirements.*
- *Where the impacts are limited in their temporal and spatial scale.*
- *Where there is minimal risk of the shipment of a product that does not conform to ASC requirements.*
- *Where the failure does not meet the definition of a Major Non-conformity*
- *Where the failure will not produce a non-conforming product.*

6 Evaluation Results

Tasman		
PRINCIPLE 1. OBEY THE LAW AND COMPLY WITH ALL APPLICABLE NATIONAL LAWS AND LOCAL REGULATIONS		
1.1 Compliance with all applicable local and national legal requirements and regulations		
1.1.1 Presence of documents demonstrating compliance +with local and national regulations and requirements on land and water use		
a	Maintain copies of applicable land and water use laws.	Tassal Group Ltd is an ASX 200 publically listed company on the Australian Securities Exchange. As part of the Corporate Governance they must comply with a number of Business & Operating licenses (as detailed in Land and Water use laws). The marine farm grow-out site at Creeses Mistake in the Tasman region has a current DPIPWE (Dept. Primary Industry, Parks, Water & Environment) Marine Farming Lease No. 190 (24.99 ha): ▪ 30 year lease from 23 March 1999 to 22 March 2029 ▪ MF Licence No 190 to carry out Atlantic salmon culture 1/12/13 to 30/11/14 (renewed annually) ▪ Cartographic survey 6/9/2007. Other evidence for legal compliance for farms and depots includes: ▪ Power bill Aurora Accrual – month ending 31/01/2014 ▪ Freshwater Operations Permits and other licences forfour hatcheries (two owned by Tassal, two SALTAS Industry hatcheries). ▪ Titles and Crown Lease for Badgers Cove land base ▪ Salmon By-products Agreement with SeaFish Tasmania (27/1/11 24p) ▪ Heads of Agreement between Tassal and De Bruyn's Transport to provide and operate a feed supply vessel to service Tassal's SE Tasmania sites, signed 7/3/2014. The main depot (land-base) is at Badgers Cove, Nubeena with administration office & staff amenities, equipment stores, dive room, jetty, workshop, mortality chiller, chemical & fuel stores and small laboratory. Inspections of the land base including the jetty operations area, offices, workshop, mortality container and fuel and chemical storage areas showed that they were operated in line with legislative requirements for WHS and environmental protection. Evidence of this included many safety signs displayed, WHS noticeboards and posters and safety committee meetings minutes; Visitor/ Contractor Sign In Registration with PPE and access requirements; appropriate storage of chemicals & fuels (with MSDS) & spill kits; first aid kits; testing & tagging of electrical equipment and RCDs); securing of gas & dive bottles; testing & tagging of fire extinguishers (2 Mar'14); pre-starts and maintenance checks for forklifts; pest control through Morris with up-to-date licenses #94 (expiry 4/9/14) & permits initials GPO (expiry 22/10/14), the Map (1/10/13) shows fly machines and bait stations (internal &

		external), recycling bins and waste control and appropriate facilities for staff for eating, drinking & ablutions. For Marine Operations Protocols (MOPs): ▪ The Regional Manager (RM) is in responsible for maintaining lease boundaries & plan area controls. ▪ IALA Lighting Requirements as Marine & Safety Tas 7/08/06, letter from DPIW 9/08/06 Copies of all applicable land and water use permits were in order and maintained according to applicable laws and regulations. Minor non-conformity: The land base equipment was not always operated in line with legislative requirements for WHS and environmental protection. The testing of electric drill had expired, test & tag was due in February '14.
b	Maintain original lease agreements, land titles, or concession permit on file as applicable.	Refer to above.
c	Keep records of inspections for compliance with national and local laws and regulations (if such inspections are legally required in the country of operation).	Refer to 1.1.1 a. Regional requirements are also contained in the following documents on file at Tassal: ▪ Tasman Peninsula and Norfolk Bay MFDP (November 2005) Finfish Farming Benthic Monitoring Program Review The legal compliance is discussed in Tassal Sustainability report 2013. Tassal's MF 190 lease has been in operation since 2005. Annual Compliance Surveys of video monitoring (reviewed 2013 data set, discussed elsewhere) are sent to MFB of DPIPWE for assessment. The MFB reserves the right to inspect anything they wish on Tassal farms pertaining to environmental regulations they set in the MFDP, including directing them to do sampling (e.g. redox, sulphides).
d	Obtain permits and maps showing that the farm does not conflict with national preservation areas.	The Tasman Peninsula and Norfolk Bay MFDP (November 2005, 49p) includes updated map with all Marine Farming Zones listed p2 and marked on Map 2.2. As these areas were selected by DPIPWE, there is no conflict with national or state preservation areas.
1.1.2 Presence of documents demonstrating compliance with all tax laws		
a	Maintain records of tax payments to appropriate authorities.	Lists of taxes paid FY2012 and FY2013 detailed in 2013 Sustainability report p9; also 2012 Annual Report (pages 4-5 & 7) and 2013 Annual Report (pages 4-5 & 7). Tassal engages accounting firm KPMG as their registered tax agent and all records are maintained.
b	Maintain copies of tax laws for jurisdiction(s) where company operates.	Tassal uses the ATO Legal Database website for Australian Taxation Legislation for the jurisdiction in which Tassal operates (http://law.ato.gov.au/atolaw/Browse.htm?Node=0&ImA=CollapseAll). Deloitte's audit resulted in signoff of 2013 Annual Report (20/01/13) on p36.

c	Register with national or local authorities as an "aquaculture activity".	Federal gov't registrations include: ▪ Tassal Group Ltd - ACN 106 067 270, ABN 15 106 067 270 ▪ Tassal Operations Pty Ltd - ACN 106 324 127, ABN 38 106 324 127 Tasmanian Gov't Marine Farm leases and licenses detailed above in 1.1.1.
1.1.3. Presence of documents demonstrating compliance with all relevant national and local labour laws and regulations		
a	Maintain copies of national labour codes and laws applicable to farm (scope is restricted to the farm sites within the unit certification).	Tassal was named a Tasmanian Employer of Choice in 2012. Document "Conditions of Employment Policy (IMS-P1047 Issue 3, 8/1/13, 1p)" includes General principles, conditions of employment, related policies & agreements. Letter of Offer (draft 28/4/11 template, 6p) list legal & award conditions. The National Employment Standards entitlements (NES 2010, 2p) list 10 entitlements for fair Work. The Tassal Workplace Agreement (WPA) "Tassal Marine Operations Enterprise Agreement Work Place Agreement 20011-14, 36p) signed by Tassal, Australian Workers Union with stamped approval Fair Work Australia 3/11/11 (1p) expiry 1/10/14. The Legislation Register contains relevant acts & regulations. Tassal 2012 Sustainability Report, p37-45, describes programs and compliance with a wide range of acts, regulations & legislation including *Australian Fair Work Act 2009, Criminal Code Act 1995, Tasmanian Anti-Discrimination Act 1998, Tasmanian Workers Rehabilitation & Compensation Act 1988, Age discrimination Act 2004, Sexual Discrimination Act 1984, Disability Discrimination Act 1992, Racial Discrimination Act 1975 and Environment* and *Pollution Control Act 1994*. Tassal used the "National Employment Standard" (2p, 2010) lists 10 minimum entitlements given at induction and on display boards.
b	Keep records of farm inspections for compliance with national labour laws and codes (only if such inspections are legally required in the country of operation).	Inspections of the farm are not undertaken by Federal Government agencies. The Australian Workers Union doesn't conduct scheduled inspections of the work site. The union seeks permission from Tassal before they come on site. Tassal has never refused entry.
1.1.4. Presence of documents demonstrating compliance with regulations and permits concerning water quality impacts		
a	Obtain permits for water quality impacts where applicable.	At sea: - Marine Farming Licences (refer to 1.1.1a) Schedule 3 detail the monitoring/sampling sites, parameters, methods, equipment and reporting, for annual video monitoring. These requirements are also described in Marine Farm Development Plans. - As part of the MFP process Tassal farms are strategically placed in areas suitable for farming operations away from areas officially designated as protected areas (such areas are prohibited for commercial and recreational fishing or farming). Extensive baseline surveys and more recently environmental impact assessments are carried out before a farming lease and license and the appropriate approval is handed down from the Tasmanian

		government . - Annual video monitoring (in house or external contractors) compliance surveys sent to MFB (DPIPWE) for assessment. - DPIPWE licence compliance sign-off letters 10/1/12 & 1/8/13 to report that video footage & associated monitoring reports for 2012 & July 2013 (14p) reviewed and these have been accepted and licence requirements met. A non-compliance was recorded on 25/7/13 because a lease marker was 16 m outside the lease and a buoy and rope were located 45 m outside the lease boundary. On land: Feed Barge sewage tanks emptied by Ebenezer Septic Tank at sit office and house Grey water system. Taken away by Peninsula pumping and treated - The bloodwater discharges from the harvest vessels (usually *Tassal 1*) are logged including date, volume, pH, temp & EC mS/s; this is expelled at Dover Processing (part of their Trade Waste Agreement). - Majority of wastes removed by Veolia, refer Badgers Cove MOPs Waste Flow Chart; Veolia Consolidated Report July '12 to June '13 shows amounts of Cardboard, Comingled Wastes, General Wastes, Oily Wastes, Liquid Discharge and Compactor Feed Bags - Compliance with Trade Waste Agreements and other successes are described in Tassal Sustainability Report 2012 p21-30 and 2013 p27. - Signatory to Aus. Packaging Covenant (APC) action plan (July'10 to June '15, 27p) to recycle packaging; APC Action Plan: 27-slide Power Point Presentation V0.7 April 2011. All applicable permits were obtained from Tassal.
b	Compile list of and comply with all discharge laws or regulations.	Refer to above.
c	Maintain records of monitoring and compliance with discharge laws and regulations as required.	Refer to 1.1.4 a.
PRINCIPLE 2: CONSERVE NATURAL HABITAT, LOCAL BIODIVERSITY AND ECOSYSTEM FUNCTION		
2.1 Benthic biodiversity and benthic effects		
2.1.1 Redox potential or sulphide levels in sediment outside of the Allowable Zone of Effect (AZE) [3], following the sampling methodology outlined in Appendix I-1.		
a	Prepare a map of the farm showing boundary of AZE (30 m) and GPS locations of all sediment collections	Received map of sampling locations as part of the report "Annual Compliance Survey Report Marine Farm 190 Creeses Mistake Finfish Farm Tassal Group Pty Ltd July 2013"

	stations. If the farm uses a site-specific AZE, provide justification [3] to the CAB.	
b	If benthos throughout the full AZE is hard bottom, provide evidence to the CAB and request an exemption from 2.1.1c-f, 2.1.2 and 2.1.3.	N/A
c	Inform the CAB whether the farm chose option #1 (redox potential) or option #2 (sulphide concentration) to demonstrate compliance with the requirements of the Standard.	Redox measurements are requirement and listed in Schedule 3 for new leases but thereafter are not monitored unless at the discretion of the Department of Primary Industry, Parks, Water and Environment (DPIPWE) or lease holder. The MFB can at any stage request the lease holder to sample for redox or sulphides. After extensive research comparing chemical, biological and visual methods to assess localised benthic effects, DPIPWE mandated in Schedule 3V of the Marine Farming Licence that all salmon farms are assessed visually by video monitoring of the seabed in place of chemical proxies such as redox and sulphide. If the video monitoring suggests an impact then other indicators such as redox or sulphides will be required by DPIPWE. To address this criteria, Tassal propose to continue using this researched and approved visual assessment methodology. A variance request was submitted to the ASC on 13th March, 2014 asking for formal approval for the applicability of the already well-established sampling methods applied by Tassal in this region. The variance request was approved on 20th March, 2014. Tassal has provided reports on visual surveys now that the variance request has been granted.
d	Collect sediment samples in accordance with the methodology in Appendix I-1 (i.e. at the time of peak cage biomass and at all required stations).	Remote Operated Vehicle (ROV) benthic survey reports are produced regularly on the farm. Visual benthic surveys are conducted annually at sites within and outside the lease area as part of license requirements. Sites within the lease are specified by DPIPWE and are selected in areas which have had the highest level of feed input over the preceding twelve months. The variance outlined under 2.1.1 c was granted and therefore the sampling complies with this indicator.
e	For option #1, measure and record redox potential (mV) in sediment samples using an appropriate, nationally or internationally recognized testing method.	N/A
f	For option #2, measure and record sulphide concentration (uM) using an appropriate, nationally or internationally recognized testing method.	N/A
g	Submit test results to ASC as per	Reports of visual surveys were submitted to the ASC.

	Appendix VI. If site has hard bottom and cannot complete tests, report this to ASC.	
2.1.2 Faunal index score indicating good [4] to high ecological quality in sediment outside the AZE, following the sampling methodology outlined in Appendix I-1. Requirement: AZTI Marine Biotic Index (AMBI [5]) score ≤ 3.3, or Shannon-Wiener Index score > 3, or Benthic Quality Index (BQI) score ≥ 15, or Infaunal Trophic Index (ITI) score ≥ 25		
a	Prepare a map showing the AZE (30 m or site specific) and sediment collections stations (see 2.1.1).	See 2.1.1 a. Benthic infaunal assessments have been conducted at Creeses Mistake as part of a baseline survey March 1999 and over a two year period from February 2001 to March 2003 as part of a research project : Macleod, C.K., Moltschaniwskyj, N.A., Crawford, C.M. and Forbes, S.E. (2007). Biological Recovery from Organic Enrichment Some Systems Cope Better than Others. *Marine Ecology Progress Series* 342, 41-53.
b	Inform the CAB whether the farm chose option #1, #2, #3, or #4 to demonstrate compliance with the requirement.	The indices referred to by the ASC are fairly commonplace in benthic faunal evaluations, and are a core component of sediment quality assessments in Europe and the Americas; however Australia and Tasmania specifically are not a complete fit. The similarities and differences in the local Tasmanian ecology compared with overseas systems, are well recognised (Macleod *et al*., 2004, 2007, and Edgar *et al.*, 2010), as are the differences between Northern and Southern Hemisphere systems (Macleod *et al*., 2008, and Keeley *et al*., 2012). As a result, it has been highlighted that many of the biotic indices metrics derived in northern context do not readily translate to Australia. Many of the recommended faunal indices are species-specific, but not all. Currently benthic biodiversity is analysed using Bray-Curtis Similarity Index and multidimensional scaling (MDS). A variance request was submitted to the ASC on 13th March, 2014 asking for formal approval for the applicability of the already well-established sampling methods applied by Tassal in this region. The variance request was approved on 20th March, 2014.
c	Collect sediment samples in accordance with Appendix I-1 (see 2.1.1).	See above.
d	For option #1, measure, calculate and record AZTI Marine Biotic Index [5] score of sediment samples using the required method.	See 2.1.2b.
e	For option #2, measure, calculate and record Shannon-Wiener Index score of sediment samples using the required method.	See 2.1.2b.
f	For option #3, measure, calculate and	See 2.1.2b.

	record Benthic Quality Index (BQI) score of sediment samples using the required method.	
g	For option #4, measure, calculate and record Infaunal Trophic Index (ITI) score of sediment samples using the required method.	See 2.1.2b.
h	Retain documentary evidence to show how scores were obtained. If samples were analysed and index calculated by an independent laboratory, obtain copies of results.	The variance request, outlined under 2.1.2 b, which covers the current methodology applied by Tassal was approved by ASC. The reports of the approved method from the Bray-Curtis Similarity Index and multidimensional scaling (MDS) were provided after the variance request was approved
i	Submit faunal index scores to ASC (Appendix VI).	Report was submitted to the ASC.
2.1.3 Number of macrofaunal taxa in the sediment within the AZE, following the sampling methodology outlined Appendix I-		
a	Document appropriate sediment sample collection as for 2.1.1a and 2.1.1c, or exemption as per 2.1.1b.	See 2.1.2
b	For sediment samples taken within the AZE, determine abundance and taxonomic composition of macrofauna using an appropriate testing method.	See 2.1.2
c	Identify all highly abundant taxa and specify which ones (if any) are pollution indicator species.	N/A
d	Retain documentary evidence to show how taxa were identified and how counts were obtained. If samples were analysed by an independent lab, obtain copies of results.	Tassal proposed the possibility of ASC recognising that there is enough infauna data from previous studies to assess benthic impacts using visual means rather than faunal indices. As mentioned above, a variance request was submitted to the ASC on 13th March, 2014 asking for formal approval for the applicability of the already well-established sampling methods applied by Tassal in this region. The variance request was approved on 20th March, 2014.
e	Submit counts of macrofaunal taxa to ASC as per Appendix VI.	Reports were submitted to the ASC after variance was granted.
2.1.4 Definition of a site-specific AZE based on a robust and credible modelling system		
a	Undertake an analysis to determine the site-specific AZE and depositional pattern before 3 years have passed since publication of the Standard on June 13, 2012.	Tassal's AZE is 35 metres and this distance was defined by the regulators (Marine Farming Branch) based on multiple lines of evidence from the international (Brown et al., 1987; Gowen et al., 1988; Cromey et al., (1998); Hargrave et al., 1993; Cromey et al., 2002) and local research (Macleod, 2000; Crawford et al., 2002; Macleod et al., 2004). This 35 m AZE regulation has

		been in place for over 15 years and monitoring since then by research bodies and farms (as a part of the licence conditions) has provided the government with evidence that a 35 m AZE is a suitable distance for this particular farming environment.
b	Maintain records to show how the analysis (in 2.1.4a) is robust and credible based on modelling using a multi-parameter approach.	Copies of above publications and reports are kept.
c	Maintain records to show that modelling results for the site-specific AZE have been verified with > 6 months of monitoring data.	As mentioned above a variance request was submitted to the ASC on 13th March, 2014 asking for formal approval for the applicability of the already well-established sampling methods. The variance request was approved on 20th March, 2014.
2.2 Water quality in and near the site of operation		
2.2.1 Weekly average percent saturation of dissolved oxygen (DO) [14] on farm, calculated following methodology in Appendix I-4		
a	Monitor and record on-farm percent saturation of DO at a minimum of twice daily using a calibrated oxygen meter or equivalent method. For first audits, farm records must cover ≥ 6 months.	Dissolved oxygen (DO) together with salinity and temperature is measured twice daily at 7 am and 3 pm. Weekly Environmental Parameters were reviewed.
b	Provide a written justification for any missed samples or deviations in sampling time.	N/A
c	Calculate weekly average percent saturation based on data.	Weekly Environmental Parameters tables were reviewed.
d	If any weekly average DO values are < 70%, or approaching that level, monitor and record DO at a reference site and compare to on-farm level	N/A
e	Arrange for auditor to witness DO monitoring and calibration while on site.	DO monitoring is conducted on a daily basis and calibration of probes is done at least every 2-3 weeks and as required.
f	Submit to ASC results from monitoring of average weekly DO	Results were submitted to the ASC
2.2.2 Maximum percentage of weekly samples from 2.2.1 that fall under 2 mg/litre DO		
a	Calculate the percentage of on-farm samples taken for 2.2.1a that fall under 2 mg/l DO.	Full list of measurements with weekly averages were submitted to CAB. 0% fall under 2 mg/l DO (100% >5 ppm= 4.9 mg/l) therefore Creeses Mistake site complies with this indicator
b	Submit results from 2.2.2a to ASC as	Results were submitted to ASC.

	per Appendix VI.	
2.2.3 For jurisdictions that have national or regional coastal water quality targets [16], demonstration through third-party analysis that the farm is in an area recently [17] classified as having "good" or "very good" water quality [18]		
a	Inform the CAB whether relevant targets and classification systems are applicable in the jurisdiction. If applicable, proceed to "2.2.3.b". If not applicable, take action as required under 2.2.4	Australian and New Zealand Guidelines for Marine and Freshwater Quality (2000) (ANZECC Guidelines) for Southeastern Australia for estuarine and marine environments. However, these trigger values have been developed without the inclusion of water quality data from Tasmania and may not be relevant to the Tasman region.
b	Compile a summary of relevant national or regional water quality targets and classifications, identifying the third-party responsible for the analysis and classification.	Tassal has recently implemented a water quality sampling program to develop specific water quality guidelines for the Tasman region. This sampling program follows ANZECC guidelines of monthly sampling for nutrients in surface and bottom waters at sites in the receiving water body including near the farms and at reference sites. The first report - Tasman Peninsula Water Quality Sampling Summary Report: Aug2013-April 2014 was reviewed. However, sampling at Nubeena has only occurred from February 2014.
c	Identify the most recent classification of water quality for the area in which the farm operates.	See above.
2.2.4 For jurisdictions without national or regional coastal water quality targets, evidence of weekly monitoring of nitrogen and phosphorous [20] levels on farm and at a reference site, following methodology in Appendix I-5		
a	Develop, implement, and document a weekly monitoring plan for N, NH4, NO3, total P, and ortho-P in compliance with Appendix I-5, testing a minimum of once weekly in both locations. For first audits, farm records must cover ≥ 6 months.	Tassal has recently implemented a water quality sampling program to develop specific water quality guidelines for the Tasman region. This sampling program follows ANZECC guidelines of monthly sampling for nutrients in surface and bottom waters at sites in the receiving water body including near the farms and at reference sites. However ANZECC guidelines require 24 months of sampling and sampling only started in February 2014. <u>Minor non-conformity:</u> The Benthic Monitoring Program (BEMP) does not apply for the Tasman site and monthly monitoring of the nitrogen and phosphorus levels around the farm commenced in February, 2014.
b	Calibrate all equipment according to the manufacturer's recommendations.	See minor NC above

c	Submit data on N and P to ASC as per Appendix VI.	See minor NC above
2.2.5. Demonstration of calculation of biochemical oxygen demand of the farm on a production cycle basis		
a	Collect data throughout the course of the production cycle and calculate BOD according to formula in the instruction box.	Calculations of BOD were provided.
b	Submit calculated BOD to ASC as per Appendix VI.	BOD was submitted to ASC.
2.3 Nutrient release from production		
2.3.1. Percentage of fines in the feed at point of entry to the farm		
a	Determine and document a schedule and location for quarterly testing of feed. If testing prior to delivery to farm site, document rationale behind not testing on site.	Reviewed new draft procedures to measure percentage of fines in the feed and observed trial testing of methods. Staff attested that testing will occur quarterly. This will be reviewed at the first surveillance audit. Minor non-conformity: Currently the feed used at the Creeses Mistake site is not tested quarterly.
b	If using a sieving machine, calibrate equipment according to manufacturer's recommendations.	Testing equipment does not include a sieving machine.
c	Conduct test according to detailed methodology in Appendix I-2 and record results for the pooled sample for each quarter.	See minor non-conformity under 2.3.1.a.
2.4 Interaction with critical or sensitive habitats and species		
2.4.1 Evidence of an assessment of the farm's potential impacts on biodiversity and nearby ecosystems that contains at a minimum the components outlined in Appendix I-3		
a	Perform (or contract to have performed) a documented assessment of the farm's potential impact on biodiversity and nearby ecosystems. The assessment must address all components outlined in Appendix I-3.	" Environmental Impact Statement to accompany a request to amend Zone 14a as prescribed by the Tasman Peninsula And Norfolk Bay Marine Farming Development Plan November 2005" (EIS) provides a detailed description of the existing environment. This EIS describes environmental conditions including bathymetry, substrates, hydrology, flora and fauna including critical, sensitive and protected habitats and species in or near Creeses Mistake lease and land and marine reservation systems. It also discusses in detail potential impacts of the farm on the natural and human environment (p 44-119), including impact on biodiversity, habitats and sensitive species.

		All components listed in Appendix I-3 are addressed in the EIS.
b	If the assessment (2.4.1a) identifies potential impact(s) of the farm on biodiversity or nearby critical, sensitive or protected habitats or species, prepare plan to address those potential impacts.	The EIS for Creeses Mistake discusses potential effects of the marine farm and management options to minimize impact. Tassal has implemented a number of plans to address potential impacts and reduce known impacts. These are summarized in Tassal's Sustainability Reports 2011, 2012, 2013 and include: - Wildlife Interaction Plan and documented Wildlife Management System, - Planned role out of predator-proof kikko nets and seal-proof bird nets across all farms. - Target to cease using copper based antifoulant paints on nets by end FY2014 has been met in March 2014 already; instead using an *in situ* marine inspection cleaner which has been developed by Tassal. - Planned reduction in antibiotic use and only to be used when fish welfare is at stake. - Fish Health Management plan - SE region. - Ongoing monthly water quality monitoring. - Supported research project s: FRDC 2011-042 "Clarifying the relationship between salmon farm nutrient loads and changes in macroalgal community structure/distribution", and FRDC 2011/070 "Comparative susceptibility and host responses of endemic fishes and salmonids to amoebic gill disease in Tasmania".
c	Keep records to show how the farm implements plan(s) from 2.4.1b to minimize potential impacts to critical or sensitive habitats and species.	Annual Sustainability Reports contain summaries of records showing reduced impacts of operations on the environment. As described elsewhere, Tassal keeps records of farm operations, wildlife interactions, antibiotic use, fish health, and on-farm and broadscale water quality indicators.
2.4.2 Allowance for the farm to be sited in a protected area or High Conservation Value Areas		
a	Provide a map showing the location of the farm relative to nearby protected areas or High Conservation Value Areas (HCVAs) as defined above (see also 1.1.1a).	Map provided of farm relative to marine reserves and conservation areas. Also discussed in EIS.
b	If the farm is <u>not</u> sited in a protected area or High Conservation Value Area as defined above, prepare a declaration attesting to this fact. In this case, the requirements of 2.4.2c-d do not apply.	Tassal provided a declaration dated 11th December 2013 that states that Tassal`s farming sites are <u>not</u> sited in a protected area or High Conservation Value Area.
c	If the farm <u>is</u> sited in a protected area or HCVA, review the scope of applicability of Indicator 2.4.2 (see	N/A

	Instructions above) to determine if your farm is allowed an exception to the requirements. If yes, inform the CAB which exception (#1, #2, or #3) is allowed and provide supporting evidence.	
d	If the farm is sited in a protected area or HCVA and the exceptions provided for Indicator 2.4.2 do not apply, then the farm does not comply with the requirement and is ineligible for ASC certification.	N/A
2.5 Interaction with wildlife, including predators		
2.5.1 Number of days in the production cycle when acoustic deterrent devices (ADDs) or acoustic harassment devices (AHDs) were used.		
a	Prepare a written statement affirming that the farm's management is committed to eliminate all usage of acoustic deterrent devices (ADDs) or acoustic harassment devices (AHDs) by June 13, 2015.	Received written statement from Tassal affirming that the farm's does not use any acoustic deterrent devices.
b	Compile documentary evidence to show that no ADDs or AHDs were used by the farm after June 13, 2015 (applicable only after the specified date).	N/A
2.5.2 Prior to the achievement of 2.5.1, if ADDs or AHDs are used, maximum percentage of days in the production cycle that the devices are operational		
a	Maintain a log for the use of any ADDs or AHDs on farm that includes recording the number of days (24-hour cycles) during which the devices were used.	No acoustic deterrent devices used- N/A.
b	Calculate the percentage of days in the production cycle that the devices were operational in the most recent complete production cycle.	N/A
c		Confirmed at onsite audit that operation uses no ADD (<40% of days of the production cycle).
d	Submit data on number of days that ADDs/AHDs were used to the ASC as	N/A

	per Appendix VI.	
2.5.3 Number of mortalities of endangered or red-listed marine mammals or birds on the farm.		
a	Prepare a list of all predator control devices and their locations.	Tassal prepared a map of seal predator control devices and their locations at the Tasman main office and provided user logs over the past 6 months.
b	Maintain a record of all predator incidents.	Reviewed separate records for birds ("Bird monitoring data sheet") and mammals as well as annual sustainability reports 2011, 2012, 2013. Tassal's 2013 Sustainability Report p33-35 contains summary data.
c	Maintain a record of all mortalities of marine mammals and birds on the farm identifying the species, date, and apparent cause of death.	As above, records of mortalities include species, date and apparent cause of death.
d	Maintain an up-to-date list of endangered or red-listed marine mammals and birds in the area (see 2.4.1)	EIS documents critical, sensitive and protected habitats and species in or near Creeses Mistake lease
e	Compare results from (a) through (d) above to confirm that there were no mortalities of endangered or red-listed marine mammals or birds on farm.	Confirmed by comparing results from a-d.
2.5.4 Evidence that the following steps were taken prior to lethal action against a predator: **1. All other avenues were pursued prior to using lethal action** **2. Approval was given from a senior manager above the farm manager** **3. Explicit permission was granted to take lethal action against the specific animal from the relevant regulatory authority**		
a	Provide a list of all lethal actions that the farm took against predators during the previous 12-month period. Note: "lethal action" is an action taken to deliberately kill an animal, including marine mammals and birds.	One seal died after sedation in the previous 12 month period; however no planned lethal actions were taken.
b	For each lethal action identified in 2.5.4a, keep record of the following: 1) a rationale showing how the farm pursued all other reasonable avenues prior to using lethal action; 2) approval from a senior manager above the farm manager of the lethal action; 3) where applicable, explicit	N/A

	permission was granted by the relevant regulatory authority to take lethal action against the animal.	
c	Provide documentary evidence that steps 1-3 above (in 2.5.4b) were taken prior to killing the animal. If human safety was endangered and urgent action necessary, provide documentary evidence.	During onsite audit it was confirmed through staff that no lethal control has been necessary at the site.
2.5.5 Evidence that information about any lethal incidents on the farm has been made easily publicly available		
a	For all lethal actions (see 2.5.4), keep records showing that the farm made the information available within 30 days of occurrence.	Currently Wildlife Branch (DPIPWE) is notified as per requirements. Information is also currently reported in Tassal`s annual Sustainability Report.
b	Ensure that information about all lethal actions listed in 2.5.5a are made easily publicly available (e.g. on a website).	The information about lethal incidents are currently reported in Sustainability Report annually but not easily been made publically available. Staff indicated that there will be a specific section on the new website to ensure the information is publically available. This will be reviewed at the first surveillance audit. Minor non-conformity: Currently information about lethal incidents is not made publically available within 30 days.
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		
a	Maintain log of lethal incidents (see 2.5.4a) for a minimum of two years. For first audit, > 6 months of data are required.	Received bird interaction datasheet for the farm site. Received copy of log of lethal mammal interactions for all Tassal`s farm sites for 1/7/2011 – 30/6/2013 and 1/1/14 – 10/6/14. Seal data sheets identify regions but not individual leases.
b	Calculate the total number of lethal incidents and the number of incidents involving marine mammals during the previous two year period.	Bird data was provided for full 12 months showing two dead birds. Mammals: Three seals died at the farm site in a two year period 1/7/2011 – 30/6/2013 Minor non-conformity: The marine mammal mortality was greater than 2 over prior 2 years. Observation: The data relating to bird mortalities was not provided for full 2 years period prior to the audit.
c	Submit data on lethal incidents of	Data submitted to the ASC.

	marine mammals and birds to ASC.	
2.5.7 In the event of a lethal incident, evidence that an assessment of the risk of lethal incident(s) has been undertaken and demonstration of concrete steps taken by the farm to reduce the risk of future incidences		
a	Keep records showing that the farm undertakes an assessment of risk following each lethal incident and how those risk assessments are used to identify concrete steps the farm takes to reduce the risk of future incidents.	Record kept of cause of mortality. Tassal has a Wildlife Interaction Plan (WIP) and documented Wildlife Management System in place. Tassal 2011, 2012, 2013 Sustainability Reports provide summary data. Tassal commissioned a report on "A risk assessment of fur seal interactions with aquaculture in Tasmania" from IMAS, University of Tasmania, July 2013. Recommendations included better net design, better data collection, improved relocation procedures and use of deterrents by trained staff. Tassal also provided 3 year strategy to decrease lethal incidents on Tassal's salmon farms. Necropsy assessments of dead seals conducted where appropriate and means of death recorded. Most are by entanglement, sedation or holding cage relocation. Tassal has implemented procedures to reduce deaths including using kikko nets, improved treatment of seals during relocation and reduced number of relocations, and improved sedation methods. These are discussed in the Sustainability report 2013.
b	Provide documentary evidence that the farm implements those steps identified in 2.5.7a to reduce the risk of future lethal incidents.	Target for reduction has been explained in Tassal 2013 Sustainability Report (p33-34). In addition improvements were seen in FY2012 and 2013 Sustainability Report Environmental Metrics (work in progress) following steps outlined in 3 year strategy (see above).

PRINCIPLE 3: PROTECT THE HEALTH AND GENETIC INTEGRITY OF WILD POPULATIONS		
3.1 Introduced or amplified parasites and pathogens		
3.1.1 Participation in an Area-Based Management (ABM) scheme for managing disease and resistance to treatments that includes coordination of stocking, fallowing, therapeutic treatments and information-sharing.		
a	Submit to the CAB a description of how the ABM (3.1.1a) coordinates management of disease and resistance to treatments	Note: Area Management Agreement is equivalent to Area Based Management (ABM). In Tasmania AMAs are only in place for Macquarie Harbour which involves Tassal, Huon Aquaculture Company (HAC) and Petuna. A high level of collaboration between the three salmonid companies with harbour-wide plans has been developed through the Tasmanian Salmonid Growers Association (TSGA). The TSGA provides a number of forums for participation with the other companies (see below). All four salmon companies (the fourth is Van Diemen Aqua, VDA) understand and adhere to the requirements of the OIE Aquatic Animal Health Code (2012) (document sighted on file) and the Australian and New Zealand Standard Diagnostic Procedures and the Aquatic Animal Health requirements from the Department of Agriculture, Fisheries and Forestry. In the Tasman region Tassal is the only company with salmon farms and management of disease follows the Tassal Farm Disease Management and Biosecurity Protocol (SOP MO-116).
b	Keep record of farm's participation in an ABM scheme	As a requirement of Schedule 3 & Marine Farm Licences, the following records, unless otherwise determined by the Director, must be kept by the licence holder for a period of five years and reported to the Department using electronic reporting templates specified by the Director – feed inputs, av. & historical biological FCRs, smolt inputs (all single year class) & fallowing regimes (Based on the outcome of Annual Compliance Surveys the Senior Environmental Officer will advise on fallowing). The TSGA Committee, Working Group & Forum Representation document (undated, 3p) list 33 groups in which Tassal collaborates including: ▪ The CEO Management Group meets annually (no records reviewed). ▪ The state Technical Working Group meets 6 times a year. ▪ Salmonid Health Working Group (SHWG) meets at least 4 times a year, the last was a special meeting for Yersinia (20/12/13 2p) involving the four main fish Vets and the TSGA CEO. ▪ Amoebic Gill Disease Working Group temporarily on hold. ▪ In addition there are at least annually and as needed Tasmanian Salmonid Health Surveillance Program Review Working Group meetings, Minutes reviewed for Meeting #1 (22/5/13) and #2 (19/9/13) with comments by Tassal rep HoS. ▪ Recently a Mass Kill Contingency Working Group is being

		organised with state/EPA involvement. Due to the same membership and overlapping areas of discussion the SHWG been rolled into the Biosecurity Strategy Group and Biosecure Fish Facility Expansion working groups – the next meeting is within 2 weeks. The main intent of these Biosecurity groups is based on the success of the strong technical working group supported TSGA for the AMA in MH. Already they are working together with the BEMP as an area managed approach. Other issues include the nitrogen cap, a biosecurity plan for an area approach to FMP and the FH Surveillance Program. Discussions are underway with HAC around fish health for Channel & Huon River, move towards AMA. Minutes for meeting #4 (15/11/13 3p) show 10+ attendees and a wide agenda including the Biosecure Fish Facility Expansion.
c	Provide the CAB access to documentation which is sufficient for the auditor to evaluate the ABM's compliance with all requirements in Appendix II-	There are no sea lice at any Tassal farm site (App II-2 is not applicable).
d	Submit dates of fallowing period(s) to ASC as per Appendix VI.	Based on the outcome of Annual Compliance Surveys the Senior Environmental Officer will advise on fallowing. The client has submitted data/information to ASC.
3.1.2. A demonstrated commitment [40] to collaborate with NGOs, academics and governments on areas of mutually agreed research to measure possible impacts on wild stocks		
a	Retain records to show how the farm and/or its operating company has communicated with external groups (NGOs, academics, governments) to agree on and collaborate towards areas of research to measure impacts on wild stocks, including records of requests for research support and collaboration and responses to those requests.	N/A = Salmonids are not endemic to Australia, thus there are no native wild Atlantic salmon stocks in Tasmanian waters (refer 3.2). Tassal commissioned an evaluation of practices on salmon farms to mitigate escapes and ecological impacts by IMAS researchers - Lyle & Frijlink S, 2013, Report on the suitability and effectiveness of Tassal's management practices and action plans designed to minimise, monitor and respond to escape events, 30p. There is good evidence of collaboration between Tassal, some other farming companies and research institutions for research into escapees and their interactions with native fauna, with several recent publications (refer below 3.2.2).
b	Provide non-financial support to research activities in 3.1.2a	N/A - no wild native Atlantic salmon populations in Tasmania (feral population issue is discussed in 3.2)
c	When the farm and/or its operating company denies a request to collaborate on a research project,	N/A - no wild native Atlantic salmon populations in Tasmania

	ensure that there is a written justification for rejecting the proposal	
d	Maintain records from research collaborations (e.g. communications with researchers) to show that the farm has supported the research activities identified in 3.1.2a.	N/A - no wild native Atlantic salmon populations in Tasmania
3.1.3 Establishment and annual review of a maximum sea lice load for the entire ABM and for the individual farm as outlined in Appendix II-2		
a	Keep records to show that a maximum sea lice load has been set	N/A - there are no sea lice problems for Salmonids in Tasmania. On 21/1/14 the Tassal Vet Alistair Brown stated "There are 2 species of sea-lice that are of concern to the worldwide Atlantic salmon aquaculture industry – *Lepeophtheirus salmonis* and *Caligus elongatus*. At the time of writing this advice note, neither *Lepeophtheirus salmonis* nor *Caligus elongatus* are not present in Tasmania." The main external parasite affecting the SE Tasmania salmonid farms is Amoebic Gill Disease (AGD), which is becoming a major problem in Europe. In addition, AGD does not have the same epidemiology as sea lice and it does not have an intermediate finfish host so it does not compare with sea lice regulation --this is discussed in Diseases (Principle 5). However an example of the controls underway is summarised in AGD Update Board 13 Dec final – a 12 slide PowerPoint presentation (13/12/13).
b	Maintain evidence that the established maximum sea lice load (3.1.3a) is reviewed annually	N/A - there are no sea lice associated with Salmonids in Tasmania.
c	Provide the CAB access to documentation which is sufficient for the auditor to evaluate whether the ABM has set (3.1.3a) and annually reviewed	N/A - there are no sea lice associated with Salmonids in Tasmania.
d	Submit the maximum sea lice load for the ABM to ASC	N/A - there are no sea lice associated with Salmonids in Tasmania.
3.1.4 Frequent on-farm testing for sea lice, with test results made easily publicly available within seven days of testing		
a	Keep records to show that a maximum sea lice load has been set	N/A - there are no sea lice associated with Salmonids in Tasmania (refer 3.1.3).
b	Maintain evidence that the established maximum sea lice load (3.1.3a) is reviewed annually	N/A - there are no sea lice associated with Salmonids in Tasmania.
c	Provide the CAB access to documentation which is sufficient for the auditor to evaluate whether the	N/A - there are no sea lice associated with Salmonids in Tasmania.

	ABM has set (3.1.3a) and annually reviewed	
d	Submit the maximum sea lice load for the ABM to ASC	N/A - there are no sea lice associated with Salmonids in Tasmania.
e	Keep records of when and where test results were made public.	N/A - there are no sea lice associated with Salmonids in Tasmania.
f	Submit test results to ASC	N/A - there are no sea lice associated with Salmonids in Tasmania.
3.1.5 In areas with wild salmonids [43], evidence of data [44] and the farm's understanding of that data, around salmonid migration routes, migration timing and stock productivity in major waterways within 50 kilometres of the farm		
a	Identify all salmonid species that naturally occur within 75 km of the farm through literature search or by consulting with a reputable authority. If the farm is not in an area with wild salmonids, then 3.1.5b and c do not apply.	From 3.1.2 – this is N/A = Salmonids are not endemic to Australia, thus there are no native wild Atlantic salmon stocks in Tasmanian waters. Email from Inland Fisheries Service (IFS) (Tas, 26/11/13) states "There are no native species of fish of the family Salmonidae in Tasmanian Inland Waters. Brown trout (*Salmo trutta*) and Rainbow trout (*Oncorhynchus mykiss*) however have been introduced into Tasmanian Inland Waters and this species is a Salmonid. Brown trout have naturally recruiting populations in most rivers and lakes in Tasmania." The most recent correspondence with IFS (13/01/2014) states: "*Trout have been stocked into Tasmanian waterways since 1864, early acclimatisation society activity was extensive but unfortunately IFS does not have records of most of these."* Therefore similar to farm sites in Macquarie Harbour and North West Bay (previously assessed), feral or wild populations of Brown Trout (some self-sustaining) could be found within the 75 km radius criteria for all of the Tassal farms in the SE.
b	For species listed in 3.1.5a, compile best available information on migration routes, migration timing (range of months for juvenile outmigration and returning salmon), life history timing for coastal resident salmonids, and stock productivity over time in major waterways within 50 km of the farm.	N/A - Refer above.
c	From data in 3.1.5b, identify any sensitive periods for wild salmonids (e.g. periods of outmigration of juveniles) within 50 km of the farm.	N/A – Refer 3.1.5a.
d		N/A however information has been communicated

3.1.6 In areas of wild salmonids, monitoring of sea lice levels on wild out-migrating salmon juveniles or on coastal sea trout or Arctic char, with results made publicly available. See requirements in Appendix III-1.		
a	Inform the CAB if the farm operates in an area of wild salmonids. If not, then Indicator 3.1.6 does not apply.	N/A – Refer 3.1.5a.
b	Keep records to show the farm participates in monitoring of sea lice on wild salmonids	N/A – Refer 3.1.5a.
c	Provide the CAB access to documentation which is sufficient for the auditor to evaluate whether the methodology used for monitoring of sea lice on wild salmonids is in compliance with the requirements in Appendix III-1.	N/A – Refer 3.1.5a.
d	Make the results from 3.1.6b easily publicly available (e.g. posted to the company's website) within eight weeks of completion of monitoring.	N/A – Refer 3.1.5a.
e	Submit to ASC the results from monitoring of sea lice levels on wild salmonids as per Appendix VI.	N/A – Refer 3.1.5a.
3.1.7 In areas of wild salmonids, maximum on-farm lice levels during sensitive periods for wild fish [45]. See detailed requirements in Appendix II, subsection 2.		
a	Inform the CAB if the farm operates in an area of wild salmonids. If not, then Indicator 3.1.7 does not apply.	N/A – Refer 3.1.5a.
b	Establish the sensitive periods [45] of wild salmonids in the area where the farm operates. Sensitive periods for migrating salmonids are during juvenile outmigration and approximately one month before.	N/A – Refer 3.1.5a.
c	Maintain detailed records of monitoring on-farm lice levels (see 3.1.4) during sensitive periods as per Appendix II-2.	N/A – Refer 3.1.5a.

d	Provide the CAB with evidence there is a 'feedback loop' between the targets for on-farm lice levels and the results of monitoring of lice levels on wild salmonids (Appendix II-2).	N/A – Refer 3.1.5a.
3.2 Introduction of non-native species		
3.2.1. If a non-native species is being produced, demonstration that the species was widely commercially produced in the area by the date of publication of the SAD standard		
a	Inform the CAB if the farm produces a non-native species. If not, then Indicator 3.2.1 does not apply.	The MF Licences (refer 1.1.1) specify Atlantic salmon as the approved species for farming and state net specifications etc. relating to fish containment and environmental monitoring. Tassal provided information that states that Atlantic salmon and Rainbow (Ocean) trout were introduced into Tasmania by the then Tasmanian Fisheries Development Authority (TFDA) for the development of a salmonid farming industry. Salmonid farming has been underway for more than 30 years (http://www.tsga.com.au/history/), Tassal has been operating for most of this time. Rainbow trout were introduced in the 19th century. Inland Fisheries Service publications indicate rainbow trout introduced into Tasmania in 1898 from New Zealand. In addition Biosecurity regulations are in place in Tasmania and Australia to avoid importation of fresh salmon product or live or genetic materials. The MF Licences (refer 1.1) show sites used for 15+ years; Fish farms are sited in marine farming zones identified in marine farming development plans in which marine farming is a permitted activity. Biophysical characteristics must meet minimum biological requirements addressed in the planning process. New or expanded zones are subject to the statutory planning provisions of the *Marine Farming Planning Act 1995, which prescribes mandatory public consultation processes.*
b	Provide documentary evidence that the non-native species was widely commercially produced in the area before publication of the SAD Standard (i.e. before June 13, 2012).	Refer above. Yes, the non-native species was widely commercially produced in the area before publication of the SAD Standard (i.e. before June 13, 2012).
c	If the farm cannot provide evidence for 3.2.1b, provide documentary evidence that the farm uses only 100% sterile fish that includes details on accuracy of sterility effectiveness.	Farm uses mostly diploid all females and some triploids. Received Memo (4/2/14, 1p) from the Company Veterinarian stating that he conducts assessments of their triploid stocks during the freshwater phase of their life cycle to ensure that the stocks are all triploid and therefore cannot reproduce. This is also discussed in the Lyle and Frijlink, 2013 report.
d	If the farm cannot provide evidence	Refer above.

	for 3.2.1b or 3.2.1c, provide documented evidence that the production system is closed to the natural environment and for each of the following: 1) non-native species are separated from wild fish by effective physical barriers that are in place and well maintained; 2) barriers ensure there are no escapes of reared fish specimens that might survive and subsequently reproduce [47]; and 3) barriers ensure there are no escapes of biological material [47] that might survive and subsequently reproduce (e.g. UV or other effective treatment of any effluent water exiting the system to the natural environment).	
3.2.2 If a non-native species is being produced, evidence of scientific research completed within the past five years that investigates the risk of establishment of the species within the farm's jurisdiction and these results submitted to ASC for review.		
a	Inform the ASC of the species in production (Appendix VI).	Email from Inland Fisheries Service, Tas (26/11/13) states "There are no native species of fish of the family Salmonidae in Tasmanian Inland Waters. Brown trout (*Salmo trutta*) however have been introduced into Tasmanian Inland Waters and this species is a Salmonid. Brown trout have naturally recruiting populations in most rivers and lakes in Tasmania." Tassal farm Atlantic salmon only however, none of the companies farm Brown Trout; therefore wild populations can only have resulted from stocking by Inland Fisheries or private groups. The client has submitted this information to ASC.
b	Inform the CAB if the farm produces a non-native species. If not, then Indicator 3.2.2 does not apply.	Atlantic salmon was introduced by Tasmanian Fisheries Development Authority (State Gov't) more than 30 years to develop a commercial salmonid farming industry, adequate information is provided on http://www.tsga.com.au/history/ also Tassal website "Our History" http://www.tassal.com.au/our-history.html Inland Fisheries Service publications indicate rainbow trout introduced into Tasmania in 1898 from New Zealand.
c	If yes to 3.2.2b, provide evidence of scientific research completed within the past five years that investigates the risk of establishment of the	No naturally recruiting populations (anadromous) of Atlantic salmon have been reported and no stocking in rivers by Inland Fisheries or private groups has been reported; thus any salmon found in the SE Region are escapees from the farms.

	species within the farm's jurisdiction. Alternatively, the farm may request an exemption to 3.2.2c (see below).	Evidence for recent collaboration between the four Tasmanian farming companies and research institutions for research into escapees (this has focused on the Macquarie Harbour region) and their interactions with native fauna, with several recent publications includes: ▪ Monitoring Escapees in Macquarie Harbour: a collaborative study between the salmon industry (TSGA) and the Tasmanian Aquaculture and Fisheries Institute (TAFI) M. Steer and J. Lyle (2003). ▪ Do exotic salmonids feed on native fauna after escaping from aquaculture cages in Tasmania, Australia? Kátya Gisela Abrantes, Jeremy Martin Lyle, Peter D. Nichols, and Jayson Mark Semmens, Can. J. Fish. Aquat. Sci. 68: 1539–1551 (2011). ▪ Can Biochemical Methods Determine If Salmonids Feed And Thrive After Escaping from Aquaculture Cages? A Pilot Study, Kátya G. Abrantes, Jayson M. Semmens, Jeremy M. Lyle & Peter D. Nichols. NRM Cradle Coast Project CCCPR24006, 55p. (2010). ▪ Lyle & Frijlink S, 2013, Report on the suitability and effectiveness of Tassal's management practices and action plans designed to minimise, monitor and respond to escape events, 30p. The Lyle and Frijlink, 2013 report concludes: "*Thus far, two Tasmanian studies have assessed the performance of escaped Atlantic salmon in this context. In 2003, a collaborative study between the Tasmanian Salmon Growers Association (TGSA) and the Tasmanian Aquaculture and Fisheries Institute (TAFI) examined the gut contents of Atlantic salmon (n = 200) and rainbow trout (n = 153) recaptured between 2 and 5 months following two significant escape events in Macquarie Harbour (Steer and Lyle, 2003). Among the Atlantic salmon, 82% had stomachs that did not contain food items (61% were completely empty, 20% contained leaves and 1% contained stones), 14% contained feed pellets and only 4% contained native fauna (fish and invertebrates). The results for rainbow trout demonstrated slightly greater success in feeding (24% contained feed pellets and 7% native fauna) and support the general observation that escaped Atlantic salmon are less adaptable than other farmed salmonids (Thorstad et al., 2008). The low incidence of naturally occurring prey items in the stomachs suggests that escaped salmonids did not successfully transition to feeding on native species during the study period. However, the authors cautioned against reaching broader level generalisations regarding the feeding behaviour of escaped Atlantic salmon due to the limited temporal scope of the study and relatively low food availability at the time the study was conducted.*" This evidence suggests that escaped Atlantic salmon are not feeding and thriving in the wild. In combination, the report and additional observations as well as the knowledge that Tassal`s stock is diploid female or triploid in SE region and

		cannot reproduce provides evidence that the risk of establishment of the species within the farm's jurisdiction is very low.
d	If applicable, submit to the CAB a request for exemption that shows how the farm meets all three conditions specified in instruction box above.	N/A
e	Submit evidence from 3.2.2c to ASC for review.	Evidence submitted to ASC.
3.2.3 Use of non-native species for sea lice control for on-farm management purposes		
a	Inform the CAB if the farm uses fish (e.g. cleaner fish or wrasse) for the control of sea lice.	N/A - there are no sea lice in Tasmania. On 21/1/14 the Tassal Vet stated "There are 2 species of sea-lice that are of concern to the worldwide Atlantic salmon aquaculture industry – *Lepeophtheirus salmonis* and *Caligus elongatus*. At the time of writing this advice note, neither *Lepeophtheirus salmonis* nor *Caligus elongatus* are present in Tasmania."
b	Maintain records (e.g. invoices) to show the species name and origin of all fish used by the farm for purposes of sea lice control.	N/A - there are no sea lice in Tasmania.
c	Collect documentary evidence or first-hand accounts as evidence that the species used is not non-native to the region.	N/A - there are no sea lice in Tasmania.
3.3 Introduction of transgenic species		
3.3.1 use of transgenic salmon by the farm		
a	Prepare a declaration stating that the farm does not use transgenic salmon.	Tassal's Vet Declaration dated 4/10/12 (1p) stating that Tassal's stocks including hatcheries do not contain any transgenic fish – the stocks are either diploid or triploid. Received Memo (4/2/14, 1p) from the Company Veterinarian stating that he conducts assessments of their triploid stocks during the freshwater phase of their life cycle to ensure that the stocks are all triploid and therefore cannot reproduce. This fact is also discussed in the Lyle and Frijlink, 2013 report. Received Memo (21/1/14) from Dr. Peter Kube (Aquaculture Geneticist CSIRO Food Futures Flagship) "I have been involved with the applied breeding of Atlantic salmon for 10 years, and the involvement of my CSIRO colleagues is nearly twice that. I, on behalf of CSIRO, can verify that no transgenic Atlantic salmon are, or have been, used in Tasmania. The broodstock history of

		Atlantic salmon in Tasmania is well known and the introduction of this species has been well documented and tightly regulated. Two references describing the only introductions are: Jungalwalla, P.J., 1991. The development of an integrated saltwater salmonid farming industry in Tasmania, Australia. Can. Tech. Rep. Fish. Aquat. Sci. 1831: 65-73. Elliott, N.G., Reilly, A. 2003. Aquaculture 215: 31–44".
b	Maintain records for the origin of all cultured stocks including the supplier name, address and contact person(s) for stock purchases.	Smolt deliveries are organised by Hatchery Manager. Before stocking, all smolt/fingerlings must have the Veterinary Health Certificate For Salmonids Destined For Tasman (2p) from Tassal's own hatcheries as well as external (SALTAS); this is undertaken by Company Vet. The Veterinary Health Certificates (template from FHMP) for 13YC stockings at Tasman farms include: ▪ #13.004 on April 8th 2013 from Rookwood Road hatchery ▪ # 13.009 on June 10th 2013 from SALTAS Florentine hatchery, The Vet's Declaration relates to the hatchery health assessment and no evidence of infectious diseases of concern (as described in the SE Fish Health Management Plan). Tassal maintains mortality records as well as a health checks for all stock transfers from the hatcheries.
c	Ensure purchase documents confirm that the culture stock is not transgenic.	Not needed as there are no transgenic salmonids in Tasmania (Dr. Kube, refer 3.3.1a). The Rookwood Road Hatchery and Russell Falls Hatchery are both Tassal owned and therefore no purchase documents exist. Documentation used includes the - Fish Transfer - NAME Hatchery (MO-F274 Issue 3 6/3/13, 1p) and the Smolt Dispatch Form (MO-F278 Issue 4, 6/3/13, 1p). Tassal is a shareholder of SALTAS, and there are regular meetings at Board level as well as technical working group to discuss issues and day to day communications through Vets with regular reporting to Head of Farming.
3.4 Escapes		
3.4.1 Maximum number of escapees [56] in the most recent production cycle		
a	Maintain monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapees.	The Escape Prevention and Response Protocol (MO-146 29/07/13, 8p) details the Escape Prevention Plan for all Tassal's farming regions and the notification requirements – for farms in the SE the escape threshold for immediate response is >500 and the MFB must be notified. Procedures for other escapes greater than 100 fish are detailed, also the procedures for incidental losses (1-2 fish).

		Recovery netting has only been trialed in MH - the document Tassal Routine Escape Surveys FINAL (undated, 2p) describes how Tassal's Environment and Sustainability department wanted to work with Government and Scientific bodies to develop a means of conducting escape surveys to ascertain the potential impacts, distribution, behaviour, biological key indicators, and life expectancy/survivorship for escaped aquaculture species state-wide. The aim was to conduct routine escape surveys around their active marine leases. These would generally be conducted on an annual basis to assess any Atlantic salmon that may be present around leases. A trial was undertaken in Macquarie Harbour with a special fish recovery permit (DPIPWE Netting of salmonids in Macquarie Harbour permit from 5/5/10 to 5/6/10, 2p). Unfortunately only 45 salmon were caught in 4 days of fishing (refer Lyle report, p18). Tassal had initial meeting with Marine Farming about renewing, but did not progress to another permit stage. The DPIPWE did not allow for testing with nets in the SE area. Tassal monitors and reports all escapes (Escape Analysis & Tassal Escapes spreadsheets – refer 3.4.4) and have escape prevention and response plans on all farming sites. This issue links closely with their seal issue due to holes and seals eating salmon. Seal exclusion technology is being rolled out across the company over time. The MF Licences show net specifications etc. relating to fish containment and specify Atlantic salmon approved species for farming. Email from DPIPWE MFB 11/10/12 re: notified escapes in last three years for all the sites – no concerns expressed, just noted that the escapes had been reported. Escape Analysis & Tassal Escapes spreadsheets show that for the past 10 years (since January 2000) there have been only one incident at TASMAN – 20,500 fish in Dec 19 2007 due to holes in the net. Mortality diving at least 2/week to keep holes mended, don't raise weights so less chances for seal to push in. Swim through process also improved.
b	Aggregate cumulative escapes in the most recent production cycle.	There have been no reported escapes in the current production cycle.
c	Maintain the monitoring records described in 3.4.1a for at least 10 years beginning with the production cycle for which farm is first applying for certification	Noted by Tassal – data (number of escapes episodes per production cycle, dates, cause, no of escapes per episode and total escapes) will continue to be recorded in Fish Talk and summarised in spreadsheets for all stockings and harvests.
d	If an escape episode occurs (i.e. an incident where > 300 fish escaped), the farm may request a rare exception to the Standard [57]. Requests must provide a full account of the episode	The Escape Analysis spreadsheet summarises data over the past 10 years and for Tasman this shows only 1 incident for 20,500 fish in Dec 19th 2007 (refer also Lyle and Frijlink, 2013 report).

	and must document how the farm could not have predicted the events that caused the escape episode.	
e	Submit escape monitoring dataset to ASC as per Appendix VI.	The client has submitted data/information to ASC
3.4.2 Accuracy of the counting technology or counting method used for calculating stocking and harvest numbers		
a	Maintain records of accuracy of the counting technology used by the farm at times of stocking and harvest. Records include copies of spec sheets for counting machines and common estimates of error for hand-counts.	The specs for the AquaScan fish counter model AquaScan Registration Unit CSE3150 state an accuracy of 98-100%. The procedure Aquascan Counter Operation (MO-105 Issue 6, 6/3/13, 2p) describes the pre-count checks and start-up, calibration is required with fish 100 fish purely to ensure they travel in single file through the scanner.
b	If counting takes place off site (e.g. pre-smolt vaccination count), obtain and maintain documents from the supplier showing the accuracy of the counting method used (as above).	For smolt the Vaki Macro Counters are used in the hatcheries; these are a scanning camera based counter, with each image being analysed and then counted. At maximum capacity, the counter is over 98% accurate (the Technical Specifications report accuracy at "over 99%"). Because it is a camera based counter, the images are automatically recorded and can be used to validate the accuracy of the count. These counts are manually recorded, and forwarded to the receiving region. Fish Transfer – Rookwood Rd Hatchery (MO-F274), Smolt Despatch Form (MO-F278), and Fish Transfer – Hatchery (MO-F688) are used to record smolt numbers and weight prior to transfer to the respective MOPs region; this data is also recorded in "Fish Talk".
c	During audits, arrange for the auditor to witness calibration of counting machines (if used by the farm).	The automatic calibration of the counting machine was witnessed on the harvest vessel *Tassal 1* for the AquaScan.
d	Accuracy at stocking and harvest.	The stated accuracy of counting equipment is confirmed.
e	Submit counting technology accuracy to ASC as per Appendix VI.	The client has submitted data/information to ASC
3.4.3 Estimated unexplained loss [59] of farmed salmon is made publicly available		
a	Maintain detailed records for mortalities, stocking count, harvest count, and escapes (as per 3.4.1).	Tassal declaration (by HoS, January'14) states EUL = (stocking count) – (harvest count) – mortalities – (recorded escapes). Inventory records maintained in Fish Talk - Summarised in Escape Analysis & Tassal Escapes spreadsheets (EUL). Data includes Input Count, Mortalities, Closing Count and Deviation (EUL).
b	Calculate the estimated unexplained loss as described in the instructions	Tassal has demonstrated an understanding of calculation and the requirement to disclose estimated unexplained losses (EUL) after final harvest.

	(above) for the most recent full production cycle. For first audit, farm must demonstrate understanding of calculation and the requirement to disclose EUL after harvest of the current cycle.	The results specific for TASMAN from Fish Talk for the calendar input year class include: 9.38%
c	Make the results from 3.4.3b available publicly. Keep records of when and where results were made public (e.g. date posted to a company website) for all production cycles.	EUL calculations are in 3.4.3b. The most recent production cycle is 12YC. Tassal declaration (by HoS, January'14) states they will make the results of these calculations publically available for all production cycles going forward on their website and in their annual Sustainability Report.
d	Submit estimated unexplained loss to ASC as per Appendix VI.	The client has submitted data/information to ASC
e	Compare EUL values (3.4.3a) and counting accuracy (3.4.2a) to recorded escapes to check whether farm reporting is plausible. If EUL is greater than the combined margin of error related to fish counts, investigate potential sources of error	EUL is greater than the combined margin of error related to fish counts. Tassal states that farms might have under estimated losses or mortalities.
3.4.4 Evidence of escape prevention planning and related employee training, including: net strength testing; appropriate net mesh size; net traceability; system robustness; predator management; record keeping and reporting of risk events (e.g., holes, infrastructure issues, handling errors, reporting and follow up of escape events); and worker training on escape prevention and counting technologies		
a	Prepare an Escape Prevention Plan and submit it to the CAB before the first audit. This plan may be part of a more comprehensive farm planning document as long as it addresses all required elements of Indicator 3.4.4.	The MF Licences (refer 1.1.1) specify Atlantic salmon as the approved species for farming. Evidence provided to CAB included: ▪ Escape Prevention and Response Protocol (MO-146 29/7/13, 8p) refers to legislation relating to escapees and containment with several well labelled Emergency Response Kits on leases, reports recorded for analysis on Fish Talk database which inventory fish numbers & losses (including escapes). ▪ The document Tassal Routine Escape Surveys FINAL (undated, 2p) describes Tassal's Environment and Sustainability department aim to conduct routine escape surveys around their active marine leases. These would generally be conducted on an annual basis to assess any Atlantic salmon that may be present around leases. ▪ The issue of stock management (numbers) is being addressed by undertaking more splits, for example according to Split/Mother Count Plan 2013 Procedure. Evidence of acknowledgement signoffs on Fish Escape Response Protocol.
b	If the farm operates an open (net pen) system, ensure the plan (3.4.4a)	Escape Prevention and Response Protocol (MO-146 29/07/13, 8p) covers net inventory (including net strength testing & net traceability), checking of nets

	covers the following areas: - net strength testing; - appropriate net mesh size; - net traceability; - system robustness; - predator management; - record keeping; - reporting risk events (e.g. holes, infrastructure issues, handling errors); - planning of staff training to cover all of the above areas; and - planning of staff training on escape prevention and counting technologies.	(including appropriate net mesh size), procedures for deploying nets & weighting systems (including system robustness & predator management), jump fences, checking nets after stocking (including record keeping) & reporting risk events such as holes, infrastructure issues, handling errors), net breaking strengths, weighting of nets, daily farm checks, Escape Response Plan and Escape response Flow.
c	If the farm operates a closed system, ensure the plan (3.4.4a) covers the following areas: - system robustness; - predator management; - record keeping; - reporting risk events (e.g. holes, infrastructure issues, handling errors); - planning of staff training to cover all of the above areas; and - planning of staff training on escape prevention and counting technologies.	N/A
d	Maintain records as specified in the plan.	The Escape Analysis spreadsheet summarises data over the past 10 years and shows only 1 incident for 20,500 fish in Dec'07 because of tears in net.
e	Train staff on escape prevention planning as per the farm's plan.	During onsite audit knowledge of escape response plan demonstrated by staff interviewed (feed barge operators, cleaning boat operator, divers, Regional Manager). The Escape response checklists & netting strategically placed around farm (feed barges, transfer barges, some vessels, dive boat). Containment kits held on Feed Barges and work vessels, laminated flow charts as posted. Evidence of acknowledgement of training for Fish Escape Response Protocol. Tasman Regional Manager confirmed process for escapes >500 was to notify DPIPWE staff reported that there had been none for many years.

PRINCIPLE 4: USE RESOURCES IN AN ENVIRONMENTALLY EFFICIENT AND RESPONSIBLE MANNER		
4.1 Traceability of raw materials in feed		
4.1.1 Evidence of traceability, demonstrated by the feed producer, of feed ingredients that make up more than 1% of the feed.		
a	Maintain detailed records of all feed suppliers and purchases including contact information and purchase and delivery records.	In the past, only two suppliers have been used - Ridley Aqua Feed & Skretting, according to Tassal 2012 Sustainability Report (p23-25) now only Skretting is used at all sites. For Tasman sites this has occurred since 13YC– the 11YC & 12YC included some Ridley feeds. Contact details for these are on the Approved Supplier List and Fish Talk. Skretting announced it was committed to "being able to deliver feeds complaint to ASC strict criteria, starting with salmon feeds" (Intrafish Media 5/11/13).
b	Inform each feed supplier in writing of ASC requirements pertaining to production of salmon feeds and send them a copy of the ASC Salmon Standard.	Confirmed by Tassal through email sent on 8/1/14 to Skretting with the Feed Supplier Notification Letter (signed by Head of Sustainability, 1p) including a copy of Standard and details on requirements 4.3.1a and 4.4.2b.
c	For each feed producer used by the farm, confirm that an audit of the producer was recently done by an ASC-acknowledged auditing firm or CAB. Obtain a copy of the most recent audit report for each feed producer.	As SGS Australia undertakes CoC audits, it has been judged they are an "ASC-acknowledged auditing firm or CAB". Three letters from Skretting to Head of Sustainability on 17/10/13 (1p) and updates 20/12/13 (1p) and 12/3/14 (1p) declaring that Skretting as their feed supplier endeavors to meet the requirements of the ASC certification. The 12/3/14 letter has a 4p ASC Salmon Standard Compliance Declaration (Declaration of Compliance) addressing 2 criterion in Principle 2 (2.2.5 & 2.3.1) and various Principle 4 clauses with a verification signoff on 17/10/13 by a food safety auditor from SGS Australia (initials PJ confirmed by email 29/10/13). Skretting notes that evidence of traceability can be assured via a third party audit of their Nutrace tracking and tracing system. As required by the ASC Standard the traceability of their feed is for all ingredients that make of >1% of the feed. The traceability audit undertaken by SGS stated that Skretting compliance using the 'mass balance' method (Method #2). The audit involved two randomly selected samples. Details are provided in the 17/10/13 Skretting letter. A pre-assessment audit for GlobalGAP has been scheduled for 21-22/1/14; a certification audit is booked for 15-16/5/14 (both to be undertaken through SGS Australia).
d	For each feed producer, determine whether the farm will use method #1	Email from Head of Sustainability to SCS (8/1/14, 1p) confirming the use of Method #2 to show compliance of feed producers.

	or method #2 (see Instructions above) to show compliance of feed producers. Inform the CAB in writing.	
e	Obtain declaration from feed supplier(s) stating that the company can assure traceability of all feed ingredients that make up more than 1% of the feed to a level of detail required by the ASC Salmon Standard	Refer also Traceability Audit referenced in 4.1.1c. As referenced in 4.1.1a the Skretting ASC declaration letters state they can demonstrate evidence of traceability in regard to all feed materials (>1% of feed). There is further evidence that Skretting is being proactive in working towards fulfilling all the ASC requirements; for example in the document "ASC detailed questions 11-7-13_ASC Response" (3p) Skretting provided specific questions for the following raw materials which was answered by ASC: *Rendered land-animal proteins and oils* All of our rendered raw materials (i.e. poultry meal, feather meal, blood meal, meat meal, poultry oil) are only sourced from Australian suppliers accredited with the Australian Renderers Association. Our documentation currently traces back to our suppliers. The ASC response was that given all sources from Australia, there was no need to provide information on different regions/states they are from. *Vegetable proteins and oils* Our grains and legumes (i.e. wheat, faba bean, lupin, and canola oil) are sourced from Australian suppliers. Similar to our rendered ingredients, our documentation traces back to our suppliers. Again the ASC response was that given all sources from Australia, there was no need to provide information on different regions/states they are from. *Wheat gluten meal* We purchase our wheat gluten meal from China. Similar to above, our supplier sources the raw materials from various suppliers. The ASC response was country of origin acceptable. *Soy protein concentrate* We know the country of origin of our SPC is Brazil, but we currently do not request information from our supplier on what region the soya was grown. The ASC response was country of origin acceptable.
4.2 Use of wild fish for feed		
4.2.1 Fishmeal Forage Fish Dependency Ratio (FFDRm) for grow-out (calculated using formulas in Appendix IV- 1) Requirement: < 1.35		
a	Maintain a detailed inventory of the feed used including: - Quantities used of each formulation (kg); - Percentage of fishmeal in each	The database Fish Talk includes all the required information – the download "Inventory - Vendor Purchases Feed Jun 2012 to May 2013" records all of the feed purchased in each FY, including quantities of the various formulations. At the end of each Quarter Skretting provides Tassal with a feed declaration

	formulation used; - Source (fishery) of fishmeal in each formulation used; - Percentage of fishmeal in each formulation derived from trimmings; and - Supporting documentation and signed declaration from feed supplier.	that contains the % inclusion quantity & fishery origin of all fish meal and fish oil (reduction & trimming sources) used in each feed per month to the ASC-compliant farming site over the previous quarter (titled "ASC Feed origin data declaration"). The procedures for calculating or collecting data for ASC are summarised in the Skretting SOP ASC Compliant Data Declaration (Ref 31.18.01 Version 0, 7p). The document "33.06.01 Method of handling rework in recipe declaration reporting - Version 1" is referred to in the ASC Compliant document. Both of these documents were examined during the audit. All fish species are listed in the independent report by Irvine (refer 4.3.2a). The feed origin Data declaration report submitted to the ASC provides Percentage of fishmeal in each formulation used.
b	For FFDRm calculation, exclude fishmeal derived from rendering of seafood by-products (e.g. the "trimmings" from a human consumption fishery.	Noted by Tassal
c	Calculate eFCR using formula in Appendix IV-1 (use this calculation also in 4.2.2 option #1).	Confirmed eFCR calculations onsite.
d	Calculate FFDRm using formulas in Appendix IV-1.	For 12YC production cycle the FFDRm is 0.59, which is less than required by ASC <1.35.
e	Submit FFDRm to ASC as per Appendix VI.	Noted by Tassal, the Excel spreadsheet "ASC Feed origin data declaration TASMAN 12YC"summarises these results. The client has submitted data/information to ASC.
4.2.2. Fish Oil Forage Fish Dependency Ratio (FFDRo) for grow-out (calculated using formulas in Appendix IV- 1), OR Maximum amount of EPA and DHA from direct marine sources [64] (calculated according to Appendix IV-2) Requirement: FFDRo < 2.95 or (EPA + DHA) < 30 g/kg feed		
a	Maintain a detailed inventory of the feed used as specified in 4.2.1a.	Refer 4.2.1a.
b	For FFDRo and EPA+DHA calculations (either option #1 or option #2), exclude fish oil derived from rendering of seafood by-products (e.g. the "trimmings" from a human consumption fishery.	Received spreadsheet "ASC Feed origin data declaration TASMAN 12YC" which contains shows details of FFDRo and EPA+DHA calculations.
c	Inform the CAB whether the farm chose option #1 or option #2 to demonstrate compliance with the requirements of the Standard.	Email from Head of Sustainability to SCS (8/1/14, 1p) confirming the use of option #1 to demonstrate compliance with the requirements of the Standard (this was confirmed by Skretting in their declaration of 12/3/14).

d	For option #1, calculate FFDRo using formulas in Appendix IV-1 and using the eFCR calculated under 4.2.1c.	For 12YC production cycle FFDRo is 2.43 which is less than ASC requirement <2.95 eFCR calculated under 4.2.1c.
e	For option #2, calculate amount of EPA + DHA using formulas in Appendix IV-2.	N/A
f	Submit FFDRo or EPA & DHA to ASC as per Appendix VI.	Noted by Tassal, use Excel spreadsheet ASC Feed origin data declaration TASMAN 12YC. The client has submitted data/information to ASC.
4.3 Source of marine raw materials		
4.3.1 Timeframe for all fishmeal and fish oil used in feed to come from fisheries [65] certified under a scheme that is an ISEAL member [66] and has guidelines that specifically promote responsible environmental management of small pelagic fisheries. Requirement: < 5 years after the date of publication [67] of the SAD standards (i.e. full compliance by June 13, 2017)		
a	Prepare a policy stating the company's support of efforts to shift feed manufacturers purchases of fishmeal and fish oil to fisheries certified under a scheme that is an ISEAL member and has guidelines that specifically promote responsible environmental management of small pelagic fisheries.	Confirmed by Tassal, email sent on 8/1/14 to Skretting including copy of Standard and details on requirements (signed by Head of Sustainability) in Feed Supplier Notification Letter (1p) including the type of certification scheme noted in 4.3.1a of the Standard.
b	Prepare a letter stating the farm's intent to source feed containing fishmeal and fish oil originating from fisheries certified under the type of certification scheme noted in 4.3.1a	Ref 4.1.1b.
c	Starting on or before June 13, 2017, use feed inventory and feed supplier declarations in 4.2.1a to develop a list of the origin of all fish products used as feed ingredients.	Noted by Tassal, will use a version of the Excel spreadsheet ASC Feed origin data declaration TASMAN 12YC for the appropriate production cycle. This is supported by the Source Fishery of FM & OF (April'12 to Nov'13).
d	Starting on or before June 13, 2017, provide evidence that fishmeal and fish oil used in feed come from fisheries [65] certified under a scheme that is an ISEAL member [66] and has guidelines that specifically promote responsible environmental management of small pelagic fisheries	Currently working with Skretting – the Nutreco Sustainable Procurement Policy for Marine Products Version 2010 (4p) states that Skretting will continue to work globally to obtain sufficient sources, including by-products & trimmings from suitability managed fish resources (ISEAL) or an equivalent scheme. There is good evidence that Skretting is being proactive in working towards fulfilling all the ASC requirements; for example from correspondence with

		ASC ("ASC detailed questions 11-7-13_ASC Response" 3p) it was noted that with the slow development seen in MSC certification of reduction fisheries, they can expect IFFO RS to be the only realistic alternative for certified marine raw materials for quite some time. IFFO RS does not assess fisheries (as does MSC), but rather certifies that fishmeal and fish oil come from fisheries that comply with a given set of criteria. Further, IFFO RS is not ISEAL compliant at the moment, but ASC believe the goal is to become compliant in the future. With the likely completion of the Feed Standard Dialogues for ASC by 2015, it is expected that this requirement will be modified. Skretting have assured Tassal they will comply with the criteria accordingly within the allowable timeframe (this was confirmed by Skretting in their declaration of 12/3/14).
4.3.2 Prior to achieving 4.3.1, the FishSource score [68] for the fishery (ies) from which all marine raw material in feed is derived. Requirement: All individual scores ≥ 6, and biomass score ≥ 8.		
a	Record FishSource score for each species from which fishmeal or fish oil was derived and used as a feed ingredient (all species listed in 4.2.1a).	Until otherwise instructed, up until June 2017, Skretting have committed at each annual review to declare the FishSource score of species in the fish meal and fish oil (reduction fishery sources only) used in feeds. Reviewed the independent assessment of marine ingredients commissioned by Skretting entitled "Review of the status of fish Stocks used to produce fishmeal and fish oil for Skretting Australia" (2/1/14, 74p) discloses the FishSource scores for the marine species used in feeds fed over the past 6 months. This is supported by the summary document Source Fishery of FM & FO (April '12 to Nov '13). The report "Fishery Source Key" summarises the key source fisheries of FM & FO (marine ingredients) purchases made between Aug. 2012 to Dec. 2013) as detailed in the Irvine independent marine assessment report (2014). Skretting will disclose the Fish Source scores for the marine species used in the feeds fed over the past 6 months at the time of the ASC audit (this was confirmed by Skretting in their declaration of 12/3/14). There is good evidence that Skretting is being proactive in working towards fulfilling all the ASC requirements; for example the document ASC detailed questions 11-7-13_ASC Response (3p) noted that the SFP report released in May 2013 reported that the Peruvian Anchovy (northern-central stock) was downgraded to a level that was not compliant with the FishSource score. However, on the 21st June 2013 the FishSource score for the Peruvian northern-central stock [FIP: Peruvian Anchovy (northern-central stock), Sociedad Nacional de Pesqueria] was upgraded and is now compliant with the ASC standard. Skretting also commissioned and independent report by Irvine (refer 4.3.2a) the FishSource Scores for the Reduction Fishery species that are used in their feeds.

b	Confirm that each individual score ≥ 6 and the biomass score is ≥ 8.	From the independent report by Irvine (refer 4.3.2a) the FishSource Scores for the Reduction Fishery species that are used in feeds at Tasman site: - Anchovy northern-central Peru (meet ASC criteria) - Anchovy Southern Peru / Chilean various units (do not meet ASC criteria) - Jack Mackerel Bycatch Chilean Units III-IV (do not meet ASC criteria) - Chub Mackerel Bycatch Chilean Units III-IV (do not meet ASC criteria) Skretting has supplied the spreadsheet "Source Fishery of FM & FO" for the Tasman site with the marine ingredient purchases made between April '12 and November '13 which shows that these sources are only used for fish oil. Fish oil is also sourced from the Northern-central Peru anchovy units as well as from New Zealand Hoki fishery (and bycatch species) – both meet ASC criteria. Skretting has been sourcing the Sustainable Fisheries Partnership report "Global Sustainability Overview of South American and Atlantic Fish Stocks Used for Fishmeal and Fish Oil" (May 2013, 14p). Skretting states they will continue to monitor their Fish Meal & Fish Oil sources and purchase in line with their Marine Sustainability policy. <u>Minor non-conformity:</u> Not all ingredients of the feeds used at the Tasman sites achieve individual fish source scores >6.
c	If the species is not on the website it means that a FishSource assessment is not available. Client can then take one or both of the following actions: 1. Contact FishSource via Sustainable Fisheries Partnerships to identify the species as a priority for assessment. 2. Contract a qualified independent third party to conduct the assessment using the FishSource methodology and provide the assessment and details on the third party qualifications to the CAB for review.	Currently working with Skretting for full compliance.
4.3.3 Prior to achieving 4.3.1, demonstration of third-party verified chain of custody and traceability for the batches of fishmeal and fish oil which are in compliance with 4.3.2.		
a	Obtain from the feed supplier documentary evidence that the origin of all fishmeal and fish oil used in the feed is traceable via a third-party verified chain of custody or	Reviewed declaration of third party* audit of Nutrace system (see 4.1.1) and includes all species used as per 4.3.2a, 4.2.1a, and 4.2.2a. In addition, there is good evidence that Skretting is being proactive in working towards fulfilling all the ASC requirements. See also 4.3.2a.

	traceability program.	* Undertaken by SGS Australia (as noted in the Skretting declaration of 12/3/14, SGS Australia undertakes CoC Audits, and SGS has been deemed a suitable CAB as they are an 'ASC- acknowledged auditing firm or CAB).
b	Ensure evidence covers all the species used (as consistent with 4.3.2a, 4.2.1a, and 4.2.2a).	Refer above.
4.3.4 Feed containing fishmeal and/or fish oil originating from by-products [69] or trimmings from IUU [70] catch or from fish species that are categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species [71]		
a	Compile and maintain, consistent with 4.2.1a and 4.2.2a, a list of the fishery of origin for all fishmeal and fish oil originating from by-products and trimmings.	Skretting's approved supplier program includes a Marine Vendor Policy (the Nutreco Sustainable Procurement Policy for Marine Products Version 2010, 4p). This policy states that the species included in the fish meal and fish oil does not originate from Illegal, Unregulated and Unreported (IUU) catch. Each supplier of marine raw materials purchased by Skretting is required to sign a statement. The independent report by Irvine (refer 4.3.2a) summarises these FM & FO sources. This will continued to be declared to Tassal (this was confirmed by Skretting in their declaration of 12/3/14).
b	Obtain a declaration from the feed supplier stating that no fishmeal or fish oil originating from IUU catch was used to produce the feed.	Reviewed declarations from the three largest suppliers for Skretting feeds. These indicate that fishmeal or fish oil do not originate from IUU catch
c	Obtain from the feed supplier declaration that the meal or oil did not originate from a species categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species and explaining how they are able to demonstrate this (i.e. through other certification scheme or through their independent audit).	The Nutreco Sustainable Procurement Policy for Marine Products does not yet include vulnerable level, only endangered or critically endangered. The Skretting declaration (17/10/13) states that from now onwards any new marine ingredients purchased require the supplier to fill in a new marine origin declaration including vulnerable species are not used according to the IUCN Red List. If it is then a regional assessment using IUCN methodology or equivalent is to be carried out to demonstrate compliance. Email from Skretting 13/1/14 that there are currently no new vulnerable declarations.
d	If meal or oil originated from a species listed as "vulnerable" by IUCN, obtain documentary evidence to support the exception as outlined in [72].	Only source of species that was previously listed as vulnerable" by IUCN is bigeye tuna; however tuna from the Eastern Pacific Ocean meet the requirements of Criterion 4.3 of the ASC Salmon Standard. Refer to Annex I for the IUCN regional Independent assessment of this species from the EPO. The stock status of bigeye in the EPO has recently been classified as "not overfished", but the IUCN listing is based on a global decline of the population. Therefore, there is further need for investigation. In order to ascertain if bigeye Tuna (BET) from the EPO is ecologically sustainable, Dr Irvine highly recommended a more thorough assessment for this species

		using the MSC standard and methodology. Skretting has noted this and is collecting more evidence.
4.4 Source of non-marine raw materials in feed		
4.4.1 Presence and evidence of a responsible sourcing policy for the feed manufacturer for feed ingredients that comply with recognized crop moratoriums [75] and local laws [76]		
a	Compile and maintain a list of all feed suppliers with contact information. (See also 4.1.1a)	Tassal Responsible Sourcing Policy (IMS-P1084 issue 1, 8/1/14, 1p) states "*Tassal supports efforts to shift feed manufacturers purchases of fishmeal and fish oil to fisheries certified under a scheme that is an ISEAL member or an equivalent approved scheme and has guidelines that specifically promote responsible environmental management of small pelagic fisheries. Tassal supports efforts to shift feed manufacturers' purchases of soya to soya certified under the Roundtable for Responsible Soy (RTRS) or equivalent*". Both Skretting & Ridley are in the Tassal Approved Supplier System. Refer also to 4.1.1.
b	Obtain from each feed manufacturer a copy of the manufacturer's responsible sourcing policy for feed ingredients showing how the company complies with recognized crop moratoriums and local laws.	The 17/10/13 declaration also states that Skretting has a responsible sourcing policy that applies to non-marine feed ingredients (for soy refer 4.4.2). The Nutreco general Vendor Policy (Version 2010, 4p) has a section (p4) that is signed by the vendor to states they will abide by the laws and regulations of the country or region that governs their business activities (this was confirmed by Skretting in their declaration of 12/3/14). Reviewed all signed Vendor copies.
c	Confirm that third party audits of feed suppliers (4.1.1c) show evidence that supplier's responsible sourcing policies are implemented.	Refer 4.1.1c and above.
4.4.2 Percentage of soya or soya-derived ingredients in the feed that are certified by the Roundtable for Responsible Soy (RTRS) or equivalent. Requirement: 100%, within five years of the publication [78] of the SAD standards		
a	Prepare a policy stating the company's support of efforts to shift feed manufacturers' purchases of soya to soya certified under the Roundtable for Responsible Soy (RTRS) or equivalent.	Tassal's Responsible Sourcing Policy (IMS-P1084 issue 1, 8/1/14 1p) states "*Tassal supports efforts to shift feed manufacturers purchases of fishmeal and fish oil to fisheries certified under a scheme that is an ISEAL member or an equivalent approved scheme and has guidelines that specifically promote responsible environmental management of small pelagic fisheries. Tassal supports efforts to shift feed manufacturers' purchases of soya to soya certified under the Roundtable for Responsible Soy (RTRS) or equivalent*". Currently working with Skretting - Nutreco Sustainable Procurement Policy for Soy Products (Version 2010, 4p) includes preference for RTRS. Skretting are not purchasing any RTRS at present (only small qualities available). The Procurement Policy includes policy for non-certified soy with mandatory

		procedures similar to those in the RTRS.
b	Prepare a letter stating the farm's intent to source feed containing soya certified under the RTRS (or equivalent)	Confirmed by Tassal in email sent on 8/1/14 to Skretting including copy of Standard and details on requirements (signed by Head of Sustainability) in Feed Supplier Notification Letter (1p) including intention to source soya from RTRS or equivalent.
c	Notify feed suppliers of the farm's intent (4.4.2b).	Refer above.
d	Obtain and maintain declaration from feed supplier(s) detailing the origin of soya in the feed.	Only single supplier from Brazil in 2013 – Email from Regional Purchasing Manager Skretting Australia & Japan 209/13 with information for the Brazilian supplier of soy produced from 4 states.
e	Starting on or before June 13, 2017, provide evidence that soya used in feed is certified by the Roundtable for Responsible Soy (RTRS) or equivalent [77]	Noted by Tassal (this was also confirmed by Skretting in their declaration of 12/3/14).
4.4.3 Evidence of disclosure to the buyer [79] of the salmon of inclusion of transgenic [80] plant raw material, or raw materials derived from transgenic plants, in the feed		
a	Obtain from feed supplier(s) a declaration detailing the content of soya and other plant raw materials in feed and whether it is transgenic.	Skretting has a non-GMO Policy which is given on page 4 of the Skretting Quality Assurance document (ref 31.12.01, Version 03, 4p) which states that "since Jan. 2000 Skretting have maintained a 'GMO DNA free' status for their aquaculture feeds. Except for soy and wheat gluten, all vegetable raw materials are purchased Australian sources. For all products sourced from Australia a declaration from the suppliers QA manager (Jan '12, 1p) was provided, stating that their products do not contain any GMOs and have not been subject to any form of radiation. For the soy from sourced from Brazil, a copy of the non-GMO certification was provided (this was confirmed by Skretting in their declaration of 12/3/14).
b	Disclose to the buyer(s) a list of any transgenic plant raw material in the feed and maintain documentary evidence of this disclosure. For first audits, farm records of disclosures must cover > 6 months.	N/A
c	Inform ASC whether feed contains transgenic ingredients (yes or no) as per Appendix VI.	N/A
4.5 Non-biological waste from production		

4.5.1 Presence and evidence of a functioning policy for proper and responsible [83] treatment of non-biological waste from production (e.g., disposal and recycling)		
a	Prepare a policy stating the farm's commitment to proper and responsible treatment of non-biological waste from production. It must explain how the farm's policy is consistent with best practice in the area of operation.	The Waste Management & Disposal Policy (IMS-P1031 9/01/13, 1p) states the farm's commitment to proper and responsible treatment of non-biological waste from production with a Waste Disposal Plan (WDP). For marine operations Tassal's WDP is handled by two documents – Dangerous Goods & Hazardous Substances (WHS-110 Issue 3 20/6/13 8p) and the Marine Operations Waste Management Plan (MO-130 Issue 2 6/3/13, 4p); both list staff roles & responsibilities; both are linked to legislative requirement. The Tasman MOPS waste flow chart includes various recycled wastes.
b	Prepare a declaration that the farm does not dump non-biological waste into the ocean.	Viewed a declaration stating that Tassal does not dump non-biological waste into the ocean. Environmental Policy (IMS-P1002 9/01/13, 1p) to minimise environmental impacts. Marine Operations Waste Management Plan (MO-130) page 1 'Legal Matters' adequately summarises the various acts and legislation and Tassal's objectives to target zero waste in marine environment. Tassal undertakes at least annual clean-ups of foreshores in the region. The Bird Protocols (MO-228, 6/3/13, 7p) discusses the timing of the foreshore rubbish collections to avoid times when shore birds are nesting. The use of coloured ropes (black & grey weave) allows the easy identification of ropes from Tassal farms. Clean up record reviewed, included pictures of debris (ropes from Tassal and others, plastics, etc.)
c	Provide a description of the most common production waste materials and how the farm ensures these waste materials are properly disposed of.	The Tasman MOPS waste flow chart includes: - Site wastes - Recycling bin (cans, bottles, paper) is also collected for recycling. - Waste pipe/collar/stanchion-chipped and recycled. - Waste chain/shackles/metal-bin collection and recycled. - Feed bags are recycled. Most of these wastes are collected in skip bins or other methods by Veolia.
d	Provide a description of the types of waste materials that are recycled by the farm.	Refer to 4.5.2b
4.5.2 Evidence that non-biological waste (including net pens) from grow-out site is either disposed of properly or recycled		
a	Provide a description of the most common production waste materials and how the farm ensures these waste materials are properly disposed of.	Refer to 4.5.1c

	(see also 4.5.1c)		
b	Provide a description of the types of waste materials that are recycled by the farm. (See also 4.5.1d)	Tasman MOPs waste flow chart shows the disposal & recycling methods used through Veolia, specific recycling includes: - Feed bags - Metals including chains, shackles, system pieces - Cans, bottles, paper - Plastics – pipes, stanchions, collars.	
c	Inform the CAB of any infractions or fines for improper waste disposal received during the previous 12 months and corrective actions taken.	Email from Head of Sustainability to SCS (March 10th 2014, 1p) confirming no infractions or fines for improper waste disposal received during previous 12 months.	
d	Maintain records of disposal of waste materials including net-pens.	The farm land base has plastic roller bins and separate storage area for oils & site wastes. All boats and barges have wheelie bins or plastic bins which are emptied into land base skip bin; staff are trained and understand the importance in using bins provided. Feed bags are collected for recycling. Net Pens - old steel cage pens are disposed of as scrap metal. Plastic pens are dismantled; the steel recycled and plastic chipped and recycled. Any reusable components are reused. Tassal has committed to using copper-free nets for the whole company. Copper-free nets will be reused or sent to landfill. These records are in the Veolia Consolidated Report July '12 to June '13 shows amounts of Cardboard, Comingled Wastes, General Wastes, Oily Wastes, Liquid Discharge and Compactor Feed Bags. Waste waters from barges are disposed of into town water sewage system via contract vessel.	
4.6 Energy consumption and greenhouse gas emissions on farms			Refe
4.6.1 Records of greenhouse gas (GHG [85]) emissions [86] on farm and evidence of an annual GHG assessment, as outlined in Appendix V-1			
a	Maintain records for energy consumption by source (fuel, electricity) on the farm throughout each production cycle.	Tassal Life Cycle Assessment (LCA) FY2011-12 by Amy White (Sep'12, 56p) states Tassal used a total of 448,332 GJ of energy, a 2% decrease from previous year (FY10-11). The main contributors are fuels and electrical. According to HoS the LCA is to be undertaken every 2 years, extrapolations are to be used in odd years, next is to be July 2013-June 2014; this LCA is to be finalised before end of 2014. HoS indicated that feed is the biggest input including emissions costs from transport. Consideration is underway for export of final products – it has been recognised that sales requiring air-freight considerably adds to GHG. Thus Tassal has determined their Logistics Dept. is required to assist in reducing GHG – their involvement and improvements are to be documented in the next LCA. Company-wide, business unit (for example Marine Operations), and on farm	

		direct energy use and emissions are recorded and calculated for each financial year. Records of energy consumption are kept in the spreadsheet Site Energy Summary 2012-2013. The spreadsheet Site Energy Summary 2012-2013 shows for FY12-13 a total of 2,355,000 kWh for MOPs, and including hatcheries, corporate/admin, processing a total of just over 23,600,000 kWh. The spreadsheet NGER GHG Emissions Threshold Estimator has been developed by the Aus. Government Clean Energy Regulator. This is used to determine Scope 1 and Scope 2 GHG (CO2-e) t emissions and GJ E consumed. Calculations shown for Tasman: Year GHG (CO2-e) t GJ E consumed 2012 969 13,738 2013 608 12,870
b	Calculate the farm's total energy consumption in kilojoules (kj) during the last production cycle.	Tassal Life Cycle Assessment (LCA) FY2011-12 by Amy White (Sep'12, 56p) states a total of 23,582 t CO_2e emitted for the whole company slightly decreased by 48 t CO_2e from theprevious year. For FY12/13 the TASMAN Farm used 12,870 GJ and produced 908 t CO2e. This accounts for fish harvested from 11YC (100%) and partly from 12YC in FY12/13.
c	Calculate the total weight of fish in metric tons (MT) produced during the last production cycle.	Tassal FY11-12 production cycle was 23,536 MT (FY12-13 is expected to be fairly similar). For the TASMAN FY12/13 2,940.8 MT were harvested. Recorded in the spreadsheet FY12-13Tasman Farm Biomass Energy GWP.
d	Using results from 4.6.1b and 4.6.1c, calculate energy consumption on the farm as required, reported as kilojoule/MT fish/production cycle.	The spreadsheet FY12-13 Tasman Farm Biomass Energy GWP has two assumptions including: a. Year Class growing period on farm is from beginning of Smolt input to end of class harvest (i.e. 18 months) – a production cycle; b. all farm energy usage, across relevant financial years, is apportioned to year class production cycle based on % of farm biomass in the water at the end of the FY and % biomass harvested at the end of the FY. Functional Unit CED (GJ) GWP (t CO2e) For FY 2012 Per tonne live weight 4.32 0.305 For FY 2011 Per tonne live weight 3.94 0.278
e	Submit results of energy use calculations (4.6.1d) to ASC as per Appendix VI.	The client has submitted data/information to ASC.
f	Ensure that the farm has undergone an energy use assessment that was	Of this, 38 per cent (9,038 t CO2e) was scope 1 emissions from the use of fuels on site and in fleet vehicles. A further 18 per cent (4,329 t CO2e) were

	done in compliance with requirements of Appendix V-1.	scope 2 emissions from the use of electricity with the remainder classed as scope 3. Majority of the scope 3 emissions were attributable to the transportation undertaken by contractors (7,372 t CO2e) as well as the smolt sourced from SALTAS and the GHGs released in the production of inputs such as diesel fuel.
4.6.2 Records of greenhouse gas (GHG [85]) emissions [86] on farm and evidence of an annual GHG assessment, as outlined in Appendix V-1		
a	Maintain records of greenhouse gas emissions on the farm.	Tassal Life Cycle Assessment (LCA) FY2011-12 by Amy White (Sep'12, 56p) states a total of 23,582 t CO2e was emitted, a slight decrease of 48 t CO2e from previous year. The spreadsheet FY12-13 TASMAN Farm Biomass Energy GWP records farm emissions; Site Energy Summary 2012-13 records energy use and GHG emission calculations.
b	At least annually, calculate all scope 1 and scope 2 GHG emissions in compliance with Appendix V-1.	Tassal Life Cycle Assessment (LCA) FY2011-12 by Amy White (Sep'12, 56p), states that 38 per cent (9,038 t CO2e) was scope 1 emissions from the use of fuels on site and in fleet vehicles. A further 18 per cent (4,329 t CO2e) were scope 2 emissions from the use of electricity with the remainder classed as scope 3. According to the spreadsheet FY12-13 TASMAN Farm Biomass Energy GWP records farm emissions; for FY12/13 the TASMAN Farm used 12,870 GJ and produced 908 t CO2e.
c	For GHG calculations, select the emission factors which are best suited to the farm's operation. Document the source of those emissions factors.	Completed for FY12/13 documenting the emissions factors.
d	For GHG calculations involving conversion of non-CO_2 gases to CO_2 equivalents, specify the Global Warming Potential (GWP) used and its source.	GHG calculations have been provided including non-CO_2 gases to CO_2 equivalents, specifying the Global Warming Potential (GWP) used and its source.
e	Submit results of GHG calculations (4.6.2d) to ASC as per Appendix VI.	Completed for FY12/13. The client has submitted data/information to ASC.
f	Ensure that the farm undergoes a GHG assessment as outlined in Appendix V-1 at least annually	Completed for FY12/13. The client has submitted data/information to ASC.
4.6.3 Documentation of GHG emissions of the feed [87] used during the previous production cycle, as outlined in Appendix V, subsection 2. Requirement: Yes, within three years of the publication [88] of the SAD standards (i.e. by June 13, 2015)		
a	Obtain from feed supplier(s) a declaration detailing the GHG emissions of the feed (per kg feed).	The Skretting Declaration (17/10/13) states that after June 2015 they will declare GHG emission of the feed (per kg of feed).

		According to HoS further substitution of FM & FO methodology will see further reductions in GHG. The use of a Tasmania feed producer is also important in reducing GHG due to transport (alternative manufacturer is over 24 hrs. freight time away (southern QLD.).
b	Multiply the GHG emissions per unit feed by the total amount of feed from each supplier used in the most recent completed production cycle.	Noted by Tassal.
c	If client has more than one feed supplier, calculate the total sum emissions from feed by summing the GHG emissions of feed from each supplier.	Noted by Tassal.
d	Submit GHG emissions of feed to ASC as per Appendix VI.	Noted by Tassal Tassal Life Cycle Assessment (LCA) FY2011-12 by Amy White (Sep'12, 56p) states Tassal's feed's carbon footprint is significantly higher than those used for overseas salmonid culture - emissions per tonne of Tassal's salmon (0.18 t CO2e) being double that of the UK, which is the highest of all of the studies (0.09 t CO2e), and more than four times those of the Chilean industry (0.04 t CO2e) which is the lowest the majority of this comes from by-products. However, Tassal has a far higher degree of by-products (52%) than all other salmon feeds reviewed with the closest being Chile at 27 per cent and the UK at 20 per cent. However, the impacts are much higher on account of the feeds being responsible for 87 per cent of energy use, 90 per cent of GHG emissions and 15 per cent of eutrophication per tonne of HOG.
4.7 Non-therapeutic chemical inputs		
4.7.1 For farms that use copper-treated nets, evidence that nets are not cleaned [92] or treated in situ in the marine environment		
a	Prepare a farm procedure for net cleaning and treatment that describes techniques, technologies, use of off-site facilities, and record keeping.	N/A – copper based treatments are not used on nets. The Sustainability Report '12 (p30) refers to significant commitment companywide to stop using antifoulants on all farms by end of FY2014, this target has already been achived with the removal of the last copper net in March 2014. There are no antifouled nets at the Tasman region. All nets cleaned in situ by Plastic Fabrications Marine Inspector Cleaner (MIC).
b	Maintain records of antifoulants and other chemical treatments used on nets.	Email from Head of Sustainability to SCSG (8/1/14, 1p) confirming that no copper-based or other antifoulants are used on nets at Tasman; thus Farm is exempt from Indicator. Press release on 25/3/14 for final net to be taken from Dover.

		Tassal have negotiated a plan with EPA for Hawkers Net Slab (a processing facility for old copper treated nets), looking for a disposal options for contaminated nets, soils and sludges from cleaning; this includes a long term program moving nets from other storage sites.
c	Declare to the CAB whether copper-based treatments are used on nets.	N/A
d	If copper-based treatments are used, maintain documentary evidence (see 4.7.1b) that farm policy and practice does not allow for heavy cleaning of copper-treated nets in situ.	N/A
e	Inform ASC whether copper antifoulants are used on farm (yes or no) as per Appendix VI.	N/A
4.7.2 For any farm that cleans nets at on-land sites, evidence that net-cleaning sites have effluent treatment		
a	Declare to the CAB whether nets are cleaned on-land.	Email from Head of Sustainability to SCS (8/1/14, 1p) confirming treated nets are not cleaned on land at Tasman or any other sites (refer 4.7.2a); thus Farm is exempt from Indicator.
b	If nets are cleaned on-land, obtain documentary evidence from each net-cleaning facility that effluent treatment is in place.	N/A
c	If yes to 4.7.2b, obtain evidence that effluent treatment used at the cleaning site is an appropriate technology to capture of copper in effluents.	N/A
4.7.3 For farms that use copper nets or copper-treated nets, evidence of testing for copper level in the sediment outside of the AZE, following methodology in Appendix I-1		
a	Declare to the CAB whether the farm uses copper nets or copper-treated nets. (See also 4.7.1c). If "no", Indicator 4.7.3 does not apply.	Email from Head of Sustainability to SCS (8/1/14, 1p) confirming that copper nets are no longer used in Tasman region (thus Farm is exempt from Indicator). The Copper remediation study through TSGA and the Top Line Survey shows that Tassal are still participating in work to treat sediments contamination – responsible follow-up on issues is being planned.
b	If "yes" in 4.7.3a, measure and record copper in sediment samples from the reference stations specified in 2.1.1d and 2.1.2c which lie outside the AZE.	N/A
c	If "yes" in 4.7.3a, maintain records of	N/A

	testing methods, equipment, and laboratories used to test copper level in sediments from 4.7.3b.	
4.7.4 Evidence that copper levels [94] are < 34 mg Cu/kg dry sediment weight		
a	Inform the CAB whether: 1) farm is exempt from Indicator 4.7.4 (as per 4.7.3a), or 2) Farm has conducted testing of copper levels in sediment.	Email from Head of Sustainability to SCSG (8/1/14, 1p) confirming exemption from 4.7.4 (refer 4.7.3a) as no biocides used by the farm in net antifouling.
b	Provide evidence from measurements taken in 4.7.3b that copper levels are < 34 mg Cu/kg dry sediment weight.	N/A
c	If copper levels in 4.7.4b are ≥ 34 mg Cu/kg dry sediment weight, provide evidence the farm tested copper levels in sediments from reference sites as described in Appendix I-1 (also see Indicators 2.1.1 and 2.1.2).	N/A
d	Analyze results from 4.7.4c to show the background copper concentrations as measured at three reference sites in the water body.	N/A
e	Submit data on copper levels in sediments to ASC as per Appendix VI.	N/A
4.7.5 Evidence that the type of biocides used in net antifouling are approved according to legislation in the European Union, or the United States, or Australia		
a	Identify all biocides used by the farm in net antifouling.	N/A refer 4.7.3a.
b	Compile documentary evidence to show that each chemical used in 4.7.5a is approved according to legislation in one or more of the following jurisdictions: the European Union, the United States, or Australia.	N/A

Principle 5: Manage Disease		
5.1 Survival and health of farmed fish		
5.1.1 Evidence of a fish health management plan for the identification and monitoring of fish diseases and parasites		
a	Prepare a fish health management plan that incorporates components related to identification and monitoring of fish disease and parasites. This plan may be part of a more comprehensive farm planning document.	Received Fish Health Management Plan – South East; MO-175 Farm Disease Management and Biosecurity Protocol; MO-116.
b	Ensure that the farm's current fish health management plan was reviewed and approved by the farm's designated veterinarian.	Reviewed position descriptions for Contract Veterinarian Fish Health (dated Oct.'12) who advises on animal welfare aspects of operational procedures and Senior Manager Fish Health (Jan. '12, started in April '12, 4yr contract) who oversees fish health and welfare strategy. Tassal`s Database is now used for electronic approvals of documents. Reviewed screenshots of database showing dates and approval of relevant person.
5.1.2 Site visits by a designated veterinarian [96] at least four times a year, and by a fish health manager [97] at least once a month		
a	Maintain records of visits by the designated veterinarian and fish health managers.	Received record of farm site visits by company Veterinarian. In total 5 visits were conducted in 2013 and 8 in 2014. However the company veterinarian had not been visiting the Creeses site on a quarterly basis during most of 2013. Reviewed a new site visit planner for both the designated veterinarian and fish health manager for 2014. Staff interviews confirmed that site visits are planned more frequently for the company vet in the future. <u>Minor non-conformity:</u> During the last 2 years, visits by the company vet were not conducted quarterly. This will be reviewed at the first surveillance audit.
b	Maintain a current list of personnel who are employed as the farm's designated veterinarian(s) and fish health manager(s).	Reviewed current list of personnel who are employed as the farm's designated veterinarian and fish health manager at onsite visit.
c	Maintain records of the qualifications of persons identified in 5.1.2b.	CVs of the farm's designated veterinarian and fish health manager have been provided before the onsite audit.
5.1.3 Percentage of dead fish removed and disposed of in a responsible manner		
a	Maintain records of mortality removals	Received AQUAVET Plan, Operational procedures manual Disposal

	to show that dead fish are removed regularly and disposed of in a responsible manner.	Version 2.0, 2009, which discussed responsible disposal and outlines plan for implementation. Received MO-200 Stock, Net Inspection and Mortality Retrieval Tassal uses "Fish Talk" to record mortality classifications.
b	Collect documentation to show that disposal methods are in line with practices recommended by fish health managers and/or relevant legal authorities.	Received MO-116 Farm Disease Management and Biosecurity Protocol. Cross checked with operational procedures (see above).
c	For any exceptional mortality event where dead fish were not collected for post-mortem analysis, keep a written justification.	All mortalities of the 12 YC were classified, reviewed reports of post mortem analyses. FHU reports reviewed, example: Case Id: 10/287, samples collected 18/08/2010, damaged gills and other tissues, fish affected by amoebic gill disease.
5.1.4 Percentage of mortalities that are recorded, classified and receive a post-mortem analysis		
a	Maintain detailed records for all mortalities and post-mortem analyses including: - date of mortality and date of post-mortem analysis; - total number of mortalities and number receiving post-mortem analysis; - name of the person or lab conducting the post-mortem analyses; - qualifications of the individual (e.g. veterinarian, fish health manager); - cause of mortality (specify disease or pathogen) where known; and - classification as 'unexplained' when cause of mortality is unknown (see 5.1.6).	Received Final reports of examinations conducted by Animal Health Laboratory, Department of Primary Industries, Parks, Water and Environment, Tasmania on a case by case basis, FHU reports reviewed, example: Case Id: 10/287, samples collected 18/08/2010, damaged gills and other tissues, fish affected by amoebic gill disease. Tassal records all mortalities of the site for each year. Fish health manager provided records related to a random mortality event in 2013 and 2014 (current and previous production cycles). Tassal maintains records of all lab reports that are associated with any mortality event that list cause of the mortality event (if determined) – see 5.1.3 c for specific example.
b	For each mortality event, ensure that post-mortem analyses are done on a statistically relevant number of fish and keep a record of the results.	All farm mortality events with final examinations reports see 5.1.3 c for specific example.
c	If on-site diagnosis is inconclusive and disease is suspected or results are inconclusive over a 1-2 week period, ensure that fish are sent to an off-site laboratory for diagnosis and keep a	See 5.1.3 c.

	record of the results (5.1.4a).	
d	Using results from 5.1.3a-c, classify each mortality event and keep a record of those classifications.	See 5.1.3 c.
e	Provide additional evidence to show how farm records in 5.1.4a-d cover all mortalities from the current and previous two production cycles (as needed).	Database contained list of all events, at onsite visit to linked to all farm mortality events with final examinations reports see 5.1.3 c for specific example.
f	Submit data on numbers and causes of mortalities to ASC.	Data was submitted to ASC
5.1.5 Maximum viral disease-related mortality [100] on farm during the most recent production cycle		
a	Calculate the total number of mortalities that were diagnosed (see 5.1.4) as being related to viral disease.	N/A –Viral disease is not a problem in Tasman region. This was confirmed at onsite audit through interviews with company vet, fish health manager and other staff.
b	Combine the results from 5.1.5a with the total number of unspecified and unexplained mortalities from the most recent complete production cycle.	N/A –Viral disease is not a problem
c	Submit data on total mortality and viral disease-related mortality to ASC.	Submitted
5.1.6 Maximum unexplained mortality rate from each of the previous two production cycles, for farms with total mortality > 6%; Requirement: ≤ 40% of total mortalities		
a	Use records in 5.1.4a to calculate the unexplained mortality rate (%) for the most recent full production cycle. If rate was ≤ 6%, then the requirement of 5.1.6 does not apply. If total mortality rate was > 6%, proceed to 5.1.6b.	Received total mortality estimates for 2011 and 2012 which were >6% so b applies.
b	Calculate the unexplained mortality rate (%) for each of the two production cycles immediately prior to the current cycle. For first audit, calculation must cover one full production cycle immediately prior to the current cycle.	Reviewed summary mortality data sheets for year class YC12. Classifications include “decomposed” and “normal” mortality” without any explanation of cause in addition to “unknown mortality. Therefore the total estimated unknown mortality in the most recent production cycles are >40% at Tasman. <u>Minor non-conformity:</u> During the last full production cycle the unexplained mortality at the farm site was greater than 40% of overall mortality.
c	Submit data on maximum unexplained	Data were submitted to ASC.

	mortality to ASC.	
5.1.7 A farm-specific mortalities reduction program that includes defined annual targets for reductions in mortalities and reductions in unexplained mortalities		
a	Use records in 5.1.4a to assemble a time-series dataset on farm-specific mortalities rates and unexplained mortality rates.	Received time series of mortality rates per farm as well as demonstration of "Fish Talk" to track and monitor stock including mortalities ("Fish Talk").
b	Use the data in 5.1.7a and advice from the veterinarian and/or fish health manager to develop a mortalities-reduction program that defines annual targets for reductions in total mortality and unexplained mortality.	Received specific Fish Health Strategy July 2012 (power point presentation) with specific targets for reduction in mortalities as well as Fish health Strategy Nov. 2013. Staff interviews conducted onsite confirmed awareness. Fish health professionals are working on the SOMV problem together with authorities and other farms.
c	Ensure that farm management communicates with the veterinarian, fish health manager, and staff about annual targets and planned actions to meet targets.	Power point presentations are provided to staff (see above). Staff interviews conducted onsite confirmed awareness.
5.2 Therapeutic treatments		
5.2.1 On-farm documentation that includes, at a minimum, detailed information on all chemicals and therapeutants used during the most recent production cycle, the amounts used (including grams per ton of fish produced), the dates used, which group of fish were treated and against which diseases, proof of proper dosing, and all disease and pathogens detected on the site		
a	Maintain a detailed record of all chemical and therapeutant use that includes: - name of the veterinarian prescribing treatment; - product name and chemical name; - reason for use (specific disease) - date(s) of treatment; - amount (g) of product used; - dosage; - MT of fish treated; - the WHO classification of antibiotics (also see note under 5.2.8); and - the supplier of the chemical or therapeutant.	Received a copy of the Dangerous Goods and Hazardous Substances Register which is kept on Tassal's intranet site- one specific for each region of farming. It notes product name and chemical name as well as reason for use, date(s) and amount (g) of product used. Received detailed record of all therapeutant use for each farm site. Last antibiotic use in Tasman was in February 2009 (Tylosin). Fish health reports were successfully linking to treatment records and prescription. Also received copy of WHO classification of antibiotic.
b	If not already available, assemble records of chemical and therapeutant	See above 5.2.1 a.

	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.	
c	Submit information on therapeutant use (data from 5.2.1a) to ASC.	Information of antibiotic use was submitted to ASC.
5.2.2 Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [103] in any of the primary salmon producing or importing countries		
a	Prepare a list of therapeutants, including antibiotics and chemicals, that are proactively banned for use in food fish for the primary salmon producing and importing countries listed in [104].	Received a copy of the Dangerous Goods and Hazardous Substances Register which is kept on Tassal's intranet site- one specific for each region of farming. It notes product name and chemical name as well as reason for use, date(s) and amount (g) of product used. Received detailed record of all therapeutant use for each farm site. Last antibiotic use in Tasman was in February 2009 (Tylosin). Fish health reports were successfully linking to treatment records and prescription. Also received copy of WHO classification of antibiotic.
b	Maintain records of voluntary and/or mandatory chemical residue testing conducted or commissioned by the farm from the prior and current production cycles.	Received copy of residue monitoring program description and results that SARDI conducts for Tasmanian Salmonid Growers Association (TSGA) 2011-2012.
5.2.3 Percentage of medication events that are prescribed by a veterinarian		
a	Obtain prescription for all therapeutant use in advance of application from the farm veterinarian (or equivalent, see [96] for definition of veterinarian).	No records for farm site Creeses Mistake, however reviewed example from 2009.
b	Maintain copies of all prescriptions and records of veterinarian responsible for all medication events. Records can be kept in conjunction with those for 5.2.1 and should be kept for the current and two prior production cycles.	Confirmed that detailed, specific records are kept.
5.2.4 Compliance with all withholding periods after treatments		
a	Incorporate withholding periods into the farm's fish health management plan (see 5.1.1a).	Received Fish Health Management Plan – South East (Doc # MO175, 16.4.13) which mentions withholding periods, which would be specific for each treatment/ medication. Doc # MO110 states that harvested stock, which falls

		within a period of two times the stated withdrawal period, will be tested for antibiotic residues. Interviews with farm staff at onsite audit will be required to confirm implementation.
b	Compile and maintain documentation on legally-required withholding periods for all treatments used on-farm. Withholding period is the time interval after the withdrawal of a drug from the treatment of the salmon before the salmon can be harvested for use as food.	According to Tassal, there are no legally-required withholding periods. This was confirmed during interviews with staff with company vet in Hobart.
c	Show compliance with all withholding periods by providing treatment records (see 5.2.1a) and harvest dates for the most recent production cycle.	Doc # MO110 states that harvested stock, which falls within a period of two times the stated withdrawal period, will be tested for antibiotic residues will need to be confirmed also for all other treatments at onsite audit.
5.2.5 Maximum farm level cumulative parasiticide treatment index (PTI) score as calculated according to the formula in Appendix VII		
a	Using farm data for therapeutants usage (5.2.1a) and the formula presented in Appendix VII, calculate the cumulative parasiticide treatment index (PTI) score for the most recent production cycle. Calculation should be made and updated on an ongoing basis throughout the cycle by farm manager, fish health manager, and/or veterinarian.	N/A – no parasite treatmeant at Tasman
b	Provide the auditor with access to records showing how the farm calculated the PTI score.	N/A
c	Submit data on farm level cumulative PTI score to ASC as per Appendix VI.	N/A
5.2.6 For farms with a cumulative PTI ≥ 6 in the most recent production cycle, demonstration that parasiticide load [105] is at least 15% less that of the average of the two previous production cycles (within five years of the publication of the SAD standard (i.e. by June 13, 2017)		
a	Review PTI scores from 5.2.5a to determine if cumulative PTI ≥ 6 in the most recent production cycle. If yes, proceed to 5.2.6b; if no, Indicator 5.2.6 does not apply.	N/A – no parasite treatment at Tasman
b	Using results from 5.2.5 and the weight	N/A

	of fish treated (kg), calculate parasiticide load in the most recent production cycle.	
c	Calculate parasiticide load in the two previous production cycles as above (5.2.6b) and compute the average. Calculate the percent difference in parasiticide load between current cycle and average of two previous cycles. For first audit, calculation must cover one full production cycle immediately prior to the current cycle.	N/A
d	As applicable, submit data to ASC on parasiticide load for the most recent production cycle and the two previous production cycles (Appendix VI).	N/A
5.2.7 Allowance for prophylactic use of antimicrobial treatments		
a	Maintain records for all purchases of antibiotics (invoices, prescriptions) for the current and prior production cycles.	Received records of all antibiotics purchased (medicine stocks 2012-2013) for the whole company as well as total amounts of antibiotics used for individual farms with details about dosage and duration of treatments.
b	Maintain a detailed log of all medication-related events (see also 5.2.1a and 5.2.3)	Received detailed record of all therapeutant use for Tasman site. No antibiotics have been used at the Tasman site Creeses Mistake since 2009.
c	Calculate the total amount (g) and treatments (#) of antibiotics used during the current and prior production cycles (see also 5.2.9).	No antibiotics have been used at the Creeses Mistake site since 2009.
5.2.8 Allowance for use of antibiotics listed as critically important for human medicine by the World Health Organization		
a	Maintain a current version of the WHO list of antimicrobials critically and highly important for human health.	Received copy of current WHO list of critically important for human health medicine.
b	If the farm has not used any antibiotics listed as critically important (5.2.8a) in the current production cycle, inform the CAB and proceed to schedule the audit.	No antibiotics used at Tasman Creeses Mistake since 2009.
c	If the farm has used antibiotics listed as critically important (5.2.8a) to treat any	N/A

	fish during the current production cycle, inform the CAB prior to scheduling audit.	
d	If yes to 5.2.8c, request an exemption from the CAB to certify only a portion of the farm. Prior to the audit, provide the CAB with records sufficient to establish details of treatment, which pens were treated, and how the farm will ensure full traceability and separation of treated fish through and post- harvest.	N/A
5.2.9 Number of treatments of antibiotics over the most recent production cycle		
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.	Received records of all antibiotics purchased (2012-2013) for Tasman as well as total amounts of antibiotics used for all farms with details about dosage and duration of treatments.
b	Calculate the total number of treatments of antibiotics over the most recent production cycle.	The total number of treatments during the current production cycle (13YC) was 0 at the Tasman site and the last completed cycle (12YC) did not receive any treatments either.
5.2.10 If more than one antibiotic treatment is used in the most recent production cycle, demonstration that the antibiotic load is at least 15% less that of the average of the two previous production cycles (Yes, within five years of the publication of the SAD standard (i.e. full compliance by June 13, 2017)		
a	Use results from 5.2.9b to show whether more than one antibiotic treatment was used in the most recent production cycle. If not, then the requirement of 5.2.10 does not apply. If yes, then proceed to 5.2.10b.	There were no antibiotic treatments during the current production cycle (13YC) or the last completed production cycle (12YC).
b	Calculate antibiotic load (antibiotic load = the sum of the total amount of active ingredient of antibiotic used in kg) for most recent production cycle and for the two previous production cycles. For first audit, calculation must cover one full production cycle immediately prior to the current cycle.	N/A
c	Provide the auditor with calculations showing that the antibiotic load of the	N/A

	most recent production cycle is at least 15% less than that of the average of the two previous production cycles.	
d	Submit data on antibiotic load to ASC	N/A
5.2.11 Presence of documents demonstrating that the farm has provided buyers of its salmon a list of all therapeutants used in production		
a	Prepare a procedure which outlines how the farm provides buyers of its salmon with a list of all therapeutants used in production (see 4.4.3b).	Reviewed copy of ES-112 Disclosure to Buyers Procedure. Therapeutant use is communicated to Tassal's buyers in their annual sustainability report, page 34.
b	Maintain records showing the farm have informed all buyers of its salmon about all therapeutants used in production.	Received copy of Tassal's "disclosure to buyer procedure" (ES 112) and reviewed the paragraph in Tassal's 2012 Annual Sustainability Report that includes the therapeutants used in production.
5.3 Resistance of parasites, viruses and bacteria to medicinal treatments		
5.3.1 Bio-assay analysis to determine resistance when two applications of a treatment have not produced the expected effect		
a	In addition to recording all therapeutic treatments (5.2.1a), keep a record of all cases where the farm uses two successive medicinal treatments.	All records of therapeutic treatments have been kept.
b	Whenever the farm uses two successive treatments, keep records showing how the farm evaluates the observed effect of treatment against the expected effect of treatment.	N/A
c	For any result of 5.3.1b that did not produce the expected effect, ensure that a bio-assay analysis of resistance is conducted.	N/A
d	Keep a record of all results arising from 5.3.1c.	N/A
5.3.2 When bio-assay tests determine resistance is forming, use of an alternative, permitted treatment, or an immediate harvest of all fish on the site		
a	Review results of bio-assay tests (5.3.1d) for evidence that resistance has formed. If yes, proceed to 5.3.2b. If no, then Indicator 5.3.2 is not applicable.	N/A
b	When bio-assay tests show evidence that resistance has formed, keep	N/A

	records showing that the farm took one of two actions: - used an alternative treatment (if permitted in the area of operation); or - immediately harvested all fish on site.	
5.4 Biosecurity measures		
5.4.1 Evidence that all salmon on the site are a single-year class		
a	Keep records of the start and end dates of periods when the site is fully fallow after harvest.	Reviewed records onsite with farm staff at site visit at Creeses Mistake Tasman site (5/28/14) and confirmed that start and end dates are kept.
b	Provide evidence of stocking dates (purchase receipts, delivery records) to show that there were no gaps > 6 months for smolt inputs for the current production cycle.	Reviewed records onsite (5/2014) in Fishtalk.
5.4.2 Evidence that if the farm suspects an unidentifiable transmissible agent, or if the farm experiences unexplained increased mortality, the farm has: 1. Reported the issue to the ABM and to the appropriate regulatory authority 2. Increased monitoring and surveillance on the farm and within the ABM 3. Promptly made findings publicly available		
a	For mortality events logged in 5.1.4a, show evidence that the farm promptly evaluated each to determine whether it was a statistically significant increase over background mortality rate on a monthly basis. The accepted level of significance (for example, $p < 0.05$) should be agreed between farm and CAB.	Received TSGA fish health surveillance program and State biosecurity plan which all include actions and reporting for reportable diseases. Reviewed information from mortality event in July 2013, Animal Health Laboratory Report.
b	For mortality events logged in 5.1.4a, record whether the farm did or did not suspect (yes or no) an unidentified transmissible agent.	Unidentified transmissible agent has not been suspected for any of the mortality events which was confirmed through interviews with the company vet and fish health manager at the onsite meeting. High mortalities are attributable to viral causes
c	Proceed to 5.4.2d if, during the most recent production cycle, either: - results from 5.4.2a showed a statistically significant increase in unexplained mortalities; or - the answer to 5.4.2b was 'yes'. Otherwise, Indicator 5.4.2 is not	N/A

	applicable.	
d	If required, ensure that the farm takes and records the following steps: 1) Report the issue to the ABM and to the appropriate regulatory authority; 2) Increase monitoring and surveillance [117] on the farm and within the ABM; and 3) Promptly (within one month) make findings publicly available.	N/A
e	Submit data to ASC as per Appendix VI about unidentified transmissible agents or unexplained increases in mortality (if applicable).	N/A
5.4.3 Evidence of compliance with the OIE Aquatic Animal Health Code		
a	Maintain a current version of the OIE Aquatic Animal Health Code on site or ensure staff has access to the most current version.	Received copy of AUSTRALIAN AQUATIC VETERINARY EMERGENCY PLAN - AQUAVETPLAN Operational procedures manual Disposal Version 2.0, 2009 that contains a series of technical response plans that describe the proposed Australian approach to aquatic animal disease incursions.
b	Develop policies and procedures as needed to ensure that farm practices remain consistent with the OIE Aquatic Animal Health Code (5.4.3a) and with actions required under indicator 5.4.4.	Received the Tasmania State Special Emergency Management Plan for Biosecurity Emergencies. No evidence of company specific policies and procedures. Need has not be demonstrated yet.
5.4.4. If an OIE-notifiable disease is confirmed on the farm, evidence that: **1. the farm has, at a minimum, immediately culled the pen(s) in which the disease was detected** **2. the farm immediately notified the other farms in the ABM** **3. the farm and the ABM enhanced monitoring and conducted rigorous testing for the disease** **4. the farm promptly made findings publicly available**		
a	Ensure that farm policies and procedures in 5.4.3a describe the four actions required under Indicator 5.4.4 in response to an OIE-notifiable disease on the farm.	N/A
b	Inform the CAB if an OIE-notifiable disease has been confirmed on the farm during the current production	See above.

	cycle or the two previous production cycles. If yes, proceed to 5.4.4c. If no, then 5.4.4c and 5.4.4d do not apply.	
c	If an OIE-notifiable disease was confirmed on the farm (see 5.4.4b), then retain documentary evidence to show that the farm: 1) immediately culled the pen(s) in which the disease was detected; 2) immediately notified the other farms in the ABM [122] 3) enhanced monitoring and conducted rigorous testing for the disease; and 4) promptly (within one month) made findings publicly available.	See above.
d	Submit data to ASC as per Appendix VI about any OIE-notifiable disease that was confirmed on the farm (if applicable).	N/A
e	OIE-notifiable disease was confirmed on the farm, verify notifications were made to regulatory bodies required under law and the OIE Aquatic Animal Health Code.	N/A

PRINCIPLE 6: DEVELOP AND OPERATE FARMS IN A SOCIALLY RESPONSIBLE MANNER		
6.1 Freedom of association and collective bargaining		
6.1.1 Evidence that workers have access to trade unions (if they exist) and union representative(s) chosen by themselves without managerial interference		
a	Workers have the freedom to join any trade union, free of any form of interference from employers or competing organizations set up or backed by the employer.	The Tassal Marine Operations Enterprise Agreement Workplace Partnerships Agreement (WPA 2011-14, 36p) was negotiated by the Australian Workers' Union (AWU) on behalf of workers. Clause 33 of the WPA acknowledges workers' rights to Freedom of Association. Freedom of Association is also recognized in practice, with both workers and AWU representatives confirming that workers at Tassal are able to freely exercise their right to Freedom of Association. The AWU has access to workers onsite, and this was confirmed through interviews with AWU, workers and Tassal.
b	Union representatives are chosen by workers without managerial interference. ILO specifically prohibits "acts which are designated to promote the establishment of worker organizations or to support worker organizations under the control or employers or employers' organizations."	AWU is independent of Tassal, and all AWU representatives are chosen without any influence from Tassal, or managerial interference.
c	Trade union representatives have access to their members in the workplace at reasonable times on the premises.	It was confirmed that union representatives visit workers onsite. This was confirmed by workers (members and non-members), management representatives and AWU.
d	Be advised that workers and union representatives (if they exist) will be interviewed to confirm the above.	Workers (union members and non-union members) and AWU representatives were interviewed in evaluating these indicators.
6.1.2 Evidence that workers are free to form organizations, including unions, to advocate for and protect their rights		
a	Employment contract explicitly states the worker's right of freedom of association.	The Tassal Marine Operations Enterprise Agreement Workplace Partnerships Agreement (WPA 2011-14, 36p), which is the employment contract for non-managerial staff, is negotiated by AWU, a union independent of Tassal. The WPA acknowledges the union's role and rights in the Tassal workplace.
b	Employer communicates that workers are free to form organizations to advocate for and protect work rights (e.g. farm policies on Freedom of Association; see 6.12.1).	Freedom of association is communicated in the WPA, and workers understand that they are free to organize as a way to protect work rights.
c	Be advised that workers will be	Workers interviewed confirmed the above criteria.

	interviewed to confirm the above.	
6.1.3 Evidence that workers are free and able to bargain collectively for their rights		
a	Local trade union, or where none exists a reputable civil-society organization, confirms no outstanding cases against the farm site management for violations of employees' freedom of association and collective bargaining rights.	AWU representatives confirmed that there are no outstanding cases against Tassal farm site management related to violations of freedom of association and collective bargaining rights.
b	Employer has explicitly communicated a commitment to ensure the collective bargaining rights of all workers.	The Tassal WPA is a collective bargaining agreement and was negotiated by AWU on behalf of workers. This document expresses workers' right to freedom of association and collective bargaining. AWU will negotiate a new WPA on behalf of Tassal workers later in 2014, as the current WPA will expire on October 1st 2014.
c	There is documentary evidence that workers are free and able to bargain collectively (e.g. collective bargaining agreements, meeting minutes, or complaint resolutions).	The Tassal WPA is a collective bargaining agreement. AWU will negotiate a new WPA on behalf of Tassal workers later in 2014, as the current WPA will expire on October 1st 2014.
6.2 Child labor		
6.2.1 Number of incidences of child labor		
a	In most countries, the law states that minimum age for employment is 15 years. There are two possible exceptions: - in developing countries where the legal minimum age may be set to 14 years (see footnote 125); or - in countries where the legal minimum age is set higher than 15 years, in which case the legal minimum age of the country is followed. If the farm operates in a country where the legal minimum ages is not 15, then the employer shall maintain documentation attesting to this fact.	The minimum age for full-time employment in Tasmania is 16, and for hazardous work the minimum age is 18. At the time of the audit at Tassal's Tasman site, there were no workers below the age of 18.
b	Minimum age of permanent workers is 15 or older (except in countries as noted above).	The minimum age for full-time employment in Tasmania is 16. At the time of the audit at Tassal's Tasman site no workers under the age of 18 were employed.
c	Employer maintains age records for employees that are sufficient to demonstrate compliance.	Tassal's Human Resources department maintains electronic and hard copy files relating to all workers. These files include age records for all employees.
6.2.2 Percentage of young workers that are protected		
a	Young workers are appropriately identified in company policies & training	At the time of the audit at Tassal's Tasman site no workers under the age of 18 were employed. Thus the criteria under 6.2.2 are not applicable.

	programs, and job descriptions are available for all young workers at the site.	
b	All young workers (from age 15 to less than 18) are identified and their ages are confirmed with copies of IDs.	See above.
c	Daily records of working hours (i.e. timesheets) are available for all young workers.	See above.
d	For young workers, the combined daily transportation time and school time and work time does not exceed 10 hours.	See above.
e	Young workers are not exposed to hazards [129] and do not perform hazardous work [130]. Work on floating cages in poor weather conditions shall be considered hazardous.	See above.
f	Be advised that the site will be inspected and young workers will be interviewed to confirm compliance.	It was confirmed through document review, site inspection, and worker and management interviews that there are no workers under 18 at Tassal's offices or Tasman sites.
6.3 Forced, bonded or compulsory labor		
6.3.1 Number of incidences of forced, bonded or compulsory labor		
a	Contracts are clearly stated and understood by employees. Contracts do not lead to workers being indebted (i.e. no 'pay to work' schemes through labor contractors or training credit programs).	The Tassal WPA and Letters of Offer for individual employees are clearly stated and ensure that workers are not indebted to Tassal, or forced into non-voluntary labor. Worker interviews confirmed that workers understand their contracts.
b	Employees are free to leave workplace and manage their own time.	Tassal workers are engaged in voluntary employment and may resign at any time. During working hours employees are free to leave the workplace within reason and workers manage their own time to the extent possible.
c	Employer does not withhold employee's original identity documents.	Tassal does not hold any original identity documents belonging to employees.
d	Employer does not withhold any part of workers' salaries, benefits, property or documents in order to oblige them to continue working for employer.	Tassal workers are engaged in voluntary employment and Tassal does not withhold any pay, benefits, property or documents as a way to oblige continued employment.
e	Employees are not to be obligated to stay in job to repay debt.	Tassal workers are engaged in voluntary employment and Tassal does not oblige continued employment through debt.
f	Maintain payroll records and be advised that workers will be interviewed to confirm the above.	Payroll records were reviewed and workers were interviewed to confirm compliance with these criteria.
6.4 Discrimination		

6.4.1 Evidence of comprehensive [134] and proactive anti-discrimination policies, procedures and practices		
a	Employer has written anti-discrimination policy in place, stating that the company does not engage in or support discrimination in hiring, remuneration, access to training, promotion, termination or retirement based on race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation, age or any other condition that may give rise to discrimination.	Tassal has a Harassment, Bullying and Discrimination Policy (IMS-P1004 9/01/13 3p); Harassment, Bullying and Discrimination Procedure (HR-100 13/03/13 6p) and Code of Conduct Policy (IMS-P1046 9/01/13 3p); These documents state Tassal's responsibility and commitment to ensure that the forms of discrimination described by this criterion do not occur in the Tassal workplace.
b	Employer has clear and transparent company procedures that outline how to raise, file, and respond to discrimination complaints.	Tassal's Harassment, Bullying and Discrimination Procedure (HR-100 13/03/13 6p) outlines this process, which is clear and transparent.
c	Employer respects the principle of equal pay for equal work and equal access to job opportunities, promotions and raises.	The Harassment, Bullying and Discrimination Policy (IMS-P1004 9/01/13 3p) and Harassment, Bullying and Discrimination Procedure (HR-100 13/03/13 6p) state Tassal's responsibility and commitment to equal treatment and opportunity.
d	All managers and supervisors receive training on diversity and non-discrimination. All personnel receive non-discrimination training. Internal or external training acceptable if proven effective.	Non-discrimination and diversity are topics covered in Tassal's induction training (August 2012), which is provided to all employees. There has been no discrimination complaints filed at the Tasman site.
6.4.2 Number of incidences of discrimination		
a	Employer maintains a record of all discrimination complaints. These records do not show evidence for discrimination.	Tassal maintains a register of all complaints, including discrimination complaints. No discrimination complaints have been made from offices or Tasman sites (confirmed through worker and management interviews and review of complaints register). The register of any discrimination and grievance claims is to be included in monthly Board Reports, and details of any claims are recorded electronically.
b	Be advised that worker testimonies will be used to confirm that the company does not interfere with the rights of personnel to observe tenets or practices, or to meet needs related to race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation or any other condition that may give rise to discrimination.	Workers were interviewed and it was confirmed by all accounts that Tassal does not discriminate against, or interfere with, the rights of employees.
6.5 Work environment health and safety		

6.5.1 Percentage of workers trained in health and safety practices, procedures and policies on a yearly basis		
a	Employer has documented practices, procedures (including emergency response procedures) and policies to protect employees from workplace hazards and to minimize risk of accident or injury. The information shall be available to employees.	The WH&S Policies and Procedures Register lists all corporate-level policies and procedures relating to work place safety and emergency response. The policies and procedures listed in the register are maintained and it was confirmed through worker interviews that workers have access to all of these documents.
b	Employees know and understand emergency response procedures.	It was confirmed through worker interviews that Tassal workers know and understand emergency response procedures.
c	Employer conducts health and safety training for all employees on a regular basis (once a year and immediately for all new employees), including training on potential hazards and risk minimization, Occupational Safety and Health (OSH) and effective use of PPE.	Health and safety training is ongoing, and is both internal and external and it is summarised in the spreadsheet Summary of internal and external training FY13, Tassal Training Matrix and Tassal License Matrix. The employee induction includes a general health and safety component, and all workers are given more specific and targeted health and safety training on an ongoing basis. Workers must be trained and signed off on Standard Operating Procedures (SOPs) for individual tasks and pieces of equipment, and these procedures include identification of hazards and risks, minimization of those hazards and risks, and use of proper PPE. Additionally, workers hold licenses and permits for specific tasks that are high-risk. These licenses and tickets are kept up to date through trainings provided by Tassal through external trainers/agencies. The Licence Matrix records licence and training dates for employees (some casual) and uses colour codes to highlight status – for example red is overdue, yellow signifies due this month, whilst white is current.
6.5.2 Evidence that workers use Personal Protective Equipment (PPE) effectively		
a	Employer maintains a list of all health and safety hazards (e.g. chemicals).	As per Dangerous Goods and Hazardous Substances (WHS-110 Issue 2 132/3/13 1p) Tassal maintains the Tasman MOP's Dangerous Goods Hazardous Substances Register (last updated 11/3/14). Additionally, there are lists of non-product hazards in the Tasman Risk Register (6/12/13)
b	Employer provides workers with PPE that is appropriate to known health and safety hazards.	The Personal Protective Equipment (PPE) Procedure (WHS-128 12/3/13 3p) requires that Tassal provides workers with appropriate PPE. It was observed and confirmed through worker interviews that this is done in practice. All SOPs include PPE requirements and these are followed by workers.
c	Employees receive annual training in the proper use of PPE (see 6.5.1c).	Workers must be trained and signed off on SOPs for individual tasks and pieces of equipment, and these procedures include PPE requirements. SOP training is ongoing.
d	Be advised that workers will be	Workers were interviewed to confirm the above criteria.

	interviewed to confirm the above.	
6.5.3 Presence of a health and safety risk assessment and evidence of preventive actions taken		
a	Employer makes regular assessments of hazards and risks in the workplace. Risk assessments are reviewed and updated at least annually (see also 6.5.1a).	Tassal has two procedures that outline the practices related to risk and hazard assessments: WHS Hazard Identification, Risk Assessment & Control Procedure (WHS-100 17/3/13, 10p); Workplace Health and Safety Hazard Reporting Procedure (WHS-108 24/12/12, 7p). Risks are assessed on an ongoing basis by management through Monthly Site Inspections (WHS-F136 Issue 2 12/3/13 7p), and by workers, and are catalogued in the following registers: - Tasman MOP's Dangerous Goods Hazardous Substances Register (last updated 11/3/14) - Tasman Risk Register (6/12/13) Monthly site inspections are conducted by site management and quarterly site inspections are conducted by Head office.
b	Employees are trained in how to identify and prevent known hazards and risks (see also 6.5.1c).	Workers are trained on the WHS Hazard Identification, Risk Assessment & Control Procedure (WHS-100 17/3/13, 10p) and Workplace Health and Safety Hazard Reporting Procedure (WHS-108 24/12/12, 7p). Workers are also trained to complete Job Safety Analysis Worksheets (JSA) (WHS-F133 12/3/13, 1p) for planned or scheduled tasks. The JSA requires workers to list hazards and risk control measures for each step of a task. Workers are trained on Pocket JSA's, for identifying hazards and controls for non-routine tasks that are simple in nature and require immediate attention. Workers are also trained on the 'Take 5' process, which requires workers to take time to consider the task at hand and the associated hazards before beginning that task.
c	Health and safety procedures are adapted based on results from risk assessments (above) and changes are implemented to help prevent accidents.	Health and safety procedures are updated as new risks are identified or existing risk assessments are updated. This was confirmed through interviews with management and workers, and through review of the WH&S Policy & Procedure register in conjunction with the following registers: - Tasman MOP's Dangerous Goods Hazardous Substances Register (last updated 11/3/14) - Tasman Risk Register (6/12/13)
6.5.4 Evidence that all health- and safety-related accidents and violations are recorded and corrective actions are taken when necessary		
a	Employer records all health- and safety-related accidents.	Tassal has an Incident Reporting and Investigation Policy (IMS-P1044 9/1/13, 1p) and Incident Reporting and Investigation Procedure (WHS-107 15/3/13, 8p) which outline expectations and process for recording all health and safety accidents. It was confirmed that this was done in

		practice through interviews and review of Incident Reports at Tasman site office. Accidents are recorded through incident reports and are then addressed accordingly.
b	Employer maintains complete documentation for all occupational health and safety violations.	All workplace health and safety violations are documented through incident reports and supporting documentation and this documentation is maintained.
c	Employer implements corrective action plans in response to any accidents that occur. Plans are documented and they include an analysis of root cause, actions to address root cause, actions to remediate, and actions to prevent future accidents of similar nature.	Tassal implements corrective actions in response to any accidents that occur. Corrective actions identify immediate actions that can be taken to prevent a reoccurrence. They also include an investigation process including a root cause analysis to identify long term solutions to prevent similar incidents on a permanent basis.
d	Employees working in departments where accidents have occurred can explain what analysis has been done and what steps were taken or improvements made.	Workers who had been directly involved in incidents were able to explain each step of the reporting and corrective action process, and this explanation aligned with the documentation kept at the Tasman site office.
6.5.5 Evidence of employer responsibility and/or proof of insurance (accident or injury) for 100% of worker costs in a job-related accident or injury when not covered under national law		
a	Employer maintains documentation to confirm that all personnel are provided sufficient insurance to cover costs related to occupational accidents or injuries (if not covered under national law). Equal insurance coverage must include temporary, migrant or foreign workers. Written contract of employer responsibility to cover accident costs is acceptable evidence in place of insurance.	Tassal has a workers compensation insurance policy that provides full coverage to all workers for any workplace injury or accident, regardless of the circumstances of the injury or accident – the Certificate of Currency is current until 31/3/15.
6.5.6 Evidence that all diving operations are conducted by divers who are certified		
a	Employer keeps records of farm diving operations and a list of all personnel involved.	All divers are direct employees of Tassal, and individual employment and training records are kept accordingly. Dive operations are defined and recorded according to the Dive Operations Manual 'DOM '(MO-190 1/07/13, 27p)
b	Employer maintains evidence of diver certification (e.g. copies of certificates) for each person involved in diving operations. Divers shall be certified through an accredited national or international organization for diver certification.	Copies of current diver licenses for divers held on file were reviewed. The divers are accredited through the Australian Diver Accreditation Scheme (ADAS).
6.6 Wages		

6.6.1 The percentage of workers whose basic wage [136] (before overtime and bonuses) is below the minimum wage		
a	Employer keeps documents to show the legal minimum wage in the country of operation. If there is no legal minimum wage in the country, the employer keeps documents to show the industry-standard minimum wage.	The full-time minimum wage in Australia is $16.37 per hour, or $622.20 per week. A Level 1 employee at Tassal will receive well above minimum wage.
b	Employer's records (e.g. payroll) confirm that worker's wages for a standard work week (≤ 48 hours) always meet or exceed the legal minimum wage. If there is no legal minimum wage, the employer's records must show how the current wage meets or exceeds industry standard. If wages are based on piece-rate or pay-per-production, the employer's records must show how workers can reasonably attain (within regular working hours) wages that meet or exceed the legal minimum wage.	Entry level employees at Tassal receive exceeds the minimum wage of $16.37 per hour. This was confirmed through payroll review. There are no piece-rate wages.
c	Maintain documentary evidence (e.g. payroll, timesheets, punch cards, production records, and/or utility records) and be advised that workers will be interviewed to confirm the above.	Payroll records were reviewed and workers were interviewed to confirm wage rates.
6.6.2 Evidence that the employer is working toward the payment of basic needs wage		
a	Proof of employer engagement with workers and their representative organizations, and the use of cost of living assessments from credible sources to assess basic needs wages. Includes review of any national basic needs wage recommendations from credible sources such as national universities or government.	The minimum wage in Australia is $16.37 per hour, which meets the definition of a basic needs wage as defined by SAI: “Wages paid for a standard working week should enable workers to meet their basic needs such as food, clean water, clothes, shelter, transport, education, and a discretionary income” (http://www.sa-intl.org/index.cfm?fuseaction=Page.viewPage&pageID=488&parentID=472#faq12) . Tassal pays above the Australian minimum wage level to all workers.
b	Employer has calculated the basic needs wage for farm workers and has compared it to the basic (i.e. current) wage for their farm workers.	Tassal already pays above a basic needs wage to workers.
c	Employer demonstrates how they have taken steps toward paying a basic needs wage to their workers.	See above.
6.6.3 Evidence of transparency in wage-setting and rendering		
a	Wages and benefits are clearly articulated to workers and documented in contracts.	Wages and benefits for workers are clearly stated in the Tassal Marine Operations Enterprise Agreement Workplace Partnerships Agreement (WPA 20011-14, 36p).

b	The method for setting wages is clearly stated and understood by workers.	The method for setting wages is clearly stated in the Tassal WPA and workers understand this.
c	Employer renders wages and benefits in a way that is convenient for the worker (e.g. cash, check, or electronic payment methods). Workers do not have to travel to collect benefits nor do they receive promissory notes, coupons or merchandise in lieu of payment.	Employees are paid on a bi-weekly basis through direct deposit to personal bank accounts.
d	Be advised that workers will be interviewed to confirm the above.	The above criteria were confirmed through worker interviews.
6.7 Contracts (labor) including subcontracting		
6.7.1 Percentage of workers who have contracts		
a	Employer maintains a record of all employment contracts.	The Tassal Marine Operations Enterprise Agreement Workplace Partnerships Agreement (WPA 20011-14, 36p) is in place for all non-managerial workers. For managerial workers Tassal maintains individual employment contracts.
b	There is no evidence for labor-only contracting relationships or false apprenticeship schemes.	All workers are paid for employment according to their respective employment contract. There are no labor-only contracts in place.
c	Be advised that workers will be interviewed to confirm the above.	The above criteria were confirmed through worker interviews.
6.7.2 Evidence of a policy to ensure social compliance of its suppliers and contractors		
a	Farm has a policy to ensure that all companies contracted to provide supplies or services (e.g. divers, cleaning, and maintenance) have socially responsible practices and policies.	Tassal's Contractor Safety Management Procedure (WHS-109 12/12/12, 11p) requires that "only contractors that display the highest level of safety, quality and environmental management work at Tassal". This procedure also states that "Contractor safety, health and environmental work procedures need not be identical to Tassal procedures but they must afford an equivalent level of protection".
b	Producing company has criteria for evaluating its suppliers and contractors. The company keeps a list of approved suppliers and contractors.	Tassal evaluates contractors providing supplies and services based on the criteria outlined in the Contractor Safety Management Procedure (WHS-109 12/12/12, 11p), and maintains a list of the contractors.
c	Producing company keeps records of communications with suppliers and subcontractors that relate to compliance with 6.7.2.	Tassal provides contractors with the Tassal Contractor Handbook (WHS-F139 12/03/13, 18p) which covers expectations regarding: discrimination, harassment & bullying policy, safety & emergency procedures, PPE, moving vehicles, electrical safety, risk assessment & control, JSAs & work permits, lockout procedures, ladders & working at heights, chemicals & hazardous substances, hygiene & environmental considerations. Contractors are also provided with the Tassal Contractor Information Pack, of which there are two types - Existing/Current Contractors (WHS-F140 12/03/13, 21p) or New Contractor Pre-qualification pack (WHS-F141 12/03/13, 19p). Contractor activities are tracked through the Tassal

		intranet.
6.8 Conflict resolution		
6.8.1 Evidence of worker access to effective, fair and confidential grievance procedures		
a	Employer has a clear labor conflict resolution policy for the presentation, treatment, and resolution of worker grievances in a confidential manner.	Tassal's Grievance Prevention and Handling Policy (IMS-P1057) and Code of Conduct Policy (IMS-P1046 9/01/13, 3p) outline the process for confidential reporting, treatment and resolution of worker grievances.
b	Workers are familiar with the company's labor conflict policies and procedures. There is evidence that workers have fair access.	Worker interviews confirmed that workers do have fair access to all of Tassal's policies, including those related to labor conflicts: Grievance Prevention and Handling Policy (IMS-P1057); Code of Conduct Policy (IMS-P1046 9/01/13, 3p), Disciplinary Procedure (HR-106 13/3/13, 3p); Managing Conduct and Performance Policy (IMS-P1021 9/1/13, 3p); Performance Management Procedure (HR-104 13/3/13, 2p). Workers interviewed felt that any grievances they may have will be resolved.
c	Maintain documentary evidence (e.g. complaint or grievance filings, minutes from review meetings) and be advised that workers will be interviewed to confirm the above.	Tassal maintains records of grievances and associated communications. Workers were interviewed to confirm the above criteria.
6.8.2 Percentage of grievances handled that are addressed within a 90-day timeframe		
a	Employer maintains a record of all grievances, complaints and labor conflicts that are raised.	Tassal keeps electronic records of any grievances or complaints.
b	Employer keeps a record of follow-up (i.e. corrective actions) and timeframe in which grievances are addressed.	Tassal keeps electronic records of the responses to any grievances or complaints that are raised.
c	Maintain documentary evidence and be advised that workers will be interviewed to confirm that grievances are addressed within a 90-day timeframe.	These records are maintained and workers were interviewed to confirm that grievances are efficiently and effectively addressed, although only one worker interviewed had experienced a work-related issue and this was resolved through communication with a supervisor.
6.9 Disciplinary practices		
6.9.1 Incidences of excessive or abusive disciplinary actions		
a	Employer does not use threatening, humiliating or punishing disciplinary practices that negatively impact a worker's physical and mental health or dignity.	Tassal's Disciplinary Procedure (HR-106 13/3/13, 3p); Managing Conduct and Performance Policy (IMS-P1021 9/1/13, 3p); and Performance Management Procedure (HR-104 13/3/13, 2p), regulate disciplinary practices, and Tassal does not engage in any abusive disciplinary practices.
b	Allegations of corporal punishment, mental abuse [144], physical coercion, or verbal abuse will be investigated by auditors.	There have been no allegations of abuse filed against Tassal.

c	Be advised that workers will be interviewed to confirm there is no evidence for excessive or abusive disciplinary actions.	Workers were interviewed to confirm the above criteria.
6.9.2 Evidence of a functioning disciplinary action policy whose aim is to improve the worker		
a	Employer has written policy for disciplinary action which explicitly states that its aim is to improve the worker [143].	Tassal's Disciplinary Procedure (HR-106 13/03/13, 3p) states that its purpose is "to change and improve behavior or performance whilst protecting the employee concerned and Tassal from difficulties arising from procedural unfairness and other impacts associated with under performance."
b	Maintain documentary evidence (e.g. worker evaluation reports) and be advised that workers will be interviewed to confirm that the disciplinary action policy is fair and effective.	Records of disciplinary responses were reviewed and the procedure was followed. Workers were interviewed to confirm this.
6.10 Working hours and overtime		
6.10.1 Incidences, violations or abuse of working hours and overtime laws		
a	Employer has documentation showing the legal requirements for working hours and overtime in the region where the farm operates. If local legislation allows workers to exceed internationally accepted recommendations (48 regular hours, 12 hours overtime) then requirements of the international standards apply.	The Tassal Marine Operations Enterprise Agreement Workplace Partnerships Agreement (WPA 20011-14, 36p) is the legal document defining working hours for Tassal workers. All Australian Enterprise Agreements must be vetted and approved by the Fair Work Commission. Working hours vary according to the season and number of daylight hours and shifts vary according to job. Workers will work 1 of 3 shift arrangements: 4 days on/4 days off; 2 days on, 2 days off, 3 days on, 2 days off, 2 days on, 3 days off; or 2 days on, 2 days off, 5 days on, 5 days off. Additionally management works a traditional 5 days on and 2 days off for the weekend. Depending on their work schedule workers will work either 2,007 or 2,080 hours per year. Workers do not work more than 7 consecutive full shifts without taking a day off. Workers are paid overtime at 150% of their normal rate in accordance with the law and their agreements.
b	Records (e.g. time sheets and payroll) show that farm workers do not exceed the number of working hours allowed under the law.	The Enterprise Agreement is legally approved by the Australian Government, and workers do not work in excess of the agreement.
c	If an employer requires employees to work shifts at the farm (e.g. 10 days on and six days off), the employer compensates workers with an equivalent time off in the calendar month and there is evidence that employees have agreed to this schedule (e.g. in the hiring contract).	Workers may not work more than 7 consecutive full shifts without taking a day off.
d	Be advised that workers will be	Workers who were interviewed confirmed that the hours worked are

	interviewed to confirm there is no abuse of working hours and overtime laws.	aligned with their agreements.
6.10.2 Overtime is limited, voluntary [146], paid at a premium rate and restricted to exceptional circumstances		
a	Payment records (e.g. pay slips) show that workers are paid a premium rate for overtime hours.	Payroll records show that workers are paid 150% of normal rate for overtime work.
b	Overtime is limited and occurs in exceptional circumstances as evidenced by farm records (e.g. production records, time sheets, and other records of working hours).	The Enterprise Agreement specifically allows for overtime according to a fixed schedule.
c	Be advised that workers will be interviewed to confirm that all overtime is voluntary except where there is a collective bargaining agreement which specifically allows for compulsory overtime.	The Enterprise Agreement specifically allows for overtime according to a fixed schedule.
6.11 Education and training		
6.11.1 Evidence that the company encourages and sometimes supports education initiatives for all workers (e.g., courses, certificates and degrees)		
a	Company has written policies related to continuing education of workers. Company provides incentives (e.g. subsidies for tuition or textbooks, time off prior to exams, flexibility in work schedule) that encourage workers to participate in educational initiatives. Note that such offers may be contingent on workers committing to stay with the company for a pre-arranged time.	Tassal's Training Policy (IMS-P1058 9/01/13, 2p) and Tassal Marine Operations Enterprise Agreement Workplace Partnerships Agreement (WPA 20011-14, 36p) cover continuing education of workers. Tassal pays for all work-related training, certification, licensing, and continuing education on behalf of workers.
b	Employer maintains records of worker participation in educational opportunities as evidenced by course documentation (e.g. list of courses, curricula, certificates, degrees).	Tassal maintains records of all trainings provided to workers, along with copies of licenses, certificates and tickets.
c	Be advised that workers will be interviewed to confirm that educational initiatives are encouraged and supported by the company.	Workers confirmed that Tassal provides them with opportunities and funding for educational initiatives.
6.12 Corporate policies for social responsibility		
6.12.1 Demonstration of company-level [148] policies in line with the standards under 6.1 to 6.11 above		
a	Company-level policies are in line with all social and labor requirements	Tassal's corporate policies are aligned with the criteria within Principle 6 of this standard. Additionally, Tassal must comply with all state and

	presented in 6.1 through 6.11.	national Legislation including Australian Fair Work Act 2009, Criminal Code Act 1995, Tasmanian Anti-Discrimination Act 1998, Tasmanian Workers Rehabilitation & Compensation Act 1988, Australian Fair Work Act 2009, Age Discrimination Act 2004, Sex Discrimination Act 1984, Disability Discrimination Act 1992 and Racial Discrimination Act 1975.
b	Company-level policies (see 6.12.1a) are approved by the company headquarters in the region where the site applying for certification is located.	All corporate-level policies are managed in Tassal's Integrated Management System (TIMS) from its head office.
c	The scope of corporate policies (see 6.12.1a) covers all company operations relating to salmonid production in the region (i.e. all smolt production facilities, grow-out facilities and processing plants).	The scope of Tassal's corporate policies covers all of Tassal's operations & activities.
d	The site that is applying for certification provides auditors with access to all company-level policies and procedures as are needed to verify compliance with 6.12.1a (above).	During the onsite audit at Tasman Tassal provided access to all company policies and procedures.

PRINCIPLE 7: BE A GOOD NEIGHBOR AND CONSCIENTIOUS CITIZEN		
7.1 Community engagement **7.1.1 Evidence of regular and meaningful consultation and engagement with community representatives and organizations**		
a	The farm engages in consultations with the local community at least twice every year (bi-annually).	Tassal has been engaging in consultations with the local community on an ongoing basis since 2011. Tassal employs a full-time Community Engagement Officer who is responsible for community outreach and consultation. Public feedback and complaints are submitted through Tassal's website, or through direct communication with Tassal's Community Engagement Officer. Tassal's annual Sustainability Report (Tassal 2011, 2012 and 2013 Sustainability Reports) provides the public with detailed information about its operations, including: stakeholder engagement, community engagement, Social Return on Investment (SROI) projects, community complaints, and community sponsorships. The Tassal Sustainability Report Advisory Committee (SRAC) provides Tassal with feedback and guidance regarding the content of the Sustainability Report. The SRAC is comprised of stakeholders from a range of groups, including: Tasmanian Seafood Industry Council (TSIC); Tasmanian Conservation Trust (TCT); Environmental Protection Authority (EPA) Tasmania; the Department of Primary Industries, Parks, Water and Environment; the Tasmanian Association for Recreational Fishing (TARFISH). The Southern Coastcare Association of Tasmania (SCAT) was also approached to participate, but is currently not participating. Tassal also engages with local schools and students. Tassal conducted consultation process regarding the expansion of the Creeses Mistake Lease at Nubeena. Tassal distributed a project summary seeking community feedback on the proposal. Additionally, Tassal has made a presentation to the Tasman council regarding the proposal, and an open day was held on August 10th 2013 to solicit feedback and provide the community with information regarding the proposal. Recently, this lease expansion was approved. The Tassal website has a public comment portal, and comments submitted through the website are responded to by Tassal. Tassal was represented on the Steering Committee for the Your Marine Values: Public Report 2013. This report was part of a broader project, INFORMD Stage 2, funded by the Fisheries Research and Development Corporation on behalf of the Australian Government, which aims to develop ways to "support integrated planning, management and development of marine and coastal ecosystems in South East Tasmania." The reporting process included public surveys regarding personal values related to local marine areas.

b	Consultations are meaningful. OPTIONAL: the farm may choose to use participatory Social Impact Assessment (pSIA) or an equivalent method for consultations.	No participatory Social Impact Assessment (pSIA) has been conducted for the Tasman Peninsula regarding aquaculture operations. Interviews with local community members found both positive and negative feedback regarding Tassal's general operations and community outreach in the Nubeena area. Interviewees noted that Tassal is an accepted and integrated part of the Nubeena community and that there is a meaningful dialogue between the community and Tassal.
c	Consultations include participation by elected representatives from the local community who were asked to contribute to the agenda.	The Tasman Council has been included in community consultations.
d	Consultations include communication about, or discussion of, the potential health risks of therapeutic treatments (see Indicator 7.1.3).	The topic of antibiotic treatment is covered in Tassal's 2013 Sustainability Report, which outlines the company's antibiotic usage. Minor non-conformance: Currently there is no direct communication with the community regarding antibiotics treatments and potential health risks.
e	Maintain records and documentary evidence (e.g. meeting agenda, minutes, report) to demonstrate that consultations comply with the above.	Meeting agendas and records, reports, emails, letters and supporting documentation were provided as evidence.
f	Be advised that representatives from the local community and organizations may be interviewed to confirm the above.	Community representatives and stakeholders were interviewed in evaluating the above criteria.
7.1.2 Presence and evidence of an effective policy and mechanism for the presentation, treatment and resolution of complaints by community stakeholders and organizations		
a	Farm policy provides a mechanism for presentation, treatment and resolution of complaints lodged by stakeholders, community members, and organizations.	Tassal's website, Facebook and Twitter pages, and its Customer Feedback Procedure (QA-109 4/4/13 3p) provide a mechanism for the resolution of complaints from groups and individuals outside Tassal. Tassal's Community Engagement Officer is also available to receive complaints directly. Records of all complaints are maintained in Tassal's complaints database.
b	The farm follows its policy for handling stakeholder complaints as evidenced by farm documentation (e.g. follow-up communications with stakeholders, reports to stakeholder describing corrective actions).	Tassal adheres to its Customer Feedback Procedure (QA-109 4/4/13 3p) and maintains records of all complaints, corrective actions and supporting documentation including communications records and photographs.
c	The farm's mechanism for handling complaints is effective based on resolution of stakeholder complaints	Records of complaints maintained in the Tassal complaints database demonstrated that complaints were resolved effectively.

	(e.g. follow-up correspondence from stakeholders).	
d	Be advised that representatives from the local community, including complainants where applicable, may be interviewed to confirm the above.	Local representatives, including complainants, were interviewed to confirm the above criteria.
7.1.3 Evidence that the farm has posted visible notice [151] at the farm during times of therapeutic treatments and has, as part of consultation with communities under 7.1.1, communicated about potential health risks from treatments		
a	Farm has a system for posting notifications at the farm during periods of therapeutic treatment.	Tassal has not conducted antibiotic treatments at its Tasman sites since February 2009, however there is a plan in place to post signage on pens during periods of antibiotic treatments.
b	Notices (above) are posted where they will be visible to affected stakeholders (e.g. posted on waterways for fishermen who pass by the farm).	Tassal has a plan in place to display signage on pens during periods of antibiotic treatments, allowing the signs to be seen by members of the community passing on boats.
c	Farm communicates about the potential health risks from treatments during community consultations (see 7.1.1)	The topic of antibiotic treatment is covered in Tassal's 2013 Sustainability Report, which outlines the company's antibiotic usage. Minor non-conformance: Currently there is no direct communication with the community regarding antibiotics treatments and potential health risks.
d	Be advised that members of the local community may be interviewed to confirm the above.	Local community members and workers were interviewed as part of the evaluation process for the above criteria.
7.2 Respect for indigenous and aboriginal cultures and traditional territories		
7.2.1 Evidence that indigenous groups were consulted as required by relevant local and/or national laws and regulations		
a	Documentary evidence establishes that the farm does or does not operate in an indigenous territory (to include farms that operate in proximity to indigenous or aboriginal people [152]). If not then the requirements of 7.2.1 do not apply.	At the time of the 2011 census 8.4% of Nubeena's population identified as indigenous, and Tassal's Tasman sites are considered to be operating in indigenous territory, in accordance with this performance indicator. Aboriginal Heritage Tasmania determined through a desktop assessment that there are no Aboriginal heritage sites in close proximity to the Creeses Mistake lease. This is stated in section 5.6.1 of the Creeses Mistake EIS. The *Your Marine Values Report* includes a section regarding Tasmanian Aboriginal Heritage, and specifically Aboriginal sites of cultural significance. Tassal is aware of the Marine Farming Planning Act of 1995, which requires the consideration of Tasmanian Aboriginal Heritage values as part of Marine Farm Development Plans.

		Tassal is also aware of the Tasmanian government's proposed new Aboriginal heritage legislation which will replace the Aboriginal Relics Act 1975.
b	Farm management demonstrates an understanding of relevant local and/or national laws and regulations that pertain to consultations with indigenous groups.	Tassal is aware of Aboriginal Heritage Protection legislation and regulations, and the Native Title (Tasmania) Act 1994 (No. 81 of 1994), and Tassal has an understanding of the indigenous heritage in the Tasman Peninsula.
c	As required by law in the jurisdiction: - farm consults with indigenous groups and retains documentary evidence (e.g. meeting minutes, summaries) to show how the process complies with 7.2.1b; OR - farm confirms that government-to-government consultation occurred and obtains documentary evidence.	Tassal has complied with the legislation and regulations described above in 7.2.1.b.
d	Be advised that representatives from indigenous groups may be interviewed to confirm the above.	Representatives from indigenous groups were not interviewed to confirm the above.
7.2.2 Evidence that the farm has undertaken proactive consultation with indigenous communities		
a	See results of 7.2.1a (above) to determine whether the requirements of 7.2.2 apply to the farm.	The requirements of 7.2.2 do apply to Tassal, and Tassal has not yet engaged in consultations with indigenous community leaders or groups. <u>Minor non-conformity:</u> Currently there is no consultations with aboriginal groups
b	Be advised that representatives from indigenous communities may be interviewed to confirm that the farm has undertaken proactive consultations.	Tassal has not yet engaged in consultations with indigenous community leaders or groups. This was confirmed by Tassal. <u>Minor non-conformity:</u> as above
7.2.3 Evidence of a protocol agreement, or an active process to establish a protocol agreement, with indigenous communities		
a	See results of 7.2.1a (above) to determine whether the requirements of 7.2.3 apply to the farm.	Protocol agreements are not required by Australian law and are not applicable in this context. The requirements of 7.2.3 do not apply to Tassal.
b	Maintain evidence to show that the farm has either: 1) reached a protocol agreement with the indigenous community and this fact is documented; or 2) continued engagement in an active	See 7.2.3.a

	process [153] to reach a protocol agreement with the indigenous community.	
c	Be advised that representatives from indigenous communities may be interviewed to confirm either 7.2.3b1 or b2 (above) as applicable.	See 7.2.3.a
7.3 Access to resources		
7.3.1Changes undertaken restricting access to vital community resources [154] without community approval		
a	Resources that are vital [155] to the community have been documented and are known by the farm (i.e. through the assessment process required under Indicator 7.3.2).	Tassal is aware of the resources that are vital to the community. Tassal engages with individuals and community organizations that use the Wedge Bay area for a range of purposes, including fishing, diving, tourism, yachting, boating, and general enjoyment of the natural environment.
b	The farm seeks and obtains community approval before undertaking changes that restrict access to vital community resources. Approvals are documented.	The local community has been consulted in development of plans to expand the Creeses Mistake Lease at Nubeena. These changes have been approved, but not yet implemented.
c	Be advised that representatives from the community may be interviewed to confirm that the farm has not restricted access to vital resources without prior community approval.	Community representatives were interviewed in evaluating the above criteria.
7.3.2 Evidence of assessments of company's impact on access to resources		
a	There is a documented assessment of the farm's impact upon access to resources. Can be completed as part of community consultations under 7.1.1.	The assessment of the farm's impact upon access to resources is done as part of the community engagement work conducted by Tassal. See also 7.3.1
b	Be advised that representatives from the community may be interviewed to generally corroborate the accuracy of conclusions presented in 7.3.2a.	Tassal has been informed.

SECTION 8. REQUIREMENTS FOR SUPPLIERS OF SMOLT--		
8.1 Compliance with local and national regulations		
a	Identify all of the farm's smolt suppliers. For each supplier, identify the type of smolt production system used (e.g. open, semi or closed systems) and submit this information to ASC (Appendix VI).	Smolt can be sourced from two directly-controlled, Tassal owned hatcheries (Rookwood Rd [RR] and Russell Falls [RF]) as well as majority owned industry hatcheries SALTAS (Florentine and Wayatinah). The types of hatchery systems include: - Tassal Russell Falls Hatchery – semi-closed system - Tassal Rookwood Road Hatchery - closed recirculation system - SALTAS Wayatinah Hatchery – semi-closed system - SALTAS Florentine Hatchery – semi-closed system Smolt is transferred in aerated tankers from hatchery to sea for stocking in pens. The fish are grown for approximately 6 months or to an average size >800 g before transfer to a grow-out pen with 34 mm net mesh nets. For the current Tasman 13YC smolt were sourced from all SALTAS and Tassal hatcheries. All hatcheries are covered in this Section.
b	Where permits related to water quality are required, obtain copies of smolt suppliers' permits.	Hatcheries in Tasmania operate under a Fish Farm Licence issued by the Inland Fisheries Service (IFS); Local councils issue EPNs that form the requirements of water quality monitoring and reporting. For the four hatcheries these are: - Tassal Russell Falls Hatchery – EPN #7 (Derwent Valley Council 3/7/02 3p) and Fish Farm Licence #5, Fish Farm Licence #29 – Karanja Fish Farm. - Tassal Rookwood Road Hatchery - EPN # 2008/1 (Huon Valley Council), Rookwood also operates under Special Plumbing Permit (SPP) # 96/2008 from HVC for wastewater disposal system; EMP (2013 28p) for wastewater disposal system, Fish Farm Licence #9 - SALTAS Wayatinah Hatchery Fish Farm Licence #26 - SALTAS Florentine Hatchery Fish Farm Licence #40
c	Obtain records from smolt suppliers showing monitoring and compliance with discharge laws, regulations, and permit requirements as required.	Schedule 1 outlines conditions for the Environmental Protection Notice for Rookwood Rd, Russell Falls and Saltas hatcheries in accordance with section 44(3) EMPCA 1994.
d	Verify that farm keeps record to show how smolt producer comply with regulations on	Received copies of data spreadsheets for each hatchery on water quality measures to show compliance with regulations.

	discharge and permit requirements related to water quality.	
8.2 Compliance with labour laws and regulations		
a	Obtain declarations from smolt suppliers affirming compliance with labour laws and regulations.	Tassal is a vertically integrated company from egg to plate. As fully-owned Tassal operations, both Russell Falls and Rookwood Rd comply with labour laws and regulations as documented under Principle 6. For SALTAS this is covered by the SALTAS Industrial Agreement 2012-Final Version (29p).
b	Keep records of supplier inspections for compliance with national labour laws and codes (only if such inspections are legally required in the country of operation; see 1.1.3a)	As above.
8.3 Evidence of an assessment of the farm's potential impacts on biodiversity		
a	Obtain from the smolt supplier(s) a documented assessment of the smolt site's potential impact on biodiversity and nearby ecosystems. The assessment must address all components outlined in Appendix I-3.	Evidence for Russell Fall hatchery includes: ▪ Report by Freshwater Systems (2013, 19p) on annual monitoring benthic macroinvertebrates upstream – the conclusions stated Equivalence in TRCI Aquatic life macroinvertebrate condition (MI) scores between the upstream and downstream sites in spring 2013 indicated compliance with the ASC Salmon Standard (2012) accreditation requirements. For Rookwood Road Hatchery: ▪ Environmental Management Plan can be used to show compliance for all components outlined in Appendix I-3 are covered. ▪ Construction Environmental Management Plan (DPEMP). For SALTAS hatcheries: ▪ Freshwater Systems (2014, 19p) Benthic Macroinvertebrate Monitoring compliance assessment SALTAS Wayatinah Hatchery ▪ Freshwater Systems (2014, 18p) Benthic Macroinvertebrate Monitoring compliance assessment SALTAS Florentine Hatchery
b	Obtain from the smolt supplier(s) a declaration confirming they have developed and are implementing a plan to address potential impacts identified in the assessment.	Received a copy of the Environmental Management Plan for the Huon River Hatchery (Rookwood Rd). The Russell Falls hatchery report mentioned above showed overall condition of the benthic macroinvertebrate communities at both

		sites were good, with a high rating for all indicators. Tassal proposes to address any impacts if they are identified in the future. The SALTAS Wayatinah hatchery report showed overall compliance with the ASC Salmon Standard requirements for benthic macroinvertebrate monitoring. The SALTAS Florentine hatchery report indicates non-compliance with ASC Salmon Standard requirements for benthic macroinvertebrate monitoring under Appendix VIII-3, even though the overall condition of the benthic macroinvertebrate community at both sites was good and moderate respectively. Freshwater Systems is preparing quotes to conduct two consecutive faunal surveys in the next 12 months as per Appendix VIII-3.
8.4 Monitoring total amount of phosphorus		
a	Obtain records from smolt suppliers showing amount and type of feeds used for smolt production during the past 12 months.	ASC Feed data declaration volumes Tasman 12YC shows amounts used in past 12 months for SALTAS & RF hatcheries. Skretting feeds used include: ▪ Nutra RC for salmonid parr (31.11.48 V1 2p) ▪ Nutra XP for salmonid fry (31.11.28 V4 2p) ▪ Nutra Supreme Spirit Supreme for salmonid transfer (31.11.24 V5 2p).
b	For all feeds used by the smolt suppliers (result from 8.4a), keep records showing phosphorus content as determined by chemical analysis or based on feed supplier declaration (Appendix VIII-1).	Skretting declaration (12/13/14) provided stating they will provide a feed declaration detailing the total amount of phosphorous in their smolt feeds annually. This will allow the salmon farm to calculate the total phosphorous discharged per tonne of smolt produced. The appropriate product data sheets will also be provided. The Skretting ASC Feed Phosphorus Declaration (4/12/13, 1p) states they will provide an annual feed declaration detailing the total amount of phosphorous in their smolt feeds: ▪ Nutra RC 1.3% phosphorous ▪ Nutra XP 1.7% phosphorous ▪ Nutra Supreme for salmonid transfer 1.3% phosphorous.
c	Using the equation from Appendix VIII-1 and results from 8.4a and b, calculate the total amount of phosphorus added as feed during the last 12 months of smolt production.	The calculations have been provided, see below.
d	Obtain from smolt suppliers records for stocking, harvest and mortality which are sufficient to calculate the amount of biomass produced (formula in Appendix VIII-1) during the past 12 months.	Records were provided for all Tassal and SALTAS hatcheries to calculate the biomass production during the past 12 months.

e	Calculate the amount of phosphorus in fish biomass produced (result from 8.4d) using the formula in Appendix VIII-1.	The calculations have been provided, see (d) above.
f	If applicable, obtain records from smolt suppliers showing the total amount of P removed as sludge (formula in Appendix VIII-1) during the past 12 months.	The calculations have been provided, see (d) above.
g	Using the formula in Appendix VIII-1 and results from 8.4a-f (above), calculate total phosphorus released per ton of smolt produced and verify that the smolt supplier is in compliance with requirements.	Tassal provided calculations of total phosphorus released per ton of smolt produced (using total amount of phosphorus added as feed during the last 12 months of smolt production, total amount of Phosphorus removed as sludge, records for stocking, harvest and mortality of smolt). The calculations have been provided, see (d) above.
8.5 Culturing of non-native species		
a	Obtain written evidence showing whether the smolt supplier produces a non-native species or not. If not, then Indicator 8.5 does not apply.	Salmonids are introduced to Tasmania - Refer Principle 3 (3.2.1).
b	Provide the farm with documentary evidence that the non-native species was widely commercially produced in the area before publication of the SAD Standard. (See definition of area under 3.2.1).	Refer Principle 3 (3.2.1).
c	If the smolt supplier cannot provide the farm with evidence for 8.5b, provide documentary evidence that the farm uses only 100% sterile fish.	Memo (4/2/14, 1p) from the Company Veterinarian stating that assessments are conducted of their triploid stocks during the freshwater phase of their life cycle to ensure that the stocks are all triploid and therefore cannot reproduce. This fact is also discussed in the Lyle & Frijlink 2013 report.
d	If the smolt supplier cannot provide the farm with evidence for 8.5b or 8.5c, provide documented evidence for each of the following: 1) non-native species are separated from wild fish by effective physical barriers that are in place and well maintained; 2) barriers ensure there are no escapes of reared fish specimens that might survive and subsequently reproduce; and 3) barriers ensure there are no escapes of biological material that might survive and subsequently reproduce.	N/A
e	Retain evidence as described in 8.5a-d necessary to show compliance of each facility supplying	Evidence as retained under Principle 3

	smolt to the farm.	
8.6 Escapees in the most recent production cycle		
a	Obtain documentary evidence to show that smolt suppliers maintained monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapees.	The Escape Prevention and Response Protocol includes hatcheries (MO-146 p 4). From Fish Talk records Tassal has not had any escapes from hatcheries. SALTAS – From Fish Talk records SALTAS has had no recorded escapes.
b	Using smolt supplier records from 8.6a, determine the total number of fish that escaped. Verify that there were fewer than 300 escapees from the smolt production facility in the most recent production cycle.	Refer above.
c	Inform smolt suppliers in writing that monitoring records described in 8.6a must be maintained for at least 10 years beginning with the production cycle for which the farm is first applying for certification (necessary for farms to be eligible to apply for the exception noted in [159]).	Records at Tassal's Rookwood Road and Russell Falls hatcheries will be maintained for at least 10 years beginning with the production cycle for which the farm is first applying for certification. SALTAS will maintain records of all incidences of confirmed or suspected escapes for at least 10 years beginning with the production cycle for which the farm is first applying for certification.
d	If an escape episode occurs at the smolt production facility (i.e. an incident where > 300 fish escaped), the farm may request a rare exception to the Standard [159]. Requests must provide a full account of the episode and must document how the smolt producer could not have predicted the events that caused the escape episode.	N/A
8.7 Accuracy of the counting technology or counting method		
a	Obtain documentary evidence to show that smolt suppliers maintained monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapees.	MO-146 Escape Prevention and Response Protocol (8p) includes information on Vaki Macro Counters used in the hatcheries; these are a scanning camera based counter, with each image being analysed and then counted. At maximum capacity, the counter is over 98% accurate (the Technical Specifications report accuracy at “over 99%”). Because it is a camera based counter, the images are automatically recorded and can be used to validate the accuracy of the count.

		These counts are manually recorded, and forwarded to the receiving region with documents such as Fish Transfer – Rookwood Rd Hatchery (MO-F274), Smolt Despatch Form (MO-F278), and Fish Transfer – Rookwood Road (MO-F274) used to record smolt numbers and weight prior to transfer to the respective MOPs region; this data is also recorded in Fish Talk.
b	Using smolt supplier records from 8.6a, determine the total number of fish that escaped. Verify that there were fewer than 300 escapees from the smolt production facility in the most recent production cycle.	N/A
c	Inform smolt suppliers in writing that monitoring records described in 8.6a must be maintained for at least 10 years beginning with the production cycle for which the farm is first applying for certification (necessary for farms to be eligible to apply for the exception noted in [159]).	Acknowledged by Tassal
d	If an escape episode occurs at the smolt production facility (i.e. an incident where > 300 fish escaped), the farm may request a rare exception to the Standard [159]. Requests must provide a full account of the episode and must document how the smolt producer could not have predicted the events that caused the escape episode.	N/A
8.8 Evidence of a functioning policy for responsible treatment of non-biological waste		
a	From each smolt supplier obtain a policy which states the supplier's commitment to proper and responsible treatment of non-biological waste from production. It must explain how the supplier's policy is consistent with best practice in the area of operation.	As with farm sites, all Tassal hatcheries comply with the Environmental Policy (IMS-P1002 9/01/13 1p) which aims to minimise environmental impacts. Marine Operations Waste Management Plan (MO-130) page 1 'Legal Matters' adequately summarises the various acts and legislation and Tassal's objectives to target zero waste in marine environments– this refers to freshwater hatcheries as well. The Waste Management & Disposal Policy (IMS-P1031 9/01/13 1p) states the farm's commitment to proper and responsible treatment of non-biological waste from production with a Waste Disposal Plan (WDP).
8.9 Presence of an energy-use assessment		
a	Obtain records from the smolt supplier for energy consumption by source (fuel, electricity) at the supplier's facility throughout each	Tassal Life Cycle Analysis (LCA) - Final Report FY 2011-12 by Amy White (Sep'12, 56p) states Tassal used a total of 448,332 GJ of energy, a 2% decrease from previous year.

	production cycle.	Estimates for all Tassal`s hatcheries, for FY11-12 were: ▪ electricity 8,938 MWh ▪ diesel 4 kL, no petrol ▪ LPG 3.6 kL. This does not include transport of smolt to the farms. Energy consumption for the Rockwood and Russell Falls Hatchery were 33.4 GJ and 39.8 GJ respectively.
b	Confirm that the smolt supplier calculates total energy consumption in kilojoules (kj) during the last production cycle.	See above for financial year reporting.
c	Obtain records to show the smolt supplier calculated the total weight of fish in metric tons (MT) produced during the last smolt production cycle.	For 2012 Freshwater YC, these records are provided in 8.4 b.
d	Confirm that the smolt supplier used results from 8.9b and 8.9c to calculate energy consumption on the supplier's facility as required and that the units are reported as kilojoule/MT fish/production cycle.	Energy consumption was calculated using the results of total weight of fish in metric tons (MT) produced and reported as GJ/MT fish/ last production cycle for both relevant hatcheries (see 8.9a). For FY11-12 the White (2012) report states production-weighted inputs for 1 tonne smolt are: ▪ electricity 9.23 MWh ▪ diesel 4.02L, no petrol ▪ LPG 3.6L. The GJ for hatcheries increased from 75,418 in FY10-11 to 77,126 in FY11-12.
e	Obtain evidence to show that smolt supplier has undergone an energy use assessment in compliance with requirements of Appendix V-1. Can take the form of a declaration detailing a-e.	Refer to above.
8.10 Records of greenhouse gas (GHG) emissions		
a	Obtain records of greenhouse gas emissions from the smolt supplier's facility.	Tassal Life Cycle Assessment (LCA) FY2011-12 by Amy White (Sep'12, 56p) states a total of 23,582 t CO2e was emitted, a slight decrease of 48 t Co2e from previous year. This LCA included the two Tassal hatcheries. For FY2013 Prod cycle the ENERGY DISTRIBUTION GHG (CO2-e) t GJ E consumed GHG (CO2-e) t/t Rookwood 2007.5 24090.2 2.8 Russell Falls 673.8 8086.0 3.3

		SALTAS 1302.7 15848.7 3.3
b	Confirm that, on at least an annual basis, the smolt supplier calculates all scope 1 and scope 2 GHG emissions in compliance with Appendix V-1.	For FY11-12 the White (2012) report states a total of 23,582 t CO2e was emitted as a result of Tassal's operations in 2011-12. Of this, 38 per cent (9,038 t CO2e) was scope 1 emissions from the use of fuels on site and in fleet vehicles. A further 18 per cent (4,329 t CO2e) were scope 2 emissions from the use of electricity with the remainder classed as scope 3. Majority of the scope 3 emissions were attributable to the transportation undertaken by contractors (7,372 t CO2e) as well as the smolt sourced from SALTAS and the GHGs released in the production of inputs such as diesel fuel.
c	For GHG calculations, confirm that the smolt supplier selects the emission factors which are best suited to the supplier's operation. Confirm that the supplier documents the source of the emissions factors.	Confirmed with statement about how GHG is calculated, see below.
d	For GHG calculations involving conversion of non-CO2 gases to CO2 equivalents, confirm that the smolt suppliers specify the Global Warming Potential (GWP) used and its source.	Reviewed statement that GHG calculations involving conversion of non-CO2 gases to CO2 equivalents. For FY11-12 the 2 Tassal hatcheries contributed 10% to the total GWP (CO2e).
e	Obtain evidence to show that the smolt supplier has undergone a GHG assessment in compliance with requirements Appendix V-1 at least annually.	GHG emissions at the hatcheries have been supplied and will be calculated on an annual basis.
8.11 Evidence of a fish health management plan,		
a	Obtain a copy of the supplier's fish health management plan for the identification and monitoring of fish disease and parasites.	The DPIPWE Tas Salmonid Health Surveillance Program 2012/13 (6p) details the program undertaken in the past year for the whole state; this is supported by the DPIPWE Summary of Tasmanian Salmonid Disease Activities. The Fish Health Management Plan - South East (MO-175 Issue 3 16/4/13, 29) include Tassal hatcheries. Before stocking all smolt/fingerlings must have the Veterinary Health Certificate For Salmonids Destined For Tasman from Tassal's own hatcheries as well as external.
b	Keep documentary evidence to show that the smolt supplier's health plans were approved by the supplier's designated veterinarian.	These are approved by the Company Veterinarian.
8.12 Percentage of fish that are vaccinated for selected diseases		

a	Maintain a list of diseases that are known to present a significant risk in the region, developed by farm veterinarian and supported by scientific evidence.	The MO-175 Fish Health Management Plan (South East) lists: 2.1 DISEASES OF CONCERN WHICH ARE EXOTIC TO THE SOUTH EAST 2.1.1 VIRAL DISEASES (EXOTIC TO AUSTRALIA AND NOTIFIABLE) • Infectious haematopoietic necrosis (IHN) (List A Disease) • Infectious pancreatic necrosis (IPN) (List A Disease) • Infectious salmon anaemia (ISA) (List A Disease) • Pancreas disease (PD) 2.1.2 VIRAL DISEASES (EXOTIC TO TASMANIA AND NOTIFIABLE) • Epizootic haematopoietic necrosis (EHN) (List A Disease) 2.1.3 BACTERIAL DISEASES (EXOTIC TO AUSTRALIA AND NOTIFIABLE) • Bacterial kidney disease (IHN) (*Renibacterium salmoninarum*) (List A Disease) • Enteric redmouth disease (ERM) (*Yersinia ruckeri* – Hagerman strain) (List A Disease) • Furunculosis (*Aeromonas salmonicida* subspp. *salmonicida*) (List A Disease) • Piscirickettsiosis (*Piscirickettsia salmonis*) (List A Disease) 2.1.4 OTHER DISEASES/PATHOGENS EXOTIC TO AUSTRALIA • Gyrodactylosis (*Gyrodactylus salaris*) • Sea lice (*Lepeophtheirus salmonis*) (List A Disease) • Whirling disease (*Myxobolus cerebralis*) (List A Disease) Before stocking all smolt/fingerlings must have the Veterinary Health Certificate For Salmonids Destined For Tasman from Tassal's own hatcheries as well as external.
b	Maintain a list of diseases for which effective vaccines exist for the region, developed by the farm veterinarian and supported by scientific evidence.	Diseases for which effective vaccines are available in Tasmania include: ▪ *Aeromonas salmonicida biovar acheron* (Anguimonas) ▪ *Vibrio anguillarum,* ▪ *Yersinia ruckeri* (Yersinivac) and ▪ *Vibrio anguillarum* (Anguillvac).
c	Obtain from the smolt supplier(s) a declaration detailing the vaccines the fish received.	The declaration from the company vet, indicates that all fry are vaccinated with Yersinivac-B against *Yersinia ruckeri.*
d	Demonstrate, using the lists from 8.12a-c above, that all salmon on the farm received vaccination against all selected diseases known to present a significant risk in the regions for which an effective vaccine exists.	See above, all relevant vaccines have been used for fry destined for SE sites.
8.13 Percentage of smolt groups tested for select diseases		
a	Obtain from the smolt supplier a list of diseases of regional concern for which smolt should be tested. List shall be supported by scientific	See 8.12 a - Vet certification of smolts ensure that 100% of smolt groups are tested prior to entering the grow-out phase on farm. Tassal do not test specifically for diseases, just general analysis

	analysis as described in the Instruction above.	(histology & microbiology).
b	Obtain from the smolt supplier(s) a declaration and records confirming that each smolt group received by the farm has been tested for the diseases in the list (8.13a).	The declaration from the company vet indicates that all fry are vaccinated with Yersinivac-B against *Yersinia ruckeri.* Fry destined for Macquarie Harbour are also vaccinated with Anguimonas against *Aeromonas salmonicida* and *Vibrio anguillarum.*
8.14 Chemicals and therapeutants used during the smolt production cycle		
a	Obtain from the smolt supplier(s) a detailed record of all chemical and therapeutant use for the fish sold to the farm that is signed by their veterinarian and includes: - name of the veterinarian prescribing treatment; - product name and chemical name; - reason for use (specific disease) - date(s) of treatment; - amount (g) of product used; - dosage; - MT of fish treated; - the WHO classification of antibiotics (also see note under 5.2.8); and - the supplier of the chemical or therapeutant.	The document Antibiotics Tassal (20/12/13) records two antibiotics in use: ▪ Trimethoprim ▪ Oxytetracycline And lists the WHO classification of antibiotics and the supplier of the chemical. The Tassal Antibiotic use log (Antibiotic use - Freshwater up to March 2014) includes information on chemical name; reason for use and specific disease; Date of treatment; amount (g) of product used; dosage and MT of fish treated.
8.15 Allowance for use of therapeutic treatments that include antibiotics		
a	Provide to the smolt supplier the list (see 5.2.2a) of therapeutants, including antibiotics and chemicals, that are proactively banned for use in food fish for the primary salmon producing and importing countries listed in.	Tassal has compiled a list of therapeutants, including antibiotics and chemicals, that are proactively banned for use in food fish for the primary salmon producing and importing countries including USA, EU, (France & UK), Norway, Japan, Chile and Canada.
b	Inform smolt supplier that the treatments on the list cannot be used on fish sold to a farm with ASC certification.	Acknowledged by Tassal that the company's vet is aware.
c	Compare therapeutant records from smolt supplier (8.14) to the list (8.15a) and confirm that no therapeutants appearing on the list (8.15a) were used on the smolt purchased by the farm.	Acknowledged by Tassal. During a visit to the Rookwood hatchery, no banned therapeutants were seen and the hatchery manager confirmed they are not in use.
8.16 Number of treatments of antibiotics		
a	Obtain from the smolt supplier records of all treatments of antibiotics (see 8.14a).	See 8.14a above.

b	Calculate the total number of treatments of antibiotics from their most recent production cycle.	See 8.14a above.
8.17 Allowance for use of antibiotics listed as critically important for human medicine		
a	Provide to smolt supplier(s) a current version of the WHO list of antimicrobials critically and highly important for human health [167].	The Intranet contains a copy of the WHO List - 3rd Revision 2011 (38p). It is supported by Tassal's Antibiotics document "Antibiotics Tassal (20/12/13)".
b	Inform smolt supplier that the antibiotics on the WHO list (8.17a) cannot be used on fish sold to a farm with ASC certification.	Acknowledged by Tassal that all Hatcheries have been informed.
c	Compare smolt supplier's records for antibiotic usage (8.14, 8.15a) with the WHO list (8.17a) to confirm that no antibiotics listed as critically important for human medicine by the WHO were used on fish purchased by the farm.	No antibiotics listed as critically important for human medicine by the WHO were used on fish purchased by the farm.
8.18 Evidence of compliance with the OIE Aquatic Animal Health Code		
a	Provide the smolt supplier with a current version of the OIE Aquatic Animal Health Code (or inform the supplier how to access it from the internet).	Tassal has current version of this document. Email (16/7/13) to Russell Falls and Rookwood Road Hatchery Managers and Email (12/2/2014) to the Manager at SALTAS with link to OIE Aquatic Animal Health Code.
b	Inform the supplier that an ASC certified farm can only source smolt from a facility with policies and procedures that ensure that its smolt production practices are compliant with the OIE Aquatic Animal Health Code.	Noted by Tassal.
c	Obtain a declaration from the supplier stating their intent to comply with the OIE code and copies of the smolt supplier's policies and procedures that are relevant to demonstrate compliance with the OIE Aquatic Animal Health Code.	As per 5.4.3 for companywide (all incl. SALTAS and Tassal-owned hatcheries).
8.19 Evidence of company-level policies and procedures in line with the labour standards		
a	Obtain copies of smolt supplier's company-level policies and procedures and a declaration of compliance.	As per 6.1-6.11 for companywide (all incl. Tassal-owned hatcheries). For SALTAS this is covered under the SALTAS Industrial Agreement 2012-Final Version (29p).

b	Review the documentation and declaration from 8.19a to verify that smolt supplier's policies and procedures are in compliance with the requirements of labour standards under 6.1 to 6.11.	See above.
8.20 Evidence of regular consultation and engagement with community representatives and organizations		
a	From each smolt supplier obtain documentary evidence of consultations and engagement with the community.	As per 7.1.1 for companywide (all incl. Tassal-owned hatcheries). Tassal has engaged with the following organisations in the areas within which the hatcheries operate (SALTAS, Russell Falls): ▪ Hamilton Show ▪ Westerway Primary School ▪ Westerway Primary School Kitchen Garden ▪ Glenora District High School
b	Review documentation from 8.20a to verify that the smolt supplier's consultations and community engagement complied with requirements.	See above.
8.21 Evidence of a policy for resolution of complaints		
a	Obtain a copy of the smolt supplier's policy for presentation, treatment and resolution of complaints by community stakeholders and organizations.	As per 7.1.1 for companywide (all incl. Tassal-owned hatcheries).
8.22 Evidence that indigenous groups were consulted		
a	Obtain documentary evidence showing that the smolt supplier does or does not operate in an indigenous territory (to include farms that operate in proximity to indigenous or aboriginal people (see Indicator 7.2.1). If not then the requirements of 8.22 do not apply.	As per 7.2 for companywide (all incl. Tassal-owned hatcheries). ▪ Native Title (Tasmania) Act 1994 ▪ Native Title Resource Guide Tasmania, 31 December 2010 ▪ Proposed Aboriginal Heritage Protection Legislation fact sheet – Overview ▪ Proposed Aboriginal Heritage Protection Legislation fact sheet – Regulations ▪ Planning report to support DA for Wayatinah facility (includes Land Title) ▪ Planning report support DA for Florentine facility (includes Forestry Lease correspondence)
b	Obtain documentation to demonstrate that, as required by law in the jurisdiction: smolt supplier consulted with indigenous groups and retains documentary evidence (e.g. meeting	See above.

	minutes, summaries) to show how the process complies with 7.2.1b; OR smolt supplier confirms that government-to-government consultation occurred and obtains documentary evidence.	
8.23 Evidence that the farm has undertaken proactive consultation with indigenous communities		
a	See results of 8.22a (above) to determine whether the requirements of 8.23 apply to the smolt supplier.	As per 7.2 for companywide (all incl. Tassal-owned hatcheries).
b	Where relevant, obtain documentary evidence that smolt suppliers undertake proactive consultations with indigenous communities.	See above.
8.24 Allowance for producing or holding smolt in net pens with native salmonids		
a	Obtain a declaration from the farm's smolt supplier stating whether the supplier operates in water bodies with native salmonids.	N/A = Salmonids are not endemic to Australia; there are no river run stocks of Atlantic salmon in Tasmania.
b	Request smolt suppliers to identify all water bodies in which they operate net pens for producing smolt and from which facilities they sell to the client.	N/A
c	For any water body identified in 8.24b as a source of smolt for the farm, determine if native salmonids are present by doing a literature search or by consulting with a reputable authority. Retain evidence of search results.	N/A
8.25 Allowance for producing or holding smolt in net pens in any water body		
a	Take steps to ensure that by June 13, 2017 the farm does not source smolt that was produced or held in net pens.	N/A
8.26 Evidence that carrying capacity of the freshwater body has been established		
a	For the water body(s) where the supplier produces smolt for the client (see 8.24b), obtain a copy of the most recent assessment of assimilative capacity.	N/A
b	Identify which entity was responsible for	N/A

	conducting the assessment (8.26a) and obtain evidence for their reliability.	
c	Review the assessment (8.26a) to confirm that it establishes a carrying capacity for the water body, it is less than five years old, and it meets the minimum requirements presented in Appendix VIII-5.	N/A
d	Review information to confirm that the total biomass in the water body is within the limits established in the assessment (8.26a).	N/A
e	If the study in 8.26a is more than two years old and there has been a significant increase in nutrient input to the water body since completion, request evidence that an updated assessment study has been done.	N/A
8.27 Maximum baseline total phosphorus concentration of the water body		
a	Obtain documentary evidence to show that smolt suppliers conducted water quality monitoring in compliance with the requirements of Appendix VIII-6.	N/A
b	Obtain from smolt suppliers a map with GPS coordinates showing the sampling locations.	N/A
c	Obtain from smolt suppliers the TP monitoring results for the past 12 months and calculate the average value at each sampling station.	N/A
d	Compare results to the baseline TP concentration established below (see 8.29) or determined by a regulatory body.	N/A
e	Confirm that the average value for TP over the last 12 months did not exceed 20 ug/l at any of the sampling stations nor at the reference station.	N/A
8.28 Minimum percent oxygen saturation		
a	Obtain evidence that smolt supplier conducted water quality monitoring in compliance with the requirements (see 8.27a).	N/A
b	Obtain from smolt suppliers the DO monitoring results from all monitoring stations for the past 12 months.	N/A
c	Review results (8.28b) to confirm that no values were below the minimum percent oxygen	N/A

	saturation.	
8.29 Trophic status classification of water body		
a	Obtain documentary evidence from the supplier stating the trophic status of water body if previously set by a regulator body (if applicable).	N/A
b	If the trophic status of the water body has not been classified (see 8.29a), obtain evidence from the supplier to show how the supplier determined trophic status based on the concentration of TP.	N/A
c	As applicable, review results from 8.29a to verify that the supplier accurately assigned a trophic status to the water body in accordance with the table in Appendix VIII-7 and the observed concentration of TP over the past 12 months.	N/A
d	Compare the above results (8.29c) to trophic status of the water body as reported for all previous time periods. Verify that there has been no change.	N/A
8.30 Maximum allowed increase in total phosphorus concentration in lake from baseline		
a	Determine the baseline value for TP concentration in the water body using results from either 8.29a or 8.29b as applicable.	N/A
b	Compare the above baseline (result from 8.30a) to the average observed phosphorus concentration over the past 12 months (result from 8.27e).	N/A
c	Verify that TP did not increase by more than 25% from baseline.	N/A
8.31 Allowance for use of aeration systems		
a	Obtain a declaration from the farm's smolt supplier stating that the supplier does not use aeration systems or other technological means to increase oxygen levels in the water bodies where the supplier operates.	N/A
8.32 Water quality monitoring matrix completed and submitted to ASC		
a	Obtain records from smolt suppliers showing that water quality monitoring was conducted at least quarterly (i.e. once every 3 months) over the last 12 months.	Received copies of the Rookwood Road (Rookwood Road (HRH) Re-use Water Quality) and Russell Falls (Russell Falls Water Quality) water quality monitoring spreadsheets showing at least monthly sampling for both hatchery sites. SALTAS No specific parameters specified in regulations.

		Received copies of historical AST reports and records. Quote from AST for quarterly monitoring of upstream intake and downstream discharge (sampling to occur from March 2014 – completed).
b	Obtain water quality monitoring matrix from smolt suppliers and review for completeness.	See above.
c	Submit the smolt supplier's water quality monitoring matrix to ASC as per Appendix VIII-2 and Appendix VI.	Data was submitted to ASC.
8.33 Minimum oxygen saturation in the outflow		
a	Obtain the water quality monitoring matrix from each smolt supplier (see 8.32b).	See 8.32a above.
b	Review the results (8.33a) for percentage dissolved oxygen saturation in the effluent to confirm that no measurements fell below 60% saturation.	Rookwood Road is a closed system therefore there is no effluent released where DO would need to be measured Russell Falls is a semi-closed system with a proportion of the water recirculated. A proportion of Tasman 13YC smolt was derived from this hatchery. DO saturation is not currently measured at Russell Falls. SALTAS is a semi-closed system with a proportion of the water recirculated. DO saturation is not currently measured at SALTAS. <u>Minor non-conformity:</u> DO saturation is not currently measured at Russell Falls or the SALTAS semi-closed hatchery systems, that supplied some smolt to the Tasman farm sites.
c	If a single DO reading (as reported in 8.33a) fell below 60%, obtain evidence that the smolt supplier performed daily continuous monitoring with an electronic probe and recorder for a least a week demonstrating a minimum 60% saturation at all times (Appendix VIII-2).	Data was submitted to ASC.
8.34 Macro-invertebrate surveys downstream from the farm's effluent discharge		
a	Obtain documentation from smolt supplier(s) showing the results of macro-invertebrate surveys.	For Russell Falls Hatchery: Report by Freshwater Systems (2013, 19p) on annual monitoring benthic macroinvertebrates upstream of Russell Falls hatchery – the conclusions stated Equivalence in TRCI Aquatic life macroinvertebrate condition (MI) scores between the

		upstream and downstream sites in spring 2013 indicated compliance with the ASC Salmon Standard (2012) requirements. This is not relevant for the Rockwood Hatchery as it is a full recirculation system with no discharge. SALTAS hatchery: ▪ Freshwater Systems (2014, 19p) Benthic Macroinvertebrate Monitoring compliance assessment SALTAS Wayatinah Hatchery ▪ Freshwater Systems (2014, 18p) Benthic Macroinvertebrate Monitoring compliance assessment SALTAS Florentine Hatchery
b	Review supplier documents (8.34a) to confirm that the surveys followed the prescribed methodology (Appendix VIII-3).	Compliance confirmed.
c	Review supplier documents (8.34a) to confirm the survey results show that benthic health is similar to or better than upstream of the supplier's discharge.	See above.
8.35 Evidence of implementation of biosolids (sludge) Best Management Practices		
a	Maintain a copy of smolt supplier's biosolids (sludge) management plan and confirm that the plan addresses all requirements in Appendix VIII-	Evidence for Rookwood Road Hatchery includes: ▪ Tassal LCA report (Sep'12 56p) section 5.6 describes estimated amount of nutrients that were recovered and redistributed from sludge from the Rookwood Rd hatchery to agriculture. It does not cover other hatcheries. Collection of sludge prevented release of 7.1 t of nitrogen & 2.6 t of phosphorus. ▪ Huon Valley Council EPN No. 2008/1 ▪ Southern Water Tankered Trade Waste Consent from 9/2/12 ▪ Rookwood Road Hatchery (HRH) Water Re-use Scheme (3/8/08 18p+attachments) ▪ Veolia Invoice from 30/6/13 (2p) for biosolids removals ▪ Tassal Biosolids statement from Rookwood hatchery manager 7/9/13 declaring no discharge of biosolids into natural water bodies in the past 12 months. Evidence for Russell Falls Hatchery includes: ▪ Russell Falls Process Flow Diagram ▪ Spectran Invoices (x2) for desludging of underground sludge attenuators ▪ Spectran sludge removal correspondence including proposal and AST report

		Evidence for SALTAS Hatchery includes: ▪ SALTAS Biosolids removal document ▪ Sludge removal correspondence
b	Obtain from smolt suppliers a process flow diagram (detailed in Appendix VIII-2) showing how the farm is dealing with biosolids responsibly.	▪ The Water Treatment Process document for the Rookwood Road hatchery has a flow diagram. ▪ Russell Falls Process Flow Diagram ▪ SALTAS Process Flow Diagram
c	Obtain a declaration from smolt supplier stating that no biosolids were discharged into natural water bodies in the past 12 months.	Tassal Biosolids statement for Russell Falls and Rookwood hatcheries 7/9/13 declaring no discharge of biosolids into natural water bodies in the past 12 months.
d	Obtain records from smolt suppliers showing monitoring of biosolid (sludge) cleaning maintenance, and disposal as described in Appendix VIII-2.	As per 8.35a this includes copies of Veolia invoice for biosolids disposal, Spectran Invoice (x2) for desludging of underground sludge attenuators, Spectran sludge removal correspondence including proposal and AST report, Huon River Hatchery Water Re-use Scheme. Evidence for SALTAS Hatchery includes: ▪ SALTAS Biosolids removal document ▪ Sludge removal correspondence

7 Certification Decision

It is the consensus judgment of the assessment team and of the SCS Certification Committee that the Tassal's Tasman Site (Lease 190 Creeses Mistake) complies with the ASC Salmon Standard v.1.0.

The assessment team presented all evidence to the SCS Certification Committee, which agreed with the assessment team's findings and certification recommendation, and authorized certification of Tassal's Tasman Site (Lease 190 Creeses Mistake). Therefore, SCS as the conformity assessment body of record concludes that these Sites should be issued an ASC certificate.

8 Determination of the Start of the Chain of Custody (CoC)

Integrity of certified products

SCS Global Services has determined that the system for Tassal Operations Pty. Ltd at Dover is sufficient for products to enter into further certified chains of custody and be eligible to carry the ASC Label.

Tracking, tracing and segregation system in use

Tassal has a vertically integrated production system. All harvested salmon is sourced from Tassal or Tassal-owned hatcheries (smolt producers). The harvest vessels are all Tassal-owned and no subcontractors are used. Only one harvest vessel operates during the harvest season and typically only harvests one pen/per site/per day and never from multiple sites (production systems). There are no other operator/ company farming salmon in the Dover region.

Production (at individual pen level) as well as harvest are documented throughout by paper trail (accurate counts of fish as well as weights) and recorded in "Fish Talk", the company-specific, electronic information system used to track and record information relevant to Hatchery and Farm productions. Fish Talk is also used to record egg and smolt information which enables full traceability of harvested fish back to the hatchery. Additional information recorded in Fish Talk includes feed batches and quantities, treatments, vaccinations, mortalities, harvest, fish numbers and weights.

The monitoring, control and traceability system in place from farm pens to landing compromises:

- **Daily Harvest Plan** - instructs harvest boats which pen to harvest from, quantity of fish to harvest, and destination.
- **Harvest Record Sheet** – filled out by harvest vessel and is supplied to processing facility at landing. This document records:
    - Pen Site
    - Pen ID
    - Date (with start and end time)
    - Vessel /Skipper
    - Total Harvest (# of fish)
    - Hold or Bin fish is loaded into
- **Daily Wet Processing Report** – created by factory and records

  - Production date
  - Pen ID
  - Factory supplied lot #
  - Harvest Vessel
  - Total number of fish processed
- **Product Information Report** – Created from Fishtalk database and includes:
  - Batch ID
  - Harvest Vessel
  - Pen Site
  - Pen ID
  - Species
  - # of fish
  - Harvest Date
  - Processing plant
  - Fry input ID
  - Feed type, supplier, amount and last day used for fry input

The opportunity of substitution prior to or at harvesting

There is low risk of substitution. Only one individual pen is harvested at one time and each receives a unique harvest ID number. Tassal has a robust traceability system in place as outlined in the section above.

The possibility of introducing product from outside the unit of certification

There is low risk of introducing product from outside the unit of certification. All of the harvested salmon from the farm sites in Dover are from Tassal-owned or contractually controlled smolt producers. Only one individual pen is harvested at one time and a specific harvest ID number is assigned indicating location pen and harvest date.

Robustness of the management system

Tassal has a robust quality management system in place that include company specific, electronic information system that is used to track and record information relevant to production (hatchery and farm sites), harvest as well as processing. The electronic system is backed up by paper based integrated management system records.

Any transhipment activities taking place

The harvest vessels (usually the *Tassal 1*, sometimes the *Mareeba*) are both Tassal-owned and managed; there are no subcontractors used and only one harvest vessel operates during the harvest season.

The number and/or location of points of harvest

In one day, usually only one pen (or part of a pen) per farming lease is harvested. On a rare occasion, more than one pen will be harvested; however, these pens are always within the same farming lease. At

both Dover grow-out sites there are 24 positions at the Redcliffs farm site and 16 positions at the Stringers farm site for polar circles (120m circumference) pens. Not all positions are always stocked. Tassal has an electronic information system (Fish Talk) that is used to track and record information relevant to production and harvest.

Point from which Chain of Custody certification is needed

Chain of Custody (CoC) certification is required from the point of unloading from the boat onto sub-contracted trucks that transport to the processing unit if ownership changes. If ownership does not change, CoC starts at the processing facilities. The Harvest Record Sheet described above establishes eligibility to enter into ASC chain of custody.

Only products harvested as of or after the date of certification are approved to carry the ASC logo.

9 Non-conformity Reports

The following table summarizes the areas of necessary improvement with identified non-conformities to the ASC Salmon Standard V.1.0. Items from the requirements are listed in order of Principle and performance indicators and not in order of magnitude or importance.

Table 2. Non-Conformity Reports.

Criterion	Year	Category	Summary of Finding	Client Root Cause Analysis	Client Action Plan	Deadline Closure of this NCR is required no later than one year after issuance
1.1.1.a	2014	Minor NC	The land base in Tasman equipment was not always operated in line with legislative requirements for WHS and environmental protection (e.g. testing of electric drill had just expired test & tags (Feb'14)	Operator error: Not following documented process.	Test and tag scheduled immediately. Before the first surveillance audit in 2015, Tassal will ensure operations are in line with legislative requirements for WHS and environmental protection	Corrective actions to be assessed at the first surveillane audit
2.2.4	2014	Minor NC	The Benthic monitoring Program (BEMP) does not apply for the Tasman site and monthly measurements of nitrogen and	The BEMP builds on the management and compliance controls that regulate marine farming practices at the fine spatial scale by monitoring water quality and sediment chemistry and biology to determine whether the environmental	Tassal will continue to monitor as per stated sampling program.	Corrective actions to be assessed at the first surveillane audit

			phosphorus levels on farm only commenced in February, 2014.	impacts to marine ecosystems from marine farming occur at the broadscale level. The BEMP is a Marine Farm licence condition for all salmonid farmers operating in the D'Entrecasteaux Channel and Huon Estuary. It does not apply to the Tasman Peninsula and Norfolk Bay MFDP area. Tassal has voluntarily commenced water quality monitoring program in the Tasman and Norfolk Bay MFDP region adjacent to their farming operations at Nubeena and Port Arthur to complement their existing compliance monitoring activities, and to ensure that their operations are not impacting on marine ecosystems at the broadscale level. This program involves monitoring for dissolved nutrients and microalgal biological information at both near-farm and control locations. It also serves as an important dataset for broad-scale monitoring of the environment, analogous to the		

				BEMP program in the D'Entrecasteaux Channel and Huon Estuary. The dataset also provides the potential for examining differences in water quality between farming regions, which in turn may lead to opportunities for improved management of farming operations in the southeast region.		
2.3.1.a, c	2014	Minor NC	Currently, the feed used at the sites is not tested quarterly.	Feed has been tested annually by feed supplier as per contractual agreement. At the time of the audit Tassal was had implemented internal quarterly testing procedures, but historical evidence was not yet available.	Equipment has been purchased and procedure implemented. Training scheduled for August 2014. Testing will be conducted quarterly going forward	Corrective actions to be assessed at the first surveillane audit
2.5.5.b	2014	Minor NC	Currently, information about lethal incidents is not made publically available within 30 days.	Historically, Tassal has reported lethal incidents annually in their Sustainability Report. As per ASC requirements, Tassal has made a commitment to report any lethal incidents on their website (www.tassal.com.au) within 30 days.	A new website will include a tab for all ASC reporting requirements. Any lethal incidents will be reported there within 30 days. New website was launched June 2014.	Corrective actions to be assessed at the first surveillane audit
2.5.6.c	2014	Minor NC	At the Tasman farm site, the marine mammal mortality is greater than 2 over prior	Wildlife interactions inevitably occur at salmon farms, as farmed salmon is a tempting protein rich source	Tassal is committed to reducing interactions with wildlife at our marine farms, especially	Corrective actions to be assessed at the first surveillane audit

			2 years		interactions that result in mortalities. Tassal has two full-time wildlife management officers and team of casual staff responsible for managing interactions between wildlife and our salmon. The most effective way to reduce interactions with wildlife is to prevent them from entering our sea pens. We utilise a number of passive strategies including: •Highly tensioned nets that help to prevent seals chewing through the nets •Seal proof bird netting, which acts as an exclusion measure for birds and is strong enough to prevent seals from jumping into the pens. We continue	

					our work with researchers and international experts to find better ways of preventing interactions with seals and we are currently rolling out the very latest in net design across our farms through the use of Kikko nets. By the end of June 2014, we will have over 100 kikko nets in the water.	
4.3.2.b	2014	Minor NC	Not all ingredients of the feeds used at the NWB site achieve individual fish source scores >6.	Feed ingredients purchased prior to ASC commitment	Working with Skretting (Feed company) to achieve full compliance to the criteria	Corrective actions to be assessed at the first surveillane audit
5.1.2.a	2014	Minor NC	During the last 2 years, visits by the company vet were not conducted quarterly.	Historically, the Fish Health team (including company vet) have visited Tassal regions as required with no specific schedule in place. This process has been implemented; however, there is no historical evidence to support this. At the time of the audit Tassal had implemented quarterly vet visits at this region, but historical evidence was not yet available.	Before the first surveillance audit in 2015, the fish health team will visit site quarterly, as per site visit planner.	Corrective actions to be assessed at the first surveillane audit

5.1.6.b	2014	Minor NC	During the last full production cycle, the unexplained mortality was greater than 40% of overall mortality at the farm site.	Based on pathology findings, there are multiple disease processes occurring at the Tasman region so it is difficult to ascribe to a single cause. • Physiological and metabolic effects of sustained high temperatures • Jelly fish and algae • Infectious agents – Rickettsia (RLO) and Aquareovirus (ARV)	Multifactorial approach: • Summer study in collaboration with Skretting to develop better summer diets • Increase of Jelly fish and algae surveillance • Industry and Government (FHU) existing projects to develop vaccines for RLO and ARV	Corrective actions to be assessed at the first surveillance audit
7.1.1.d and 7.1.3.c	2014	Minor NC	Currently there is no direct communication with the community regarding antibiotic treatments and potential health risks.	Historically, Tassal has reported antibiotic use and supplied relevant information annually in their Sustainability Report. There is also information supplied on Tassal`s current website (updated June 2014). Although Emergency Response Plans are in place, there is currently no communication with specific communities.	A series of presentations to community groups regarding Tassal operations to be scheduled for FY2014/FY215. These presentations if relevant to antibiotic use in the region, to include information regarding potential health risks associated with antibiotic treatments	Corrective actions to be assessed at the first surveillance audit

7.2.2.a, b	2014	Minor NC	Currently there is no consultations with aboriginal groups	While significant engagement is undertaken in the communities in which Tassal operate, no engagement strategies have been implemented to consult with aboriginal groups specifically	Before the first surveillance audit in 2015 Tassal is planning to work with Cradle Coast NRM who are prepared to assist Tassal in forming a relationship with one of the indigenous organisations (Aboriginal Land Council of Tasmania. An initial framework for the relationship will be the inclusion of sites of aboriginal cultural significance in Tassal's employee induction package	Corrective actions to be assessed at the first surveillanc e audit
8.33b	2014	Minor NC	DO saturation is not currently measured at Russell Falls and SALTAS, semi-closed hatchery systems that supplied some smolt to the farm site.	Alternate process currently being followed. Task specific equipment not yet received	Before the first annual surveillance audit, the DO saturation will be measured as per ASC requirements.	Corrective actions to be assessed at the first surveillanc e audit

10 References

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Appendix 1: Stakeholder Consultation

For each cluster of Tassal farm sites undergoing ASC full assessment, SCS has sought comment and participation from stakeholders through direct emailing, posting advisories on the ASC website, and conducting onsite meetings. Tassal provided SCS with a list of stakeholders. A cluster of Tassal farms can be defined as a farming region. Tassal has six farming regions in the state of Tasmania. The Macquarie Harbour region was certified on 4th of April 2014, and the North West Bay region was certified on 10th of June 2014. The scope of this report is the current Dover, Bruny Island and Tasman farming regions.

The initial audit announcement was posted on the ASC website on the 22nd April 2014. Stakeholder consultation for the Tasman region commenced on May 17th, 2014 with an email sent to identified stakeholders announcing onsite meetings and requesting comments and participation.

Following this email, five onsite meetings with stakeholders were conducted as follows:

- May 26th at Dover High School Hall, Dover (Stakeholder Meeting #1)
- May 27th at the Oyster Cove Inn, Kettering (Stakeholder Meeting #2)
- May 28th at Adventure Bay Hall, Bruny Island (Stakeholder Meeting #3)
- May 29th at the Nubeena RSL, Nubeena (Stakeholder Meeting #4)
- May 30th at the Salamanca Inn, Hobart (Stakeholder Meeting #5)

Stakeholders were again notified and asked to contribute when the draft report was posted for a 10-day comment period, which took place August 11th-25th 2014. Written submissions were also received throughout the assessment period. Many stakeholder comments received to date were about potential lease extensions and therefore not within the scope of ASC certification. These comments have been acknowledged and communicated to Tassal.

A comprehensive list of stakeholder comments from the previous two assessments and the respective responses by the assessment team can be found in the Macquarie Harbour and North West Bay audit reports, located on the ASC website.

The purpose of the Stakeholder consultation is not to provide a balanced assessment of the Company's stakeholder engagement, rather to gather the issues relating to the farm undergoing certification evaluation and relating to the company's operations in general. Not all Stakeholders listed provided responses to SCS.

Nubeena meeting on May 29th with Attendees: Susan Westcott, Graeme Foster, Steven Wei

Hobart meeting on 30/5/14 with Attendees: Klaus Leitges, Stephenie Cahalan, Jamie Reardon, Karen Harvey, Lucie Whitten, Dawn Whitten, Forrest Whitten, Marina Hagen, Uwe Feist, Patsy Harmsen, Grant Maddock, Ron Bugg, Claire Blichfeldt, Eric Woehler, Allegra Biggs Dale, Adrian J. Dale, Neil Stump, Adrienne Godsmark, Joe Blake, Graham Bury, Greg Whitten, Rob Gott, Vica Bayley.

10.1 Stakeholder Issues and CAB responses

Responses to Issues Raised at Stakeholder Meetings for Tasman Peninsula

Issue	Relevant ASC Salmon Standard Principle	Response
Impact of Salmon farming on Benthic Health	Principle 2	This issue is covered in Principle 2 of the ASC Salmon Standard and has been addressed there with details on ongoing monitoring that is required as part of the lease agreement and in addition to the requirements. These sections also have a list of references that are relevant here showing that there has been significant monitoring and research that is also ongoing. All salmon farming companies in Tasmania must conduct annual video surveys for each active lease to assess that the farm is not having an unacceptable impact on the local benthic environment. This is a Management Control within the Huon River and Port Esperance Marine Farming Development Plan and a regulatory requirement of the Marine Farming license and is assessed by DPIPWE. Details of the filming procedure for the video monitoring are specified in Schedule 3 of Marine Farming License conditions. Spot dives are also conducted at compliance sites as specified by DPIPWE; these sites are mostly at 35 m from the boundary of the lease area and in the down current direction. Six video surveys are also conducted inside the lease area which must include sites that have been subjected to the heaviest stocking pressure (highest feed input prior to fallowing or in previous 12 months) and are filmed from the edge to the centre of the cage. The license specifies significant visual impacts which must not occur within the lease area – excessive feed, bacterial mats or spontaneous gas bubbling from the sediment; and beyond the boundary of the lease area – presence of feed pellets, bacterial mats, gas bubbling, or numerous opportunistic polychaetes on the sediment surface. If a significant visual impact is detected, then additional environmental monitoring is required and fallowing or resting of the impacted pen bay or lease may be recommended
Water quality	Principle 2	This issue is covered in Principle 2 of the ASC Salmon Standard and has been addressed there with details on ongoing monitoring that is required as part of the lease agreement and in addition to the requirements.

		These sections also have a list of references that are relevant here showing that there has been significant monitoring and research that is also ongoing. Copper treated nets are no longer used by Tassal. The Tasmanian Salmon farming industry have had a SE (South East of Tasmania) Broadscale Environmental Monitoring Program (BEMP) in place since 2009 in association with a State regulated Nitrogen Cap. The BEMP has recently undergone a third party scientific review by the Institute of Marine and Antarctic Sciences (IMAS). The review can be found at http://dpipwe.tas.gov.au/Documents/Ross---Macleod-BEMP-Data-Review-2009-2012-.pdf#search=broadscale%20environmental%20monitoring%20program. Assessment of the monitoring data (the review) has shown that at current levels of industry production, which are capped under regulation, the ecosystem has the capacity to assimilate the inputs from salmon farms. The BEMP was developed from an ecological model which generated water quality triggers and compliance against these triggers is government-mandated within Tassal's jurisdiction.
Impacts on wild fish populations	Principle 3	This issue is covered in Principle 3 of the ASC Salmon Standard and has been addressed there with details on ongoing monitoring that is required as part of the lease agreement and in addition to the requirements. These sections also have a list of references that are relevant here showing that there has been significant monitoring and research that is also ongoing. The aim of Principle 3 of the ASC Salmon Standard is to ensure that salmon farms do not harm the health of wild fish populations. This section of this report addresses impacts associated with disease, parasites and escapes. Tassal has also commissioned an evaluation of practices on salmon farms to mitigate escapes and ecological impacts by IMAS researchers - Lyle & Frijlink S, 2013.
Concern about lack of transparency from Tassal and regulatory bodies, particularly in relation to water quality and benthic impacts.	Principle 1	National and local legal compliance is covered in Principle 1 of the ASC Salmon Standard and has been addressed there with details. Environmental monitoring of the Channel does take place and scientific data is collected by independent consultancies. The information has been included and referenced in the report. Refer to Tassal's Sustainability Report, Website and Fact Sheets. Environmental monitoring of the Channel does take place and scientific data is collected by independent consultancies. Tassal has committed to transparency of operations through the annual publication of their Sustainability Report. In the 2013 report they have increased the scope of their report to include land based operations, meaning they are now reporting on the entire business. Further information is also available on the website and through Fact Sheets. The ASC Salmon Standard also requires certain information be made publically available. Tassal has showed compliance with this requirement through the development of their ASC Dashboard on the Tassal website. Tassal has been independently benchmarked as the number 1 for transparency in Corporate

		Sustainability Reporting for salmon farming globally.
Concern about legislative compliance of Tassal	Principle 1	National and local legal compliance is covered in Principle 1 of the ASC Salmon Standard and has been addressed there in detail.
Lack of scientific evidence/ information regarding operations	Principle 1	National and local legal compliance is covered in Principle 1 of the ASC Salmon Standard and has been addressed there with details. Environmental monitoring of the Channel does take place and scientific data is collected by independent consultancies. The information has been included and referenced in the report. Refer to Tassal's Sustainability Report and Independent Papers (IMAS, CSIRO).
Feed – responsible sourcing and impacts on native populations	Principle 4	Efficient and responsible use of resources is covered in Principle 4 of the ASC Salmon Standard and has been addressed there with further details. Some fish are sourced from South America, and some are sourced locally. In the medium term, the ASC requirements ask for the fish meal and oil used in feed be certified under ISEAL guidelines as demonstrated through full membership in the ISEAL Alliance, along with a feed source traceability system. Tassal and Skretting (the feed provider) are compliant with ASC guidelines. These guidelines contemplate a reduction in the use of fishmeal and oil and specify clear goals in regards to the dependency on wild caught fish. ASC requires fish meal and oil to be certified under ISEAL guidelines as demonstrated through full membership in the ISEAL Alliance, along with a feed source traceability system. The ASC guidlines contemplate a reduction in the use of fish meal and oil and specify clear goals in regards to the dependency on wild fish stocks. Salmon growers must use feed from fisheries which meet sustainability indexes (FishSource) and will be required to be certified under a scheme that meets ISEAL guidelines as demonstrated through full membership in the ISEAL Alliance within the next 5 years
Freshwater use	Principle 1	Efficient and responsible use of resources is covered in Principle 4 of the ASC Salmon Standard and has been addressed there with further details. The freshwater outtake is metered and monitored at all sites. Freshwater is used to bathe fish in order to combat the effects of amoebic gill disease (AGD). This accounts for approximately 90% of all freshwater used by Tassal. Freshwater Licences issued by DPIPWE are required for all Freshwater resources. The freshwater outtake is metered and monitored at all sites. Tassal is developing a freshwater framework to standardise information regarding water use across the business and to better understand the potential ecological impact of extracting this water from our waterways. The freshwater framework will evaluate and describe the use of reticulated water used in Tassal's Russell Falls hatchery and processing facilities and bore water used in our Rookwood Rd Hatchery. Additionally, it will describe the use of freshwater for bathing in our south east marine sites, including points

		of removal, river, stream dam and catchment as well as volume used, distance from marine waterway and proximity to known conservation values. Tassal published its freshwater use in its FY2013 Annual Sustainability Report
Antibiotic use	Principle 5	Therapeutic treatments are covered under Principle 5 of the ASC Salmon Standard and this topic has been addressed there with further details. Additionally, Tassal provides detailed information regarding antibiotic usage in its annual Sustainability Report. Whenever antibiotic treatments are made, Tassal is required by the ASC Salmon Standard to post public notifications and is currently doing that on its pens, so that they are visible to passing watercraft. Tassal only administer antibiotics when fish welfare is at stake. Antibiotics are not used prophylactically. If treated, fish go through a withdrawal period before harvest and Tassal comply with residue testing requirements. Fish are never fed antibiotics to enhance growth. Tassal provides detailed information regarding their antibiotic use in their annual Sustainability Reports and on the ASC Dashboard on their website (www.tassal.com.au). Management controls as stipulated in the Huon River and Port Esperance MFDP and Schedule 3 of Marine Farming Licence Conditions relevant to this issue are noted below: • **Condition 1.6 (MF Licence)** Levels of antibiotics, or chemical residues derived from farm therapeutic use, present in sediments within or outside the Lease Area, are not to exceed levels specified to the licence holder by prior notice in writing by either the Director or the Chief Veterinary Officer, Tasmania. • **Condition 1.7 (MF Licence)** Prior to any stock being treated with therapeutants, the licence holder must advise the Director, and provide a copy of any medication authority specific to stock treatment that has been issued. The licence holder must comply with requirements to undertake any reasonable residue testing prescribed by the Director Please note AGD is not treated with antibiotics, it is only treated with freshwater .
Marine debris	Principle 4	These concerns have been noted and communicated to Tassal. SCS recommends that community members continue to use Tassal's complaint mechanism. SCS will monitor the development of the dialogue between Tassal and the local community regarding this issue. Tassal conducts at minimum, bi-annual marine debris clean-ups of the shorelines surrounding its operations

		as a part of the "Adopt a Shoreline" program. This is done with the cooperation and advice of BirdLife Tasmania to ensure that nesting shorebirds are protected from disturbance during their breeding season. The use of coloured ropes (black & grey weave) allows the easy identification of ropes from Tassal farms and shows accountability. During the onsite audit, SCS observed comprehensive beach clean-up files on site, with pictures of debris collected included in reports. In addition a copy of Tassal's farm level waste mitigation plan has been supplied to the SCS. Please refer to section 4 of this report for more information and reference to Tassal's waste mitigation plan Huon Rubbish Removal services are not used by Tassal to collect marine debris from shorelines.
Stakeholder meetings and certification process was not adequately promoted. Recommend that newspaper advertisement is used next time	N/A	SCS appreciates any feedback and recommendations related to circulation of information related to stakeholder meetings as part of the ASC audit process. We are constantly growing our community stakeholder contact list and the circulation of this information will continue to expand over time. We will take all suggestions into account during the planning phase for the next round of audits.
Product traceability, and separation of certified product from non-certified product	ASC Chain of Custody	Tassal has a robust quality management system in place that includes company specific, electronic information system that is used to track and record information relevant to production (hatchery and farm sites), harvest as well as processing. The electronic system is backed up by paper based integrated management system records. A documented traceability system needs to be in place for ASC certified products and will be subject to Chain of Custody audits for its ASC certified product.
Marketing by Tassal of ASC certification when not all sites have been certified	ASC Chain of Custody	This concern is noted and understood. The ASC Salmon Standard allows for individual sites to be certified. SCS's role as Certification Body is to evaluate compliance to the ASC Salmon Standard. Tassal`s intent is to have all their farm sites assessed by the end of 2014.
Increase in sea urchins in the area as a result of salmon farms	Principle 2	Sea urchin species, particularly the introduced species (*Centrostephanus* spp.) are extending their range as a result of warming waters off Tasmania and the southerly extension of the East Australia Current. This phenomena is not related to salmon farming. Studies are under way to investigate the impacts. However the introduction and increase in abundance cannot be attributed to salmon farming.

		Ref: Johnson C.R. et al. 2011 Climate change cascades: Shifts in oceanography, species' ranges and subtidal marine community dynamics in eastern Tasmania., Journal of Experimental Marine Biology and Ecology, Volume 400: 17-32. (available at http://www.sciencedirect.com/science/article/pii/S0022098111000803)
Most other certification schemes have a principle of 'association', where the entirety of an applicant's operations is assessed concurrently. Recommend that the ASC adopt a policy of association and not allow certification for individual farms of the same operator without certification of the whole operation	N/A	This recommendation is noted, however it must be stated that SCS is independent of the ASC and as such does not have authority or influence in this area. However comments and feedback have been passed onto the ASC.
How big could Tassal's operations be until they were no longer able to qualify for ASC	N/A	There is no limit to size of an operation to qualify. All operations small or large can be assessed. What will be determined during the audit is if and how well the operation complies with the ASC standard.
General environmental impacts of Tassal's operations	Principle 2 Principle 3	These issues are covered in Principle 2 and 3 of the ASC Salmon Standard and have been addressed there with details of the ongoing monitoring that are required as part of the lease agreement. These sections also have a list of references that are relevant here, showing that there has been significant monitoring and research which is also ongoing. Tassal is required to comply with Management Controls contained in the Huon River and Port Esperance Marine Farming Development Plan. Management Controls are prepared in accordance with section 24 of the *Marine Farming Planning Act 1995*. Management Controls must contain any measures necessary to manage and mitigate negative effects which Marine Farming operations may have within the management area.

PCBs	N/A	PCBs are widespread in the environment worldwide. Their presence cannot be attributed to salmon farms.
Increased localised nutrient inputs	Principle 2	This issue is covered in Principle 2 of the ASC Salmon Standard and has been addressed there with details on ongoing monitoring that is required as part of the lease agreement and in addition to the requirements. These sections also have a list of references that are relevant here showing that there has been significant monitoring and research that is also ongoing. Tassal is required to comply with Management Controls contained in the Huon River and Port Esperance Marine Farming Development Plan. Management Controls are prepared in accordance with section 24 of the *Marine Farming Planning Act 1995*. Management Controls must contain any measures necessary to manage and mitigate negative effects which Marine Farming operations may have within the management area.
Escapes	Principle 3	SCS: Tassal has clear procedures for reporting and preventing escapes. Escapes are closely monitored and reported. Personnel are trained in escape prevention and response procedures. There has been no recorded establishment of an Atlantic salmon population in Tasmania. Tassal employees are trained in escape prevention procedures and the use of escape response kits. Research has been conducted at the Institute of Marine and Antarctic Studies, University of Tasmania, on the effects of escapees on the environment, especially in Macquarie Harbour and no significant effects have been detected. Tassal is required to comply with the following Management Controls under the Huon River and Port Esperance Marine Farming Development Plan: • **Management Control 3.8.2 (MFDP)** Lessees must not intentionally release into State waters fish of the species authorised in the relevant marine farming licence. • **Management Control 2.4 (MF Licence**) the licence holder must report to the Director any significant incident of fish escapes within 24 hours of becoming aware of the escape. A significant escape is defined as any loss of licensed species to the marine environment in excess of 500 individuals at any one time. Tassal has records of escape events for all of their Marine Farming Regions dating back to January 2000.
Independent benchmarking, monitoring and assessment of Tassal's operations does not take	Principle 2 and 3	There is ongoing monitoring for all of Tassal`s active farm sites as part of the licence agreements and addition studies and research. For more details see the information provided under Principle 2 and 3 as well as the summary on environmental monitoring in the background section of the report. Tassal is participating in both ASC and BAP certification programs voluntarily. Tassal is also assessed on an

place		international platform by Seafood Intelligence against indicators for Corporate, Social and Environmental Responsibility (CSER) reporting.
Licence requirements do not take into consideration tidal flows, currents and winds that are able to deposit soluble waste (uneaten feed and faecal waste) on beaches and rocky shores within the vicinity of the farm	Principle 2	Tassal undertakes studies on current, tidal and water movement in the D'Entrecasteaux Channel and Huon estuary to establish the movement of soluble wastes and the impact on amenity and the environment. Compliance monitoring of impact on the seabed is also regularly conducted at each farm at sites which are determined according to tidal and current flows. Details are provided in Principle 2 of this report.
ASC certification MUST be conditional on independent toxicity and chemical bioavailability assessment studies on a range of locally relevant species, over a range of life stages and copper sensitivities and a range of operational and environmental conditions relevant to the salmonoid industry	Principle 2	Tassal does not use any copper-based antifoulant paints on their nets any longer. Tassal has also participated in comprehensive studies of the impact of copper based antifoulants, which have been reported in: Simpson SL, Spadaro DA and O'Brien D. (2013) Incorporating bioavailability into management limits for copper in sediments contaminated by antifouling paint used in aquaculture. Chemosphere 93 2499–2506. Macleod, C.M, Eriksen, R.S, Simpson, S.L, Davey, A. and Ross, J (2014) Assessment of the environmental impacts and sediment remediation potential associated with copper contamination from antifouling paint (and associated recommendations for management), FRDC Project 2011-041 (University of Tasmania, CSIRO), Australia.
Predator control use	Principle 2	Wildlife mitigation devices are strictly regulated by Australian authorities. Shot like noises are from non-lethal seal control devices. Tassal is in the process of changing all its nets to semi-rigid kikko netting which is proving to be effective at keeping out seals.
Inadequate data existing on the impact on reef systems and benthic fauna and flora outside	Principle 2	Habitats in the D'Entrecasteaux Channel, including rocky reef systems and seagrass beds, have been mapped by SeaMap Tasmania and are available at http://seamap.imas.utas.edu.au/

of the lease area		
Wildlife interactions	Principle 2	Bird entanglement is strictly monitored and recorded. There has not been any incidence of sea eagles at any of Tassals site. Wildlife officers trained for rescue and release of birds and mammals are on call and ready to respond if such incidence should occur.
Habitat disturbance particularly in regard to State and Nationally listed endangered species	Principle 2	*P. vivipara* was listed as threatened largely because of its very small distributional range. It has since been found to occur over a wider range, including Southport Lagoon
Recommendation to analyse cumulative impacts	Principle 2	Your recommendation has been noted and communicated to Tassal and the ASC. Environmental monitoring designed to assess cumulative impacts in the Channel does take place and scientific data is collected by independent consultancies. The information is included and monitoring reports are referenced in the assessment report.
Recommendation that the BEMP undergo a formal public review for improvement	Principle 2	The BEMP has been reviewed by IMAS recently and the report "Evaluation of Broadscale Environmental Monitoring Program (BEMP) data from 2009-2012" has been released and is publically available. This monitoring program is part of an adaptive management process and is improved as more data become available. This is supported by a five year multi-million dollar FRDC federally funded research project involving IMAS and CSIRO. This project, entitled "INFORMD Stage 2: Risk-based tools supporting consultation, planning and adaptive management for aquaculture and other multiple-uses of the coastal waters of southern Tasmania" is currently underway to support improved multi-use management of South-Eastern Tasmanian coastal waters
Recommendation to conduct a regional planning review of fish farms in south-east Tasmania that involves the community and other users of the waterway at its core	Principle 7	Your comments have been noted and communicated to Tassal via this report. Please note that SCS is not a regulatory body or government agency.
Request for more community involvement in decision making schemes and regulatory	Principle 1 Principle 7	Your comments have been noted and communicated to Tassal via this report. Please note that SCS is not a regulatory body or government agency.

planning and approval processes.		
Employment - Aquaculture industry provides employment in a state with high unemployment rate	Principle 6 Principle 7	These comments have been noted and communicated to Tassal via this report. Channel Region: 79% workforce resides in Channel or other regional area Derwent Valley: 100% workforce reside in Derwent Valley Administration: 72% reside in rural areas (mostly where Tassal farms and processing facilities are sited) Huon Valley operations 89% based in Huon Valley or other regional area Tasman Peninsula 79% based on Tasman Peninsula West Coast : 22% based on west coast
Request that Tassal promote establishment of Marine reserves	Principle 2	This comment has been noted and communicated to Tassal via this report. Under Principle 2, Criteria 2.4.2 of the ASC Salmon Standard, farms are not permitted to be sited in a protected area or HCVA. Tassal is compliant with this requirement. The following Protected Areas exist within the D'Entrecasteaux Channel: • The Ninepin Point Marine Nature Reserve occupies 731.8 hectares in the D'Entrecasteaux Channel near the mouth of the Huon River. This area was first declared in 1991 as a nature reserve under the *National Parks and Wildlife Act 1970.* This reserve classification was carried forward into the *Nature Conservation Act 2002*. Ninepin Point Marine Nature Reserve is also listed as a marine nature reserve under the *Living Marine Resources Management Act 1995* by virtue of Rule 3 of the Fisheries Rules 1999. These Rules establish 'no take' fishing restrictions within this reserve. • Tinderbox Marine Nature Reserve was declared to provide a safe, sheltered marine study area for education, research and recreation. A beach and the foreshore are included within the reserve. This is also a 'no take' area. • The Huon Estuary and Central Channel Marine Conservation Areas are listed as conservation areas under the *Nature Conservation Act 2002*. Fishing is permitted in these reserves.
What does 'Fallowing' mean and involve?	Principle 3	Fallowing of pen bay positions is undertaken regularly to allow benthic habitat to recover and for the level of organic enrichment caused by farming (i.e. faeces, net washing) to be metabolised by natural benthic processes. Tassal conducts internal ROV surveys to determine optimal fallowing regimes and to adjust stocking schedules based on the environmental characteristics and recovery capacity of individual farm sites. Tassal are required to submit fallowing dates for each certified lease to the ASC for their records. Please refer to section 3 of this report for further information.

10.2 Additional stakeholder comments received during the public comment period

Issue	Relevant Tassal site	Response
SCS received an email from Department of Primary Industries, Parks, Water and Environment (DPIPWE) to consider relevant comments that were made to an earlier assessment report.	Tasman	The department's comments were considered and relevant changes were made to the draft report.
One stakeholder submitted three specific concerns: 1. assessment of antibiotics presence in the environment has been overlooked; 2. there is no nonconformity in the report related to this issue; and 3. no baseline surveys were conducted prior to establishment of marine farms in the Huon and D'entrecasteaux Channel, so there is no natural benchmark.	Tasman	SCS informed the stakeholder that: 1. By interviewing the veterinarian that prescribes antibiotics to salmon farms and looking at the company's records it was confirmed as part of the audit that Tassal had not used any antibiotics at the Tasman farm site since 2009. Please see section 5.2.2 of the report. 2. Baseline monitoring for the farm site at Creeses Mistake was conducted in March 1999. This is part of the approval process and needs to be conducted before approval for any new farming lease is granted by the Tasmanian Government.
One stakeholder was concerned that many transgressions (non-conformities identified in the report) were allowed and did not preclude certification.	All	SCS informed the stakeholder that a Certification Body like SCS is responsible assess a certification applicant's (such as Tassal) conformance to the requirements of the ASC salmon standard, but we do not define the rules of the ASC certification program. In the ASC certification program, before a farm can be certified it must first address all major non-conformities and put in place corrective action plans for any minor non-conformities.
One stakeholder was concerned that minor nonconformities were being issued where major non-conformities should be issued. The stakeholder felt that these nonconformities, along with stakeholder concerns, should be addressed before certification is granted.	All	These comments were considered during review of the draft report. In the ASC certification program, before a farm can be certified all major non-conformities need to be addressed and corrective action plans for any minor non-conformities need to be put in place and addressed before the first surveillance audit.

Additionally, the stakeholder was also concerned that some requirements evaluated as non-applicable should apply.		
SCS received comments from a stakeholder advising to nominate a representative from the Southern Coastcare Association of Tasmania (SCAT) on the Tassal advisory group and requesting potential subsidiary or reimbursement for travel to contribute to attend community engagement and advisory panels.	All	SCS clarified that the sustainability report advisory committee is a Tassal initiative that SCS is not involved with and to contact Tassal directly.
BirdLife Tasmania is very supportive of TASSAL's continuing focus on environmental stewardship within their operations. We acknowledge the Major Non-conformity identified on P 126 of the report into TASSAL's operation at Soldiers Point, Bruny Island. We will continue to engage with TASSAL on the issue of bird entanglements and mortalities.	All	These comments were noted by SCS.
Environment Tasmania submitted a number of concerns related to the ASC certification process: *Public submission periods too short and not publicly extensive* *ASC certification is perceived as sustainable, but the claim (logo) is for "responsible farming"* *Inherent limited scope of farm level rather than cumulative, system wide assessments.* *The ASC assessment process is a desktop review of publicly available information, without critical review of that information.*	All	These ASC process related comments were provided to the ASC for their consideration. Publicly available scientific reports and papers that have been used in the reports has been peer reviewed before release. Third-party auditors come onsite and witness certain activities (e.g. DO meter calibration and measurements, feeding and monitoring of feeding cycles, data entry, net cleaning etc)

Salmon farms conduct their own water testing and monitoring, rather than having a third-party do it. Lack of objective scientific assessment available in Tasmania. Specific concerns related to each of the 3 audit reports in progress (Dover, Bruny Island and Tasman regions). These concerns included: disease, fish feed source, marine mammal deaths, community opposition, chronic debris, and biodiversity and ecosystem monitoring. Finally, Environment Tasmania recommended that no certification be issued until all non-conformities are addressed.		Monitoring and testing at Tassal`s site is done by third-party consultants (see Principle 2 of the report and references) These concerns have been raised during the stakeholder meetings and are covered in the previous section (10.1) where all collected issues are listed.
A Huon Valley Councillor raised a number of concerns that had been raised by residents: • Impacts on sailing activities. • Noise. • Water quality and significant changes in the wild fish population, (numbers, size and health) in the area over the past twenty years. • Expansion of salmon farming. • Fish feed source, marine mammal deaths, disease, and the level of cast-off ropes etc. • Lack of public information about marine biodiversity and ecosystem monitoring.	All	Most of these concerns have been raised during the stakeholder meetings and are covered in the previous section (10.1) where all collected issues are listed.