Report for Tassal Operations Pty Ltd:

Huon Region - MF 185 Tin Pot Point and MF 203 Partridge Island

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: Dr. Christine Crawford, David O`Sullivan and Dr. Sabine Daume
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Acronyms

ACN	Australian Company Number
ABM	Area Based Management
ABN	Australian Business 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
AMSA	Australian Maritime Safety Authority
APC	Australian Packaging Covenant
APVMA	Australian Pesticides and Veterinary Medicines Authority
ASC	Aquaculture Stewardship Council
AST	Analytical Services Tasmania
ASX	Australian Stock Exchange
ATO	Australian Taxation Office
AWU	Australian Workers' Union
AZE	Allowable Zone of Effect
ANZECC	Australian and New Zealand Environment Conservation Council
AZTI	A non-profit research foundation
BAP	Best Aquaculture Practices
BEMP	Broadscale Environmental Monitoring Plan
BET	Bigeye Tuna
BFCR	Biological Feed Conversion Ratio
BOD	biochemical oxygen demand
BQI	Benthic Quality Index
CAB	Conformity Assessment Body
CED	Cumulative energy demand
CEO	Chief Executive Officer
CO_2	Carbon Dioxide
CoC	Chain of Custody
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CV	Company Veterinarian
DAFF	Department of Agriculture, Fisheries and Forestry
DCIEM	Defence and Civil Institute of Environmental Medicine
DHA	Docosahexaenoic Acid
DNA	Deoxyribonucleic Acids
DO	Dissolved Oxygen
DOM	Dive Operations Manual
DPIPWE	Department of Primary Industry, Parks, Water and Environment
eFCR	Economic Feed Conversion Ratio
EHN	Epizootic haematopoietic necrosis
EIS	Environmental Impact Statement
EPA	Environmental Protection Authority
EPO	Eastern Pacific Ocean

ERM	Environmental Resource Management
ERP	Enterprise Resource Planning
EUL	Estimated Unexplained Losses
EUT	Eutrophication
FCRs	Feed Conversion Ratios
FFDRo	Fish Oil Forage Fish Dependency Ratio
FFDRm	Fishmeal Forage Fish Dependency Ratio
FHFO	Fish Health Field Officer
FHLT	Fish Health Laboratory Technician
FHMP	Fish Health Management Plan
FHU	Fish Health Unit
FIP	Fisheries Improvement Project
FM	Fish Meal
FMA	Fish Medication Authorities
FO	Fish Oil
FRDC	Fisheries Research & Development Corporation
FTO	Farm / Region Technical Officer
FY	Financial Year
GHG	Green House Gas
GJ	Gigajoules
GMO	Genetically Modified Organism
GWP	Global Warming Potential
HAC	Huon Aquaculture Company
HAG	Huon Aquaculture Group
HCVA	High Conservation Value Areas
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
IMAS	Institute of Marine & Antarctic Studies, University of Tasmania
IPN	Infectious pancreatic necrosis
ISA	Infectious salmon anaemia
ISEAL	International Social and Environmental Accreditation and Labeling Alliance
ISO	International Organization for Standardization
ITI	Infaunal Trophic Index
IUCN	International Union for Conservation of Nature
IUU	Illegal, Unregulated, and Unreported
JSA	Job Safety Analysis
kL	Kilolitre
KPIs	Key Performance Indicators
kWh	Kilowatt hour
LCA	Life Cycle Analysis/Assessment
LOI	Loss on Ignition
LPG	Liquid Petroleum Gas

MA	Medication Authority
MDS	multidimensional scaling
MF	Marine Farm
MFB	Marine Farming Branch
MFDP	Marine Farm Development Plan
MFP	Marine Farm Planning
MIC	Marine Inspector Cleaner
MLA	Maximum Leasable Area
MOP	Marine Operations Protocol
MSC	Marine Stewardship Council
MSDS	Material Safety Data Sheet
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
PI	Partridge Island (Huon Region)
PPE	Personal Protective Equipment
QA	Quality Assurance
RCD	Residue Current Device
RDS	RDS Partners
RM	Regional Manager
ROV	Remotely Operated Vehicle
RONC	Remote Operated Net Cleaner
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
SKA	Skretting Australia
SMFH	Senior Manager Fish Health
SOP	Standard Operating Procedure
SOMV	Salmon Orthomyxovirus
SPP	Special Plumbing Permit
SRAC	Sustainability Report Advisory Committee
STL	System Team Leader
SROI	Social Return on Investment
TARFISH	Tasmanian Association for Recreational Fishing
TASI	Tasmanian Aboriginal Site Index
TC	Total Carbon
TCT	Tasmanian Conservation Trust

TFDA	Tasmania Fisheries Development Authority
TIMS	Tassal's integrated Management System
TN	Total Nitrogen
TP	Tin Pot Point (Huon Region)
TPDNO	Total Permitted Dissolved Nitrogen Output
TRCI	Tasmanian River Condition Index
TSGA	Tasmanian Salmonid Growers Association
TSHSP	Tasmanian Salmonid Health Surveillance Program
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
YC	Year Class

1 Summary

The Tassal Operations Pty Ltd's (Tassal) salmon culturing sites within the scope of this full-assessment, Marine Farm (MF) MF 185 Tin Pot Point and MF 203 Partridge Island, within the Huon farming region, showed good 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 were 12 non-conformities (NCs) and 1 observation identified during the full assessment of the Huon farming region, which equated to 93% compliance against the 152 compliance criteria of the ASC salmon standard v 1.0; a subset of these criteria 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 3). Progress against the action plan will be assessed at the first surveillance audit.

The audit team identified two NCs in Principle 2 (Conserve natural habitat, local biodiversity and ecosystem function): one related to feed testing, one related to an internal system that would make lethal incidents publically available within 30 days. There is one NC in Principle 3 (Protect the health and genetic integrity of wild populations) which is about the development of an area based management plan. 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 three 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 second one pertains to virus related mortality which was higher than 10% at the farm sites, and the third one deals with the records on chemical and therapeutant use. Two NCs have been identified in Principle 7 (Be a good neighbour and conscientious citizen): the first one is about 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 which is covered under two compliance criteria, also. Three NCs have been identified in Section 8 (Requirements for suppliers of smolt). One NC is about records on chemical and therapeutant use at the hatchery, the second NC is about consultation with aboriginal communities in relation to the hatcheries and the third is about dissolved oxygen (DO) measurements in effluent of the semi-open hatchery system at Saltas.

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 major.

Criterion	Related to	Rating
2.3.1.a	feed testing	minor
2.5.5	system to make information about lethal incidents publically available within 30 days.	minor
3.1.1.a	area based management plan	minor
4.3.2.b	FishSource score for feed material	minor
5.1.2.a	quarterly veterinarian visits	minor
5.1.6b	unexplained mortality	minor
5.2.1.a	records on chemical and therapeutant use are not always completely correct	minor
7.1.3.c 7.1.1d	informing the public during therapeutic treatment periods	minor
7.2.2.a&b	consultations with aboriginal groups	minor
8.15.c	records on chemical and therapeutant use at the Saltas hatchery	minor
8.23.a	currently there is no consultations with aboriginal groups	minor
8.33.b	dissolved oxygen levels for effluent at hatchery	minor

One Observation was raised, identifying areas of improvement. This was not graded as a non-conformance and therefore does not require an action plan by the client. It relates to 5.1.5.a.

Observation 5.1.5.a:

The spreadsheet, 12YC Mortality Summary, Huon does not provide differentiation of mortalities between the two farms and the smolt sites.

2 Historical Background of Farm and Farming Area

The Tassal sites assessed during this full-assessment, MF 185 Tin Pot Point and MF 203 Partridge Island, are located close to Dover, Tasmania, Australia (Figure 1).

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 Atlantic salmon predominately for the Australian market, and has a retail presence in over 2,000 outlets around Australia.

Tassal Group Ltd is an ASX 300 public company listed on the Australian Securities Exchange. Including Huon, it has six regional farming sites. Tassal farms Atlantic salmon (*Salmo salar*) in open net cage farming systems.

The sites assessed during this full-assessment, MF 185 Tin Pot Point and MF 203 Partridge Island, are located within Zone 18A of the D'Entrecasteaux Channel Marine Farming Plan area, at the entrance of Great Taylors Bay, the southernmost bay on the western side of Bruny Island (Figure 1). Zone 18A is located approximately 1.7km north-east of Butlers Point and 2.1km north-west of Tin Pot Point. Boundaries of this zone are defined in the D'Entrecasteaux Channel Marine Farming Development Plan (MFDP) February 2002. The area of the zone is approximately 442.91 hectares with a Maximum Leasable Area (MLA) of 150.00 hectares. Tassal is permitted to farm finfish in this zone as per provisions of marine farming licenses.

Tassal holds Best Aquaculture Practices (BAP) salmon certificates for the Tin Pot Point and Partridge Island farm sites as well as for their processing facility in Dover.

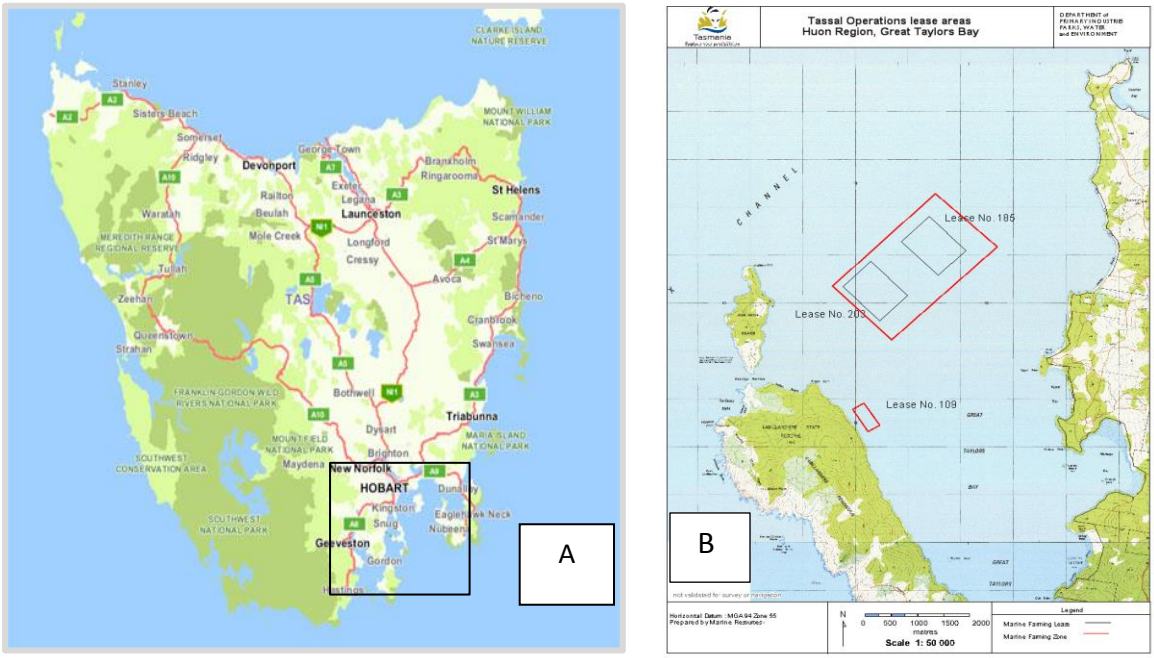

Figure 1. Map A: Area that contains the 2 sites (MF 184 and MF 203) in Huon Region (indicated by black box), Tasmania, Australia. Map B: Close-up location of the lease sites (MF 184and 203). Other sites are not included in unit of certification and not used for grow-out.

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 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 Licence 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 videos 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 licence 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 licence holders in the D'Entrecasteaux Channel and Huon River and Port Esperance MFDP areas must participate in BEMP, which is investigating the cumulative impact of all salmon farms in this 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 3 BEMP of the licence provides detailed a description of sampling procedures, processing, analysis and reporting for each environmental variable.

Tassal's Stakeholder Engagement

Tassal has been engaging in consultations with the local community on an ongoing basis since 2010. 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) 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.

As an example for recent engagement, Tassal has been participating in a consultation process regarding proposed amendments to the Lippies and Browns leases in the D'Entrecasteaux Channel, and has solicited feedback from community stakeholders about the proposal.

Fact sheets were developed as part of community consultations regarding Lippies and Browns proposed amendments – information about government regulations, environmental monitoring, nitrogen cap, salmon feed, and antibiotic use.

Tassal held a meeting with the Tasmanian Abalone Council on February 18, 2014 and again several times in September and October 2014 with industry members to discuss the proposed amendments to Lippies

and Browns leases, as well as the Butlers lease in Great Taylors Bay, and address questions, concerns, and requests for information brought forth by the Council.

Tassal has made a number of public presentations on several topics related to its current operations, plans, and goals.

As a result of these consultations and because of significant public opposition to the proposed amendment to the Browns lease, primarily related to the location of the farm offshore from a subdivision of relatively pristine land and proposed ecotourism ventures, Tassal decided to not continue with the proposed Browns lease.

Presentations have been made at the following events: Tasmanian Abalone Council, April 2014; Christian Men's Fellowship, November 2013; ABARES, 2013; Margate Rotary Club May 6, 2014; NRM Cradle Coast Committee, April 17, 2014; Seafood Directions, October 2013, Sustainable Food Summit, March 2013; Derwent Sailing Squadron Club Rooms, February 2014.

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 (FRDC) 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.

Tassal is also participating in the D'Entrecasteaux Channel Project, a partnership between councils, industry, environmental management bodies, which seeks to ensure the sustainable management of the D'Entrecasteaux Channel, specifically to ensure: a healthy waterway, and a culture of public stewardship for the waterway. Partners in the Project include: Kingborough Council, Huon Valley Council, TasWater, Tassal, Huon Aquaculture, Derwent Estuary Program, NRM South, International River Foundation, IMAS, CSIRO and DPIPWE.

Consultation with Indigenous Communities

Tassal has been in conversation with parties in Tasmania regarding the most culturally appropriate manner with which to engage with the Indigenous Community. Tassal is committed to getting this process right, with respect and understanding and local sensitivities and barriers to engagement. The assessment team has been provided with a detailed description and confirmation of Tassal`s efforts which highlights Tassal`s commitment and willingness to conduct meaningful and culturally sensitive consultations with indigenous communities. This detailed description and confirmation of Tassal's efforts was pertinent to the audit team's determination that the non-conformity relative to Performance Indicators 7.2.2 and 8.23, presented later in this report, should be classified as Minor rather than Major.

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 185 Tin Pot Point and MF 203 Partridge Island, two sites assessed as cluster
Receiving Water Body	D'Entrecasteaux Channel, 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 from 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, one North West Bay leases (MF 94 Sheppards), one lease in the Tasman Region (MF 190 Creases Mistake) and two leases in the Dover farming region (MF 209 Stringers and MF 201 Redcliffs). Tassal received ASC certification for the Macquarie Harbour farming region on the April 4th 2014, for the North West Bay farming region on the 10th June 2014, for the Dover farming region on the 4th September 2014 and for the Tasman farming region on the 18th September 2014. There have been no previous audits for the two farm site that are the subject of this report (MF185 Tin Pot Point and MF 203 Partridge Island).

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, David O`Sullivan and Dr. Christine Crawford. James McNaughton contributed remotely by reviewing the findings of the report.

Dr. Sabine Daume, SCS Global Services – Regional Director Australasia, MSC and ASC Lead Auditor

Dr. Daume is responsible for leading SCS's Sustainable Seafood Certification program in Australasia, which includes aquaculture, fishery and fisheries improvement projects under the auspices of both the Aquaculture Stewardship Council (ASC) 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 interactive training materials for the industry and led industry workshops.

David Bruce O'Sullivan (Dos), Dosaqua Pty Ltd- Technical Expert

Dos O'Sullivan is a Director and principal consultant with Dosaqua Pty Ltd. He has been involved in information dissemination since 1986, not only through industry workshops and seminars but also as a lecturer at three universities and several TAFE colleges.

His consulting specialties include project development and downstream management; industry status and potential; freshwater crayfish production; expert witness; environmental management / impact assessment; education, feasibility and risk analyses; industry liaison and extension; and independent analysis. With AusAID funds PSM established a 100-tonne/yr marine finfish farm in Philippines in 1999. For 5 years he was non-technical director of a large (800tpa) Barramundi farm located in NE USA which was listed on the Australian Stock Exchange, this company has also developed a 2,000MT capacity barramundi seapen farm and hatchery in Vietnam. Until 2012 Dos wrote annual reports on the status of aquaculture in Australia and he is recognised as the major commentator on industry issues and trends. He also has a major interest in promoting Aboriginal aquaculture and training; he is currently working with communities in Tasmania and South Australia.

Dr. Christine Crawford, Institute of Marine and Antarctic Studies (IMAS) - Technical Expert

Dr. Christine Crawford has over thirty years' experience in shellfish and finfish aquaculture, including hatchery and intertidal shellfish production, research and effects of aquaculture on the environment, both in Australia and overseas. She is currently a Senior Research Fellow at the Institute for Marine and Antarctic Studies, University of Tasmania. Dr Crawford has also lead research projects investigating the ecology and health and monitoring of estuaries, including environmental flows and links between

changing climatic conditions and estuarine water quality. Christine has worked for the Tasmanian government for many years. In recent years she has conducted ecological sustainability assessments for aquaculture operations in Australia and overseas for WWF.

Dr. Crawford has published widely in the international peer-reviewed literature, including 38 papers, 6 book chapters, book co-editor and over a hundred reports to industry and government. Her work has also involved a diverse range of stakeholders, often in remote locations.

James McNaughton, SCS Global Services – Fair Trade USA Auditor

James McNaughton coordinates the Fair Trade USA certification program managed by SCS Global Services, and has been heavily involved in the development of the program since its inception in 2011. During this time, James has worked with Fair Trade USA to develop their standards – the Farm Workers Standard, Independent Smallholders Standard, and Trade Requirements Standard. In addition to standards development he is working with Fair Trade USA to develop guidelines for each of their standards, and has designed and developed a number of key program documents and audit tools. James manages the Fair Trade USA certification processes, and is a certification decision maker within the Food & Agriculture Division at SCS. James is a certified ISO 9001 lead auditor, and is trained to conduct audits against each of the Fair Trade USA Standards. He works to develop and deliver Fair Trade USA auditor training programs that are targeted to local and regional contexts. Before working at SCS as full-time employee, James worked on the development of SCS's Fair Labor Practices and Community Benefits Standard as part of an internship that took place in conjunction with an 18-month Education Abroad Program at the University of California, Berkeley. James received his Bachelor of International Studies and Bachelor of Media Studies from the University of Adelaide. 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 Huon Sites to undergo a full assessment (11 August, 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 (9th -11th September, 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 3-4 pm on the 11th September 2014 and met with interested stakeholders in Hobart, Australia.

Gathering of evidence (September, 2014)

Evidence in the form of documents, reports and internal protocols and procedures were received before the audit in September and throughout the month. Further evidence was submitted during and after the audit. The audit was closed when the last documents were submitted to SCS, on September 25th, 2014.

Drafting the report (September-October, 2014)

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

Client review of the report (October, 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 that if major non-conformities were identified, these would 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 (17 October, 2014)

SCS released the Draft Report for a 10-day stakeholder comment period which closed on the 1st November, 2014.

Stakeholders were informed through posting on the ASC website and direct email to known stakeholders. Additional comments were summarized and responded to by SCS (see Appendix 1).

Release of Final Report with certification decision (07 November, 2014)

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

4.4 Staff Interviews

Table 2, below, lists the staff that were interviewed at Tassal's Head Office and at the land based office for the Huon full assessment audit.

Table 2. Summary of Worker and Management Interviews

Personnel and Title
Linda Sams, Head of Sustainability
Heidi Hansen, Environmental Certification Officer
Fiona Ewing, Community Engagement Officer
Alistair Brown, Fish Health Staff Members
Human Resources Department Representative
Grant Purdon, Regional Manager
Systems Team Leader
Operation Manager
Team Leader 1
Dive Team Member 1
Dive Team Member 2
Farm Attendant 1
Farm Attendant 2

4.5 Stakeholders

In order to ensure a thorough and robust assessment process, and a process in which all interested stakeholders were afforded opportunities to participate, SCS sought comment from the public through direct mailing and posting advisories on the ASC website; as well, the audit team 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. A meeting related to the farm sites under assessment occurred on 11th September 2014 in Hobart, Tasmania.

The stakeholder comments received and the audit team's responses can be found in Appendix 1 of this report. The following organizations were identified as potentially interested stakeholders during the pre-assessment process of Tassal, conducted earlier in 2014. 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 12 minor non-conformities (NCs) and 1 observation identified during the full assessment of the Huon farm sites. Any outstanding findings and their respective action plans including root cause analyses are listed in Table 3 of Section 9 below.

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

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 300 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 sites at Tin Pot Point and Partridge Island in the Huon region are located within Zone 18A of the D'Entrecasteaux Channel Marine Farming Plan area. They have current DPIPWE (Dept. Primary Industry, Parks, Water & Environment) Marine Farming Leases and Licences: Tin Pot Point Lease No. 185 (74.9 ha): ▪ 30 year lease from 1 July 1998 ▪ Lease boundaries/corners survey from 12 May 2009 ▪ MF Licence No 185 to carry out Atlantic salmon culture 1/12/13 to 30/11/14 (renewed annually) Partridge Island Lease No. 203 (75 ha) ▪ 30 year lease from 1 July 1998 ▪ Lease boundaries/corners from 4/2/1999 ▪ MF Licence No 203 to carry out Atlantic salmon culture 1/12/13 to 30/11/14 (renewed annually) Other evidence for legal compliance for farms and depots includes: ▪ Invoices from Tas Water for water and sewage utilities for 23/10/13 & 4/2/14. ▪ Power bill Aurora Accrual – month ending 31/01/2014 ▪ Freshwater Operations Permits and other licences for 4 hatcheries (2 owned by Tassal, two run by SALTAS). ▪ Lease for Crown land at Meads Creek, 1/11/1989-1/6/2007 ▪ Land title at Meads Creek 2004 ▪ Salmon By-products Agreement with SeaFish Tasmania (27/1/11 24p) expiry 1/7/16. ▪ Heads of Agreement between Tassal and De Bruyn's Transport to provide and operate a feed supply vessel to service Tassal's SE Tas sites, signed 7/3/2014. The main depot (land-base) is at Dover with administration office & staff amenities, equipment store, dive room, workshop, chemical and fuel stores and vessel mooring. Inspections of the land base including the jetty operations area, offices,

		workshop, dive room 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; pre-starts and maintenance checks for forklifts; pest control, recycling bins and waste control and appropriate facilities for staff for eating, drinking & ablutions. For Marine Operations (MOPs): ▪ The Regional Manager (RM) is responsible for maintaining lease boundaries & plan area controls. ▪ IALA Lighting Requirements as Marine & Safety Tas 7/08/06, letter from DPIW 9/08/06 ▪ Certificate of Operations from Marine and Safety Tasmania and AMSA #T1079-1-1 lists all vessels in use registered from 13/8/13 to 13/8/18 including *Ebenezer* (contractor feed & freshwater delivery, remove blackwater), RAADAS Huon *, Together Crayz* , (dive), Tin Pot Point and Partridge Island feed barges Liberty and Aurora (no registration required), *Hurricane* (bathing & heavy works barge) and *Dynamic II* (net cleaning). ▪ Similar equipment and documentation observed on the Feed Barges – laminated charts include the Escape Response Procedure as well as Escape Response Flowchart, also current MSDS for chemicals held on board. The barge was maintained in a tidy state along with appropriate storage of bulk fuels (in double skin containers). Copies of all applicable land and water use permits were in order and maintained according to applicable laws and regulations.
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. The legal compliance is discussed in Tassal's Sustainability Report for 2013. The MF 203 and 185 leases have been in operation since 1998. Annual Compliance Surveys of video monitoring and BEMP (reviewed 2013 data set and BEMP review, discussed elsewhere) are sent to MFB in 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). Regional requirements and results of assessments are contained in the following documents on file at Tassal:

		▪ D'Entrecasteaux Channel MFDP (February 2002) ▪ Broadscale Environmental Monitoring Program - BEMP ▪ Finfish Farming Benthic Monitoring Program Review ▪ Nitrogen Cap (TPDNO) DPIPWE (19/12/08) ▪ State of D'Entrecasteaux Channel and Huon Estuary - Data Inventory ▪ TSGA Letter of support - Tassal BEMP
d	Obtain permits and maps showing that the farm does not conflict with national preservation areas.	The D'Entrecasteaux Channel MFDP (February 2002, 64p) includes updated map (Map 1.1 p2) with all Marine Farming Zones listed p3 and marked on Map 2.2 (p43). 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 by 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) which 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 and broad scale monitoring as per the Broadscale Environmental Monitoring Program - BEMP (04-12-08) . 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 monitoring (in house or external contractors) compliance surveys sent to MFB (DPIPWE) for assessment– these include sediments, carbon, N2, phosphates and nitrogenous wastes with trigger levels. - Nitrogen Cap (TPDNO) DPIPWE (19/12/08) is discussed in Criterion 2.3. - DPIPWE licence compliance sign-off letters 23/12/13 and 7/2/2014 for Tin Pot Point and Partridge Island, respectively, reporting that video footage & associated monitoring reports for November 2013 and January 2014 have been reviewed and accepted and licence requirements met. On land: - The blackwater/sewage is managed by Tas Water (refer 1.1.1 for utilities invoice information). - The bloodwater discharges from the harvest vessels 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 Huon 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 stations. If the farm uses a site-specific AZE, provide justification [3] to the CAB.	Received map of sampling locations as part of the reports "Annual Compliance Survey Report for Marine Farm 185 Tin Pot Point and Marine Farm 203 Partridge Island Finfish Farms, Tassal Group Pty Ltd September 2013".
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 required and listed in Schedule 3 for new leases but thereafter are not monitored unless at the discretion of the Marine Farming Branch (MFB) 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. Copies were provided of 'Annual Compliance Survey Report Marine Farm 203 Partridge Island Finfish Farm Tassal Group Pty Ltd January 2014' and of a letter from DPIPWE 7/2/14 approving the annual video survey. Similarly copies were provided of 'Annual Compliance Survey Report Marine Farm 185 Tin Pot Point Finfish Farm Tassal Group Pty Ltd, November 2013, and a letter from DPIPWE 23/12/2013 approving the annual video survey. 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 Appendix VI. If site has hard bottom and cannot complete tests, report this to ASC.	Reports of visual surveys were submitted to the 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. Additionally, Tassal participates in a regional environmental monitoring program as part of their Marine Farm Licence requirements (Schedule 3 BEMP), and sites for faunal assessment are provided in the report "Evaluation of Broadscale Environmental Monitoring program (BEMP) from 2009-2012."
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 record Benthic Quality Index (BQI) score of sediment samples using the required method.	See 2.1.2b.
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	See 2.1.2

	2.1.1c, or exemption as per 2.1.1b.	
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.	As discussed above, Tassal's farms in the SE region of Tasmania in the Huon River and D'Entrecasteaux Channel Marine Farm Development Plan Areas have been well studied as per Tasmanian (Southern Hemisphere) systems. Tassal proposed the possibility of ASC's acknowledgment that there is enough infauna data from previous studies (the majority of them conducted in this specific region) to assess benthic impacts using visual means rather than faunal indices. However, benthic infauna is examined at a regional scale, under Schedule 3 BEMP of Tassal's Marine Farming Licence (see 2.1.2 above). Details of the benthic sampling and analysis 2009-2012 are provided in the BEMP report. 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 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. Received a copy of 2 technical papers: ▪ Macleod, C.K., Mitchell, I.M., Crawford, C.M. and Connell, R.D. (2002) Evaluation of Sediment Recovery after Removal of Finfish Cages from Marine Farm Lease No.76 (Gunpowder Jetty), North West Bay. ▪ Crawford, C.M., Macleod, C.K., Mitchell, I.M. (2002) Evaluation of techniques for environmental monitoring of salmon farms in Tasmania.

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 tables 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	DO data from 1/9/13 to 31/8/14, average 8.08 at Tin Pot and 8.16 at Partridge Island.
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 the Tin Pot Point and Partridge Island sites complies with this indicator.
b	Submit results from 2.2.2a to ASC as per Appendix VI.	Results were submitted to ASC.
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	There are regional limit levels for nitrogen in place for the SE farming sites including Tin Pot Point and Partridge Island.
b	Compile a summary of relevant national or regional water quality targets and classifications, identifying the third-party responsible for the analysis and classification.	Water quality triggers have been recommended as guidelines for the Broadscalet Environmental Monitoring Program (BEMP) for the D'Entrecasteaux and Huon Estuary farming areas to replace the ANZECC Water Quality Guidelines. These are assessed in the report "Evaluation of Broadscale Environmental Monitoring program (BEMP) from 2009-2012."
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.	N/A
b	Calibrate all equipment according to the manufacturer's recommendations.	N/A
c	Submit data on N and P to ASC as per Appendix VI.	N/A
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 at onsite assessment. Skretting provides an annual feed declaration detailing the % TN and TC in their feeds so Tassal can calculate BOD.
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 procedure 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 Tin Pot Point and Partridge Island farm sites are not tested quarterly. Skretting have provided a feed dust/chips declaration to Tassal stating that they control for dust/chips during the production process and declare that feeds leaving the factory contain ≤1% dust/chips.
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.	The document "Report to Tassal Operations Pty Ltd on management of natural habitat, local biodiversity and ecosystem function quality in Great Taylors Bay, Tasmania" prepared by Aquenal Pty Ltd., September 2004 provides a detailed description of the existing environment in and around Marine farms Tin Pot Point and Partridge Island. This report documents sensitive and critical species and habitats that occur in Great Taylors Bay and discusses the potential for the farms to impact on them. The report "Evaluation of Broadscale Environmental Monitoring Program (BEMP) data from 2009-2012" assesses physical, chemical and biological indicators of impact in the D'Entrecasteaux Channel, which includes the Tin Pot Point and Partridge Island marine farms. As outlined in the report on biodiversity and the review of the BEMP, all components listed in Appendix I-3 are addressed.
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	The Report to Tassal Operations Pty Ltd on management of natural habitat, local biodiversity and ecosystem function quality in Great Taylors Bay, Tasmania 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

	potential impacts.	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 roll out of predator-proof Kikko nets and seal-proof bird nets across all farms. - the target to cease using copper based antifoulant paints on nets by end FY2014 has already been met in March 2014 ; instead Tassal is using an *in situ* marine inspection cleaner which has been developed by Tassal. - planned reduction in antibiotic use and only to be used on sick fish. - Fish Health Management plan - SE region. - ongoing monthly water quality monitoring as part of the Broadscale Environmental Monitoring program. Trigger values for water quality have been proposed for the D'Entrecasteaux Channel and Huon estuary and incorporate 3 levels of risk to ecological function (see BEMP report). - supported research projects: 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 broad scale 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).	D'Entrecasteaux Channel Marine Farming Development Plan 2002 contains a map showing the location of Zone 18A which contains the Tin Pot Point and Partridge Island leases, and discusses any protected areas or HCVAs in the vicinity of the farm.
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 Instructions above) to determine if your farm is allowed an exception to the requirements. If yes, inform the	N/A

	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 management is not using or planning to 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	Devises operated <40% of days of the production cycle.	Confirmed at onsite audit that operation uses no ADD
d	Submit data on number of days that ADDs/AHDs were used to the ASC as per Appendix VI.	N/A
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 predator control devices and their locations at the Meads Creek land base and on feed barges Liberty and Aurora and 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.	Bird incident spreadsheets listing number of birds found in pens, species, number released alive, mortalities and comments on likely causes from Tin Pot Point from 8/10/12 and from Partridge Island 22/12/12 to 30/6/14 showed no bird mortalities at either lease during this period. Seal mortality reports for Tassal from DPIPWE for 1/7/12 – 30/6/14 show no mortalities at Tin Pot Point or Partridge Island.
d	Maintain an up-to-date list of endangered or red-listed marine mammals and birds in the area (see 2.4.1)	Biodiversity report (2014) documents critical, sensitive and protected habitats and species in or near the Tin Pot Point and Partridge Island leases
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 2.5.3 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.	No lethal action was taken against predators in the previous 12 month period.
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 permission was granted by the	N/A

	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, the Wildlife Branch (DPIPWE) is notified as per requirements. Information is also currently reported in Sustainability Report annually.
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 is currently reported in Sustainability Report annually. Staff indicated that there will be a specific section on the new website to ensure the information is publically available. Tassal has set up a wildlife working group, including sustainability section staff, regional managers, wildlife officers and farm vets to discuss operations, ensure accurate reporting and discuss new control methods. Looking to have report from each region set up on internal dashboard. <u>Minor non-conformity:</u> 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 Huon grow out farms region from 23/3/2012 – 4/6/2014 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.
b	Calculate the total number of lethal incidents and the number of incidents involving marine mammals during the previous two year period.	No mammal or bird mortalities were reported at either Tin Pot Point or Partridge Island leases.
c	Submit data on lethal incidents of marine mammals and birds to ASC.	Data submitted to the 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.	Tassal has a Wildlife Interaction Plan (WIP) and documented detailed Wildlife Management System in place, includes responsibilities, document management, predatory mitigation equipment, exclusion measures, trapped or entangled wildlife, devices to control wildlife, sedation, humane destruction, safe storage. 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 2011 Sustainability Report (p29-30). 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). Signed Training _acknowledgement of Understanding, TRN-F114, 13/3/13 Wildlife Management System signed form training in ENV 109-wildlife management system, IMS safe and effective use of seal control units crackers policy, MO228 Bird Protocols

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. The Tassal Farm Disease Management and Biosecurity Protocol (SOP MO-116) links in with similar protocols on other farms.
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 has been rolled into the Biosecurity Strategy Group and Biosecure Fish Facility Expansion working groups. The main intent of these Biosecurity groups is based on the success of the strong technical working group supported by 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, and moving towards an AMA. Minutes for meeting #4 (15/11/13 3p) show 10+ attendees and a wide agenda including the Biosecure Fish Facility Expansion. Minor non-conformity: Currently there is no Area Based Management Plan.
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	N/A - no wild native Atlantic salmon populations in Tasmania

	collaborate on a research project, 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 company veterinarian 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	N/A - there are no sea lice associated with Salmonids in Tasmania.

	documentation which is sufficient for the auditor to evaluate whether the 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 John Diggle (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 these species are Salmonids. 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 (previously assessed), feral or wild populations of brown trout (some self-sustaining) and rainbow trout could be found within a 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 residen salmonids, and stock productivity ov time in major waterways within 50 k 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		Tassal's understanding of this information was confirmed through interviews.

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 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 much earlier, in the 1800's. In addition, Biosecurity regulations are in place in Tasmania and Australia to avoid importation of fresh salmon product or live or genetic materials. Atlantic salmon have been farmed in the Huon and D'Entrecasteaux region for almost 30 years. Boundaries for zone 18A in which the two farms occur, were defined in the D'Entrecasteaux Channel Marine Farming Development Plan (MFDP) in February 2002. Fish farms are sited via specific siting criteria set out by DPIPWE. Biophysical characteristics must meet minimum biological requirements For a new or expanded site, industry approaches DPIPWE with a proposal to develop a site, then DPIPWE put it out for public consultation, then makes judgment.
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	All female diploid fish or triploid fish are used. They cannot reproduce. Received Memo (4/2/14, 1p) from 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.

	effectiveness.	
d	If the farm cannot provide evidence 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).	Refer above.
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).	The client has submitted 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 were 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/ Rainbow trout were introduced in the 1800's.
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 species within the farm's jurisdiction. Alternatively, the farm may request an exemption to 3.2.2c (see below).	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. 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 triploid (MH) or diploid female only, 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 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	Smolt deliveries are organised by Hatchery Manager. Before stocking, all smolt/fingerlings must have the Veterinary Health Certificate

	person(s) for stock purchases.	For Salmonids Destined For 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 Huon farm site include: 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, as are 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 an initial meeting with Marine Farming about

		renewing, but did not progress to another permit stage. However, recovery netting trials were not permitted in the SE region by DPIPWE 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 as the 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. Mortality diving occurs at least 2 time per week to keep holes mended and divers do not raise weights to provide less chances for seal to push in. Swim through process also improved. Letter from DPIPWE 14/7/2014 shows no escapes from the Huon region over the last 3 years
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	Data (number of escape episodes per production cycle, dates, cause, number of escapes per episode and total escapes) are recorded in Fish Talk and have been summarised in spreadsheets for all stockings and harvests from 2000.
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 and must document how the farm could not have predicted the events that caused the escape episode.	The Escape Analysis spreadsheet summarises data over the past 10 years and this shows no incidents for Huon region since 2000.
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	The specs for the AquaScan fish counter model AquaScan Registration Unit CSE3150 state an accuracy of 98-100%.

	spec sheets for counting machines and common estimates of error for hand-counts.	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 100 fish to ensure they travel in single file through the scanner. Records of counts vs estimates and harvests provided. Observations of using the Aquascan Counter on site included calibration with 125 fish, regular checking of the operation of the Aquascan and records maintained.
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 '*Hurricane'* barge for the AquaScan.
d	-	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 (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.	Tassal has demonstrated an understanding of calculation and the requirement to disclose estimated unexplained losses (EUL) after final harvest. The results of estimated unexplained loss calculations specific for Huon were presented by Tassal for the calendar input year class.

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	The records above in 3.4.3b show that farm reporting is plausible and the EUL is NOT greater than the combined margin of error related to fish counts; Tassal has not under-reported mortalities or escapes.
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) state net specifications etc. relating to fish containment, environmental monitoring and 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's 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 records 21 of 33 (previously in Feb'13 all 27 employees signed). The Fish escape Drill was last run on 11/3/14 for 11 of 32 (previously Feb'13 for 9 for 27 employees).
b	If the farm operates an open (net pen) system, ensure the plan	Escape Prevention and Response Protocol (MO-146 29/07/13, 8p) covers net inventory (including net strength testing & net traceability), checking of nets

	(3.4.4a) 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 no escapees from MF 185 and 203.
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 signoffs on Fish Escape Response Protocol records 21 of 33 (previously in Feb'13 all 27 employees signed). Huon Regional Manager confirmed process for escapes >500 was to notify DPIPWE.

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. Contact details for these are on the Approved Supplier List and Fish Talk. According to Tassal 2013 Sustainability Report (p32-33) now only Skretting is used at all sites; for Huon this includes the last two year classes 13YC & 12YC. Skretting Australia (SKA) announced it was committed to "being able to deliver feeds compliant 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. SKA letter 4/9/14 notes they have been informed about ASC requirements and have received a copy of the ASC Standard.
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.	Letter 4/9/14 from SKA to Head of Sustainability regarding ASC Certification and 15+p attachment containing documentation to demonstrate compliance with ASC feed requirements (DH 31.18.15 Tassal's Huon Region declarations, Version 0). The letter notes SKA is Global GAP Certified, # 4052852637961 against the Global GAP CFM Standard – Chapter 13 has detailed provisions regarding traceability. 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 up >1% of the feed. Reviewed declaration of third party audit by SGS (7/10/13 5p) of Nutrace system including all species used as per 4.3.2a, 4.2.1a, and 4.2.2a. As SGS Australia undertakes CoC audits, it has been judged they are an "ASC-acknowledged auditing firm or CAB".
d	*For each feed producer, determine whether the farm will use method #1 or method #2 (see Instructions above) to show compliance of feed producers. Inform the CAB in writing.*	SKA letter (4/9/14) states that Skretting can only demonstrate predictability in attempting to fulfil the standard when using method #2 Mass Balance, and they will base their response on method #2. Individual raw materials can be traced and source fishery identified for each specific feed using the manufacturing order and Skretting's internal Tracking and Tracing system.

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. SKA letter (4/9/14) states that Skretting document the inclusion of ingredients (>1%) for the products fed to a completed production cycle. Marine ingredients and soy can be traced to country of origin (when the fish was captured or processed, or where the soya was grown). For all other raw materials we can also trace to country of origin, either directly in our own tracing system or indirectly through contacting our supplier Skretting has an electronic traceability system which is described in our internal quality procedure 07.03. Nutrace tracking and tracing (document 07.03.01 Purpose and responsibility incl support). Skretting's traceability system is part of the internal food safety quality program, Nutrace®, which is described in their internal quality procedure 07.01 Nutrace Standard (document 07.01.01 Nutrace checklist for Skretting). The spreadsheet 12YC for Huon FFDR Declaration records FFDRm as 0.63 (ASC req. <1.35) and FFDRo as 2.17 (ASC req. <2.95).
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 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.	The database Fish Talk includes all the required information – the downloaded "Inventory - Vendor Purchases Feed Jun 2012 to May 2013" records all of the feed purchased in each FY, including quantities of the various formulations. SKA letter (4/9/14) states that Skretting can declare the % inclusion and quantity of all fishmeal (reduction and trimmings sources) used in each feed fed per month to an ASC-compliant farming site for a complete production cycle. This data can be used to calculate the FFDRm. Skretting can declare the fishery origin of all fishmeal (reduction and trimmings sources), based on purchases made in the previous calendar year. Volume of feed sold per month to farming site for the assessment production cycle is provided to Skretting by the Tassal, along with the eFCR to complete the FFDRm calculation. The spreadsheet 12YC for Huon FFDR Declaration records FFDRm as 0.63 (ASC req. <1.35).

		Compliance documents received. Individual raw materials can be traced and source fishery identified for each specific feed using the manufacturing order and Skretting's internal Tracking and Tracing system.
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. SKA letter (4/9/14) states that 4.2.1a –FFDRm declaration demonstrates fishmeal from trimmings is not included in calculation - The spreadsheet 12YC for Huon FFDR Declaration records FFDRm as 0.63 (ASC req. <1.35).
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.	SKA letter (4/9/14) states that Huon region – 12YC – FFDRm = 0.63, which is below the <1.35 ASC requirement.
e	Submit FFDRm to ASC as per Appendix VI.	Noted by Tassal, the Excel spreadsheet "ASC Feed origin data declaration Huon 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 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. SKA letter (4/9/14) states that Skretting will provide a declaration that will contain the % inclusion, quantity and fishery origin of all fish oil (reduction and trimmings sources) used in each feed fed per month to an ASC-compliant farming site for a complete production cycle. This data can be used to calculate the FFDRo. Volume of feed sold per month to farming site for the assessment production cycle is provided to Skretting by the Farming Company, along with the eFCR. The spreadsheet 12YC for Huon FFDR Declaration records FFDRo as 2.17 (ASC req. <2.95). Compliance documents received: - Origin of Source Fishery for FM and FO (DH 31.18.07 Origin of Source Fishery for FM and FO, version 0) for 2013 raw material purchases Individual raw materials can be traced and source fishery identified for each specific feed using the manufacturing order and Skretting's internal Tracking and Tracing system.
b	For FFDRo and EPA+DHA calculations	Reviewed spreadsheet "ASC Feed origin data declaration Huon 12YC" which

	(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.	contains details of FFDRo and EPA+DHA calculations. SKA letter (4/9/14) states that FFDRo declaration demonstrates fish oil from trimmings is not included in calculation. The spreadsheet 12YC for Huon FFDR Declaration records: - FFDRm as 0.63 (ASC req. <1.35) - FFDRo as 2.17 (ASC req. <2.95).
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 SKA letter 4/9/14).
d	For option #1, calculate FFDRo using formulas in Appendix IV-1 and using the eFCR calculated under 4.2.1c.	Using eFCR calculated under 4.2.1c SKA letter (4/9/14) states that for Huon region 12YC the FFDRo = 2.17, which is less than the <2.95 ASC requirement.
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 Huon 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	Noted by Tassal, will use a version of the Excel spreadsheet ASC Feed origin data declaration for the farm and year class/production cycle. This is

	declarations in 4.2.1a to develop a list of the origin of all fish products used as feed ingredients.	supported by the Source Fishery of FM & FO (April'12 to Nov'13). SKA letter (4/9/14) states that this does not apply prior to June 13, 2017.
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 suitably managed fish resources (ISEAL) or an equivalent scheme. With the likely completion of the Feed Standard Dialogues for ASC by 2015, it is expected that this requirement will be modified. Skretting has 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). SKA letter (4/9/14) states that this does not apply prior to June 13, 2017.
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).	SKA letter (4/9/14) states that they chose to use the mass balance approach (Method 2), they will demonstrate compliance through the species they purchase and which comply with the FishSource score. Each year, up until June 2017, Skretting will provide an annual declaration of the FishSource score of the species in the fishmeal and fish oil (reduction fishery sources only) used in the feeds. Skretting's annual independent assessment report of marine ingredients by Dr Sarah Irvine (Marine Fisheries Scientist & Consultant) will disclose the FishSource score that all purchases for the coming year will abide by. See Appendix 7 for a more detailed explanation. Compliance documents received: - "Review of the status of fish stocks used to produce fishmeal and fish oil for Skretting Australia" report compiled by Dr Sarah Irvine (15/1/14 82p) to view FishSource scoring and IUCN Red List status. - Mass Balance explanation "Skretting's approach to using the mass balance system to demonstrate compliance to origin of marine ingredients" (2p) where SKA demonstrates that it will not issue or sell ASC certificates unless these are covered by buying fishmeal and fish oil that meets the criteria in the ASC standard. Processes include: - The stock keeping and sales of ASC Feed Certificates will be monitored in their ordinary stock and invoice systems (ERP system – Enterprise Resource Planning). In an initial phase they must do a 'manual' accounting as their ERP system needs some adjustments to be able to handle this type of transaction. - An ASC Feed Certificate will be issued to the Farming Company for the sales (tonnes) of ASC compliant feed sold to the whole Farming Company (not per

		individual site) during the previous quarter. Examples of SKA follow through – email from SKA to Tassal HoS 3/7/13
b	Confirm that each individual score ≥ 6 and the biomass score is ≥ 8.	Compliance documents reviewed: - Origin of Source Fishery for FM and FO (DH 31.18.07 Origin of Source Fishery for FM and FO, version 0) for 2013 raw material purchases. These individual raw materials can be traced and source fishery identified for each specific feed using the manufacturing order and Skretting's internal Tracking and Tracing system. - "Review of the status of fish stocks used to produce fishmeal and fish oil for Skretting Australia" report compiled by Dr Sarah Irvine (15/1/14 82p) to view FishSource scoring and IUCN Red List status. 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 (4/9/14) states they will continue to monitor their Fish Meal & Fish Oil sources and purchase in line with their Marine Sustainability policy. <u>Minor Non-conformance:</u> Not all ingredients of the feeds used at the Huon sites achieve individual fish source scores >6 and biomass Scores >8.
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. Skretting's independent assessment of marine ingredients was conducted by Dr Sarah Irvine (Marine Fisheries Scientist & Consultant). "Review of the status of fish stocks used to produce fishmeal and fish oil for Skretting Australia" report compiled by Dr Sarah Irvine (15/1/14 82p) to view FishSource scoring and IUCN Red List status.
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 traceability program.	Reviewed declaration of SGS 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.

		SKA letter (4/9/14) states that Global G.A.P. CFM standard, control point 15.3 states: *"Is the origin of species of wild captured fish used to produce fishmeal and fish oil traceable with regards to:* *The species of origin* *The country of origin* *Is the producer able to demonstrate that the list of fish species used for the production of fishmeal and fish oil does not contain species classified as critically endangered or endangered in the IUCN Red List at the time of purchase?"* Since May 2014 Skretting Australia has been Global G.A.P. certified with Global G.A.P. number 4052852637961.
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 continue 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. SKA letter (4/9/14) states that Skretting's marine vendor policy states (which their suppliers must sign): The fishery and the production of fishmeal and oil must be in compliance with the laws and regulations of the country of production or regional laws related to fisheries. The catch processed must not originate from any fisheries that are illegal, unregulated or unreported. Skretting procedure 09.05 Sustainability assessment of suppliers & raw materials (document 09.05.02 Sustainability – Criteria marine products.
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	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

	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).	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. Skretting's marine vendor policy states that the fishmeal and fish oil must not originate from species classified as endangered or critically endangered. Therefore, any new marine ingredients purchased now requires the supplier to fill in a new marine origin declaration stating that the species in the meal or oil did not originate from any species classified as vulnerable according to the IUCN Red List. These declarations were sighted during SGS ASC Traceability audit report (7/10/13 5p). Skretting contracted a marine fisheries scientist/consultant to conduct an independent assessment of the marine species in the raw materials that we have used in our feeds since January 2012. Compliance documents received: - "Review of the status of fish stocks used to produce fishmeal and fish oil for Skretting Australia" report compiled by Dr Sarah Irvine (15/1/14 82p) to view FishSource scoring and IUCN Red List status. - ASC Traceability audit report by SGS (7/10/13 5p).
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].	SKA letter (4/9/14) states that Skretting contracted a marine fisheries scientist/consultant to conduct an independent assessment of the marine species in the raw materials that they have used in their feeds since January 2012. One species was classified globally as vulnerable, but a regional assessment identified the status of the species in the Eastern Pacific Ocean was not vulnerable.
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, however for Huon only Skretting is used. 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 and 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). SKA letter (4/9/14) states that Skretting "has a responsible sourcing policy that applies to non-marine feed ingredients. For our suppliers of plant raw materials, Skretting has a general vendor policy that all our suppliers have signed. This policy outlines that the vendor must abide by the laws and regulations of the country or region that governs their business activities. We also have a specific responsible sourcing vendor policy for the purchase of soya. Soy protein concentrate from Brazil is the only soy raw material that Skretting Australia purchases, and the supplier has signed our specific soy vendor policy". ASC have confirmed that only country of origin is required from soy suppliers regarding region grown (SCS-Macquarie Harbour audit report Version 1-0 (August 2012). These vendor policies (Version 2010 4p) can be reviewed in Skretting's internal quality procedures 09.05 Sustainability Assessment of suppliers and raw materials documents: - 09.05.01 Nutreco Sustainability Policy applicable for all suppliers) - 09.05.03 Sustainability Criteria soy products
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. SKA letter (4/9/14) states that Skretting was audited by SGS and signed vendor policies were sighted. Compliance documents received: - ASC Traceability audit report by SGS (7/10/13 5p).
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. Skretting has been notified about the farms intent to source feed based on soya that fulfils ASC requirements.
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 on the Brazilian supplier of soy produced from 4 states. Skretting uses soy concentrate originating from Brazil.
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). SKA confirmed not applicable before June 13, 2017. In the interim, Skretting's has a specific soya vendor policy that recognises the RTRS certification and is encouraging soy producers to start the process of RTRS or an equivalent accreditation. These vendor policies can be reviewed in Skretting's internal quality procedure 09.05 Sustainability Assessment of suppliers and raw materials documents (document 09.05.03 Sustainability Criteria soy products).
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.	The Feeds do not contain transgenic ingredients - SKA letter (4/9/14) states that they have a non-GMO Policy which is given on page 4 of the Skretting Quality Assurance document (ref 31.12.01, Version 03, 4p): *"Our policy on genetically modified organisms is to purchase our ingredients on a GMO free basis. Since January 2000 in accordance with Australian regulation (Food Standards Australia New Zealand Code), Skretting Australia has maintained a "GMO DNA-free" status of aquaculture feeds. Our vegetable raw materials are purchased as non-GMO and supplier certifications are documented.* *Our soy supplier manufacturer declarations includes a non-GMO certificate declaring that the ingredient does not contain >1% inclusion of transgenic*

		material." Thus, except for soy and wheat gluten, all vegetable raw materials are purchased from 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 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 26/08/13, 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 Huon MOPs waste flow chart includes various recycled wastes. As part of the Daily Toolbox refresher training in the MOPs Waste Management Plan (MO-130) was run for 15 employees on 9/9/14; all of the individuals signed the Sign Off register and also Policy & Procedures). In the same meeting a drill was undertaken for MOPs Fish Escape Response (MO-146) and also signed off.
b	Prepare a declaration that the farm does not dump non-biological waste into the ocean.	Viewed a declaration from MD & CEO (11/12/13) 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. The Shoreline clean up form for Great Taylors Bay two clean-ups: - 7/8/14 with 8 employees working 8hrs collected 18 garbage bags of rubbish. Pictures included in files. - 5/9/14 with 8 employees working 4hrs collected about 8 garbage bags of rubbish. Pictures included in files. Several clean-ups planned for 2014. These records are in the Veolia Consolidated Report 2013-14 FY which summarises amounts of cardboard, comingled wastes, general wastes, oily wastes, liquid discharge and compactor feed bags. Figures are also presented for all other Tassal sites.
c	Provide a description of the most common production waste materials and how the farm ensures these waste materials are properly disposed of.	The Huon MOPS waste flow chart (15/2/13) shows the disposal & recycling methods used, specific recycling includes: - Site wastes, net or rope pieces, negotiating with Veolia for other wastes (cans, bottles, paper, cardboard) to be recycled - Recycling bins (metals, batteries) are collected for recycling. - Waste pipe/collar/stanchion to be chipped and recycled, some given to local community farmers for reuse (hot houses etc.). - Waste chain/shackles/metal put in metal bin collection and recycled. - Feed bags are recycled by De Bruyns (vessel deliveries), land Huon Delivery (through Huon Valley Council). Most of the packaging (wrap, cardboard, paper & straps) and other wastes are collected in skip bins or other methods by Huon Rubbish Removals removed every 3-4 weeks or sooner if full, at Killala it is on demand. Veolia – domestic and office waste and general farm waste goes to land fill.
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. (see also 4.5.1c)	Refer to 4.5.1c

b	Provide a description of the types of waste materials that are recycled by the farm. (See also 4.5.1d)	Refer to 4.5.1c All mortalities are usually transferred to Seafish Tasmania at Triabunna as part of Tassal's Salmon By-Products Agreement (27/1/111 to 1/7/16, 24p). Others can be sent to composting trials
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 (8/1/14, 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's 2 land bases (Killala and Dover House) have plastic roller bins and separate storage area for oils & site wastes (skip bins Huon Delivery, some larger gear to Hawkers Bins Veolia). 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. Very little scrap metal on site. Plastic pens are dismantled and plastic chipped and recycled. Any reusable components are reused. Tassal has committed to using copper-free nets for the whole company (Hawkers Net Pad). Old copper-free nets either reused or sent to landfill (Council site) These records are in the Veolia Consolidated Report 2013-14 FY which summarises amounts of Cardboard, Comingled Wastes, General Wastes, Oily Wastes, Liquid Discharge and Compactor Feed Bags. Figures are also presented for all other Tassal sites. The land based blackwater/sewage is part of the Process Plant WWTP whilst on barges all is picked up by De Bruyns.
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 in FY2011-12 used a total of 448,332 GJ of energy, a 2% decrease from previous year (FY10-11). The environmental metrics being measured are: - cumulative energy demand (CED), - global warming potential (GWP), - eutrophication (EUT) and - water use. The assessment of Tassal's direct operations indicate that the marine farming phase is the most significant contributor to all four impact categories, in particular eutrophication, with the nutrient emissions from the feeds accounting for 99% of total impacts. Changes to the protein content of the feeds in the 2011-12 resulted in a 401t reduction in the nitrogen lost to the marine environment.

Of the total 448,322 GJ of energy used by Tassal during the time period analysed, 34% came from the liquid fuels (diesel, petrol and LPG) and electricity used at the marine farms. These activities resulted in 41% of the 23,582t CO_2e Emitted by Tassal in 2011-12, which was slightly less (48t) than the emissions from 2010-11.

The freshwater bathing of the salmon at the marine stage was the largest user of water (1,900ML), whilst the recirculation hatchery was the largest consumer of water.

The other area that carried significant environmental burden was the transportation of the various inputs and outputs involved in the production of salmon. This collectively accounted for 27% of all energy used and 31% of GHG emissions. This was lower than the previous year due to a reduction in the volume of feeds used (1,640t less) combined with shift towards sourcing more feeds from Skretting that reduced the transport by 1,740km per tonne of feed, which is the equivalent 3.1GJ/tonne of feed.

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 the 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 Regional Site Energy Summary 2012-2013 shows for FY12-13 was provided. 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 (CO_2-e) t emissions and GJ E consumed.

Calculations from Huon Farm Region Biomass Energy Final:

Year	GHG (CO_2-e) t	GJ E consumed
2011/12	1,086	15,212
2012/13	1.082	15,186
2013/14	1,090	15,239

At Huon local trials for reduction of energy use:
- Trials on 3 brands/types of outboard (4 stroke) for fuel efficiency and

		reduced noise - Testing an oxygen generator for feed barges and lights use by-product of cold air to venturation, no need for cooling pipes. - Use of water sprays to keep seagulls away from nets has been chosen due to low energy requirements. - Engine for new feed barge to include natural gas turbine which uses less power than the diesel generator (by-product also use for cooling). Major service only every 5 years, significantly less servicing and use of oils and lubricants. Local trials are also underway to reduce water use for bathing; the installation of a pipeline to Butlers has allowed bathing pens to be filled there and has mean that pens do not need to be towed back and forth to Meads Creek. This has allowed significant savings in fuel use, time and water losses. All water used for bathing is dam/catchment, no town water Is used.
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 was emitted for the whole company, a slight decrease of 48 t CO_2e from previous year. Regional Site Energy Summary 2012-2013 shows for FY12-13 was provided.
c	Calculate the total weight of fish in metric tons (MT) produced during the last production cycle.	Total weight of fish in metric tons (MT) produced during last production cycle was calculated
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 Huon Farm Region Biomass Energy Final spreadsheet calculates the biomass for a YC per FY and the % farm production for a YC in a FY then calculates the total year class (YC) biomass from smolt grow-out through to date - the reporting FY - and the total energy consumption and GHG emissions for that YC biomass over the whole grow-out period (i.e. 2 or 3 financial years). The table then works out the energy consumed and GHG produced per tonne for an YC over the whole grow-out period to date. Finally the average energy consumed and GHG for fish harvested in a FY is calculated (reported above) based on the proportional or % contribution of an YC to the harvest tonnage. According to the Huon Farm Region Biomass Energy Final spreadsheet calculates farm energy consumption for year classes.
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 done in compliance with requirements	Tassal Life Cycle Assessment (LCA) FY2011-12 by Amy White

	of Appendix V-1.	
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 The Huon Farm Region Biomass Energy Final spreadsheet calculates 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.	The Huon Farm Region Biomass Energy Final spreadsheet calculates records farm emissions; Site Energy Summary 2012-13 records energy use and GHG emission calculations.
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). The use of a Tasmanian feed producer is important in reducing GHG due to transport (alternative manufacturer is over 24 hrs freight time away (southern Qld.). SKA letter (4/9/14) states that after June 13, 2015, Skretting will declare the GHG emission of the feed (per kg of feed).
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.	SKA letter (4/9/14) states that after June 13, 2015, Skretting will declare the GHG emission of the feed (per kg of feed).
c	If client has more than one feed supplier, calculate the total sum	Noted by Tassal.

	emissions from feed by summing the GHG emissions of feed from each supplier.	SKA letter (4/9/14) states that after June 13, 2015, Skretting will declare the GHG emission of the feed (per kg of feed).
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 CO_2e) being double that of the UK, which is the highest of all of the studies (0.09 t CO_2e), and more than four times those of the Chilean industry (0.04 t CO_2e) which is the lowest 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. SKA letter (4/9/14) states that after June 13, 2015, Skretting will declare the GHG emission of the feed (per kg of feed). Info submitted to ASC.
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 '13 (p27) refers to significant commitment company-wide to stop using antifoulants on all farms by end of FY2014, in fact the last net was removed from another farm site on 25/3/14. There are no antifouled nets at Huon. The last net was removed in 2011 from the Huon farm sites.
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 Huon; thus Farm is exempt from Indicator. Press release on 25/3/14 for final net to be taken from Huon. Tassal have negotiated with EPA and EPA have set a plan for Hawkers Net Slab, regarding 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,	N/A

	maintain documentary evidence (see 4.7.1b) that farm policy and practice does not allow for heavy cleaning of copper-treated nets in situ.	
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 SCSG (8/1/14, 1p) confirming treated nets are not cleaned on land at Huon 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 SCSG (8/1/14, 1p) confirming that copper nets are not used in Huon 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 sediment 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 testing methods, equipment, and laboratories used to test copper level in sediments from 4.7.3b.	N/A
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	N/A

	taken in 4.7.3b that copper levels are < 34 mg Cu/kg dry sediment weight.	
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.	Reviewed MO-175 Fish Health Management Plan – South East and the MO-116 Farm Disease Management and Biosecurity Protocol.
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: Company Veterinarian Fish Health (Oct'12 V1 2p) who advises on animal welfare aspects of operational procedures, has been working with Tassal for 7 years. Senior Manager Fish Health (Jan'12 V1 2p) who started in Sept'14 (ongoing contract, job is to oversee fish health and welfare strategy. Fish Health Field Officer (Apr'13 V1 2p) has been employed since 2013. Responsible for the surveillance and the monitoring of the fish health status in Tassal's farms. Fish Health Technician (Apr'13 V1 2p) has been employed for 4 months. Responsible for developing and maintaining the company's fish health laboratory operations; also provide backup support for quality and safety team; also provide administrative support for the fish health team. Recent CVs for these personnel were also on file. Reviewed Email (10/1/14) re: Pasidium/Q-Pulse document approval process in Tassal`s Database and the processed used for electronic approvals of documents. Screenshots of database show dates and approval of CV and the SMFH who both had input into the FHMP and other procedures. The new SMFH will begin reviewing procedures and other documents with the CV sometime soon.
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.	Reviewed a new Fish Health Team Site Visit Planner (spread sheet) for 2014 which specifies at least monthly visits by the Fish Health Team including one or more of the Fish Health Field Officer, Field Technician, Senior Manager Fish Health or the Company Veterinarian. They can undertake additional visits in response to requests or specific research projects – for example on 10/9/14 the Company Vet and the FH Technician were are TP taking water samples for a joint project with CSIRO to identify AGD organisms in the water.

		Reviewed record of farm site visits by the company veterinarian (- last visit to TP 25/6/14 (surveillance sampling Report #141571 no special records only moderate AGD) & PI only just restocked so visit only 18/7/14. The spread sheet shows 5 visits by the Company Vet to the region (TP & PI as well as smolt sites) over the past 12 months, during this period PI was not stocked for over 3 months; visits are at least one per quarter. Huon MOPs had 9 FHU Reports in 2014, the majority are from the smolt sites, however 2 others reviewed include: - TP 21/7/14 Pathology Report #14/1794 from Animal Health Lab - TP 28/7/14 Final Report #14/2058 from Animal Health Lab Both were part of a general surveillance sampling. No problems identified. Next visit by company veterinarian & new SMFH is being planned for September 2014 for both TP and PI. <u>Minor non-conformity:</u> During the last 2 years, visits by the company vet were not conducted quarterly.
b	Maintain a current list of personnel who are employed as the farm's designated veterinarian(s) and fish health manager(s).	Reviewed updated list of personnel who are employed as the farm's designated veterinarian and fish health manager at onsite visit. The Farm/Region Technical Officer for the region was interviewed at farms taking gills samples and weighing fish on the day of the TP farm visit.
c	Maintain records of the qualifications of persons identified in 5.1.2b.	CVs of the Fish Health Team were on file. Registrations of the two vets provided.
5.1.3 Percentage of dead fish removed and disposed of in a responsible manner		
a	Maintain records of mortality removals to show that dead fish are removed regularly and disposed of in a responsible manner.	Reviewed AQUAVET Plan, Operational procedures Manual Disposal Version 2.0, 2009, which discussed responsible disposal and outlines plan for implementation. Mort Collection is undertaken as per MO-200 Stock, Net Inspection and Mortality Retrieval in use at the farms. Reviewed documents in use at farms including Dive Mortality Report Sheet (MO-F230) Tassal uses “Fish Talk” to record removals and mortalities.
b	Collect documentation to show that disposal methods are in line with practices recommended by fish health managers and/or relevant legal authorities.	Reviewed MO-116 Farm Disease Management and Biosecurity Protocol. Cross checked with operational procedures (see above). Check process on farm – line bins on Mort Bins on Dive Boat, liner seal with coloured zip ties (Blue for Huon), lid on bin and zip tied (Blue) and transfer to Hawkers Chiller before transfer to SeaFish Triabunna (signed agreement in place).

c	For any exceptional mortality event where dead fish were not collected for post-mortem analysis, keep a written justification.	All mortalities of the 11 and 12 YC were classified, reviewed reports of post mortem analyses, however no exceptional events for TP.
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).	Tassal records all mortalities of the site for each year. Fish health manager checked records related to mortality events in 2013 and 2014 (current and previous production cycles), and no significant events recorded. Reviewed other provisional and final reports of examinations conducted by Animal Health Laboratory DPIPWE including: - TP Jul14 Case number 14/2212. - TP 17/7/14 Case number 14/2058. - None for PI, but visit planned for this month
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.	Typically 5 fish are sampled for analyses at each mortality event. All farm mortality events (above normal) have 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 record of the results (5.1.4a).	See 5.1.3 c for specific example.
d	Using results from 5.1.3a-c, classify each mortality event and keep a record of those classifications.	See 5.1.3 c for specific example.
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).	FishTalk Database contained list of all events; at onsite visit all farm mortality events were linked 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 – no viral disease at TP or PI. The folder on Fish Medication Authorities was reviewed and confirmed only FMA on record was for PI for 01/12. The spreadsheet 12YC Mortality Summary – Huon summarises the causes of mortalities including Amoeba, handling, harvested matures etc. However it does not differentiate between the growout sites PI and TP and those mortalities at the smolt sites. This shows 'unknown' causes to be 2.51% of total population and 6.80% of total mortalities. <u>Observation:</u> The spreadsheet 12YC Mortality Summary – Huon does not provide differentiation of mortalities between the two farms and the smolt sites.
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 (see above)
c	Submit data on total mortality and viral disease-related mortality to ASC.	N/A (see above)
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.	Reviewed total mortality estimates from Fishtalk summarised in 12YC Mortality Summary – Huon, which were >6%, so b applies.
b	Calculate the unexplained mortality rate (%) for each of the two production cycles immediately prior to the current	Reviewed summary 12YC Mortality Summary – Huon. Unknown plus decomposed and normal add up to more than 50% of

	cycle. For first audit, calculation must cover one full production cycle immediately prior to the current cycle.	mortality classification. <u>Minor non-conformance:</u> During the most recent production cycle the unexplained mortality was more than 40% of total mortalities.
c	Submit data on maximum unexplained mortality to ASC.	Data were submitted 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.	Reviewed time series of mortality rates per farm as well as demonstration of the database Fish Talk to track and monitor stock including mortalities. MOPs KPIs for 2013 include targets for 12YC and 13YC for survival, BFCR, growth and production costs.
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.	Reviewed specific Fish Health Strategy July 2012 (power point presentation) with specific targets for reduction in mortalities as well as Fish health Strategy Nov'13 (27/11/13) with 18 slides. Staff interviews conducted onsite confirmed awareness with RM and STOs on importance of mortality reduction strategies.
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 of Fish health Strategy are provided to staff (see above) at least once a year. 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;	Reviewed a copy of the Dangerous Goods and Hazardous Substances Register (WHS-F142 updated 28/8/14) for Huon MOPs which is kept on Tassal intranet site- it lists almost 130 chemicals and substances in use. It notes product name and chemical name as well as reason for use, date(s) and amount (g) of product used. The spreadsheet Antibiotic use - Seawater (last reviewed 16/7/14) records all of Tassal's Antibiotic treatments listed by lease. Columns include date, authority (MA) number, authorising Vet, region, farm, drug, quantity of

	- 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.	medication, dose rate, quality of feed, disease, treatment duration, approx. tonnage fish treated, year class, degree days, date residue test if required before harvest, forecast earliest harvest date, degree days and residue testing required. The spreadsheet listed a treatment on 25/7/13. The CV corrected statement that there has been no use of any therapeutants for each farm site over the past 12 months. <u>Minor Non-conformance:</u> Records on chemical and therapeutant use are not always completely correct. <u>Also reviewed files:</u> - WHO classification of antibiotics – 3rd Revision 2011 (38p). - Summary of Tasmanian Salmonid Disease Surveillance Activities 2004/05 to 2008/09 which contains a summary of testing undertaken as part of the Tasmanian Salmonid Health Surveillance Program (TSHSP) for the 5 year period 2004/05 through to 2008/09. The TSHSP is a joint initiative between the DPIPWE and the TSGA that has been in operation since 1993. The program aims to provide a coordinated salmonid disease surveillance program for the whole of Tasmania.
b	If not already available, assemble records of chemical and therapeutant use to address all points in 5.2.1a for the previous two production cycles. For first audits, available records must cover one full production cycle immediately prior to the current cycle.	See above 5.2.1 a.
c	Submit information on therapeutant use (data from 5.2.1a) to ASC.	Information of antibiotic use and other therapeutants was submitted to ASC for other sites.
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].	Reviewed APVMA list of "Substances Not Permitted for use on Food-Producing Animals in Australia". 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 of EU (UK, France) & Norway, USA, Japan plus separate documents for approved therapeutants in Chile & Canada Aquaculture Therapeutant Residue Monitoring List.

b	Maintain records of voluntary and/or mandatory chemical residue testing conducted or commissioned by the farm from the prior and current production cycles.	Reviewed copy of residue monitoring program description and results that SARDI conducts for Tasmanian Salmonid Growers Association (TSGA) 2010-2011, 2011-2012 and 2012-2013.These reports demonstrates that Tassal, through the TSGA program has successfully participated in a SARDI residue monitoring program for the past 3 years; this program has been: - recognised by DAFF Biosecurity as an approved residue monitoring program - has met all requirements set under Council Directive 96/23/EC. The Oct 12 download of the APVMA list of substances not permitted for use on food producing animals in Aust. is on file. In addition the 2013/2014 Aquaculture Salmon Industry Results Report from the Annual National Residue Survey 11/7/14 records *nothing detected* for over 50 Veterinary drugs and animal treatments and over 20 agriculture chemicals and animal treatments.
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).	Documents reviewed include: - Medication Authorities - Tassal Antibiotic treatments document - Antibiotic stocks document (Medicine stock – last entry for PI 27/7/13 treatment – PO, amount orders, where used, expiry and MA to cross reference) - Tassal Antibiotics document - Tasmanian Code of Practice (Jul12 5p) for the supply and use of veterinary chemical products
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).	Reviewed 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 Control of Antibiotic Residue in Harvest Fish 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 correct implementation. Other documents reviewed include:

		- Australian Veterinary Association - Guidelines for prescribing, authorising and dispensing veterinary medicines - Australian aquaculture and wild-caught fisheries residue monitoring program 2012-14 (6p).
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 given for the treatments administered. This was confirmed during interviews with staff and with the company vet in Hobart. The veterinarians are knowledgeable about clearance rates.
c	Show compliance with all withholding periods by providing treatment records (see 5.2.1a) and harvest dates for the most recent production cycle.	MO-110 states that a harvested stock, which falls within a period of two times the stated withdrawal period, will be tested for antibiotic residues. The veterinarians are knowledgeable about clearance rates which was confirmed at onsite audit. These are also documented in the Antibiotic use – Seawater spreadsheet.
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 treatment used at Huon.
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	N/A – no parasite treatment used at Huon.

	does not apply.	
b	Using results from 5.2.5 and the weight of fish treated (kg), calculate parasiticide load in the most recent production cycle.	N/A
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.	Reviewed records of all antibiotics purchased on Medicine Stocks (spread sheet) for the whole company as well as total amounts of antibiotics used for individual farms with details about dosage and duration of treatments. Viewed antibiotic stocks document (Medicine Stocks) to allow continual monitoring of amounts used and amounts in stock. Note: Medication is purchased (Medicine stock document), MA produced by registered veterinarian, sent to Skretting to produce medicated feed, tracked in Huon Region treatment document. Calculate the total amount (g) and treatments (#) of antibiotics used during the current and prior production cycles,
b	Maintain a detailed log of all medication-related events (see also 5.2.1a and 5.2.3)	Viewed spread sheet Antibiotic use - Seawater
c	Calculate the total amount (g) and treatments (#) of antibiotics used during the current and prior production cycles (see also 5.2.9).	Viewed spread sheet Antibiotic use - Seawater
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.	Reviewed copy of current WHO classification of antibiotics – 3rd Revision 2011 (38p) - of critically antimicrobials important for human health medicine. Viewed spread sheet Antibiotic use - Seawater Summer Strategy Checklist (new issue each year, 2p) is developed by Farming Operations Manager in association with FHM Team as summer is a high risk period to warn about potential problem and strategies to overcome these. It has to be signed off by the RMs.
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 critically listed antibiotics used
c	If the farm has used antibiotics listed as critically important (5.2.8a) to treat any fish during the current production cycle, inform the CAB prior to scheduling audit.	N/A
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.	Reviewed records of all antibiotics purchased (spreadsheet), as well as total amounts of antibiotics used for all farms (spread sheet Antibiotic use - Seawater) with details about dosage and duration of treatments. Tassal Antibiotic treatments document: - Current production cycle 13YC Number of treatments – 1 at PI - 12YC (Number of treatments – 1 at TP) - 11YC (Number of treatments – 0).
b	Calculate the total number of treatments of antibiotics over the most	The total number of treatments during the current production cycle (13YC) was 0 at TP and 1 at PI farms.

	recent production cycle.	
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 was only one antibiotic treatment during the current production cycle (13YC) or the last completed production cycle (12YC). The spreadsheet Antibiotic use - Seawater: - 12YC only on one at TP - 13YC only one at PI Tassal confirms need for compliance by 13/6/17 for this Region.
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.	Refer 5.2.10a
c	Provide the auditor with calculations showing that the antibiotic load of the most recent production cycle is at least 15% less than that of the average of the two previous production cycles.	N/A
d	Submit data on antibiotic load to ASC	Data was submitted to ASC.
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 (ES-112 Issue 1 8/1/14 1p) with statement as per the ASC Salmon Standard requirements Therapeutant use is communicated to Tassal's buyers in their annual sustainability reports: - Sustainability Report 2012 (p34) describes the Antibiotic use since 2009 and the total antibiotic use in FY2012 was less than 2% of their use in FY2009. – 2013 Sustainability Report (p32) describes the therapeutants used in production. - new ASC Dashboard on Tassal Website – www.tassal.com.au
b	Maintain records showing the farm have informed all buyers of its salmon about all therapeutants used in	Reviewed copy of Tassal's "disclosure to buyer procedure" (ES 112) and reviewed the Tassal's 2013 Annual Sustainability Report (p32) that includes the therapeutants used in production.

	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 by the CV; in addition treatments are recorded on Fish Talk.
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 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.	N/A
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 PI & TP site (5/28/14) and confirmed that start and end dates are kept. Strategy Day presentations (on Zero Harm for Our People (114 slides) and background discussions on evolution of Tassal's Strategy (56 slides) confirms only single year class at each region.

		From Fish Talk for FY14 observed the fallowing time (%) for PI and TP.
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 and confirmed that only a single year class was stocked: for PI Year Class 14 and for TP Year Class 13 only. No purchase receipts, delivery records in use, rather the Fish Vet Health Certificates are used. Veterinary Health Certificate for Salmonids Destined for Huon Region (2p), examples reviewed include: - #14.001 issued 11/3/14 at Rookwood Rd hatchery. - #14.003 issued 11/4/14 at Rookwood Rd hatchery. Information describes the tanks they were produced in, and can be linked to Fish Talk information on treatments etc. Statement is "The fish have no disease of concern" and is signed and dated by the Company Vet. F Viewed Fishtalk records.
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.	Reviewed TSGA fish health surveillance program and State biosecurity plan which all include actions and reporting for reportable diseases. Documents reviewed include: - Tasmanian State Biosecurity Plan (3/12/10 66p) describes prevention, preparedness, response and recovery arrangements for biosecurity emergencies in Tasmania. - DPIPWE Identification of Anguimonas bacterium (22/6/12 3p) regarding a contaminated vaccine and how to control. - Tasmanian Salmonid Health Surveillance Program 2012/2013 and - Tasmanian Salmonid Health Surveillance Program 2013/2014 covers what the Gov't are providing such as diagnostic facility (Lab) at Launceston - TSGA Biosecurity Management Plan – Rev A (Nov13, 20p).
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 at the farm site. This was confirmed through interviews with company vet and fish health manager at the onsite meeting.
c	Proceed to 5.4.2d if, during the most recent production cycle, either: - results from 5.4.2a showed a	N/A

	statistically significant increase in unexplained mortalities; or - the answer to 5.4.2b was 'yes'. Otherwise, Indicator 5.4.2 is not 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.	Reviewed 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. Regional Manager has been informed of how they can access OIE Aquatic Animal Health Code. Other documents in use include: - ES-109 Biosecurity Zone Alert Levels (10/04/2013, Issue #2) - MO-116 Farm Disease Management and Biosecurity Protocol (06/03/2013, Issue #3) - TB-100 Biosecurity in the operations of TGL (20/03/2013, Issue #10) - Tasmanian Salmonid Health Surveillance Program 2012/2013 - Tasmanian Salmonid Health Surveillance Program 2013/2014 - TSGA Biosecurity Management Plan – Rev A (Nov13, 20p).
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.	Reviewed the Tasmania State Special Emergency Management Plan for Biosecurity Emergencies. In MO-175 there is a red alert the Procedures also includes a list of diseases of concern including 15+ viral, parasitic and bacterial.
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 - No OIE-notifiable diseases confirmed on the farm, refer above including references to MO-175 Fish Health Management Plan (South East) (16/04/2013, Issue #3) and the Tasmanian State Biosecurity Plan.
b	Inform the CAB if an OIE-notifiable disease has been confirmed on the farm during the current production 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.	See above.
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 members, 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 worker 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 Huon Region sites no workers under the age of 18 were employed
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 Huon sites 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 Huon sites 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 Huon 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 Huon sites during the last 3 years.
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 Huon (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, 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 Huon MOPs Dangerous Goods & Hazardous Substances Register (last updated 21/5/14). Additionally, there are lists of non-product hazards in the Huon MOPs Risk and High Risk Task 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: -Huon MOPs Dangerous Goods & Hazardous Substances Register (last updated 21/5/14). -Huon MOPs Risk and High Risk Task Register (6/12/13) Monthly site inspections are conducted by site management and quarterly site inspections are conducted by the 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: -Huon MOPs Dangerous Goods & Hazardous Substances Register (last updated 21/5/14). -Huon MOPs Risk and High Risk Task 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 Huon sites and at Tassal head 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 incidences on a permanent basis. Implementation of the corrective action plan in response to a specific accident was witnessed onsite for the farm sites in the Huon Region.
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 accidents were able to explain each step of the reporting and corrective action process, and this explanation aligned with the documentation kept at the Huon 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, 39p), Dive Plan with DCIEM Worksheet (MO-F670 Issue 4 30/04/10, 1 sheet), Pre-dive Checklist (MO-F659 Issue 4 30/04/10, 1p), and dive log books.
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	Copies of current diver licenses for divers held on file were reviewed. The divers are accredited through the Australian Diver Accreditation Scheme (ADAS).

	international organization for diver certification.	
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 over minimum wage per hour.
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 well over minimum wage 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 labour-only contracts in place.
c	Be advised that workers will be interviewed to confirm the above.	Conformance to the above criteria was 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	Workers may not work more than 7 consecutive full shifts without taking a day off.

	month and there is evidence that employees have agreed to this schedule (e.g. in the hiring contract).	
d	Be advised that workers will be interviewed to confirm there is no abuse of working hours and overtime laws.	Workers who were interviewed confirmed that the hours worked are 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. This was confirmed with HR as well as through interviews of workers.
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 presented in 6.1 through 6.11.	Tassal's corporate policies are aligned with the criteria within Principle 6 of this standard. Additionally, Tassal must comply with all state and 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 the Huon Region farm sites, 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.
a	The farm engages in consultations with the local community at least twice every year (bi-annually).	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. Tassal is also participating in the D'Entrecasteaux and Huon Collaboration, a partnership between councils, industry, environmental management bodies, which seeks to ensure the sustainable management of the D'Entrecasteaux Channel, specifically to ensure: a healthy waterway, and a culture of public stewardship for the waterway. Partners in the Project include: Kingborough Council, Huon Valley Council, TasWater, Tassal, Huon Aquaculture, Derwent Estuary Program, NRM South, International River Foundation, IMAS, CSIRO and DPIPWE.

b	Consultations are meaningful. OPTIONAL: the farm may choose to use participatory Social Impact Assessment (pSIA) or an equivalent method for consultations.	A Social Return on Investment Analysis (SROI) report was prepared on the activities of Huon Aquaculture and Tassal in the Huon-Channel area. This report was funded by the Fisheries Research and Development Corporation, and prepared by RDS partners. The SROI examined the social and economic impact of salmon farming in the Huon-Channel area, and included an extensive community stakeholder engagement process.
c	Consultations include participation by elected representatives from the local community who were asked to contribute to the agenda.	Representatives from the Huon Valley and Kingborough Councils have been included in community consultations, and are participating in the D'Entrecasteaux and Huon Collaboration with Tassal
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. Community can be aware of treatments via the Tassal website, Sustainability Reports and signage on pens/ feed barges at times of treatment. In the future Tassal plans to post community notices through its website when antibiotic treatments are given. Minor non-conformance: Currently Tassal has not consulted with the community regarding potential health risks of antibiotic treatments.
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	Records of complaints maintained in the Tassal complaints database

	complaints is effective based on resolution of stakeholder complaints (e.g. follow-up correspondence from stakeholders).	demonstrated that Tassal's mechanism for handling complaints is effective, and that majority of formal complaints submitted to Tassal are resolved, although not all community members interviewed felt that their complaints had been sufficiently addressed.
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 Huon sites since February 2013, however there is a plan in place to post signage on pens during periods of antibiotic treatments. The same plan has been implemented at Macquarie Harbour, where treatments have taken place more recently.
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 Tassal has not consulted with the community regarding potential health risks of antibiotic treatments. Community can be aware of treatments via the Tassal website, Sustainability Reports and signage on pens/ feed barges at times of treatment.
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.	Tassal's Huon sites do operate in indigenous territory, and there are a number of Aboriginal heritage sites in the area. 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). Tassal has an understanding of the indigenous heritage in the Huon and Channel regions.
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 is compliant 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. Minor non-conformance: Currently there is no consultation with aboriginal groups. As discussed on page 11 of this report, the audit team classified this non-conformance as Minor based upon a detailed description provided by Tassal, and confirmation by the audit team, of Tassal's efforts which highlights the company's commitment and willingness to conduct meaningful and culturally sensitive consultations with indigenous communities
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 consultation with indigenous community leaders or groups (see above). This was confirmed by Tassal.
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 process [153] to reach a protocol agreement with the indigenous community.	Tassal has provided evidence to the CAB that they are in an active process to reach a protocol agreement with the indigenous community via a 3rd party who are offering to broker a relationship.
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, the most applicable being the D'Entrecasteaux Channel itself. Tassal engages with individuals and community organizations that use the channel 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.	Tassal has not undertaken changes that restrict access to vital community resources
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.	Tassal has assessed its impact on access to resources through discussions with community stakeholders about these impacts, particularly its impact on access to the D'Entrecasteaux Channel. Tassal engages with individuals and community organizations that use the channel for a range of purposes, including fishing, diving, tourism, yachting, boating, and general enjoyment of the natural environment. Additionally, Tassal has its Huon MOPs Site Traffic Management Plan and Marine Farm Development Plan which take into account Tassal's impact on access to resources.
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 are mostly sourced from two directly-controlled, fully-owned hatcheries Rookwood Rd (fully recirculation system) and Russell Falls (semi closed); however they can also be sourced from industry owned industry hatchery SALTAS (Florentine and Wayatinah); SALTAS hatcheries (refer 3.4.1 for health certification details). For the current Huon 13YC, the majority of smolt were sourced from Rookwood Rd Hatchery. For 14YC all from Rookwood Rd Hatchery, also planned for 15YC. Smolt are 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 >850 g before transfer to a grow-out pen.
b	Where permits related to water quality are required, obtain copies of smolt suppliers' permits.	Local councils issue EPNs that form the requirements of water quality monitoring and reporting. Hatcheries in Tasmania operate under FFL from Inland Fisheries Service (IFS): - SALTAS Wayatinah Hatchery Fish Farm Licence #26 - SALTAS Florentine Hatchery Fish Farm Licence #40 - Rookwood Rd Hatchery Fish Farm Licence #9 - Russell Falls Hatchery Fish Farm Licence #5 &29 Karanja.
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 both Rookwood Rd and Russell Falls in accordance with section 44(3) EMPCA 1994. Local councils issue EPNs that form the requirements of water quality monitoring and reporting: - Russell Falls EPN #7 (Derwent Valley Council) - Rookwood Road Hatchery EPN # 2008/1 (Huon Valley Council) - Rookwood also operates under Special Plumbing Permit (SPP) # 96/2008 (Huon Valley Council). - Reviewed copy of wastewater disposal system at Rookwood Rd.
d	Verify that farm keeps record to show how smolt producer comply with regulations on discharge and permit requirements related to water quality.	See above.
8.2 Compliance with labour laws and regulations		
a	Obtain declarations from smolt suppliers affirming compliance with	. As fully-owned Tassal operations, both Russell Falls and Rookwood Rd comply with labour laws and regulations as documented under Principle 6.

	labour laws and regulations.	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.	For 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. For Tassal hatcheries: - Reviewed a copy of monitoring of benthic macroinvertebrates monitoring for Tassal Russell Falls Hatchery. - The Environmental Management Plan for the Huon River Hatchery (Rookwood Rd) shows compliance for the Rookwood Road Hatchery since all components outlines in Appendix I-3 are covered.
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.	Overall conditions of the benthic macroinvertebrate communities at both Tassal 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 Huon 12YC shows amounts used in past 12 months for SALTAS & Russell Falls & Rookwood hatcheries. SKA letter (4/9/14) states that annually, Skretting will provide a feed declaration detailing the total amount of phosphorous in their smolt feeds. This allows the Farming Company to be able to calculate the total

		phosphorous discharged per ton of smolt produced. The appropriate product data sheets are provided for each of the feed used - 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). Also reviewed ASC Feed phosphorous declaration (DH 31.18.16 Feed Phosphorus declaration, version 0, 1p)
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).	Viewed Skretting product datasheets
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.	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 P removed as sludge, records for stocking, harvest and mortality of smolt).
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.	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 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 all diploid females 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 smolt to the farm.	Evidence as retained under Principle 3
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 Tassal 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]).	Tassal maintains all records on FishTalk. 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 counters use a scanning camera, 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 (all records are inputted into FishTalk).
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	N/A

	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.	
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 (this includes SALTAS) 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 environmental – 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 production cycle.	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. Estimates for hatcheries were also provided.
	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 d.
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 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 CJ 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 CO_2e was emitted, a slight decrease of 48 t CO_2e from previous year. This LCA included the two Tassal hatcheries.
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 CO_2e was emitted as a result of Tassal's operations in 2011-12. Of this, 38 per cent (9,038 t CO_2e) was scope 1 emissions from the use of fuels on site and in fleet vehicles. A further 18 per cent (4,329 t CO_2e) 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 CO_2e) 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- CO_2 gases to CO_2 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- CO_2 gases to CO_2 equivalents. For FY11-12 the 2 Tassal hatcheries contributed 10% to the total GWP (CO_2e).
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. Both the Fish Health Management Plan - Macquarie Harbour (MO-182 Issue 2 16/4/13, 30) and 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 smolt site Huon (2p) 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.	Health plans 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 diseases that are known to present a significant risk in the region. Before stocking all smolt/fingerlings must have the Veterinary Health Certificate For Salmonids Destined For smolt site Huon (2p) 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* (*Vibrio anguillarum,* Anguimonas) - *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 (26/2/14), 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*.
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	See 8.12 a - Vet certification of smolts ensure that 100% of smolt groups are visually assessed and specimens tested prior to entering the grow-out phase

	smolt should be tested. List shall be supported by scientific analysis as described in the Instruction above.	on farm – Tassal does not test specifically for diseases, just general analysis (histology & microbiology). Also on file is the document "Summary of Tasmanian Salmonid Disease Surveillance Activities 2004/05 to 2008/09" which contains a summary of testing undertaken as part of the Tasmanian Salmonid Health Surveillance Program (TSHSP) for the 5 year period 2004/05 through to 2008/09. The TSHSP is a joint initiative between the DPIPWE and the TSGA that has been in operation since 1993. The program aims to provide a coordinated salmonid disease surveillance program for the whole of Tasmania.
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 (26/2/14), 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.* Visually assessment for 100 % of smolt, they are examined for signs of pathologies, with histology and microbiology on sampled smolt.
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. It also lists the WHO classification of antibiotics and the supplier of the chemicals (AllFarm). The Tassal Antibiotic use log (Antibiotic use - Freshwater up to Jan 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. Reference through FishTalk can provide the destination of the treated smolt. Reviewed log of antibiotics used at each of the 3 hatcheries over the last 3 production cycles. No treatments have occurred at Rookwood Hatchery.
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 of EU (UK, France) & Norway, USA, Japan plus separate documents for approved therapeutants in Chile & Canada Aquaculture Therapeutant Residue Monitoring List.

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. The spreadsheet Antibiotic use - Freshwater records no use of antibiotics at the Huon Regions main smolt supplier, Rookwood Road hatchery, however treatments occurred at SALTAS and records were not available as to whether any of the treated smolt were transferred to Huon sites. <u>Minor Non-conformance:</u> Records on chemical and therapeutant use at the SALTAS hatchery were not available to determine whether any of the treated smolt were transferred to the Huon sites.
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 Tassal 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)" which lists the two in use.
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	No antibiotics listed as critically important for human medicine by the WHO were used on fish transferred to the farms.

	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 Manager at SALTAS with link to OIE Aquatic Animal Health Code. All hatcheries have access to a copy.
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 company-wide (all, including 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. For Rookwood a number of programs are underway, including some that have been undertaken for several years in the Region with the processing plants at Margate and Huonville, including: Huon Valley Little Athletics - Huon Rotary Club - Lions Club of Huon - Huon Show - Huon Eldercare - Huon Expo - Huonville 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) documents on file and available for review include: - 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 minutes, summaries) to show	See above.

	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). Minor non-conformance: Currently there is no consultation with aboriginal groups. As discussed on page 11 of this report, the audit team classified this non-conformance as Minor based upon a detailed description provided by Tassal, and confirmation by the audit team, of Tassal's efforts which highlights the company's commitment and willingness to conduct meaningful and culturally sensitive consultations with indigenous communities.
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 conducting the assessment (8.26a) and obtain evidence for their reliability.	N/A
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	N/A

	concentration established below (see 8.29) or determined by a regulatory body.	
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 saturation.	N/A
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	N/A

	applicable.	
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.	Reviewed copies of the Rookwood Road and Russell Falls water quality monitoring spreadsheets showing at least monthly sampling for both hatchery sites. SALTAS (partially owned by Tassal): No specific parameters specified in regulations. Reviewed 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. The majority of smolt that were stocked in Huon is from that hatchery. However, around 10% of the fish in 13YC came from SALTAS, which is a semi-closed system with a proportion of the water recirculated. Until last month, DO saturation was not measured at SALTAS; weekly records reviewed for 20/8 to 10/9/14 all showing 100% and above.

		Minor non-conformance: Until last month, DO saturation in the effluent was not measured at SALTAS, semi-closed hatchery system that supplied around 10% of the smolt to the Huon 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.	Reviewed copy of recent report on monitoring benthic macroinvertebrates for the Russell Fall Hatchery. This is not relevant for the Rockwood Hatchery as it is a full recirculation system with no discharge. 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	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-	The Tassal LCA report, 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. Reviewed copy of the Huon Valley Council Environmental Protection Notice 2008/1 and the Southern Water Tankered Trade Waste Consent. 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. SALTAS Process Flow Diagram is on file.
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 hatchery 7/9/13 declaring no discharge of biosolids into natural water bodies in the past 12 months. SALTAS biosolids removal documents were reviewed.
d	Obtain records from smolt suppliers showing monitoring of biosolid (sludge) cleaning maintenance, and disposal as described in Appendix VIII-2.	Reviewed 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. 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 Global Services Certification Committee that the Tassal's Huon Sites (MF185 Tin Pot Point and MF 203 Partridge Island) comply with the ASC Salmon Standard v.1.0.

The assessment team presented all evidence to the SCS Global Services Certification Committee after the public comment period on the draft report, which agreed with the assessment team's findings and certification recommendation. A final certification decision was taken by the SCS Certification Committee on the 6th November 2014. Therefore, SCS as the conformity assessment body of record concludes that the two Tassal Sites that are the subject of this report 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 Huon 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 Huon 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 will receive 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 Huon 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 Huon grow-out sites (Tin Pot Point and Partridge Island) currently hold 24 available pen bay positions at each lease. 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 relative to the ASC Salmon Standard V-1.0. Non-conforming elements of the standard are listed in order of Principle and associated Performance Indicators and not in order of magnitude or importance.

Table 3. 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
2.3.1.a	2014	Minor NC	Currently, the feed used at both Huon farm sites is not tested quarterly	Feed has been tested annually by feed supplier as per contractual agreement. At the time of the audit Tassal had implemented internal quarterly testing procedures, but historical evidence was not yet available	Equipment has been purchased and procedure developed and implemented at site. Feed test training for Feed Team Leaders was conducted in August 2014. Quarterly testing results will be available for review at 2015 surveillance audit	Corrective actions to be assessed at the first surveillance 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. The commitment has been made to report any lethal incidents	The new Tassal website includes a tab for all ASC reporting requirements. Any lethal incidents will be reported there within 30 days	Corrective actions to be assessed at the first surveillance audit

				on website within 30 days		
3.1.1.a	2014	Minor NC	There is currently no Area Based Management Plan. The State Biosecurity Plan is in draft only	Dependent on industry participation	Only Tassal and one other operator are located in this region. Working together to develop an industry biosecurity plan that could inform an AMA in the future	Corrective actions to be assessed at the first surveillance audit
4.3.2.b	2014	Minor NC	Not all ingredients of the feeds used at the Huon sites 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 surveillance 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	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 surveillance audit
5.1.6 b	2014	Minor NC	During the most recent production cycle the unexplained mortality was	Following a mortality investigation, Fishtalk was updated with the cause of	Fish Health department to work with Regional Manager to ensure that	Reviewed at the first surveillance audit

			more than 40% of total mortalities.	the mortality	Fishtalk is updated with the causation	
5.2.1a	2014	Minor NC	Records on chemical and therapeutant use are not always completely correct.	Human error	Error was immediately corrected as soon as the error was noted. The records are reviewed regularly (every 3 months)	Reviewed 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 their current website. Although Emergency Response Plans are in place there is currently no communicatio n with specific communities	A series of presentations to community groups regarding Tassal operations to be scheduled for FY2014/FY201 5. These presentations 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 consultation with aboriginal groups	While significant engagement is undertaken in the communities in which Tassal operate, no	Before the first surveillance audit in 2015 Tassal is planning to work with Cradle Coast NRM who are	Corrective actions to be assessed at the first surveillance audit

				engagement strategies have been implemented to consult with aboriginal groups specifically	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	
8.15 c	2014	Minor NC	Records on chemical and therapeutant use at the Saltas hatchery were not available. Therefore, it is unknown whether any treated smolt were transferred to Huon sites.	Medication authority`s numbers relating to that batch of smolt are recorded on the vet smolt certificate but nowhere else in the system.	Medication authority's numbers relating to that batch of smolt are recorded on the vet smolt certificate. Freshwater treatments at the Saltas hatchery will also be tracked on the Freshwater Treatments spreadsheet, noting tank treated and	Reviewed at the first surveillance audit

					fish group number.	
8.23 a	2014	Minor NC	Currently there is no consultation 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	Reviewed at the first surveillance audit
8.33	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 received and procedure implemented, however historical data is not yet available	Before the first annual surveillance audit, the DO saturation will be measured as per ASC requirements	Corrective actions to be assessed at the first surveillance audit

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Appendix 1: Stakeholder Consultation

For each cluster of Tassal farm sites undergoing ASC full assessment (Tassal farming sites in the Macquarie Harbour Region, certified 4th of April 2014, in North West Bay, certified 10th of June 2014, in the Dover Region, certified 4th September 2014 and Tasman Region certified on the 18th September 2014), SCS sought comment and participation from the general public and local community members through direct emailing, posting advisories on the ASC website, and conducting onsite meetings.

Tassal provided SCS with a detailed Stakeholder contact lists in full knowledge that negative and emotive issues would be raised during the audit process.

A cluster of Tassal farms can be defined as a farming region. Tassal has six farming regions in the state of Tasmania. The scope of this report is the current Huon farming region.

The initial audit announcement was posted on the ASC website on the 11th August 2014. Stakeholder consultation for the Huon Region sites commenced on August 12th, 2014 with an email sent to identified stakeholders announcing onsite meetings and requesting comments and participation. SCS thanks all stakeholders who provided input to the assessment process.

Following this initial email, one onsite meeting with stakeholders was held on September 11th in Hobart, Tasmania.

A comprehensive list of stakeholder comments from the previous assessment and the respective responses by the assessment team can be found in Appendix 1 of Aquaculture Stewardship Council Salmon Standard Full Assessment Report for Tassal Operations Pty Ltd: Dover MF 209 and MF201

(http://www.asc-aqua.org/upload/3_20140904_Tassal%20Operations_Dover%20Farms_FINAL.pdf)

Stakeholders were again notified and asked to submit comments when the draft version of this Huon report was posted for a 10-day comment period, which took place in October 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.

The purpose of the Stakeholder consultation is not to provide a balanced assessment of the Company's stakeholder engagement but rather to gather the issues relating to the farm site under assessment and to the company's operations in general. Positive statements regarding the Company's performance in this area have not been recorded here and not all Stakeholders listed provided responses to SCS.

Hobart meeting on 11/09/14 with Attendees and Apologies: Environment Tasmania (Rebecca Hubbard), apologies Susan Westcott (SCAT)

10.1 Stakeholder Issues and CAB responses

Responses to Issues Raised at Stakeholder Meetings for the Huon Farm Sites

Issue	Relevant ASC Salmon Standard Principle or scheme document	Response
Number of minor non-conformances allowed, how many without affecting certification	Certification and accreditation Requirements (CAR v. 1.0)	As a CAB we follow the ASC certification and accreditation requirements to grade minor and major non-conformances. The CAR v 1.0 stipulates that only major non-conformances preclude certification until the major can be closed out. There is no maximum number of minor NCs that would preclude certification.
The ASC standard does not take ecosystem approach into account. Stakeholder suggested to recognise natural values and monitor impacts on them	Principle 2, Principle 3 – (partial)	Principles 2 and 3 focus on ecosystem issues related to the farm, including interactions with wildlife and requirements for area-based management. Tassal participated in the "Your Marine Values" project conducted by IMAS in which areas/items of high value were identified by the community. They are working with the community to maintain the condition of the identified high value components of the marine environment.
Concern was raised over speed of recovery of old farm site is much longer than appears in the published reports. Stakeholder suggested that there is no scientific evidence supporting a fast recovery.	Principle 2	More details about the specific farm site would be required to comment on this issue as speed of recovery is affected by a number of factors, in particular water movement around the farm and quantity of fish and time held at the farm site. IMAS has conducted detailed research on rate of recovery of farm sites with different environmental conditions (see Macleod et al 2002, 2004, 2007, 2008).
Concerns were raised that if the ASC grants variation requests for benthic fauna	Certification and accreditation Requirements (CAR v. 1.0)	Variation requests are integrate parts of a certification scheme. Variations are assessed on merits by a technical team of the ASC

monitoring this would lower creditability of the ASC standard, and should ensure at a minimum that these monitoring or other plans are properly in place before certification		independent of the assessment team. Benthic infaunal monitoring of salmon farms in Tasmania has progressed from routine monitoring on and near the farms (which is now monitored using video recordings based on detailed studies conducted by TAFI) to benthic monitoring in relation to system-wide impacts of farms (15 sites in the Huon and Channel region).
Question was asked what happens if auditors find evidence that Tassal breached their legislative conditions for licensing (environmental) relevant to a certified farm?	Certification and accreditation Requirements (CAR v. 1.0)	If an auditor finds evidence of breach of their license condition at an annual surveillance audit, it is likely that a NC is assigned to Principle 1 performance indicators of the ASC standard. If the condition relates to environmental monitoring that is linked to any of the Principle 2 performance indicators there may be an additional NC assigned. If any potential NC is graded as a major e.g. if the cause was a systematic breakdown of the system, this would result in certificate withdrawal. If the assigned NC is classified as a minor it would need to be closed out at the next surveillance audit to maintain certification.

10.2 Additional Stakeholder Comments Received During the Public Comment Period

Issue	Relevant ASC Salmon Standard Principle or scheme document	Response
Certification process does not offer best practice consultation to gain sufficient and appropriate input from the community for legitimacy. The process of community consultation is ineffectual, and an audit of consultation the costs and benefits needs to occur.	Principle7	These comments have been forwarded to the ASC. The ASC is in the process of further developing guidelines and processes for stakeholder consultation as part of the certification process.