

Report for Tassal Operations Pty Ltd: Dover Region cluster Stringers MF 209 & Redcliffs MF 201

*First Surveillance Audit
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

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ONSITE DATES: 23-25 November 2015

REPORT ISSUED: March 11, 2016

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Acronyms

ABM	Area Based Management
ABN	Australian Business Number
ACN	Australian Company Number
AGD	Amoebic Gill Disease
AMA	Area Management Agreement
AMAMG	Area Management Agreement Management Group
AMBI	AZTI Marine Biotic Index
ANZECC	Australian and New Zealand Environment and Conservation Council
APVMA	Australian Pesticides and Veterinary Medicines Authority
ASC	Aquaculture Stewardship Council
ASI	Accreditation Services International
ASX	Australian Stock Exchange
ATO	Australian Taxation Office
AWU	Australian Workers' Union
AZE	Allowable Zone of Effect
BAP	Best Aquaculture Practices
BEMP	Broadscale Environmental Monitoring Plan
BOD	biochemical oxygen demand
BQI	Benthic Quality Index
CAB	Conformity Assessment Body
CoC	Chain of Custody
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DO	Dissolved Oxygen
DPEMP	Development Proposal and Environmental Management Plan
DPIPWE	Department of Primary Industry, Parks, Water and Environment
eFCR	Economic Feed Conversion Ratio
EHN	Epizootic haematopoietic necrosis
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EPA	Environmental Protection Authority
EPN	Environment Protection Notice
EUL	Estimated Unexplained Loss
FCR	Feed Conversion Ratio
FFDRo	Fish Oil Forage Fish Dependency Ratio
FFDRm	Fishmeal Forage Fish Dependency Ratio
FHMP	Fish Health Management Plan
FHU	Fish Health Unit
FIP	Fisheries Improvement Project
FM	Fish Meal
FO	Fish Oil
FRDC	Fisheries Research & Development Corporation
FY	Financial Year
GHG	Green House Gas
GJ	Gigajoule
GMO	Genetically Modified Organism
HAC	Huon Aquaculture Company
HO	Head Office
HOG	Head On Gutted
HoS	Head of Sustainability and Fish Health

HPLC	High-performance liquid chromatography
IALA	International Association of Marine Aids to Navigation and Lighthouse Authorities
IFFO RS	The International Fishmeal and Fish Oil Organisation - Responsible Supply
IFS	Inland Fisheries Service
IHN	Infectious haematopoietic necrosis
BKN	Bacterial kidney disease
IMAS	Institute of Marine & Antarctic Studies, University of Tasmania
IMS	Integrated Management System
IPN	Infectious pancreatic necrosis
ISA	Infectious salmon anaemia
ISEAL	International Social and Environmental Accreditation and Labeling Alliance
ISO	International Organization for Standardization
IUCN	International Union for Conservation of Nature
kWh	Kilowatt Hour
LCA	Life Cycle Analysis/Assessment
MF	Marine Farm
MFD	Marine Farming Development Plan
MOP	Marine Operations
MSDS	Material Safety Data Sheets
MT	Metric Ton
mWh	Megawatt Hour
NC	Non-conformity
NES	National Employment Standards
NRM	Natural Resource Management
OTC	Oxytetracycline
PPE	Personal Protective Equipment
QA	Quality Assurance
RLO	Rickettsia
RM	Regional Manager
SAD	Salmon Aquaculture Dialogue
SARDI	South Australian Research and Development Institute
SHWG	Salmonid Health Working Group
SOMV	Salmon Orthomyxovirus
SOP	Standard Operating Procedure
SPC	Soy Protein Concentrate
TARFISH	Tasmanian Association for Recreational Fishing
TASI	Tasmanian Aboriginal Site Index
TCT	Tasmanian Conservation Trust
TIMS	Tassal's Integrated Management System
TPDNO	Total Permissible Dissolved Nitrogen Output
TSGA	Tasmanian Salmonid Growers Association
TSIC	Tasmanian Seafood Industry Council
WDP	Waste Disposal Plan
WHS	Work Health and Safety
WIP	Wildlife Interaction Plan
WPA	Workplace Partnerships Agreement

1 Summary

The Tassal Operations Pty Ltd.'s (Tassal) salmon culturing cluster sites within the scope of this first surveillance audit, marine farms MF 201 Redcliffs and MF 209 Stringers, in and near Port Esperance in the D'Entrecasteaux Channel, showed very 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 progress against the 13 non-conformities (NCs) identified during the full assessment of the Stringers and Redcliffs farm sites and improvements following the action plans were assessed during this first surveillance audit.

During the full assessment in 2014 the following non-conformities were observed: four NCs in Principle 2 (Conserve natural habitat, local biodiversity and ecosystem function), one related to feed testing, one to a specific biodiversity-focused impact assessment which has not been conducted at the Dover sites, one about reporting of lethal incidents and one about marine mammal mortality greater than 2. There was one NC in Principle 3 (Protect the health and genetic integrity of wild populations) which was about the development of an area based management plan. 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 were three NCs in Principle 5 (Manage disease and parasites in an environmentally responsible manner). The first related to the frequency of farm site visits by the company vet, the second to virus related mortality which was higher than 10% at the farm sites and the third one related to farm sites having fish from single year classes. Three NCs were identified in Principle 7 (Be a good neighbor and conscientious citizen): the first one dealt with having meaningful community engagement, the second was about informing the community regarding antibiotics treatments and potential health risks and the third was about consultations with aboriginal groups. One NC was identified in Section 8 (Requirements for suppliers of smolt) about dissolved oxygen (DO) measurements in effluent of the semi-open hatchery system at Russell Falls.

The review of corrective actions at the 2015 surveillance audit resulted in the closure of 12 NCs from 2014. One Minor NC against Principle 2 was upgraded to a Major NC despite efforts to close the NC. One new Minor NC was identified in Principle 8 (Manage Disease and Parasites in an Environmentally Responsible Manner).

2 Background of Farm and updates to Farming operations

Tassal is the largest salmon aquaculture company in Australia, employing over 950 people. A vertically integrated company, Tassal operates two salmon hatcheries, three processing facilities, two retail outlets and marine farms in six regions throughout the state. Tassal is producing salmon predominately for the Australian market, and has a retail presence in over 3,357 outlets around Australia. Tassal Group Pty Ltd is an ASX 200 public company listed on the Australian Securities Exchange.

In the Dover region, MF 201 Redcliffs is a grow-out site stocked primarily with juvenile fish from MF209 Stringers. At the time of the audit it held 23 pens of fish. MF 201 Redcliffs is located in the

D’Entrecasteaux Channel in depths of 23-26 meters and is 50.99 Ha in size (see Figure 1). The lease period started in 2004 and is valid until 2034.



Figure 1. Map A: Area that contains the 2 sites (MF 209 and MF 201) in Dover (indicated by black box), Tasmania, Australia. Map B: Close-up location of the lease sites (MF 209 and 201). Other sites are not included in unit of certification and not used for grow-out.

MF209 Stringers, located at the entrance to Port Esperance in the D’Entrecasteaux Channel (Figure1), is a smolt (juvenile salmon) input site that receives smolt directly from one of Tassal’s hatcheries. It currently has 14 cages of fish. These smolt are ongrown to approximately 2 kg before being moved out to MF201 Redcliffs. The lease area of Stringers is 24.78 Ha and depth ranges from 17 to 40 m at the lease. The lease period started in 1999 and is valid until 2029.

Tassal farms Atlantic salmon (*Salmo salar*) in open net cage farming systems. At the site, polar circle pens, 120m in circumference, are used with densities of 15 kg/m³ maximum following internal Tassal policies. The following time is based on feed input from the preceding 12 months and benthic survey (see below environmental monitoring for more details).

Environmental Monitoring

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

On and near the farm: All salmon farms in Tasmania must conduct an annual video survey of the seabed in and near their lease to assess that the farm is not having an unacceptable impact on the local benthic environment. Details of the filming procedure for the video monitoring are specified in Schedule 3 of Marine Farming License conditions. Spot dives, generally six in total, are conducted at

compliance sites as specified by DPIPWE; these sites are mostly at 35 m from the boundary of the lease area and in the down current direction. Six video surveys are also conducted inside the lease area which must include sites that have been subjected to the heaviest stocking pressure (highest feed input prior to fallowing or in previous 12 months) and are filmed from the edge to the centre of the cage. The license specifies significant visual impacts which must not occur within the lease area—excessive feed, bacterial mats or spontaneous gas bubbling from the sediment; and beyond the boundary of the lease area - presence of feed pellets, bacterial mats, gas bubbling, or numerous opportunistic polychaetes on the sediment surface. If a significant visual impact is detected, then additional environmental monitoring is likely to be triggered.

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

Since the 2014 full assessment of the Dover Region site against the ASC Salmon standard, where 13 non-conformities were identified, Tassal has implemented several new procedures to address these findings. These include:

- Testing feed on a quarterly basis;
- Written a biodiversity-focused impact assessment for the Dover region;
- Updating lethal incidents monthly on the Tassal website;
- Improved mesh netting design and material on cages reducing seal and bird mortalities;
- Quarterly visits of fish health team;
- Improved fish health surveillance with the Zero Harm for Fish Policy;
- Writing a regular community newsletter;
- Increased consultation with aboriginal groups;
- Dissolved Oxygen is measured monthly at the hatcheries;
- Engaged the community stakeholders during site expansion;
- Engaged the community with a Q&A at a local school.

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 - <i>Salmo salar</i>)
Audit Scope	Marine farm-level production at MF 201 Redcliffs and MF 209 Stringers cluster
Receiving Water Body	D'Entrecasteaux Channel, Southern Tasmania, Australia

4 Audit Plan

4.1 Previous Audits

Tassal received ASC certification for the Dover Region cluster on September 4th, 2014.

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

4.2 Names of the Auditors

The following auditors comprised the assessment team: Dr. Christine Crawford and Joseph Kochanski.

Dr. Christine Crawford, Technical Expert

Dr. Christine Crawford has over thirty years' experience in shellfish and finfish aquaculture, including hatchery and intertidal shellfish production, 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.

Joseph Kochanski, SCS Global Services – Social Auditor

Joseph Kochanski is an Associate at SCS Global Services, specializing in social and Chain of Custody auditing. He is a Fair Trade USA trained auditor, with a focus on audit projects in Australasia. Joseph has led a wide variety of audits since completing his ISO 9001:2008 Lead Auditor course in 2010 which have ranged from MSC to FSC Chain of Custody projects. Joseph graduated from the University of Wisconsin-Madison in 2007 with a degree in Environmental Sociology. He now helps administer the Sustainable Seafood program for SCS Australia branch office.

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

Dr. Daume is responsible for leading SCS's Sustainable Seafood Certification program in Australia which includes aquaculture and fishery certification 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 produced interactive training materials for the industry and led industry workshops.

4.3 Audit Plan as Implemented

The general steps followed were:

Onsite Audit and Meetings with the company staff (November 23th-25th, 2015)

SCS planned for and conducted meetings at Tassal's central office in Hobart, Tasmania, Australia. Day 1 involved an opening meeting and discussions with HQ staff in Hobart in the morning, followed by a visit to the Dover region operations facility and farm sites in the afternoon. On day 3 further discussions, document and records reviews, and assessment of non-conformities were conducted, followed by a closing meeting.

Gathering of evidence (November 2015)

The client submitted evidence for the audit team's review via a shared Dropbox folder. This included documents, reports, internal protocols and procedures, all of which were received prior to or during the site audit.

Drafting the report (December 2015)

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

Review of the report (December 2015 – January 2016)

The complete draft report was submitted to the client for review. The draft report included a list of closed non-conformities along with new findings from the

surveillance audit. The client was requested to include a root cause analyses as well as action plan to close out any new minor non-conformities.

Release of Draft Report (March 2016)

SCS released the final report for posting on the ASC website.

4.4 Staff Interviews

The Table below summarizes the staff interviews that were conducted at Tassal head office (HO) and at the land based office for the Dover first surveillance audit.

Table 1. Summary of Worker and Management Interviews

Table 1: Summary of Worker and Management Interviews
Environmental Certification and Sustainability Officer
Community Engagement Officer
Head of Sustainability and Fish Health
Senior Manager of Fish Health
Senior Manager of Farming
Aquaculture Consultant
Regional Manager
Senior Team Leader
Farm Worker 1
Farm Worker 2
Diver 1
Diver 2
Diver 3

5 Findings

This first surveillance audit concentrated on the non-conformities identified during the full assessment for Dover Region cluster against ASC Salmon Standard V1.0 and these are reported below. Compliance with other criteria for ASC certification were also considered during the surveillance audit.

Criterion	Year	Category	Summary of Finding	Client Root Cause Analysis	Client Action Plan	Deadline
2.3.1	2014	Minor NC	Currently, the feed used at the sites is not tested quarterly.	Feed has been tested annually by feed supplier as per contractual agreement. At the time of the audit Tassal had implemented internal quarterly testing procedures, but historical evidence was not yet available.	Equipment has been purchased and procedure implemented. Training scheduled for August 2014. Testing will be conducted quarterly going forward	Corrective actions to be assessed at the first surveillance audit

<p>Progress against action plan:</p> <p>The Procedure for testing feed, MO-374, and the measurements of % fines in feeds for the previous 12 months were reviewed. No measurements were taken between February and October 2015. As testing was not conducted quarterly this is elevated to a major NC.</p> <p>Supporting Documentation Submitted:</p> <ul style="list-style-type: none"> • Dover Region cluster farms percent fines test results • Records of equipment purchased to support testing - scales, sieve lids and pans • MO-374 Quarterly Calculation of Percentage Fines in Feed <p>Status of NC: OPEN, upgraded to MAJOR Christine Crawford, 25 November 2015 (Draft Report submitted to client on January 18, 2016)</p>
<p>Client Root Cause Analysis: Root cause identified as time constraints and not understanding requirements fully.</p>
<p>Client Action Plan: Environmental Certification and Sustainability Officer met with Zone Managers to discuss action and has set up quarterly reminders in outlook for Feed Team leaders to conduct testing on their advice. Officer will follow up before the end of each quarter to ensure all tests are being completed.</p>
<p>Deadline: 3 months – April 18, 2016</p>
<p>Audit Team Response: CAP accepted and NC CLOSED by C. Crawford, 11 March 2016</p>

Criterion	Year	Category	Summary of Finding	Client Root Cause Analysis	Client Action Plan	Deadline
2.4.1	2014	Minor NC	Biodiversity-focused impact assessment is currently not conducted at the Dover sites	Currently Biodiversity impact assessments are only required by the regulator when a marine farming lease or zone is being amended.	Tassal is working with consultants to conduct biodiversity focused impact assessments that encompass all active leases	Corrective actions to be assessed at the first surveillance audit

<p>Progress against action plan:</p> <p>Tassal have completed a Biodiversity Impact Assessment for the Dover region which was made available during the audit.</p> <p>Supporting Documentation Submitted:</p> <ul style="list-style-type: none"> • Biodiversity-focused impact assessment, Dover farming region, Tassal Operations Pty Ltd., November 2015 • Copy of FRDC project “Managing ecosystem interactions across differing environments: building flexibility and risk assurance into environmental management strategies” which documents Tassal’s involvement in the research. <p>Status of NC:</p>
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CLOSED Christine Crawford, 25 November 2015

Criterion	Year	Category	Summary of Finding	Client Root Cause Analysis	Client Action Plan	Deadline
2.5.5.b	2014	Minor NC	Currently, information about lethal incidents is not made publically available within 30 days.	Historically, Tassal has reported lethal incidents annually in their Sustainability Report. As per ASC requirements, Tassal has made a commitment to report any lethal incidents on their website (www.tassal.com.au) within 30 days.	A new website will include a tab for all ASC reporting requirements. Any lethal incidents will be reported there within 30 days. New website was launched June 2014.	Corrective actions to be assessed at the first surveillance audit

Progress against action plan:

Lethal incidents are now updated monthly on the Tassal website in the ASC Dashboard.

Supporting Documentation Submitted:

- ASC Dashboard updated monthly - please refer ASC Dashboard on Tassal website (most recent updates for September 2015)

Status of NC: CLOSED Christine Crawford, 25 November 2015

Criterion	Year	Category	Summary of Finding	Client Root Cause Analysis	Client Action Plan	Deadline
2.5.6.c	2014	Minor NC	At the Dover farm site, the marine mammal mortality is greater than 2 over prior 2 years	Wildlife interactions inevitably occur at salmon farms, as farmed salmon is a tempting protein rich source	Tassal is committed to reducing interactions with wildlife at our marine farms, especially interactions that result in mortalities. Tassal has two full-time wildlife management officers and team of casual staff responsible for managing interactions between wildlife and our salmon.	Corrective actions to be assessed at the first surveillance audit

					<p>The most effective way to reduce interactions with wildlife is to prevent them from entering our sea pens. We utilise a number of passive strategies including:</p> <ul style="list-style-type: none"> •Highly tensioned nets that help to prevent seals chewing through the nets •Seal proof bird netting, which acts as an exclusion measure for birds and is strong enough to prevent seals from jumping into the pens. <p>We continue our work with researchers and international experts to find better ways of preventing interactions with seals and we are currently rolling out the very latest in net design across our farms through the use of Kikko nets. By the end of June 2014, we will have over 100 kikko nets in the water.</p>	
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Progress against action plan:

Dover region two-year running total for mammal mortality is now less than 2. The last seal mortality was in July 2014 at Stringers Cove.

Supporting Documentation Submitted:

- Dover Region wildlife - two year running total by lease and mortalities per month at each lease

Status of NC: CLOSED Christine Crawford, 25 November 2015

Criterion	Year	Category	Summary of Finding	Client Root Cause Analysis	Client Action Plan	Deadline
3.1.1a	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

Progress against action plan:

Evidence of progress on Area Management Agreement in South Eastern Tasmania was provided, including the documentation listed below

Supporting Documentation Submitted:

- Draft Tasmanian Salmon Health Surveillance project Agreement
- Tasmanian Salmonid Growers Association Biosecurity Program
- Aquatic Animal Health Centre of Excellence Strategic Plan 2014–19
- Minutes of various relevant meetings, including Biosecure Fish Facility Management Committee
- Letter from Dr Adam Main, CEO Tasmanian Salmon Growers Association, confirming progress on an AMA in South Eastern Tasmania, in particular that the TSGA Biosecurity Program was ratified in December 2014.

Status of NC: CLOSED Christine Crawford, 25 November 2015

Criterion	Year	Category	Summary of Finding	Client Root Cause Analysis	Client Action Plan	Deadline
4.3.2.b	2014	Minor NC	Not all ingredients of the feeds used at the Dover region 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

Progress against action plan:

Skretting, which supplies all feed to Tassal has recently been assessed as meeting the requirements of ASC salmon standard Principle 4 for feed. A copy of their certificate from SGS for 2015-16 was provided. Invoices from Skretting to Tassal for ASC certified feeds with dates of invoicing and delivery were observed.

Supporting Documentation Submitted:

- Q2, Q3, Q4 2014 Skretting ASC Feed Certificates
- Q1, Q2, Q3 2015 Skretting ASC Feed Certificates

Status of NC: CLOSED Christine Crawford, 25 November 2015

Criterion	Year	Category	Summary of Finding	Client Root Cause Analysis	Client Action Plan	Deadline
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5.1.2.a	2014	Minor NC	During the last 2 years, visits by the company vet were not conducted quarterly.	Historically, the Fish Health team (including company vet) have visited Tassal regions as required with no specific schedule in place. This process has been implemented; however, there is no historical evidence to support this. At the time of the audit Tassal had implemented quarterly vet visits at this region, but historical evidence was not yet available.	Before the first surveillance audit in 2015, the fish health team will visit site quarterly, as per site visit planner.	Corrective actions to be assessed at the first surveillance audit
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Progress against action plan:

Tassal has full-time trained technical health reps at each site. The Senior Manager of Fish Health (company veterinarian) visits each farm approximately every three months and site visit schedule for 2014-2015 was observed. The schedule of farm visits for former company fish veterinarian was also observed.

Supporting Documentation Submitted:

- Site visits 2014-15 (company veterinarian)
- Site visits 2014-15 (former company veterinarian)

Status of NC: CLOSED Christine Crawford, 25 November 2015

Criterion	Year	Category	Summary of Finding	Client Root Cause Analysis	Client Action Plan	Deadline
5.1.5	2015	Minor NC	Viral-related diseases > 10% of total mortalities	POMV	Vaccine, research, surveillance program, development of in-house fish health lab and team	Corrective actions to be assessed at the next surveillance audit

Progress against action plan:

Viral-related diseases were not recorded as occurring in 13YC. At the time there was no diagnostic test for POMV and it took approximately 1.5 months to get results. Fishtalk is locked at end of each month – so data can't be

altered historically. The majority of mortalities were classified in the ‘unknown’ category. Total unknown mortalities were < 40%. There is now a rapid diagnostic test and PCR is included in monthly surveillance.

Documentation provided included :

Data and graphs of the different types of mortalities for 13YC at Redcliffs.

Status of NC: Closed Christine Crawford, 25 November 2015

Criterion	Year	Category	Summary of Finding	Client Root Cause Analysis	Client Action Plan	Deadline
5.4	2015	Minor NC	Not all fish at the Dover sites are from single year class	SOMV	Vaccine, research, surveillance program, development of in-house fish health lab and team	Corrective actions to be assessed at the next surveillance audit

Progress against action plan:

A variance request was submitted to ASC that outlined the different growing conditions and disease profiles for Atlantic salmon in the Southern Hemisphere and a different approach to fish health management based on detailed risk assessments. This approach was considered to meet the intent of the standard and potentially lead to better fish health conditions.

The variance request was approved by ASC on 27/10/2015.

Documentation provided included :

- **Tassal’s ASC Client Action Plan Single Year Class Stocking**
- **Variance request and ASC’s determination**

Status of NC: CLOSED Christine Crawford, 25 November 2015

Criterion	Year	Category	Summary of Finding	Client Root Cause Analysis	Client Action Plan	Deadline
7.1.1.b	2014	Minor NC	Stakeholders indicated that community consultations are not meaningful.	Whilst significant engagement is undertaken in the communities in which Tassal operates, it is recognised that not all stakeholders will be satisfied with the outcomes of stakeholder consultations. (note: for the purposes of these (audit related) stakeholder meetings, only issues were documented (positive comments were not sought)	Tassal will continue to engage and consult with communities. Issues raised in these stakeholder consultations will inform future engagement and consultation with communities.	Corrective actions to be assessed at the first surveillance audit

Progress against action plan:

Since the 2014 certification audit, Tassal opted to begin using a new site for aquaculture production. While this is not yet included in the scope of this ASC certificate, it is managed by the Dover staff. The site had an existing lease from approximately 10 years ago, but had not been used as a farm site until recently. While they were able to start farming immediately, the company went through a stakeholder outreach process which demonstrates that the managers of the Dover certificate are actively engaging with the community. Moreover, the result of these meetings was a shifting of the farm site so that it was further out of view from a proposed resort area. Ultimately, Tassal consultation with the community proved to be meaningful as they fully adjusted their original plan to accommodate stakeholder concerns. Further consultations are planned for Stringers and Redcliffs.

Status of NC: CLOSED – Joseph Kochanski, November 23, 2015

Criterion	Year	Category	Summary of Finding	Client Root Cause Analysis	Client Action Plan	Deadline
7.1.1.d and 7.1.3.c	2014	Minor NC (Upgraded to Major at 2015 surveillance audit)	Currently there is no direct communication with the community regarding antibiotic treatments and potential health risks.	Historically, Tassal has reported antibiotic use and supplied relevant information annually in their Sustainability Report. There is also information supplied on Tassal's current website (updated June 2014). Although Emergency Response Plans are in place, there is currently no	A series of presentations to community groups regarding Tassal operations to be scheduled for FY2014/FY215. These presentations if relevant to antibiotic use in the region, to include information regarding potential health	Corrective actions to be assessed at the first surveillance audit

				communication with specific communities.	risks associated with antibiotic treatments	
<p>Progress against action plan:</p> <p>Tassal has not used antibiotics or other therapeutic treatments at its Dover site since the 2014 certification audit. As such, they have not needed to execute the proposed CAP for this NC and these requirements are currently not applicable.</p> <p>Status of NC: CLOSED. Joseph Kochanski, November 23, 2015</p>						

Criterion	Year	Category	Summary of Finding	Client Root Cause Analysis	Client Action Plan	Deadline
7.2.2.a, b	2014	Minor NC	Currently there is no consultations with aboriginal groups	While significant engagement is undertaken in the communities in which Tassal operate, no engagement strategies have been implemented to consult with aboriginal groups specifically	Before the first surveillance audit in 2015 Tassal is planning to work with Cradle Coast NRM who are prepared to assist Tassal in forming a relationship with one of the indigenous organisations (Aboriginal Land Council of Tasmania). An initial framework for the relationship will be the inclusion of sites of aboriginal cultural significance in Tassal's employee induction package	Corrective actions to be assessed at the first surveillance audit

<p>Progress against action plan:</p> <p>Since the 2014 certification audit, Tassal has been collaborating with local Aboriginal Leaders. Meetings with the Aboriginal Land Council of Tasmania (ALCT) have extended beyond the scope of this Standard, while also covering economic and commercial development opportunities for the indigenous community. Lines of communication between the two parties are fully open and additional face-to-face meetings have been planned for 2016.</p> <p>Status of NC: CLOSED. Joseph Kochanski, November 23, 2015.</p>						
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Criterion	Year	Category	Summary of Finding	Client Root Cause Analysis	Client Action Plan	Deadline
8.33.b	2014	Minor NC	DO saturation is not currently measured at Russell Falls and SALTAS, semi-closed hatchery systems that supplied some smolt to the farm site.	Alternate process currently being followed. Task specific equipment not yet received	Before the first annual surveillance audit, the DO saturation will be measured as per ASC requirements.	Corrective actions to be assessed at the first surveillance audit

Progress against action plan:

Records of DO in the outfall at the Russell Falls and SALTAS hatcheries were reviewed. Diagrams of hatcheries showing the location of DO sampling sites were provided; however, the location of sampling is not provided on the form with DO recordings. This should be included in future. Saltas DO outflow results at Wayatinah and Florentine available from January 2015, now being measured weekly.

Supporting Documentation Submitted:

- Russell Falls results (Russell Falls & Karanja), Saltas Results (Wayatinah & Florentine)

Status of NC: CLOSED Christine Crawford, 25 November 2015

Criterion	Year	Category	Summary of Finding	Client Root Cause Analysis	Client Action Plan	Deadline
8.4 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	2015	Minor NC	The spread sheet Phosphorus release - RF - Calendar years 2013 & 2014 records the Total phosphorus discharged per ton of smolt produced for 1/1/14 to 31/12/14. The result is greater than the ASC Requirement of 5kg/mt (until 2015) and 4kg/mt thereafter	Total phosphorus release per ton of smolt was higher in calendar year 2014 then the previous calendar year 2013 because no sludge was removed in this time. Tassal experience administrative delays in getting accurate results from lab to calculate total phosphorus release for Saltas as the service provider who removed the sludge was the	Tassal is currently developing a proposal and have council approval to install a drum screen on the effluent at Russell Falls. Tassal has gained permission from Saltas to have access to lab results from service providers removing sludge at their sites. Tassal is also working with the EPA on a 10 year	To be reviewed at the first surveillance audit

owner of the lab
resultswater quality
plan

Calculations of total phosphorus released per ton of smolt produced show that for 1/1/14 to 31/12/14 for Russell Falls it was greater than the ASC Requirement 5kg/mt (until 2015) and 4kg/mt, thereafter.
No calculations have been provided for Saltas for the 2014 calendar year.

Status of NC: OPEN (new) Christine Crawford, 25 November 2015

6 Results and Conclusions

It is SCS's view that Tassal Operations Pty Ltd.'s (Tassal) salmon cluster sites, Dover Region MF 209 Stringers and MF 201 Redcliffs, continue to meet the salmon standard of the ASC (V. 1.0) and comply with the 'Requirements for Continued Certification,' with the exception of one minor non conformity upgraded to a major, and one new minor NC. A mutually agreed upon action plan shall be submitted to SCS. Corrective actions must be submitted within 3 months of the submission of the audit report for the one (1) Major NC, while corrective actions for the new Minor NC will be evaluated at the 2016 2nd surveillance audit.

7 References

DPIPWE (2002) D'Entrecasteaux Channel Marine Farming Development Plan February 2002.

Available at http://dpiipwe.tas.gov.au/Documents/D%27Entrecasteaux_-MFDP_-Feb02.pdf

SCS Global Services (2014). Report for Tassal Operations Pty. Ltd: Dover Region, MF 209 Stringers and MF 201 Redcliffs. Full assessment against Aquaculture Stewardship Council (ASC) Salmon Standard V1.0. Available at: http://www.asc-aqua.org/upload/3_20140904_Tassal%20Operations_Dover%20Farms_FINAL.pdf

NOTE: No sections of this audit report has been omitted due to confidentiality reasons.