

Introduction

TASSAL GROUP is the largest vertically integrated seafood producer and Blue AgTech business in Australia. With more than 35 years' experience in responsible aquaculture, our passion drives our commitment to meet the growing market and customer demand for healthy, sustainable and nutritious food.

TASSAL GROUP was recently ranked in the top 15 global sustainable protein producers (source: FAIRR 2021).

The Tasmanian salmon industry contributed over \$1 billion annually in direct value to the Tasmanian economy, the highest value food product (source: Tasmanian Government Agri-Food Score Card 2019-20). The industry spends approximately \$500 million on local Tasmanian suppliers each year - these suppliers are a critical part of Tasmanian manufacturing, transport and ag-tech industries (source: TSGA, 2021). The industry is one of the leading employment opportunities for regional Tasmanians – with one in twenty Tasmanians directly or indirectly employed by the industry (source: TSGA, 2021). Our workforce includes world leaders. Best in class across IT, farming, safety, marine science, aquaculture, animal husbandry, engineering with many having come from Tasmanian training and education pathways.

We are no different to any Australian farmer. We care for our stock, the environment, our workforce, the communities we work in.

Salmon farming is a highly regulated and ethical practice. Farmed salmon is the global leader in feed conversion ratios for animal protein production. Farmed salmon has one of the lowest climate footprints of all animal protein sources (source: Tassal Sustainability Report 2021). Aquaculture is an eco-efficient alternate to meat and is an integral part of Australia's sustainable food systems.

Globally, with increasing pressures on our planet, access to arable land restrictive and wild fisheries plateauing from protecting vulnerable stocks, a key aspect to the future of the world's food supply is aquaculture.

Tassal commitment to biosecurity

We welcome the opportunity to comment on the Regulatory Impact Statement (RIS), the draft Biosecurity (Salmonid Biosecurity Zones) Regulations 2022 and the draft Biosecurity Program: Tasmanian Salmonid Industry.

TASSAL GROUP has forged its own biosecurity journey including single yearclass farming, fallowing of farms, biosecurity management systems, dedicated animal health & welfare teams and we are committed to good biosecurity guardianship of the areas in which we operate.

Submissions on the consultation documents

Draft Biosecurity (Salmonid Biosecurity Zones) Regulations 2022

We have no specific comments to make on the draft regulations, apart from noting the inclusion of a regulation authorising specific acts for the purpose of Part VI of the Competition and Consumer Act 2010, which is necessary to enable implementation of a number of the proposed Standards of the Biosecurity Program.

Biosecurity Program: Tasmanian Salmonid Industry (Draft for Public Consultation)

We have the following comments on the Operating Standards contained in Draft 1.2 of the Biosecurity Program: Tasmanian Salmonid Industry (the Program).

In their current form, some of these standards represent a risk to the success of aspects of the Program, because they do not necessarily reflect an intimate knowledge of the industry. This means some operating standards are:

- not appropriate for application to industry activities;
- do not achieve the original or stated intention for certain biosecurity measures elaborated in the industry blueprint;
- too detailed, restrictive or prescriptive instead of being objective focussed, and could instead be better written as more objective standard with more specific and explanatory guidelines.

TASSAL GROUP supports the submission of the Tasmanian Salmonid Growers Association (TSGA).

General comment on Standards – Lease Space Optimisation and Exemptions

As outlined above, when the original blueprint that formed the basis for the operating standards was written, there was an agreed understanding between industry and government that lease space optimisation would be required to permit some improved outcomes. This does not appear feasible in the immediate term, due to the moratorium and the 10 Year Plan process.

In the absence of lease optimisation, some industry exemptions allowed for within the operating standards, may be required on an ongoing basis. These exemptions exist reflect farm locations, the inherent architecture of the industry, biological variability from year to year and an obligation to ensure legally operating companies are not comprised in a business sense. Some exceptions are specifically written into the standards, while others may be accessed through written authorisations.

To ensure fairness the exemptions should be applied consistently either within the operating standards or as written authorisations. Where identified reasonable in the

standards currently for an exemption to permit a business to continue to operate, these should be either:

- all specifically permitted within the standards, rather than relying on authorisations; or
- all be granted by written authorisation, and be granted for a period of ten years to align with the 10 Year Plan.

Regardless of process, written authorisations should be irrevocable without agreement of the authorisation holder, unless alternative options are implemented prior.

Introduction section

Page 4: Section 1.1 Background

We feel it is important to recognise that the industry consists of, or supports, an extensive range of businesses including feed production, pen and net manufacturing, vessel manufacture, processing, transport and logistics, waste disposal, plastics recycling, cleaning, the retail sector and science, technology and education sectors.

Page 4: Section 1.2 Objective:

“and provides for reporting Standards that will enable rapid response to the detection of endemic, introduced, or new and emerging infectious diseases.”

It is important that the document reflects that there are a series of measures that are already implemented by industry that result in this outcome. There is not a current vacuum in this area.

In addition, this section may be a more relevant place for the sentence “The application of the Program Standards also provides for fish health and welfare outcomes”.

Page 5: Section 1.3 Scope:

With respect to paragraph 3, namely “the Program recognises that biosecurity in inland freshwater hatcheries must continue to be managed by the Inland Fisheries Service (IFS)”, would appear to rule out progression towards a single integrated biosecurity system, and we believe this would be better written as “the Program recognises that biosecurity in inland freshwater hatcheries must *currently* continue to be managed by the Inland Fisheries Service (IFS)”.

Schedule 1: Marine Operations Standards

MOS 14. Detection of biosecurity events

Specifically, MOS 14(b): “any incidence of any known or unknown disease affecting greater than 0.25% of fish per day for three consecutive days in an individual pen, or affecting more than 0.5% of fish in a single day in an individual pen.”

We submit that this clause should be removed from the standards.

This requirement cannot be implemented as it is specifically written. The definition of disease in relatable legislation (Animal Health Act 1995)¹ means any organism reasonably expected to be present in a pen of fish would count, including the endemic organism AGD. It is highly likely that the AGD organism would be present on a number of fish in excess of 0.25% on any day in any pen. The end result would be that industry would strictly expect to have to notify every pen every day to be sure of meeting the requirement. In addition, the global standard for freedom from disease is presence of a pathogen in a population of animals at less than 2%. The detection of disease at a design prevalence of 0.25% is impossible without completely perfect diagnostic tests, which do not exist.

We believe that the underlying intent, which has been lost in this iteration, is to ensure coverage of Section 10(b) of the Biosecurity Act 2019, namely the reporting of “(b) the presence in Tasmania, or part of Tasmania, of an animal disease that may pose a biosecurity risk to Tasmania, or part of Tasmania, regardless of whether the disease, or cause of the disease, is known or identified:”

With respect to this duty to report potential biosecurity risks to the best of the industry’s ability we consider that MOS 14(e) “any other incident, event or observation that, in the reasonable opinion of the salmonid producer, indicates that a biosecurity event has occurred or is likely to occur.” would cover the intent of MOS 14(b) and thus MOS 14(b) should be removed from the standards, as it is operationally redundant. The wording of MOS 14(b) clearly covers the pens that salmon are held in, and thus specifically refers to the farming companies. Given all the salmon farming companies have in-house veterinary expertise, there is a clear capacity to effectively judge whether an event or observation may or does represent a biosecurity event and thus there is an obligation to report through MOS 14(e).

MOS 18. Fish Movement records

MOS 18(f)(i) should be rewritten to “the relevant Inland Fisheries Service Transport Approval or *Inland Fisheries Service Exemption Permit*”

¹ “*disease* means –

- (a) a disease that affects or may affect an animal; and
- (b) a disease agent; and
- (c) a zoonosis;”

The IFS issues exemptions to seeking transport approvals for every individual fish movement, so copies of transport approvals may not be available, but a copy of the exemption will be held by the provider.

MOS 24. Separation of marine farming structures

MOS 24(2) speaks to the standard “not applying in respect of an established marine farm”. However, similar to the level of derogation for freshwater facilities that have received approvals [i.e. FOS 20(2)], the standard should be rewritten to include farms that have been approved, but not yet operational, plus farms that have been in operation but are not operating at the time of the introduction of the standards. This could be achieved by rewording the standard or the definition of “established marine farm”. We have suggested alternative wording for the definition of “established marine farm” later in this submission.

MOS 32. Movement of vessels to or from Western Salmonid Biosecurity Zone

We propose that this standard be re-written as follows:

“A salmonid producer moving any vessel to or from the Western Marine Salmonid Biosecurity Zone must ensure that –

(a) the vessel has a visibly clean hull before leaving the Zone; and

(b) any recommendations made by the Joint Salmonid Industry Health Group for vessels to be slipped for pressure washing before being used on any marine farm in another marine salmonid biosecurity zone are followed; and

(c) all vessels are otherwise cleaned and treated in order to prevent, eliminate or minimise so far as is reasonably practicable any biosecurity risk posed by the vessel before being moved from the Zone.”

The wording ensures that the Joint Salmonid Industry Health Group can specify the level of measures to be taken depending on the epidemiology situation in Tasmania to better protect the Macquarie Harbour ecosystem.

MOS 33. Well boats

Specifically with respect to MOS 33(b) we submit that the wording should be amended to read “*more than four (4) kilometres distance from any boundary of another salmonid producer’s marine farm*” as the risk management intent is that water used to bath salmon from one salmonid producer should not represent an increased risk to any other salmonid producer.

MOS 35. Movement of salmonid equipment

The words “to and from” in MOS 35(a) and MOS 35(b) should be replaced with “between” as items may be removed from marine farms for disposal and which do not necessarily therefore represent a biosecurity risk.

In addition, the definition of “used salmonid equipment” is very broad, and we will address comments to that in considering the glossary.

In addition, the Standard should include a requirement that used salmonid equipment, if removed from a marine farm but not the water must be treated or held in a way that does not increase biosecurity risk for any other operator in an area.

MOS 38. Treatment of equipment used to carry harvested fish or blood water

This standard is an example of a prescriptive and restrictive standard, namely, MOS 38(b) where it requires “an effective treatment measure after each use”.

While food safety drives the treatment of containers of harvested fish, the removal of bloodwater by vacuum tankers may involve taking on some liquid at one site and potentially more at another and the tanker may not necessarily be cleaned between, however the biosecurity risk is negligible.

It would be better worded as “subject to effective treatment measure to prevent, eliminate, or minimise biosecurity risk posed by the equipment.”

MOS 40. Certification of fish from freshwater facility to marine farm

MOS 40(1)(a) should be written “the vaccination of the fish in accordance with *any* vaccination program endorsed...” rather than “a vaccination program”, as there may not necessarily be an endorsed vaccination program under certain circumstances, for example, where a vaccine does not yet exist for certain endemic pathogens. Or it has been shown that an endemic pathogen, or pathogens, present a lower risk to the animals than the process of vaccination.

In addition, and considering consistency of standards, in this case between MOS 39 and MOS 40, we can see that MOS 39 is better written in terms of objectivity and avoiding unnecessary prescription. As written the standard requires every tank or pond to be specifically laboratory tested. This penalises operators with many smaller tanks/ponds compared to fewer larger tanks/ponds and does not take into consideration that it is the population of fish which represents a risk unit, rather than individual tanks/ponds in the same facility.

This standard should be re-written:

“MOS 40. Certification of fish from freshwater facility to marine farm

- (1) A salmonid producer must ensure that no live fish or group of live fish from a freshwater facility is moved into a marine salmonid biosecurity zone unless a veterinary biosecurity certifier has issued a biosecurity certificate in respect of the fish, which certifies the following matters:
 - (a) the vaccination of the fish in accordance with any vaccination program endorsed by the Joint Salmonid Industry Health Group and approved by the Chief Veterinary Officer; and
 - (b) the fish being from a population of fish (represented by a tank, tanks, pond or ponds of fish) that has passed, not more than 28 days prior to the day of movement, a health assessment which –
 - accounts for the history of the population; and
 - considers the disease status of all relevant populations on the respective facilities, and
 - which may include (at the discretion of the certifier):
 - a gross external inspection of the fish population by a person competent in fish health; and
 - sampling of fish for necropsy and laboratory testing, with sampling biased to the highest risk fish identified within the population.
 - (c) the fish being sufficiently seawater adapted for entry into the zone.
- (2) A salmonid producer must keep a record of all health assessments carried out, and certificates issued, under subclause (1).”

MOS 41. Decontamination of live fish transport vehicles

Very similarly to MOS 38, this standard again is prescriptive about applying a “treatment measure after each individual trip”. This was originally carried out within industry based on the practice of acclimating smolt to sea by circulating seawater through the transport tanks on the way to the marine farm. The tanks and truck therefore needed cleaning and decontamination before returning to a freshwater zone to prevent any risk from the marine environment entering the freshwater environment.

However, over time, different transport methods have evolved. Different methods of moving fish from freshwater to freshwater facilities and from freshwater facilities to marine farms present different levels of risk of the movement of potentially contaminated water from the receiving environment back into the freshwater facility. The standard therefore needs to recognise this and allow companies to manage risk via something other than the time, cost and chemical use represented by decontamination “after each individual trip”.

We submit that this standard should be re-written:

“MOS 41. Decontamination of live fish transport vehicles

Live transport vehicles undergo effective treatment to ensure biosecurity risk related to movements from the freshwater to marine, or freshwater to freshwater environments are managed.”

[REDACTED]

Content of Regulatory Impact Statement document with respect to Marine Operating Standards

The RIS (Page 12) details a series of standards of the Faroese Veterinary Model, on which the government indicates the Tasmanian Veterinary Model is to be based. We can see that almost all components have been incorporated by government. Three are absent, namely the imposition of density limits, control of sea lice and fish not to be held in open waiting pens at harvest stations.

- The absence of sea lice controls is logical given the lack of sea lice in Tasmania.

- There is good evidence² that a density limit of less than 22kg/m³ in marine netpens would ensure that stocking densities remained safe for salmon welfare and we would support the inclusion of this as a standard, understanding that welfare is not just about stocking density, but about doing everything else correctly.
- The reason for the absence of standards prohibiting the holding of harvest fish in open waiting pens at harvest stations has not been made clear in any of the documents. Tassal moved away from this practice years ago and we would submit that the intention of meeting this standard across industry should be retained, albeit with the potential for the Secretary to issue exemptions during any transitional periods.

Schedule 2: Freshwater Operations Standards

FOS 15. Fish Movement records

MOS 15(f)(i) should be rewritten to “the relevant Inland Fisheries Service Transport Approval or *Inland Fisheries Service Exemption Permit*”

The IFS issues exemptions to seeking transport approvals for every individual fish movement, so copies of transport approvals may not be available, but a copy of the exemption will be held by the provider.

FOS 23. Notification, testing and other requirements relating to therapeutants

We submit that the requirement to notify the CVO of proposed therapeutant use is an appropriate standard for the marine environment where waters are shared and treatments occur in what is essentially a public location, but not in a freshwater environment within private land. It is inconsistent with the treatment of any other animal primary producer. It is also a duplication of Environmental Licence conditions for premises regulated by the EPA.

We submit that this standard should be re-written:

“FOS 23. Requirements relating to therapeutants

A salmonid producer engaging in the use of therapeutants must ensure that –

(a) all stock receiving medicated feed is recorded to ensure the correct withholding period (if any) is met; and

² Turnbull, J.F., Bell, A., Adams, C., Bron, J. & Huntingford, F.A. (2005) Stocking density and welfare of cage farmed Atlantic salmon: application of a multivariate analysis. *Aquaculture*. 243, 121-132

(b) all feed equipment used to deliver and distribute medicated feed is appropriately treated after use to manage any risk of residual therapeutant entering any other than treated animals.”

FOS 24. Movement of salmonid equipment

The words “to and from” in FOS 24(a) and MOS 24(b) should be replaced with “between” as items may be removed from marine farms for disposal and which do not necessarily therefore represent a biosecurity risk.

In addition, the definition of “used salmonid equipment” is very broad, and we will address comments to that in considering the glossary.

FOS 27. Certification of fish from freshwater facility to marine farm

FOS 27(1)(a) should be written “the vaccination of the fish in accordance with *any* vaccination program endorsed...” rather than “a vaccination program”, as there may not necessarily be an endorsed vaccination program under certain circumstances.

In addition, and considering consistency of standards, in this case between FOS 25 and FOS 27, we can see that FOS 25 is better written in terms of objectivity and avoiding unnecessary prescription. As written the standard requires every tank or pond has to be specifically laboratory tested. This penalises operators with many smaller tanks/ponds compared to fewer larger tanks/ponds and does not take into consideration that it is the population of fish which represents a risk unit, rather than individual tanks/ponds in the same facility.

This standard should be re-written:

“FOS 27. Certification of fish from freshwater facility to marine farm

(1) A salmonid producer must ensure that no live fish or group of live fish from a freshwater facility is moved into a marine salmonid biosecurity zone unless a veterinary biosecurity certifier has issued a biosecurity certificate in respect of the fish, which certifies the following matters:

(a) the vaccination of the fish in accordance with any vaccination program endorsed by the Joint Salmonid Industry Health Group and approved by the Chief Veterinary Officer; and

(b) the fish being from a population of fish (represented by a tank, tanks, pond or ponds of fish) that has passed, not more than 28 days prior to the day of movement, a health assessment which –

- accounts for the history of the population; and
- considers the disease status of all relevant populations on the respective facilities, and

- which may include (at the discretion of the certifier):
 - a gross external inspection of the fish population by a person competent in fish health; and
 - sampling of fish for necropsy and laboratory testing, with sampling biased to the highest risk fish identified within the population.

(c) the fish being sufficiently seawater adapted for entry into the zone.

(2) A salmonid producer must keep a record of all health assessments carried out, and certificates issued, under subclause (1).”

FOS 29. Decontamination of live fish transport vehicles

This standard again is too prescriptive about applying a “treatment measure after each individual trip”. This was originally carried out within industry based on the practice of acclimating smolt to sea by circulating seawater through the transport tanks on the way to the marine farm. The tanks and truck therefore needed cleaning and decontamination before returning to a freshwater zone to prevent any risk from the marine environment entering the freshwater environment.

However, over time, different transport methods have evolved. Different methods of moving fish from freshwater to freshwater facilities and from freshwater facilities to marine farms present different levels of risk of the movement of potentially contaminated water from the receiving environment back into the freshwater facility. The standard therefore needs to recognise this and allow companies to manage risk via something other than the time, cost and chemical use represented by decontamination “after each individual trip”.

We submit that this standard should be re-written:

“FOS 29. Decontamination of live fish transport vehicles

Live transport vehicles undergo effective treatment to ensure biosecurity risk related to movements from the freshwater to marine, or freshwater to freshwater environments are managed.”

Schedule 4: Biosecurity Program: Tasmanian Salmonid Industry – Glossary

Established marine farm definition should be amended to read:

“established marine farm means a marine farm that has been fully or partially approved under the relevant marine farm development plan process prior to the date of introduction of the Standards. For the avoidance of doubt, this includes farms that have received a marine farming licence, farms

that were previously operative, but which have been rested, and farms that are currently fully operational.”

The industry has put a lot of resources into acquiring their current farming areas, in their specific locations and their productive potential should not be adversely impacted in retrospect.

Used salmonid equipment has a very broad definition and could include a wide variety of objects which would not pose any biosecurity risk. The definition could be better refined to be “**used salmonid equipment** means salmonid equipment used in the primary production of salmonids and which has been, or could be expected to have been, in contact with the salmonids or the water they have been held in.”

Draft Biosecurity (Salmonid Biosecurity Zones) Regulations 2022: Regulatory Impact Statement

Executive summary

Dot point 3: There should be recognition that the salmonid industry already works together on industry-wide biosecurity and disease management issues.

Dot point 8: We disagree that cost increases would be marginal.

Page 5, Section 2.2: Statement of the problem

The fourth paragraph suggests that none of the specified activities have been enacted by the industry before their conception in these standards. This is not correct; industry has been working together on many matters related to fish health and biosecurity, and has a strong history of collaboration in health management and research and development specifically related to biosecurity.

Page 7, White Spot Disease (WSD) and the Queensland Prawn Industry

Whilst the figures for 2016-17 may be correct, the statement above which is couched in current terms is not. The relative importance of the Logan River farms is reduced now, with the largest prawn farm in Australia at Proserpine producing almost 60% of the Australian production tonnage. Together with two other farms, TASSAL GROUP represents approximately 80% of the industry production.

Page 8, Section 2.3: The regulatory model

The third paragraph suggests that the Tasmanian salmonid industry focussed its voluntary biosecurity effort only in the marine environment; this is not accurate as companies have had active biosecurity measures throughout their freshwater facilities too.

Page 17

The first paragraph of the page suggests that diseases would not be recognised or communicated to government without these regulated standards. This is incorrect and does not reflect accurately the historical collaboration within industry and fails to recognise:

- the development of its own biosecurity plan,
- the co-development of area management agreements,
- industry worked together to revise and develop an improved biosecurity blueprint to present to government,
- the development of the Joint Salmonid Industry Health Group,
- co-funding of diagnostic and surveillance programs by industry,
- co-funding of a vaccine development program and infrastructure for the biosecurity fish facility by industry, and
- all diagnostic samples are processed through the government animal health lab, collocated with the office of the Chief Veterinary Officer

Page 18

In the 4th paragraph the author clearly states that it is not possible to precisely determine where along the invasion curve (which was actually drawn up for invasive species management). We also emphasise that the RIS did not consider that prevention in an animal disease scenario may be achieved through other measures such as vaccination.

Since all companies have co-invested in vaccine development and all companies utilise voluntarily the vaccines developed one can state that Option 1 already has placed the industry at the prevention phase.

All companies also communicate with government (animal health lab) about the potential of emerging diseases and the development of vaccines which may be required in the future.

It is hard to accept that the concept of potential savings of hundreds of millions of dollars can be necessarily justified; it is pure supposition with no data to support this position. This uncertainty then needs to be balanced against the cost to the industry of regulating, which we will argue is considerably higher than the RIS has subjectively suggested.

Page 20: Section 5.3.1 Implementation and administration costs

Page 20: Section 5.3.3 Audit and verification costs

We disagree strongly that the implementation, planning, audit and verification costs for industry under Option 2 (to regulate) would be minor.

For example, we have calculated the annual costs to establish, implement, review, maintain and train staff in the use of a single accreditation program to be in the vicinity of \$250,000 plus audit costs.

All companies agree that additional staff would be required to manage the compliance system itself (not specifically the biosecurity measures) so as to ensure comprehensive evidence of compliance with regulated standards. This simply adds production costs at a time when every cost base is increasing, and we need to keep quality protein sources affordable for Australian households.

Staff are also likely to require additional training to have the skill sets required to perform these internal audits.

Page 22: Section 5.3.6 Consumer gains

We are unclear as to exactly how the standards “support achieving public and consumer safety outcomes, particularly food safety.”

Companies have excellent traceability and comprehensive food safety programmes already, and are audited regularly.

Page 25: Table 3: Comparison of options

We recognise that the status quo would not necessarily deliver a robust regulatory framework that ensures all parties meet the same minimum level of standards; however, the industry developed a robust series of biosecurity measures in its blueprint with good intent. Our concern is that the costs are understated, and the potential gains overstated in the RIS. This makes a decision on whether to regulate, or utilise other vehicles within the Biosecurity Act 2019, such as Industry Biosecurity Plans approved by the Minister, more borderline and subjective.