Table of Contents

1. Executive Summary	3
2. The effectiveness of biosecurity controls and their implementation for managing the biosecurity risks of importation of uncooked prawns and prawn meat into Australia	5
Addressing the correct source of the outbreak	5
Import restrictions alone cannot be an effective barrier	5
Unbalanced focus on Imports	6
Disease testing in Australia	6
The Limitations of Testing	8
Lack of Robust Enforcement	8
3. The effectiveness of post-entry surveillance measures and 'end use' import	9
conditions for uncooked prawns and prawn meat into Australia	
2009 IRA	9
Reliance on end-use import conditions	9
Marinades	10
Fit for purpose	10
4. Areas for improvement in the biosecurity risk management framework and	11
its implementation for future trade in prawns and related seafood	
Pre-export testing	11
Better engagement with importers	11

1. Executive Summary

Imported uncooked prawns are not an inherently dangerous food. They have been an important part of the Australian diet for over 50 years, and last year earned Australian businesses \$547 million – ie. revenue less landed cost. (*Based on 3.5 multiplier - Ruello 2012*). Imported uncooked prawns ensure access and affordability to this category for the majority of Australian consumers; complement Australian production by keeping market channels open; and support an estimated 40,000 food outlets with year round supply. (*Restaurant & Catering Australia*).

All imported uncooked prawns are intended for human consumption only. They are imported fully processed (no heads or shells) eliminating all waste. They are labelled 'For Human Consumption - Not to be Used as Bait' or similar words.

All but a very small percentage of the 30,000 tonnes of prawns imported each year are correctly used as intended, for human consumption in foodservice outlets and homes. About 0.1% leaked to bait use. (*Estimate by Diggle 2017*). Yet the main biosecurity focus and majority cost, has fallen on these market sectors.

Aquatic diseases are not the same as terrestrial diseases in benefiting from Australia's island geography. Australia is surrounded by aquatic disease pathways and border biosecurity should not be the primary safeguard - rather it should be part of a suite of biosecurity measures resulting in an acceptable level of protection.

The import conditions resulting from the 2009 IRA would have been sufficient to ensure imported uncooked prawns remained a low risk to Australia's marine environment and fisheries - if they had been robustly enforced. There is no conclusive evidence that the IRA conditions failed or that the Logan River disease incursion was caused by imported prawns. Several pathways are suspected. The trade suspension resulted from the detection of elevated levels of infected prawns available for retail sale, and was implemented to achieve a return to ALOP as per the current IRA. Nor is there evidence that dedicated food service products (eg. marinades) failed to ensure intended end-use - other than when approved by DAWR for use in retail stores. That is, some products originally created for foodservice use only, were redesigned for retail use and were granted import permits.

The 2009 IRA low risk ALOP could have been reduced further, at little inconvenience to commerce, if DAWR had progressed multilateral or bilateral agreements on disease testing methods and standards to allow recognition of offshore PCR testing. This would have effectively screened prawns prior to export - an infinitely more safe and commercially acceptable approach than detecting and rejecting product in Australia.

Imported prawns are not a unique threat to any wild fisheries in Australia (ref: Determinations by DAWR). Our wild fisheries share oceans that are contiguous with coastlines where WSSV and other exotic diseases occur, and are subject to potential incursion via numerous other aquatic and manmade pathways. The reaction of wild fisheries to endemic and exotic diseases is vastly less pronounced than animals contained in intensive farming operations, and establishment or epidemics in the wild are normally so limited as to be indiscernible. (ref: Determinations by DAWR).

By far the greatest risk to the establishment of crustacean diseases in wild fisheries is intensive

prawn farming, where endemic disease outbreaks are common and consolidated, and exotic diseases can be escalated from low prevalence to epidemic (as just occurred) and spread to the environment. Therefore the design, location and management of prawn farms should be of priority interest to every stakeholder, including the Federal Government.

All prawns (native and imported) are potentially dangerous in the immediate vicinity of intensive prawn farm operations, if illegally used as bait, burley or aquatic feed.

If an ALOP of low risk is not sufficient to ensure the safe operation of the approximately 30 intensive prawn farming operations (hatcheries and farms) in Australia, then that industry sector should implement local biosecurity management options, including appropriate infrastructure and management systems, in conjunction with other jurisdictions such as state governments, sufficient to reduce the risk further. The federal government and Australian market sectors should not be carrying 'all the weight' on this biosecurity issue.

Any plan for the co-existence of imported prawns, local wild-caught prawns, and local prawn farms, must start with effective biosecurity at, and around, the farms - otherwise the multi-million dollar investment by the Australian community in border biosecurity, risks being rendered redundant by disease incursion from other pathways.

Australian prawn farms should be encouraged to implement at least the same standard of biosecurity and good practice as the prawn farms of our trading partners. Foreign governments have every right to complain that Australia is protecting prawn farms with trade restrictions, while those farms have not increased output in a decade, and have not reached the same standard of biosecurity as their farms. We believe this is a federal issue due to its implications for trade relations.

Finally, more robust enforcement of federal biosecurity would be assisted by the existence of adequately resourced and empowered professional association(s) to encourage and guide best practice among seafood importers, as would closer engagement between DAWR and the associations.

2. The effectiveness of biosecurity controls and their implementation for managing the biosecurity risks of importation of uncooked prawns and prawn meat into Australia

Addressing the correct source of the outbreak

At the time of writing this submission, there is no confirmation that imported prawns were responsible for the white spot outbreak on the Logan River. Indeed there are some aspects of that hypothesis, in the evidence observed, that cause concern about reaching that conclusion. The premise that existing border biosecurity controls have failed to prevent a disease incursion is not established and should not be the starting point for this enquiry.

We understand the subesequent suspension of trade in uncooked prawns resulted from the detection of higher-than-expected levels of WSSV infection in imported prawns available for retail sale in the proximity of the eight Logan River farms, and was implemented to achieve a return to ALOP. We understand that situation may have been exacerbated by one or more importers evading testing as advised in the 2009 prawn IRA and required under relevant regulations. We also understand that the evasion my have been facilitated by less than robust enforcement of the relevant biosecurity regulations.

We note that the Department has been at pains to emphasise that there is no evidence linking the two incidents, as coincidental as they seem.

We understand that such confirmation may not be possible. However, we do recognise that imported prawns used irresponsibly or illegally as bait or burley do represent a potential pathway to disease incursion - albeit largely hypothetical as it has rarely, if ever, been observed from start to finish outside experimental situations.

Therefore, it is essential that the effectiveness of all biosecurity controls, before and after the Logan River incursion, be viewed holistically to minimise the considerable cost of trade restrictions to large sectors of the Australian community; and to lower the risk of future disease incursions and subsequent financial losses across all sectors.

Import restrictions alone cannot be an effective barrier

Australia's unique continental island geography, surrounded by oceans, is an effective barrier to terrestrial diseases. However, for many aquatic diseases, the ocean is a potential expressway.

There are at least 35 viral, bacterial and other diseases impacting intensive prawn farming around the world. Many are predicted to arrive in Australia by various pathways in the future.

Those pathways include (but are not limited to):

- Imported uncooked prawns;
- Low-prevalence incursion and/or establishment in Australia from natural migration or drift of infected crustaceans (at all life stages) from oceans to our north where the diseases are prevalent;
- Broodstock obtained from northern waters;

- Prawn fishing in our northern EEZ;
- Illegal foreign fishing in our northern EEZ;
- Ballast water and bio-fouling;
- Prohibited imports including aquarium species, broodstock, food (passenger arrivals);
- Aquaculture feed and probiotics.

The 2009 IRA addressed imported prawn pathways - to the exclusion of all other risks. This has created a perception that imported prawns are the **only** pathway; that trade restrictions are the **only** remedy; and that Australia was otherwise safe from this disease. Hence, in our opinion, less attention has been paid to on-farm and other local biosecurity controls and complementary State regulations, and to addressing other potential pathways, than was prudent.

These comments are not intended to deflect the risk from imported prawns, but to provide balance in assessing the overall future risks to Australian producers and the Australian market (community).

Unbalanced focus on Imports

From our perspective, almost all the focus on blocking the potential source of contamination has been on imported prawns rather than actions in other pathways - although we note that fishing in the Logan River was banned immediately after the first outbreak. We acknowledge the significant actions around subsequent containment.

As imported prawns are primarily in the jurisdiction of DAWR, we believe the focus on imported prawns as the source unduly infuenced the nature of the trade suspension and the assessments of risk, and particularly the way the extreme cost imposed on importers and downstream operators was considered 'acceptable'.

As we understand it, DAWR has limited authority to deviate from legislation directing the management of biosecurity risks and incidents, even when those actions result in considerable financial loss to other sections of the Australian community - losses that may be avoided or mitigated in the context of a broader, or more holistic, assessment of the risk.

We also observe that risk can change rapidly as a result of subsequent events, but DAWR can be required to act on advice that is not current with those changes to risk.

Disease testing in Australia

The introduction of confirmatory testing at the Australian Animal Health Laboratory (AAHL) in Geelong has been one of the most controversial aspects of this incident.

The first point of contention is the relevance to disease transfer. We are not aware of any scientific evidence conclusively linking the detection of particles of DNA genome (or any extreme low level viral presence) to the transmission of WSSV - particularly outside experimental situations such as direct injection or feeding trials. This absence of scientific basis was repeatedly confirmed by senior DAWR management (Robyn Martin and Tim Chapman) during the second Senate hearings. The only justification given for the reliance on AAHL confirmatory testing as the final arbiter, is that it was 'precautionary'. There is no evidence that this testing contributed to reaching ALOP other than by prohibiting a large proportion of trade. There is no evidence that normal screening by the previously authorise labs was less safe in the context of the overall risk.

The second point of contention involves the methodologies used by AAHL. By using a non-OIE "CSIRO" method in parallel with the accepted OIE method (in fact, relying on multiple parallel tests), and by relying on a range of up to 45 cycles on the PCR, AAHL ran a very great risk of introducing statistical error, false positives and subjective determinations into their results. It is therefore hard to see how this so-called 'gold standard' was, in practice, useful other than to prohibit entry.

The third point of contention was the lack of transparency, and the logistical and management consequences of the confirmatory testing. Some importers who had a long history of no failures at any of the three previously authorized labs, suddenly found their product testing positive - perplexing them and their foreign suppliers. Initially AAHL could not handle the number of test requests and the waiting period increased from an estimated two days to ten days or more (imposing enormous holding costs, and creating unprecidented logistics difficulties for importers and cold stores). Consequently, this pattern of failures did not emerge for some time and meant importers could not make informed decisions about what to do with product being landed: to immediately re-export, or to hold and test incurring additional costs.

The fact that AAHL would not release information about its enhanced testing methodologies meant that importers could not replicate that testing overseas, and thus had no standard by which to understand how their product was being assesed, and no indication of how future consignments would test on arrival. That AAHL would not release raw data on which positive/negative assessments were made, which importers required to make claims against their foreign suppliers, further aggravated the situation. This lack of transparency by AAHL deprived businesses of any indication of whether future business with Australia was possible at a time when they needed to make important decisions about retaining staff, and future cash flow needs.

During this period, the following list of complaints about AAHL was made to our Association:

- Insufficient separation between DAWR (the regulator) and AAHL (a government-owned semi-commercial laboratory).
- Inconsistency in that DAWR/AAHL would trust the other labs on positives but not on negatives.
- Using non-OIE methods and procedures.
- Using an additional CSIRO method not validated by any authority.
- Using multiple methods in parallel increasing the likelihood of calling a positive result but with a greater risk of error.
- The detection of ultra small particles of WSSV DNA genome has not been proven to be relevant to the infectivity of prawns so AAHL testing was irrelevant to screening.
- AAHL was not screening, which is not within the IRA framework (low-risk, not no risk).
- Not providing accurate methodology to foreign exporters and importers, to allow confirmation or pre-export testing.
- Not providing raw data (on which a positive/negative result is assessed) for claims against foreign exporters.
- Not providing that raw data for potential re-assessment of the AAHL/DAWR decisions.

- Not allowing testing of samples from held shipments to be done in WSSV reference labs overseas. (AAHL later agreed to release samples for alternative testing but said it would not change its position on any test).
- Has refused to discuss all this with the other accredited labs.

The Limitations of Testing

This controversy highlights the undue focus on testing as the main reliance on biosecurity. The fact is, testing is only as good as the sampling regime allows it to be. As it is impossible to test every prawn on arrival, some degree of risk will remain regardless of the depth of testing and the number of samples taken. Therefore a balance needs to be struck between risk and restriction. The conclusion reached in the 2009 IRA of low-risk but not no risk, was correct in being the most affective balance. This can be restored via the previous process of authorized laboratory screening at the same (or close to the same) level of efficacy.

The importance of this statement can only be fully appreciated in the context of understanding the other pathways. For instance, of the roughly 30,000 tonnes of prawns imported into Australia annually, only two infected prawns were actually discovered in the posession of anglers in proximity to the Logan River prawn farms in a December 2016 survey by Qld Biosecurity field officers (Diggles 2017). It would be impossible to eliminate this low level of local risk with federal border controls and random testing (or even a total trade prohibition) given the existence of numerous other pathways - including the acquisition of brood stock from ocean waters in northern Australia; natural incursion from the migration or drift of carrier crustaceans, and ballast water - to name a few. Those risks must be addressed by state governments and prawn farms at a local level.

In our view the undue focus on border controls is setting DAWR up for failure in the future. As mentioned before, there are at least 35 viral, bacterial and other diseases impacting intensive prawn farming around the world. In due course, others will evolve - including here in Australia.

An over-reliance on border controls would inevitably lead to an endless procession of revised import risk analyses, revised import conditions, and further trade restrictions - with no guarantee that these diseases won't reach here by other pathways. We reiterate that these are not terrestrial diseases - these are aquatic diseases and Australia is surrounded by water.

Whilst we have no issue with reasonable import controls to reduce risk to an acceptable level of protection (low risk), we cannot accept the premise that imported prawns are the only risk; that Australia can be protected from these diseases by border controls and ever increasing import restrictions to cover emerging diseases - while the same level of intensity is not required of State governments and local industry biosecurity.

Lack of Robust Enforcement

Although our association has no specific information regarding this other than what has already been provided to the Senate hearings by DAWR to date, there appears to have been a failure to robustly enforce biosecurity conditions in relation to opening containers, the inspection of contents, and the taking of samples for testing.

There is little we can say about this other than to reiterate that we fully support seals intact inspection of containers on arrival, the inspection of contents, and the correct procedures for obtaining samples. The details around that are best left to DAWR.

3. The effectiveness of post-entry surveillance measures and 'end use' import conditions for uncooked prawns and prawn meat into Australia

2009 IRA

We reiterate our belief that, **with robust enforcement and pre-export PCR testing (see below)**, the import conditions derived from the current IRA (introduced as interim conditions in 2007) would have been sufficient to provide an acceptable level of protection for Australia against disease transmission from imported prawns. That is - low risk, not no risk.

In practice, what developed after the 2009 IRA was an over-reliance on border controls at the expense of adequate attention to other remedies and to hazard control points in other recognised pathways, that could have been more effective. From our perspective all the emphasis, cost and liability has been on imports.

This is particularly noticeable in what appears to be a lack of co-operation from other jurisdications. For instance, the 2009 IRA (page 75) concluded that imported prawns .."used as feed for live crustaceans, including to condition hatchery broodstock and as feed for aquatic animals kept in research facilities or public aquaria.." was a risk because it was not illegal under any State or Federal legislation. Hence this legislative gap contributed to the subsequent import restictions.

The SIAA and other industry stakeholders were advised that if the Queensland Government would legislate to make the use of imported prawns as aquaculture feed illegal, it would affect the ALOP and prompt a review of the conditions. Subsequent approaches to the Queensland Government failed to garner any support for this, and ten years later this simple, prudent action has still not been regulated. We can only conclude that accepting this risk pathway was (is) more politically advantageous than a possible consequent reduction in the need for import restrictions.

We also note that, despite a decade of complaints by prawn farmers *(media statements)* that anglers were using imported prawns as bait in the vicinity of their farms, the Queensland Government was unable, or unwilling, to regulate to control this. We have since learned that anglers were fishing as close as the farm inlets and drainage channels - yet no effective control could be found to prevent this. We find this extraordinary given the tens of millions of dollars in costs imposed on importers (and eventually consumers) and the Federal Government (and eventually taxpayers) by 100% testing of every shipment of uncooked imported prawns arriving anywhere in Australia.

Reliance on end-use import conditions

Traceability systems are widely used to mitigate food safety risks, and many large importing and wholesale distribution companies have international certifications covering these systems, including audit capability. They must also comply with the Food Standards Code. We believe these management systems can provide an acceptable level of confidence that the products covered will be used as intended, and ensure that any leakage to inappropriate use would be extremely low to non-existant. (This acknowledges that nothing can stop individuals from deconstructing products for inapropriate use). It is hard to see how dedicated foodservice products for sale thousands of kilometres from prawn farms and subject to management systems such as those described, could tangibly contribute to risk.

We acknowledge that not all companies have this level of traceability. However, we see no reason why the use of traceability systems to mitigate risk should not be available to those companies that can provide evidence that their systems can meet end-use conditions. This would be consistent with the approval of chain of custody systems that now apply to factories processing Australian prawns overseas for re-import to Australia.

Marinades

These were designed to provide a greater level of confidence that prawns would be used as intended in foodservice outlets (that is, consumed); difficult for anglers to access; and to be less appealing as bait. It was assumed that this would negate the need for testing. (It is a reasonable assumption that products that are consumed are not a risk.) Supporting this were minimum standards for the type and percentage of ingredients used, verified by manufacturers declaration and photos.

However, there appears to have been some 'drift' in the granting of import permits by DAWR, for products that were originally designed for foodservice use only (such as marinades), to approving those same products in retail sizes and packaging that compromised the intended end use. The assumption by most industry members was that DAWR must have calculated that any leakage from intended use would be minimal and not affect ALOP.

It should be noted that marinades have been controversial (with industry) from the outset of their introduction because of issues to do with correct net weight and labelling descriptions. When Senator Bill Heffernan produced marinated prawns in Parliament, our recollection is that it was to do with that issue - not biosecurity risk. (He visited our office, at our request, and was provided with samples of marinades.)

We are not clear about the extent to which marinades were actually implicated in misuse by anglers. Despite vocal concerns about 'washing off' by some producers and their supporters, it is hard to imagine that a marinated product would be the first choice of anyone intending misuse when better suited products (eg. unmarinated meat and cutlets) were available. In otherwords, we are not sure that marinating was not succesful in ensuring correct end use - particularly in foodservice sizes and packaging. In this case, we believe more research into the suitability of marinades as an effective end-use strategy is warranted rather than simply dismissing them on the basis of conjecture.

Fit for purpose

The Association has expressed an on-going concern that some processed products (including marinades) have not been 'fit for purpose' and both the Association and individual members have provided information to DAWR about this.

We believe 'fit for purpose' is a reasonable condition of entry for all products, including highly processed prawns, and we fully support this test at the border.

4. Areas for improvement in the biosecurity risk management framework and its implementation for future trade in prawns and related seafood

Pre-export testing

Perhaps the biggest lapse in providing adequate protection to Australia, and minimising disruption to commerce, has been the failure by DAWR to negotiate mutually acceptable standards for offshore PCR testing, and to implement a system of recognising and monitoring that.

Clearly it is in everyone's best interest if prawns leave the country of origin, free of disease. PCR testing can provide an effective screen, even if methodologies need to be homogenised to accommodate slight variations from country to country. We refer to screening, not mere detection.

Frankly, this should have been implemented ten years ago and in our opinion was not pursued energetically enough by DAWR. We are aware of some of the issues faced by both DAWR and foreign governments in achieving this; and of the efforts made - particularly by Thailand. The SIAA tried several times to accelerate this process in direct negotiation with the Thai Department of Fisheries, and with (then) Biosecurity Australia, but was unsuccessful.

In this regard DAWR has failed our trading partners and the spirit of cooperative trade, and failed Australian businesses (producers and retailers) impacted by the WSSV outbreak. By not progressing the certification/authorisation of offshore laboratories to do disease testing for Australia - widely discussed following the 2007 IRA but only partially followed up in subsequent years - DAWR effectively closed that door, and pushed foreign suppliers and importers into unsatisfactory solutions such as dedicated end-use products like marinades or highly processed value added products, to meet demand. This is despite constant lobbying by foreign governments, and our association, to recognise offshore testing capability.

This specific failure to authorise pre-export testing facilities, methodologies and chain-of-custody arrangements has frequently been referred to internationally as a non-tariff trade barrier, and the implication that supplier nations are not capable of operating to agreed laboratory standards is insulting. (We note, by contrast, that DAWR was able to recognise compenent authority certified chain-of-custody for Australian prawns processed in offshore factories, within several weeks of the trade suspension.)

Better engagement with importers

According to a recent statement by Minister Joyce, there are over 16,000 individuals or entities importing food into Australia. We estimate (but have no access to supporting information) that several hundred individuals or entities may have imported seafood over the past decade.

Our Association, which has 12 member companies at the time of writing, has no capacity or statutory power to regulate or control any aspect of seafood importing.

We have, however, lobbied consistently for greater regulation of the sector (in terms of who qualifies to be a responsible importer), and for some empowerment by government to support us as a professional organization - to no avail.

However, we have been an active member of the Imported Food Consultative Committee for over a decade, and in February this year we were invited to join the Biologicals Consultative Group (attending the April meeting.) We have also engaged with the Imported Food Reform program and attended several consultations.

Whilst we might not agree with the cost effectiveness of certain biosecurity controls, we have never condoned illegal activity of any sort. We consider any such activity as anti-competitive and not in the short-term commercial interests of our members, nor in the long-term interest of our sector - as has been demonstrated by this very costly trade suspension.

The Association has no authority, nor the capacity, to investigate any suspected illegal activity that members may be aware of. What we have done is encouraged member companies to report, anonymously or confidentially, suspected illegal activities to the relevant departments.

Within our capacity, however, we have sought to address general concerns about the level of commercial expertise, experience and good practice in the importing sector, and to discourage non-regulated anti-competitive malpractice.

Over the past decade and more, the SIAA has tried to apply remedies such as recruiting more importers to the Association, and developing membership rules and voluntary codes of practice. Throughout 2015 and 2016 the SIAA initiated two comprehensive 'Strategic Change' projects (managed by Ridge Partners - Brisbane) to engage with as many seafood importers as we could identify, to encourage them to build and join a stronger association.

In November 2015, the Association sponsored a national summit of seafood importers that recognised impediments and risks to our sector and agreed to create a new entity with stronger governance and membership rules, and with (ultimately) more financial support. DAWR (Imported Food Inspection Scheme - but not biosecurity) was one of three organisations that presented at this summit. The outcomes of that summit were being implemented at the time of the white spot outbreak and trade suspension. The entire proces, costing over \$100,000, has been paid for by the dozen or so core members of the SIAA.

In 2016, the Association undertook a research project, co-funded by the Fisheries Research and Development Corporation, to investigate the possibility of an Australian Standard for imported seafood. The purpose of this was to explore a benchmark for good practice across a range of attributes that might be described as representing 'responsible sourcing', and potentially identifying companies (through an accreditation scheme) that met or exceeded that benchmark. One purpose of this was to provide the basis for an independent 'fit and proper person' test for people or entities importing seafood, or their products, for the information of buyers or the community. It was also hoped that we could build on this to further engage with government on reform and improvement of the sector. The project is now completed and the draft report is with stakeholders for comment.

Unfortunately, it is unlikely that any of the SIAA projects can continue for the time being without government support, given the extraordinary financial damage done by the trade suspension, and by the lack of empowerment for the Association to assist members (and prospective members) in situations such as this incident, undermining the incentive for them to join.

We maintain that there is a role for a professional association to encourage best practice in the importing sector, to seek to minimise or eradicate all forms of malpractice, and to engage with government in more effectively managing the sector and achieving food safety and biosecurity goals. However to achieve this we need the support of government.

end