



Department of Primary Industries

OUT18/10131

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Dear Dr Sheridan

Thank you for your email of 26 March 2018 inviting submissions on specific issues with the *Final generic import risk analysis report for prawns and prawn products 2009* (prawn IRA) and Australia's current prawn import conditions for consideration as part of the review of the biosecurity risks of, and import conditions for, prawns and prawn products.

In summary (and I explain the details below), the NSW Department of Primary Industries (DPI):

- Supports the urgent need for a review of prawn and prawn product import conditions to ensure an appropriate level of protection is provided for the Australian (and NSW) prawn industries and wild populations;
- Is concerned the previous prawn import risk analysis (IRA) underestimated the likelihood of prawns meant for human consumption being used as bait;
- Supports proactive identification and management of biosecurity risks associated with imported prawns and prawn products.

NSW DPI supports the urgent need for such a review in light of the first Australian outbreak of the previously exotic crustacean disease, White spot disease (WSD) in prawn farms around the Logan River in December 2016 and the detection of its causative agent, White Spot Syndrome Virus (WSSV) in prawns being used as bait in the vicinity of those prawn farms at that time. Additionally, the historical detections of the WSSV, in Darwin in 2000, linked to the use of imported prawns as feed are a further cause for concern.

With respect to the *Final generic import risk analysis report for prawns and prawn products 2009*, NSW DPI has significant concerns that the assumptions that underpin the 2009 prawn IRA are incorrect regarding potential for human consumption prawns to be diverted for bait usage. NSW DPI considers that the 2009 prawn IRA significantly under-estimated the likelihood and risk of bait usage as a pathway for possible introduction.

These concerns were raised in NSW DPI's submission on the *Revised Draft Import Risk Analysis Report for Prawns and Prawn Products* in February 2007 which stated "*This pathway (product imported for human consumption diverted to bait) is of particular concern in NSW as NSW has the greatest number of recreational fishers in Australia.*" (NSW DPI, 2007).

The high potential for diversion of prawns for human consumption as bait is also supported by the Inspector-General of Biosecurity's report (Review report No. 2017–18/01) which mentions on pg 43: "*The use of imported raw prawns by fishers for bait or berley was considered in the 2009 generic import risk analysis (IRA) to be a relatively minor practice. However, by 2016 the practice had become more common due to population increases and the availability at retail outlets of frozen imported prawn product, which was often far cheaper than comparable product sold in bait shops.*" (Scott-Orr et al., 2017). Further, this report considered "*...that bait was that the use of infected imported prawns for bait or berley in the Logan River was a possible pathway of infection for 1IP*" (the first prawn farm on the Logan River to become affected by WSD); whereas the same report considered all other pathway of introduction (with the exception of deliberate sabotage) to be either unlikely or highly unlikely.

The potential for prawns used as bait to introduce exotic pathogens of concern into Australia has been recognised since at least 1996, with the National Taskforce on Fish and Fish products "*Recognising the high risks of disease introduction if imported uncooked prawns were used for bait...*" (Scott-Orr et al., 2017). However, despite this recognition, and implementation of measures to reduce risk associated with import of uncooked prawns, WSSV was detected in Darwin in 2000, and in the outbreak of WSD in the Logan River in 2016. These cases highlight the continued high risk associated with the import of green, uncooked prawns into Australia as a pathway for introduction of exotic crustacean diseases.

In Issue 1 of the Prawn review update from DAWR, dated 24 April 2018, it has been stated that "*The department will use the results from a bait and burley use survey to inform the assessment of exposure pathways during the review, as well as to provide scientifically robust data for verification of certain risk management measures such as cooking and highly processing prawns.*". While NSW DPI fully supports the need for scientifically robust data to underpin this process, I continue to have concerns that care is required to ensure that any bait or burley use survey provides a true reflection of practices undertaken by recreational fishers, and not only reflects the views and practices of a subset that may be more likely to respond to the survey. However, such survey selection bias may be very difficult to overcome.

Likewise, despite extensive education and awareness campaigns highlighting the risks associated with using prawns for human consumption as bait, NSW DPI Fisheries Compliance has continued to observe recreational fishers using such product for bait. Given that recreational fishing is enjoyed by at least 850 000 individuals in NSW, it is not practical or possible, let alone an efficient use of resources, to even attempt to ensure complete compliance that human consumption prawns are not used as bait. It is therefore critical that prawns that are imported into Australia pose a negligible biosecurity risk through appropriate at border risk mitigation measures.

To this end, the current requirements, as listed under the "Biosecurity requirements for the importation of prawns and prawn products for human consumption 7 July 2017" specifying that "*All imported prawns must be free from white spot syndrome virus (WSSV) and yellow head virus (YHV)*" and under 3b), that "*product from each batch has been found post-processing to be free of white spot syndrome virus (WSSV) and yellow head virus (YHV) based on a sampling and testing method recognised by the World Organisation for Animal Health (OIE) for demonstrating absence of disease*" are not adequately achieved through the specified verification testing which requires a "*sampling regimen that would provide 95% confidence of detecting the agent if present at 5% prevalence*".

Given that, a previous bait and burley seafood undertaken in 2002 (which has been recognised by the Inspector-General's report to be an underestimate given changes in price and volume of imported prawns) identified that > 75 tonnes of prawns that had been sold as seafood had been diverted to bait usage, an "acceptable" prevalence of pathogens at 5% (as described under the current import conditions, and in contrast to the standard 2% prevalence recommended by the OIE) nonetheless potentially represents a considerable volume of infected material directly entering into Australian aquatic environments. For WSSV, which is known to have a very broad host range in many species of decapod crustaceans, there is considerable potential for infection of wild Australian crustaceans from such imported material.

NSW DPI is therefore supportive of measures to minimise the risk of entry of viable pathogens associated with imported prawns through such measures as cooking to reduce viability and decrease likelihood of use as bait rather than reliance on batch testing for pathogens of concern. NSW DPI is also supportive of the need to verify that cooking provides adequate risk mitigation for viability of pathogens of concern.

With regard to additional specific concerns of the 2009 prawn IRA and the requirements for prawn imports for human consumption, NSW DPI provides the following comments:

- Multiple new and emerging prawn diseases have been documented in the scientific literature since the 2009 prawn IRA, and the assumptions and conclusions are no longer adequate to ensure that Australia's appropriate level of protection (ALOP) is achieved. A thorough review is therefore required.

Some specific examples include:

- The assumption that necrotising hepatopancreatitis does not pose a risk in frozen prawn and prawn products, based on sensitivity to freezing (pg 150) no longer appears valid, given that the chapter for INFECTION WITH HEPATOBACTER PENAEI (NECROTISING HEPATOPANCREATITIS) of the current OIE Manual of Diagnostic Tests for Aquatic Animals states that "Hepatobacter penaei *frozen at -20°C -70°C and -80°C have been shown to retain infectivity in experimental transmission trials with Penaeus vannamei*", which is further supported by studies by Gracia-Vallenuela et al. (2011)

- The assumption that necrotising hepatopancreatitis risk is sufficiently mitigated by removal of the cephalothorax and peeling (pg 172) may be

inadequate, given that the OIE Chapter states that, with respect to transmission "Hepatobacter penaei *in faeces shed into pond water has also been suggested as a source of contamination (Aranguren et al., 2006; Briñez et al., 2003; Morales-Covarrubias et al., 2006)*

- The definition of "highly processed" to also include crumbed or battered prawns in addition to "*prawns whereby the prawn meat is processed into dumpling, spring roll, samosa, roll, ball or dim-sum type product*" is not equivalent: there is a reasonable potential for crumbed or battered prawn product to be diverted to other usages more so than the latter products. It would be reasonable and more appropriate to apply batch testing to crumbed and battered prawns, acknowledging that the risk of diversion from human consumption is less than that of untreated raw green prawns.

NSW DPI is supportive of implementation of adjunctive measures that are referenced in the 2009 prawn IRA, such as minimum size requirements and prohibition on the import of emergency harvested stock, that were previously in place, but have since been removed on the basis that these measures alone are insufficient to mitigate risks to achieve Australia's ALOP. While these measures alone are inadequate, they are useful in conjunction with other risk mitigation measures.

NSW DPI is also supportive of a proactive, rather than a purely reactive approach to identification and management of biosecurity risks associated with imported prawns and prawn products as was proposed by the "*Australian Prawn Farmers Association Submission to Biosecurity Australia's Revised Draft Generic Import Risk Analysis Report for Prawns and Prawn Products Part B: Risk Assessment Report*", specifically recommendations listed under "*B. GENERAL CONSIDERATIONS IN ASSESSING RISK:*"

Yours sincerely

2 July 2018