Australian Marine Fisheries and Aquaculture Productivity Commission
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Productivity Commission inquiry on Marine Fisheries and Aquaculture: *Ridley Corporation submission*

Ridley Corporation applauds the Government for commissioning the Productivity Commission's inquiry into regulation of Australia's marine fisheries and aquaculture sectors. We support the regular review of our regulatory systems to ensure they are fit for purpose and support business.

Ridley is an Australian owned company and the country's largest commercial provider of animal nutrition to a wide range of industries, including aquaculture. We are immersed in the latest research and development, and support our aquaculture partners in promoting sustainable businesses.

As part of our support of Australia's aquaculture industry – particularly the prawn industry through the provision of Novacq™ prawn feed, developed in conjunction with the CSIRO – there are three key issues we wish to address through our submission to the inquiry. They are:

- The importance of aquaculture farming **lease expansion and regulation** and red tape which is effectively preventing the expansion of farms (as well as the creation of new ones);
- **Disease prevention and response**; and
- **Supporting innovation** in the aquaculture industry to promote productivity, sustainability and biosecurity.

Lease expansion and regulation

Today, the majority of Australian prawn aquaculture is conducted in Queensland. However, there has not been a new farm approved in Queensland for 14 years (Australian Prawn Farm at Ilbilbie near Mackay) and farm expansions have been limited.

This is despite evidence that prawn farms are keen to expand with new farms – Pacific Reef Aquaculture in Ayr and Australian Prawn Farms in Mackay being but two examples.

Ridley understands that one inhibitor to industry growth is a fear of the application process – and, if our interaction with prawn farms is a guide – having applications approved by the Great Barrier Reef Marine Park Authority (GBRMPA).

This uncertainty, lack of clarity around regulation, inefficiencies and lack of collaboration with industry is costing the Australian aquaculture industry jobs and more than $1billion in sunk costs, innovation, growth and opportunity[1].

This includes $14million in lost revenue and innovation investments for Ridley.

While there has been recent encouragement through Queensland's State Development enacting the Coordinator General's powers, the need for more clarity around consistent and reliable application of regulation remains. For this to happen, a broad-scale assessment of resources and environmental values are required to identify areas feasible for aquaculture in sensitive catchments such as the Great Barrier Reef World Heritage Area (GBRWHA).

There has already been progress on this front, with an assessment agreed to in February 2012 by the Commonwealth and State Governments who are undertaking a joint 'strategic assessment of the impacts of actions on the values of the GBRWHA under the Queensland Coastal Management Plan.

This approach should identify areas where aquaculture applications are likely to be approved. While application and assessment of proposals would still be required, there would be a level of expectation of approval based on the strategic assessment process with assessment confined to fine-tuning conditions to protect local and regional environmental values.

However, expectations of approval remain clouded as a result of experience.

A recent example is a Queensland prawn farm that last year received development approvals to extend and started constructing new ponds. The farm then received a letter from the Department of Environment stating an impact on a sensitive area. This is despite the farm having undertaken impact monitoring studies since the start of their licence which scientifically proved no impact. The farm was asked to provide all of its documents within two weeks. They were informed that the relevant person at the Department is on leave for an undefined period, and waited a significant period for clarification. This underlines the need for a transparent process around timeframes for response from government (and GBRMPA) and the need for a statutory time limit.

Another example of where uncertainty is hurting business is demonstrated by an operation in Guthalungra, north of Bowen.

Due to the significant existing financial commitments and business uncertainty around government process and approvals, the expansion operation has been suspended for at least a season.

The farm spent $2million to dig an additional 16 ponds, which is now sunk and non-productive capital. A $200,000 investment in aerators for the ponds is now also idle capital. Even if approvals are awarded at the end of the process, the farm will need to remediate the ponds next year at a cost of up to $4million to return them to an operational fit state.

This impact from the confusion and restriction on growth imposed as a result of red tape is not limited to one farm. Its impact is felt across the supply chain. Ridley alone will lose more than $890,000 in revenue as between 300 and 350 tonnes of feed is no longer required.

Disease prevention and response

Disease prevention and response is also a major component of ensuring a sustainable industry.

The recent detection of a strain of bacteria – acute hepatopancreatic necrosis disease (AHPND) – in Bundaberg, exposed limitations in Australia's ability to prevent and respond to such issues.

Both the Department of Agriculture and Fisheries (DAF) and Biosecurity Queensland appear to be under-resourced, the latter having only one employee who can test product and identify the bacteria strain. Test results have to be sent – typically from Far North Queensland - to the Australian Animal health Laboratory (AAHL) in Geelong for further verification.

Ridley believes the re-establishment of a regional biosecurity laboratory would encourage prawn farms to submit suspect produce for testing, rather than try to avoid delays and self-diagnose.

This is not to say we do not appreciate the assistance provided by the Queensland Government, but it clearly illustrates that to effectively prevent and respond to an issue such as AHPND, specialised aquatic resources are required.

An effective response also requires formal arrangements between governments and aquatic industries—so as to share the costs and responsibilities of emergency responses.

This was one of the recommendations to come from the 2012 Aquatic Animal Biosecurity Emergency Response Arrangements workshop.

Other conclusions and recommendations to come from this workshop which Ridley endorses include:

- The existing agreements (EADRA, EPPRD and NEBRA) do not represent a suitable mechanism for aquatic animal industries and governments to share the costs and responsibilities for emergency aquatic animal disease responses. They do not meet sectors' needs such as a strong focus on risk mitigation;
- Existing arrangements for the aquatic animal sector should be utilised; in particular, responses should be guided by AQUAVETPLAN;
- A single arrangement for all aquatic animal sectors is desirable;
- Aquaculture and fisheries industries and the Commonwealth and state and territory governments should be parties to any formal arrangements;
- Risk mitigation must be a key component of aquatic animal biosecurity emergency response arrangements. Risk management strategies (e.g. biosecurity plans) for each signatory must

be agreed by all other parties. Biosecurity plans should be developed through a consultative process involving the relevant industry sectors and government agencies; and

- There needs to be clarity about items eligible for cost-sharing, including where on-farm facilities are required to mount a response.

Supporting innovation

Innovation in the aquaculture industry not only promotes productivity and sustainability, but also biosecurity through disease prevention and improving prawn resilience to disease.

Ridley is in the final stages of negotiating the new license from CSIRO for production and marketing of Novacq™ in Thailand to complement the license already secured for Australia, Indonesia, Malaysia and the Philippines.

Novacq™ is a prawn feed additive, developed by the CSIRO, that is helping Australian prawn farmers grow bigger, healthier prawns sustainably, faster and cheaper. It allows prawns to be produced with no wild fish products in their diet, which places less pressure on precious marine resources.

By producing healthier and potentially more disease-resistant prawns, innovative products such as Novacq™ will play an important role in disease prevention and response.

Commercial-scale testing is critical in developing such products, and as such any constraints on lease expansion (such as regulation and red tape) in turn places constraints on ponds available for testing.

Fortunately, Ridley has been able to secure a long-term lease agreement for three ponds over 7.5 hectares in Yamba, New South Wales for its Novacq™ commercialisation and product development efforts.

All three ponds should be in operation as the time of this submission. If so, by the start of the next prawn season (September), Ridley will have produced up to 130 metric tonnes of Novacq™ – enough to produce 20-times that in finished prawn feed, representing 1/3 of total projected local demand. By the end of the year, that projection should more than double, meeting more than 70 per cent of projected demand.

While the first few years will realise little profit for Ridley, the production of Novacq™ is essential to continue commercial-scale feeding trials to provide production and economic data to assist development of the product.

An example of such a trial is one Ridley has recently conducted that is aimed at confirming and quantifying the ability of Novacq™ to allow reductions in dietary protein content in diets for the giant tiger prawn. This will help in reducing the nitrogen effluent problem of feeding high protein diets, which will be vital with existing strict effluent discharge laws in Australia. In addition, according to CSIRO, the Novacq™-consuming black tiger prawns grew an average of 30 percent faster than their regular-food-eating counterparts, plus they were healthier.

The recent detection of the strain of AHPND, reinforces the important role that innovative products such as Novacq™ play as part of developing a healthier, and potentially more disease-resistant prawn stock.

Realising this potential will require the support of innovation in the aquaculture industry.

Ridley's experience with Novacq™ has taught it that further research by CSIRO, academia and business will be required to validate our initial findings that it may improve prawn resilience to disease.

Should it do so, the role of a product such as Novacq™ in strengthening the bio-security of the Australian prawn industry will be significant and Ridley would require assistance from all its partners – including government – to scale its production beyond what its current plans and investment permits, **all of whom benefit from a healthier and stronger prawn industry**.

1. *Almost $14m quantifiable revenue is lost for Ridley ($890k from APF + $500k co-investment in an innovation partnership + $12.6m Guthalungra opportunity). This does not include the Pacific Reef opportunity, the significant impact of lost innovation and future growth in the prawn industry. $6m sunk cost and idle capital for the prawn industry ($2m sunk cost for APF ponds development and capital + $3-4m Environmental Impact Statements for Guthalungra). More than $2m in incremental cost to APF to reboot operations, if approved + $60m of investment scoped for the Guthalungra development project + $1.03b SeaFarms project SeaDragon lost to NT, delayed and still not confirmed = ~ $1.092b. This does not include other parts of the supply chain affected by the loss of investment, other organisations who might have considered investing in Australia's prawn industry etc.*