STATEMENT OF DECISION

APPLICATION TO VARY AN AQUACULTURE LICENCE

File Number:	**L206/13-02**
Applicant:	**Peter and Karen Armstrong**
Application Date:	**21 September 2017**
Application Type:	**Variation of an Authorisation**

1 INTRODUCTION

Background facts

Peter and Karen Armstrong ("Armstrong") (ABN 31 850 023 355) is the holder of Aquaculture Licence No. 1642 ("the Licence").

The Licence authorises the culture of *Octopus tetricus* at a site on Basile Island in the Abrolhos Islands.

The authorised site includes a jetty facility of 220 square metres within Pelsaert Group at the Abrolhos Islands and is subject to certain conditions.

On 21 September 2017, Armstrong made an application to the CEO of the Department of Primary Industries and Regional Development ("Department") under s.142 of the *Fish Resources Management Act 1994* ("the Act"), to vary the Licence to include an offshore area adjacent to the jetty facility and to add various species.

Details of the Licence variation application

The application was dated 3 September 2017 and received by the Department on 21 September 2017.

The application seeks to vary Schedule 2 of the Licence to include a 76 square metre offshore area to the authorised site and add the following species on the Licence:

- squid (*Sepioteuthis australis*);
- cuttlefish (*Sepia apama*); and
- green algae (*Caulerpa spp.*).

Attachment 1 provides a site map, which shows the proposed site and the current site authorised under the Licence.

2 COMPETENCE OF THE APPLICATION

The application has been made under s.142(1)(a) of the Act, which provides that –

"*The CEO may vary an authorisation if – (a) the holder of the authorisation applies to the CEO for the variation;*"

Section 142(2) of the Act states that "*if a person applies to the CEO for the variation of an authorisation the person is not entitled to the variation as of right*".

I consider that seeking to add an offshore area and various species to the licence constitutes a "variation" within the meaning of the Act, in the same way that substituting an entirely different area or partially replacing the area would constitute a variation.

There are no express limitations on the face of the provision; the power therefore appears to be unconstrained.

Although s.142(1)(a) does not provide for any express limitations on the exercise of the power in respect of an aquaculture licence, or any other authorisation, I regard s.142 as a general provision that is intended to enable variation of an authorisation where that would not be in conflict with other provisions of the Act that are more restrictive or exhaustive.

In my view it would be unreasonable to use the legislation to prevent a new licence from being granted for a certain activity in a specified area because certain express preconditions were not satisfied, yet use the same legislation to permit an existing licence to be varied to authorise that same activity in that same area without the same preconditions being satisfied.

The substance of the variation application is to authorise aquaculture in areas where aquaculture is not presently authorised.

I therefore consider that the power under s.142 to vary the Licence in the manner applied for may be exercised where the preconditions that would need to be satisfied if a new licence had been applied for are first satisfied.

Accordingly, consideration of the variation application will first give consideration to the issues that would need to be satisfied if the application had been for the grant of a new licence.

Subject to those issues being satisfied, I will proceed to decide the application on its merits.

3 RELEVANT ISSUES TO BE SATISFIED

On the basis of the above, the matters in s.92 and s.92A of the Act require consideration.

In connection with this consideration, reference is made to s.246 of the Act and Administrative Guideline No. 1 *Assessment of Applications for Authorisations for Aquaculture and Pearling in Coastal Waters of Western Australia* ("AG 1").

Consistent with AG 1, a consultation process was undertaken with relevant Government agencies and representative community and industry groups. The process included the opportunity for public comment.

Where relevant, those matters arising out of the consultation process that are of greater significance are referred to below.

The matters arising by reason of s.92 and s.92A of the Act are twofold:
1. The criteria specified in s.92(1); and
2. The Management and Environmental Monitoring Plan ("MEMP").

I will now consider each of these matters.

3.1 Criteria in s.92(1)

Under s.92(1) of the Act, the CEO may grant an aquaculture licence to a person if satisfied of all of the following:
- the person is fit and proper to hold an aquaculture licence;
- the person has, or will have, appropriate tenure over the land or waters on or in which the activities under the licence are to be conducted;
- it is in the better interests of the State and the community to grant the licence;
- the proposed activities are unlikely to adversely affect other fish or the aquatic environment;
- the proposed activities have been approved by other relevant authorities; and
- any other matters prescribed for the purposes of this subsection.

(a) "Fit and proper person"

S.92(1)(a) of the Act requires the CEO to be satisfied that a person who has applied for an aquaculture licence is a fit and proper person to hold an aquaculture licence.

Armstrong was granted the Licence on 22 March 2013 and has been conducting aquaculture at Pelsaert Group, Abrolhos Islands under the authority of that Licence. No circumstance has occurred during that time to question the honesty, knowledge or ability of Armstrong. This history supports the conclusion that Armstrong is fit and proper to hold an aquaculture licence to culture the species authorised under the Licence.

Ministerial Policy Guideline No. 19 titled *Matters Of Importance In Respect Of The "Fit And Proper Person" Criterion For Authorisations Under The Fish Resources Management Act 1994* ("MPG 19") provides a discussion of the types of considerations relevant to the "fit and proper person" consideration by reference to the key concepts of honesty, knowledge and ability.

MPG 19 sets out two matters of importance: firstly, consideration of the extent to which persons may act on behalf of the licence holder; secondly, the importance of accurate, complete and timely records.

With respect to the matter of persons acting on behalf of the licence holder, only Armstrong and anyone employed by Armstrong can act under the Licence. The Licence does not authorise persons to act "on behalf of" Armstrong, so Armstrong cannot authorise independent contractors or 'lessees' to carry out aquaculture.

The discussion in MPG 19 about the importance of accurate, complete and timely records refers to commercial fisheries and fishing boat operators. The activity authorised by the Licence does not relate to fishing and is therefore not relevant. What is important, however, is the requirement under regulation 64 of the *Fish Resources Management Regulations 1995* ("FRMR") for the licence holder to keep records and submit returns in respect of the sale of fish and the accurate and timely communication of information relating to disease and biosecurity. Having regard for the MEMP, I consider that Armstrong properly understands the significance of accurate, complete and timely provision of relevant information.

I am satisfied that Armstrong is fit and proper to hold a licence to conduct aquaculture of the authorised and proposed species at the authorised and proposed site.

(b) Tenure

S.92(1)(ba) requires the CEO to be satisfied that a person who has applied for an aquaculture licence has, or will have, appropriate tenure over the land or waters on or in which the activities under the licence are to be conducted.

Armstrong has an existing lease with the Minister for Fisheries under s. 97 of the Act over the area authorised by the licence. The lease has been amended to include the proposed aquaculture site.

Accordingly, I consider that Armstrong has or will have appropriate tenure over the relevant area to conduct aquaculture.

(c) Better interests

S.92(1)(b) requires the CEO to be satisfied that the granting of an aquaculture licence to the applicant would be in the better interests of the State and the community.

I consider that the assessment of the "better interests of the State and the community" requires a broad balancing of the benefits against the detriments of the intended aquaculture activities.

This consideration proceeds in the context of the objects of the Act under s.3, which include developing and managing aquaculture in a sustainable way.

The means of achieving this object include:

- ensuring that the impact of aquaculture on the aquatic fauna and their habitats is ecologically sustainable: s.3(2)(b);
- fostering the sustainable development of aquaculture: s.3(2)(d); and
- achieving the optimum economic, social and other benefits from the use of fish resources: s.3(2)(e).

In my view, the issues to consider in respect of the "better interests of the State" relate primarily to positive economic impacts, but also the extent of the regulatory burden that the State will need to carry.

The issues to consider in respect of the "better interests of the community" are more localised although not necessarily limited to the geographically adjacent area. The community will include wild-stock licensed fishers and other aquaculture licence holders.

Aquaculture at the Abrolhos Islands comprises a potentially significant and sustainable sector of Western Australia's aquaculture industry and has the potential to expand. The proposed aquaculture of squid, cuttlefish and green algae will facilitate this expansion. Aquaculture activities provide a significant contribution to economies and food production throughout the world. Aquaculture activities also provide potential growth areas of food production compared to the traditional "fishing of wild stock" activities which are directly extractive of a natural resource.

Sustainable aquaculture projects therefore have the potential to make a significant contribution to the State's economy and provide community benefits such as employment opportunities and economic diversification in regional areas.

Another benefit is that the proposed activities will provide further experience and scientific information that can assist with future aquaculture proposals. The development of science depends upon ongoing activities to provide information for analysis.

With respect to detriments such as disease and impact on the environment, I consider that these are sufficiently considered below in relation to whether the proposed activities "are unlikely to adversely affect other fish or the environment". To the extent that fish health certificates and other disease testing are required, being a

major element of the biosecurity controls, these are generally to be paid for by Armstrong.

A consideration which may be seen as a “detriment” is if the Department assumes an unduly onerous regulatory burden. The Department performs a compliance function, to ensure that people comply with the law, in particular licence holders.

Due to the low risk and because the Department must support activities consistent with the objects of the Act, I do not consider that the regulatory burden constitutes a persuasive factor against concluding that the proposed activities are in the better interests of the State.

Another relevant consideration would be whether the proposed waters of operation would be better applied to another use, thereby serving the “better interests” of the State and the community to a greater extent. For example, if an alternative use of the proposed area delivered far greater economic benefits then that may be a reason supporting a conclusion that it is not in the better interests to authorise the addition of an offshore site and the inclusion of squid, cuttlefish and green algae.

On balance, by reason of the above considerations, I am of the view that the grant of the Licence would be in the better interests of the State and community.

(d) Whether the proposed activities are unlikely to adversely affect other fish or the aquatic environment

S.92(1)(c) requires the CEO to be satisfied that the proposed aquaculture activities are unlikely to adversely affect other fish or the aquatic environment.

The main considerations for this criterion are –

1. Genetics, pests and diseases
2. Aquaculture gear
3. Environmental impact
4. Visual amenity and noise pollution

1. Genetics, pests and diseases

I note that squid, cuttlefish and green algae translocated for aquaculture purposes will usually be genetically different from natural populations; however, outgoing water will pass through micron filters to prevent outgoing solids and escapes. In addition, Armstrong will be using tanks with lockable lids to prevent octopus from escaping when they are not being monitored.

Therefore, I consider the likelihood of escapes and interbreeding can be prevented or minimised through the escape prevention procedures described in the MEMP.

I do not consider the introduction of “marine pests” to be an issue because the proposed operations do not involve introducing seawater from exotic locations to the

area or the introduction of any species other than octopus, squid, cuttlefish and green algae to the water.

With respect to disease, there are two scenarios to consider: firstly, that disease may be introduced into the natural environment through squid, cuttlefish and green algae that may be carrying the disease; secondly, that a disease outbreak may occur in the squid, cuttlefish and green algae at the aquaculture site, caused by the conditions at the site.

a. Disease introduction

The accidental introduction of disease pathogens into Western Australia through the translocation of fish can be a major concern, particularly in view of the State's relative freedom from disease. Adequate health testing and certification are consequently an essential element of any translocation policy.

Armstrong is seeking to source broodstock from within the Abrolhos Islands, subject to Exemption approval. The broodstock will be cultured in tanks on the jetty for research and development to collect information on growth rates, types of rearing and feeding systems. Armstrong will operate under biosecurity controls imposed through licence conditions and a MEMP, which includes biosecurity protocols and procedures. These controls are based on the requirement to demonstrate low risk of disease introduction and spread through conducting comprehensive health testing prior to movements being permitted.

I consider the threat of disease being introduced to the Abrolhos Island and the surrounding areas generally to be low, given the biosecurity protocols in place and the controls imposed, or that may be imposed, over the movement of the fish to the site.

b. Disease development in situ

I have noted that aquaculture has been carried out at the existing site at Pelsaert Group for over five years. In that time, there have been no reported disease incidents.

I am also mindful of the disease management requirements set out in the MEMP, which include disease incident reporting requirements. Compliance with the MEMP is a requirement under a Licence Condition.

2. Aquaculture gear

There are two aspects to the consideration of the effect of aquaculture gear on other fish or the environment: its physical and spatial impact on benthic habitats (that is, its "footprint"); and failure to remove the aquaculture gear if the aquaculture operation ceases. The environmental impact of the aquaculture activity on benthic habitats and water quality is a separate issue that is dealt with below.

a. Impact of the aquaculture gear

In this case, the proposed farming method for the squid, cuttlefish and green algae will be in tanks on the jetty.

Therefore, I consider that there would be minimal environmental impact arising from the use of the described aquaculture gear.

b. Removal of the aquaculture gear

In the event of aquaculture ceasing, any issues concerning the clean-up and rehabilitation of the site are covered in the lease deed and legislation.

3. Environmental impact

I note at the outset that it is in the best commercial interest of Armstrong to maintain a healthy environment and to ensure any ongoing environmental impact is appropriately measured and evaluated. The monitoring and management of environmental factors is a separate issue that is dealt with in the MEMP section below.

During the consultation, the Western Australian Fishing Industry Council sought information on the amount of locally caught herring and rock crab required for feed. The proponent clarified that the amount for both will be very low. The rock crab will be used to feed octopus larvae and the herring will be used to feed female octopus. The total quantity of herring used will be three fish per month.

I have noted that the selected species for production and culture are endemic to the Abrolhos Islands. All food supplies for the squid and cuttlefish will be sourced from the Abrolhos Islands and determined subject to the outcome of feed trials. Decomposing and uneaten food will be stored in containers and taken back to mainland to be disposed of appropriately. Therefore, I conclude the culture of squid, cuttlefish and green algae species will have minimal impact on the surrounding environment as there will be minimal change to nutrient levels in the water. To ensure the water quality remains high, outgoing water will be tested prior to entering the environment. In addition, because Armstrong will only be allowed to culture species reared from broodstock that occur naturally within the Abrolhos Islands, no exotic species will be introduced. This is covered in the MEMP.

I have noted that Abrolhos Islands is recognised for its significant marine and terrestrial fauna and flora; however, the environmental risk of the proposed aquaculture activity is considered low and can be managed through the requirements of the MEMP.

Therefore, I consider that the matter of environmental impact has been fully addressed and sufficient environmental monitoring and management controls provided in the MEMP and through conditions of the Licence.

4. Visual amenity and noise pollution

I have noted the location of the proposed aquaculture activity and the remote location of the site; the proposed project will not have any negative impact on visual amenity and will not result in any noise pollution.

After considering the relevant issues regarding s.92(1)(c), I am satisfied the proposed activities are unlikely to affect other fish or the aquatic environment and can be managed through the MEMP and conditions imposed on the Licence under s.95 of the Act.

(e) Whether the proposed activities have been approved by other relevant authorities

S.92(1)(d) requires the CEO to be satisfied that the proposed activities have been approved by relevant authorities. I have not identified any other relevant authority that needs to provide approval.

(f) Other matters prescribed

S.92(1)(e) requires the CEO to be satisfied of any other matters prescribed for the purposes of s.92(1). There are no other prescribed matters.

Therefore, I am satisfied of all of the criteria in s.92(1) of the Act, in respect of the variation application.

3.2 The MEMP

Section 92A of the Act requires an applicant to lodge a MEMP when lodging an application for an aquaculture licence.

A MEMP forms part of an integrated management framework for aquaculture activities, which also includes relevant legislative requirements (including the FRMR and the *Biosecurity and Agriculture Management Act 2007*) as well as conditions on licences and leases.

The purpose of a MEMP is to satisfy the CEO that any risks to the environment and public safety will be managed per s.92A(1) of the Act. A MEMP provides information on the background and purpose of the aquaculture activity, including its objectives, other information such as the species of fish to be farmed, the location of the site and the farming method, and details of environmental monitoring and management and biosecurity.

With reference to the provisions of s.92A of the Act and the Guidance Statement, I note that MEMPs generally contain requirements in respect of the following.

1. An overview of the aquaculture operation, including information on species and quantity of fish; location and areas of land or waters; and farming methods and aquaculture gear.

2. Environmental Management and Monitoring, including information on and details of baseline information; environmental monitoring parameters; the environmental monitoring program; and response thresholds and response protocols.

3. Impact on protected species and other aquatic fauna.

4. Biosecurity, including information on and details of general facility information; administrative biosecurity procedures; operational biosecurity procedures; and biosecurity incident and emergency procedures.

Armstrong has submitted a MEMP in respect of its existing licence. That MEMP has been amended to apply to the proposed operations. I have considered the contents of the MEMP and am satisfied that Armstrong will manage environmental and biosecurity matters according to the standards contained in the relevant documents set out above.

As such, I approve the MEMP provided by Armstrong (**Attachment 2**).

In respect of the public availability of the MEMP, I note that under s.250(1)(c) of the Act, a MEMP lodged under the Act is "confidential information" and cannot be divulged by the Department.

4 DISCRETION TO VARY – MERITS OF THE APPLICATION

Section 142(1)(a) of the Act provides that an authorisation may be varied where the holder of the authorisation has applied for the variation.

I am satisfied that the power to vary Armstrong's' Licence exists in this case.

S.56 of the *Interpretation Act 1984* provides that where the word "may" is used in conferring a power, then the word shall, unless the contrary intention appears in the Act, be interpreted to imply that the power may be exercised or not, at discretion.

I do not consider a "contrary intention" exists in the Act. Accordingly, I am required to consider whether to exercise the power or not, at discretion.

In considering the exercise of discretion I give regard to the merits of the application. That requires balancing the opposing considerations against the supporting considerations. For any detrimental factors, I give regard to how detriments may be minimised and controlled.

4.1 Potential disadvantages of variation

The potential disadvantages of the proposed variation are:
(a) Biosecurity (genetics and disease risk)
(b) Environmental impact
(c) Impact on compliance and resourcing
(d) Limitation on access to the proposed waters
(e) Impact on navigation
(f) Impact on recreational fishing
(g) Impact on commercial fishing and other commercial activities including tourism

(a) Biosecurity

I have considered the issue of genetics earlier at part 3.1(d)(2) of this decision, including interbreeding, and concluded genetics issues will be unlikely to have any detrimental impact.

The potential consequences of a disease outbreak include possibly serious economic impacts on the wild-stock and recreational fishers, as well as a consequential impact on the aquatic ecosystem generally; there is unlikely to be any potential impact on the pearling sector or other aquaculture licence holders.

Once present in the water column and under suitable conditions, disease-causing organisms have the ability to spread; therefore, if a disease outbreak occurs and pathogens are released into the water, it is generally difficult to control or treat the disease which has to run its natural course. Biosecurity controls are therefore needed to prevent the introduction of pathogens into the environment and to minimise the risk of diseases developing at the site by not permitting operations to be conducted so as to predispose organisms on the site to develop disease (by preventing or minimising predisposing factors).

I have considered the issue of disease introduction earlier at part 3.1(d)(1) of this decision and concluded sufficient controls will be in place and so that this issue will be unlikely to have any detrimental impact.

There can also be a requirement for disease testing on stock held in the marine farm. This approach ensures a high level of confidence in the ability to detect known disease agents.

I am aware that there have been no reported disease events in the octopus grown at the Armstrong site at the Abrolhos Islands. I note that from time to time the Principal Research Scientist Aquaculture and Fish Health may wish to undertake disease testing in the absence of a reported disease event and that these requirements may change from time to time, taking into account the diseases of interest, the characteristics of the tests available and the required confidence in the result as determined by risk assessment. A licence condition will be imposed to enable the Principal Research Scientist Aquaculture and Fish Health to determine these requirements for disease testing.

Given the biosecurity protocols in place for the aquaculture activity on the jetty and the controls imposed, or that may be imposed, over the movement of squid, cuttlefish and green algae, I consider the threat of disease being introduced to the Abrolhos Islands is low.

In respect of the species on the Licence, I note that any movements to the site will require a translocation authorisation, which would deal with matters including disease.

To address the risk of disease development *in situ*, additional testing of squid, cuttlefish and green algae at the farm site at the Abrolhos Islands can be required through a licence condition.

In summary, I have noted the issue cannot be about eliminating all risk; otherwise, aquaculture operations in the marine environment would not be able to proceed. That is contrary to the object and operation of the Act. The task, therefore, is to reduce the risk of disease outbreak to an appropriately low level by identifying and assessing biosecurity, environmental and other risks and implementing management strategies and controls to reduce the risks. This is addressed primarily through biosecurity controls implemented in the MEMP and licence conditions.

(b) Environmental impact

The MEMP provides an environmental monitoring program developed to ensure the proposed aquaculture activity will be unlikely to have any significant impact on the environment and that any impacts that may occur will be managed effectively.

Given the information provided in the MEMP, I am of the view that the proposed aquaculture activity could be implemented without significant deleterious impacts on the environment. Existing aquaculture legislation and adaptive management mechanisms provide further confidence that the aquaculture industry can be developed sustainably.

Given the information set out above, I am of the view there are sufficient controls in place to manage any environmental impact

(c) Impact on compliance and resourcing

I note that licence conditions are generally designed to facilitate efficient and effective enforcement activities and that disease testing of cultured stock is generally the financial responsibility of the operators. Therefore, I do not consider that compliance activities undertaken to enforce the varied licence conditions in this case will be unduly onerous, as they should fall within the usual activities of the Department.

(d) Whether the proposal involves limitation on access to the proposed waters.

The variation does not provide the licence holder with exclusive access to the site; therefore, granting the Licence to authorise aquaculture at the site will not limit access to waters.

(e) The possible impact on navigation

The Department referred the proposal to the Department of Transport (Navigational Safety), which recommended the areas of the site be subject to marking and lighting in accordance with Category 4 as set out in the document *Guidance Statement for Evaluating and Determining Categories of Marking and Lighting for Aquaculture and Pearling Leases/Licences (2010)*. This can be dealt with under a standard licence condition.

(f) The possible impact on recreational fishing

The variation is for a land-based site so the additional area will not have any impact on recreational fishing.

(g) The possible impact on commercial fishing and other commercial activities including tourism

The variation is for a land-based site so, as with recreational fishing, the additional area will not have any impact on commercial fishing.

4.2 Potential advantages of variation

The potential advantages of the proposed variation are:
(a) Suitability of the location for aquaculture and proximity to existing operation
(b) Very low impact on other users of the resource
(c) Potential economic benefits for the State
(d) Contribution to ongoing development of science and knowledge of aquaculture
(e) No impact on native title.

(a) Suitability of the location for aquaculture and proximity to existing operation

Correct site selection is the single most important factor that determines the success of aquaculture ventures. The history of octopus being held and maintained at Armstrong's existing site at the Abrolhos Islands indicates the general suitability of the site for aquaculture. In its application, Armstrong provided justification for the additional area and species applied for under the variation to make the venture commercially more viable.

There are numerous reasons why the site provides a good location for the proposed activity and, specifically, I have noted the following factors in respect of the location of the site:

- The area applied for appears suitable for the continued establishment of an aquaculture business; and
- the proximity of the additional area to the existing area provides an added advantage in respect of operational efficiency and compliance activity.

I am of the view the reasons set out above show that the location is suitable for squid, cuttlefish and green algae aquaculture, and that the addition of the new area to the existing site would afford advantages in respect of operational efficiency.

(b) Very low impact on other users of the resource (providing disease issues are dealt with)

For the reasons set out above, the granting of the variation to the Licence would not have any impact on other users of the resource.

I have noted that the proposal was developed in consultation with a range of stakeholders.

Providing that disease issues are dealt with, I have formed the view that the proposal will have little to no impact on other users of the resource.

(c) Potential economic benefits for the State

The establishment of aquaculture operations in regional areas has the potential to add to the economic growth of the region and increase local employment. Existing aquaculture farms around the State are already providing employment opportunities.

I have considered the issue of economic benefits for the State earlier at part 3.1(c) of this decision.

(d) Contribution to ongoing development of science and knowledge of aquaculture

Information generated from the expansion of aquaculture activities at the site would contribute to the ongoing development of the science and knowledge about aquaculture, in part by providing data pertaining to environmental impact of activities of this nature on the key identified environmental factors at this type of site; namely, benthic communities and habitat, marine environmental quality and marine fauna.

The science developed from the proposal would not only increase the efficiency of the commercial activity, but also provide a basis for adaptive management by the Department.

(e) No impact on native title

There is no impact on native title.

In respect of the various issues opposing and in favour of the proposal, I am satisfied the benefits outweigh the disadvantages and that the risks, possible detriments and other issues associated with the proposed licence variation can be managed by licence conditions and the MEMP.

4.3 Other matters the CEO has the discretion to consider

I will now address another matter relating to the application; namely, the productive use of the site.

It is in the interests of the State for aquaculture sites to be productively used by the relevant licence and lease holder. Because State waters are a community resource, it is also in the best interests of the community for aquaculture activities conducted in those waters to be productive. These principles reflect the aim under s.3(2)(e) of the Act to achieve the optimum economic, social and other benefits from the use of fish resources.

As such, I have assessed the capability of the applicant, to ensure the most productive use of the site that will be authorised under the variation.

WAFIC has commented that if the site has not been active or productive, that it may potentially be used as a vehicle to access a camp at Basile Island. WAFIC also enquired whether Armstrong has an Aquaculture Development Plan (ADP) and if the goals in the plan have been met or exceeded. Armstrong states that they hold a cray fishing licence and thus do not require Aquaculture to maintain access to camps. Regarding the ADP, Armstrong has worked to their ADP plan for the past five years, conducting research and development to close the life cycle of octopus. Up to now, Armstrong has reportedly had some success in larval rearing, however has yet to complete the cycle. Different algae and nutrients are being trailed to achieve this. Armstrong is seeking a variation to the licence to trial symbiotic relationships between species.

In respect of productive use of the site, I have considered the information provided in the application.

I consider the productive use of the site for aquaculture activities to be a significant factor in my decision to grant the variation.

On the basis of the representations from Armstrong, I am satisfied that the use of the site will be productive.

Before the lease was approved, I introduced reasonable performance criteria for this operation, based on:
1. the representations made by Armstrong in its application; and
2. the State and community interest in ensuring the productive use of State waters.

The minimum level of performance for a lease is 70% of the predetermined and agreed levels of development and agreed timeframes.

I advised the Minister that any associated aquaculture lease for the site includes performance criteria as conditions on the lease to ensure productive use of the site. I recommended to the Minister that any such aquaculture lease provides for termination of the lease if the specified performance criteria are not met by the licence holder.

5 LICENCE CONDITIONS

My reasoning has noted that certain matters can be satisfied if they are able to be dealt with by licence conditions. Accordingly, before deciding on the application to vary Armstrong's Licence, I now turn my mind to conditions I consider ought to be imposed on the licence.

The matters for which conditions may be considered are as follows.

- Requirement for a lease

  A lease will be required for aquaculture to be conducted at the site.

- Aquaculture method and gear

Conditions in respect of aquaculture method and gear provide controls over the deployment of sea cages, the materials used in their manufacture and anchoring systems. These controls are set out in the Management Policy, compliance with which is a requirement of the MEMP.

- Health management and certification

  Conditions dealing with health management and certification will minimise the risk of introduction of disease, by ensuring each group of fish moved to the site will be tested and certified free of signs of clinical disease.

  A general condition will also be imposed requiring information on mortalities to be provided at the request of the Principal Research Scientist Aquaculture and Fish Health.

- Biosecurity (including disease and genetics)

  Conditions in respect of biosecurity include controls over record keeping, the source of broodstock, health management and certification, procedures to be followed in the event of suspicion of disease and controls over the disposal of biological waste materials.

  As Armstrong would not have exclusive possession of the site and waters, an officer of the Aquaculture and Fish Health Section of the Department or a Fisheries Management Officer can enter the site at any time to inspect stocks.

  I note that with disease testing a balance needs to be struck between the benefit derived from testing against the cost of undertaking the testing. Repeated testing of healthy stock is likely to be of low value, yet would require the licence holder to incur significant costs. On the other hand, targeted testing of dead or moribund species will be likely to identify the presence of any disease-causing organisms. A level of testing should be undertaken on the recommendation of the Principal Research Scientist Aquaculture and Fish Health.

  As with any condition, if circumstances change then the requirement for testing can be changed.

- Marking and lighting

  A condition will be imposed as set out in 4.1 (e) above.

- Environmental monitoring

  Conditions in respect of environmental monitoring and reporting are set out in the MEMP.

- Compliance issues

Conditions in respect of compliance issues provide controls over or requirements for making and keeping of records.

The power to delete and add new conditions is provided for in s.95 of the Act.

The Department has liaised with the Applicant over the licence conditions. The indicative (intended) substance of the licence conditions is as follows.

1. Interpretation

(1) In the conditions on this licence –

DPIRD means the Department of Primary Industries and Regional Development.

Pathologist means an employee of a laboratory facility that is accredited by the National Association of Testing Authorities, Australia;

Principal Research Scientist Aquaculture and Fish Health means the officer occupying that position in the Department, or any officer occupying a comparable position in the Department that the CEO advises the licence holder by notice in writing will be performing the duties of the Principal Research Scientist Aquaculture and Fish Health;

site means the area specified in Schedule 2 of this licence.

(2) The following terms used in the conditions on this licence have the same meaning as in the *Fish Resources Management Act 1994* –

- CEO;
- fish; and
- record.

2. Requirement for appropriate tenure to authorise activity

The holder of this licence must make every reasonable endeavour to obtain, and must maintain in force at all times, the legal right to use the site. No aquaculture is to be carried on at the site without the legal right to use the site for aquaculture having first been granted. The legal right to use the site must be a lease, sub-lease or licence granted in accordance with the power conferred under the *Land Administration Act 1997* or under section 97 of the *Fish Resources Management Act 1994*.

3. Marking and Lighting

(1) Marking and lighting of the site must be installed and maintained in accordance with Category 4 as set out in the document “Guidance

Statement for Evaluating and Determining Categories of Marking and Lighting for Aquaculture and Pearling Leases/ Licences (2010)".

(2) The marking and lighting required under paragraph (1) must be installed before any aquaculture activity is undertaken at the site.

(3) No marking is required if the site is only used for bottom culture at a depth greater than five metres below the lowest tide.

4. Aquaculture gear

(1) Aquaculture gear must be used in such a way that it is not in contact with and does not damage any reef, coral or seagrass bed.

(2) The holder of the licence must ensure that all aquaculture gear is located within the boundaries of the site, and maintained in a safe, secure and seaworthy condition; and all floating aquaculture gear, including ropes and buoys, must be fastened securely.

5. Jetties

No aquaculture activity is to be conducted on or above any jetty unless the jetty has been assessed by a qualified structural engineer, and the engineer has issued a certificate specifying the working load limit of the jetty. No aquaculture activity is to be conducted on or above any jetty unless a copy of the working load limit certificate is kept at the jetty for inspection at any time by any DPIRD Officer and the working load limit specified in the certificate is not being exceeded. The original certificate must be kept safe and secure as a record of compliance with this condition.

6. Possession of fish and translocation

Any fish that is not native to the Abrolhos Islands must not be brought onto or kept on the site.

7. Health management and certification

(1) The licence holder must not move fish onto the site unless –

(a) the licence holder has submitted the request form, provided by the Principal Research Scientist Aquaculture and Fish Health, to a Pathologist employed by the Department for the provision of a health certificate; and

(b) the licence holder has received a health certificate from a Pathologist in respect of all fish being moved to the site; or

(c) where the licence holder has made a request under paragraph (a) to a Pathologist who is not a DPIRD Officer, the licence holder has received confirmation from the Principal Research Scientist

Aquaculture and Fish Health that a copy of a health certificate for those fish is in the possession of the Principal Research Scientist Aquaculture and Fish Health.

(2) The licence holder must ensure that any fish moved to the site is accompanied at all times by a copy of the health certificate received under paragraph (1).

(3) Paragraphs (1) and (2) do not apply with respect to broodstock collected or taken from the waters of the Abrolhos Islands Fish Habitat Protection Area.

8. Disease testing

(1) The licence holder must ensure that disease testing of fish is carried out –
   (a) prior to transport to or from the site; or
   (b) while the fish is situated at the site,
   as required by notice in writing from the Principal Research Scientist Aquaculture and Fish Health.

(2) The testing carried out under paragraph (1) will be at the cost of the licence holder.

9. Biosecurity measures

Where the licence holder -

(1) suspects that any fish at the site are affected by disease; or

(2) becomes aware of any significant or unusually high levels of fish mortality, caused by disease or otherwise, the licence holder must -
   (a) immediately notify DPIRD on 1300 278 292 (all hours) of the level of mortality or signs of disease; and
   (b) follow the directions of the Principal Research Scientist Aquaculture and Fish Health in relation to providing reports, samples of fish, or any other relevant item, at such a time as required.

10. Feeds

Any manufactured feed must be certified according to the requirements of quality standard AS/NZS ISO 9001:2008 (or equivalent regulatory standard).

11. Release of fish

No fish are to be released from the site or allowed to enter any natural water body.

12. Waste

Where any person has, or the CEO advises the licence holder in writing (including by email) that the CEO has, reasonable grounds for suspecting that –

(1) A disease to which regulation 69 (d) relates is confirmed in any tank, cage or enclosure at the site; or

(2) There is a real and sensible risk of disease being spread to the oceanic waters or stock in those waters through the discharge of waters from the tank or tanks,

then no waters are to be discharged from the tank, cage or enclosure, either directly or indirectly, to any oceanic waters or other natural waters.

13. Interaction with protected species

Any interactions between any aquaculture gear at the site and any protected species, including entangled or stranded animals, must be immediately reported to the Department of Biodiversity, Conservation and Attraction's Wildcare Hotline on (08) 9474 9055 (24-hour emergency number), the DBCA's Nature Protection Branch on (08) 9219 9837 and the local DBCA District Office.

14. Record keeping

(1) The licence holder must make accurate and timely records of –
- (a) the aquaculture gear used at the site;
- (b) the movement of fish to each type of aquaculture gear, including –
  - i. the estimated average weight or numbers of the fish moved;
  - ii. the time and date the movement took place; and
  - iii. any mortalities of fish that occurred during the movement;
- (c) the estimated average weight and numbers of fish being kept on each type of gear at the site;
- (d) the estimated weight or numbers of fish harvested from each type of aquaculture gear at the site;
- (e) all mortalities at the site, both in total and as a percentage of total stock held at the site at the time; and
- (f) all health certificates issued to the licence holder by a Pathologist.

(2) The licence holder must keep the records made under paragraph (1) in a secure place at the licence holder's registered place of business for a period of seven years.

(3) The licence holder must, upon request, provide the information in the records to the Principal Research Scientist Aquaculture and Fish Health in a form approved by the Principal Research Scientist Aquaculture and Fish Health.

(4) Records under paragraph (1) must be available to an authorised Fisheries Officer at any time.

15. MEMP Compliance Audit

An independent audit of compliance with the MEMP must be commissioned and carried out by the licence holder, at the expense of the licence holder, within four months of being directed in writing by the CEO to commission the audit. A copy of any interim and final audit report must be delivered to the CEO within seven days of being received by the licence holder.

16. MEMP Report

The holder of the licence must:

(1) at all times comply with and implement the Management and Environmental Monitoring Plan ("MEMP") prepared by the holder of the licence, and delivered to DPIRD; and

(2) before 31 July each year, submit to the CEO at the head office of DPIRD at Perth, a written annual report on its activities conducted under the MEMP during the year, which must include all results of management and monitoring activities to 1 July.

The conditions will be imposed by providing the Applicant with notice in writing, noting there is a requirement for a review period before giving effect to the decision.

I note that the aquaculture venture is a dynamic operation, not a static event, and in the event that varied or additional conditions become appropriate then those can be imposed in the future in accordance with the process in the Act.

DECISION

On the basis of the above and subject to the amendment of the licence by imposing conditions referred to above, I have decided to vary the Aquaculture Licence No. 1642, submitted by Peter and Karen Armstrong to include squid, cuttlefish and green algae as well as a 76 square metre offshore site to the Licence.

I have also decided to approve the MEMP and delete the existing conditions on the Licence and impose new conditions on the Licence under s.95 of the Act. The new conditions to be imposed are as set out above at Part 5 of this Statement of Decision.

Heather Brayford
DEPUTY DIRECTOR GENERAL, Sustainability and Biosecurity
As delegate of the CEO

Dated this 11th day of February 2019

I hereby give instruction for notice of the decision to vary the Licence under s.142 of the Act and impose conditions under s.95 of the Act to be advertised in the West Australian newspaper in accordance with s.148 of the *Fish Resources Management Act 1994*.