

## STATEMENT OF DECISION

### APPLICATION FOR THE GRANT OF AN AQUACULTURE LICENCE

**File Number:** L12/18  
**Applicant:** Harvest Road Export Pty Ltd  
**Application Date:** 21 December 2017  
**Application Type:** Grant of an Authorisation

#### 1 INTRODUCTION

##### Background facts

On 21 December 2017, Harvest Road Export Pty Ltd (“Harvest Road”) (ACN 165 170 445) made an application to the CEO of the Department of Primary Industries and Regional Development (“Department”) under s.92 of the *Fish Resources Management Act 1994* (“the Act”), for the grant of an aquaculture licence to trial the culture of native rock oyster species in waters along the Wooramel Coast in Shark Bay. Harvest Road has also made an application for an aquaculture lease for the same areas.

##### Details of the licence application

The application was dated 21 December 2017 and received by the Department on that day.

The site applied for comprises nine separate intertidal and subtidal areas in the Wooramel Coast area of Shark Bay. The total area of the nine separate sites is 6000 square metres (0.6 hectares). **Attachment 1** provides a site map. The proposed site is located within an A Class Marine Park Reserve (the Wooramel Special Purpose Zone of the Shark Bay Marine Park) and within the Shark Bay World Heritage Area.

The application seeks to culture the following native rock oyster species:

- *Saccostrea cucullata*; and
- *Saccostrea scyphophilla*

## 2 COMPETENCE OF THE APPLICATION

The application has been made under s.92 of the Act, which provides that –

*If a person applies to the CEO for the grant of an aquaculture licence and the CEO is satisfied of all of the following –*

- (a) the person is a fit and proper person to hold such a licence;*
- (ba) 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;*
- (b) it is in the better interests of the State and the community to grant the licence;*
- (c) the activities to be conducted under the licence are unlikely to adversely affect other fish or the aquatic environment;*
- (d) the activities to be conducted under the licence have been approved by other relevant authorities;*
- (e) any other matters prescribed for the purposes of this subsection,*  
*the CEO may grant to the person an aquaculture licence.*

Accordingly, in deciding the application I will first consider the issues above; I will then consider s.92A of the Act – *Applicant for licence to have management and environmental monitoring plan.*

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

However, before setting out my consideration of these issues, I will first address the preliminary aspect of environmental impact in relation to the application.

Section 38 of the *Environmental Protection Act 1986* provides for a Decision Making Authority (DMA) to refer a proposal to the Environmental Protection Authority (“EPA”) for assessment when, in the opinion of the DMA, implementation of the proposal has the potential to have a significant impact on the receiving environment. For the purpose of this application, the Department is considered a DMA.

In May 2018, consistent with s.92 of the Act and s.38 of the *Environmental Protection Act 1986* (and specifically with regard for the “significance” of the proposal in terms of public interest), the Department referred the Harvest Road proposal to the EPA for its consideration.

In September 2018, the EPA decided that the proposal is “not so significant as to warrant formal environmental assessment”. There were no appeals to this decision to not assess the proposal. The EPA noted that the environmental management and monitoring issues relating to the project can be addressed through the proponent’s Management and Environmental Monitoring Plan.

## 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”).

AG 1 outlines a process that involves consultation with relevant Government agencies and representative community and industry groups and includes the opportunity for public comment. The application was referred to all relevant stakeholders and to any other groups, which in the opinion of the CEO, may have an interest in the proposal.

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

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.

I will now consider each of these matters in turn.

## 1. Knowledge

The concept of “knowledge” refers to relevant qualifications; knowledge of relevant legislation; relevant training, business and technical skills; and previous relevant experience.

From the business plan submitted by Harvest Road, I have noted that the company has a proven history of success within the horticultural and agricultural sectors. Harvest Road has sufficient capital and has been in consultation with industry experts to ensure the project’s operational and environmental practices are conducted to the highest standard. Based on the information provided I am of the view that Harvest Road has, or will have, the knowledge required to undertake the proposed aquaculture activity.

## 2. Honesty

The concept of “honesty” generally refers to matters such as history of compliance with fishery legislation, offences and convictions for falsifying returns. I have no reason to believe Harvest Road or its directors do not meet this concept of honesty.

## 3. Ability

The concept of “ability” refers to the person’s financial situation and capacity to access finance; history of business success; possession of or access to relevant equipment or infrastructure; ability to keep records and ability to pay relevant fees.

Based on the information provided in the business plan, I have no reason to believe that Harvest Road would not have the capacity to raise the finance needed for the establishment and operation of the project.

From the information provided, it is evident that Harvest Road has a clear understanding of the level of infrastructure and aquaculture equipment needed for the successful implementation of the project. Harvest Road has no history of keeping records and paying relevant fees; however, I have no reason to doubt the ability of the company in this regard.

MPG 19 sets out two additional 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, Harvest Road is a company and accordingly must act through natural person agents. These persons are the officers (such as directors) and employees of the company. The Licence does not authorise persons to act “on behalf of” Harvest Road, so Harvest Road cannot authorise independent contractors or “lessees” to carry out aquaculture. Harvest Road has previous business experience within the horticultural and agricultural industries, so the directors can be assumed to understand relevant principles of agency.

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 to the content of the MEMP written by Harvest Road and the information provided in the application, I consider the Company properly understands the significance of accurate, complete and timely provision of relevant information.

I am satisfied that Harvest Road is fit and proper to hold a licence to conduct aquaculture of the proposed species at the proposed area.

### **(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.

Harvest Road has made an application for an aquaculture lease under s.97 of the Act to the Minister for Fisheries in respect of the intended area of operation. That application has been assessed by the Department concurrently with assessment of the licence application.

I am satisfied Harvest Road will have appropriate tenure over the site.

### **(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 licence holders.

In relation to “benefits”, aquaculture of oysters comprises a potentially significant and sustainable sector of Western Australia’s aquaculture industry and has the potential to expand. The proposed aquaculture activity will contribute to 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 aquatic 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 Harvest Road.

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, in particular licence holders, comply with the law.

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.

On balance, by reason of the above considerations I am of the view that the grant of the application 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, diseases and pests
2. Aquaculture gear
3. Environmental impact
4. Visual amenity and noise pollution.

**1. Genetics, diseases and pests**

Harvest Road will source oysters that occur naturally within Shark Bay and surrounding areas. Broodstock will be transported to the Albany Shellfish Hatchery where they will be spawned and the ensuing larvae reared to produce spat. The movement of spat from the Albany Shellfish Hatchery will require translocation approval and a health certificate from the Department, or as specified in the licence conditions.

During the consultation undertaken according to AG 1, the Western Australian Fishing Industry Council (WAFIC) commented that stakeholders agree that only the oyster species and particularly the strains of these species, that are endemic to the Shark Bay region should be cultivated and therefore suggest that the proponent should work with DPIRD and the Albany Hatchery to ensure the appropriate strains are used and no new strains are introduced. I note that Harvest road sought advice of experts in oyster genetics, including DPIRD researchers, to ensure that this requirement is met.

The Department has undertaken considerable work to guide a sensible and practical policy position for the developing rock oyster aquaculture sector. Only oyster species native to an area will be authorised for aquaculture in that area. The introduction of non-native species (that is, species that do not occur naturally in the area) will not be approved; consequently, new genetic combinations will not be introduced to the local gene pool.

Due to a lack of knowledge on the genetics and taxonomy of rock oysters in WA, the Department undertook a study in collaboration with WA Museum and other authorities, to identify the species proposed for aquaculture across the State. This work determined there are two main species native to WA; namely, *Saccostrea scyphophilla* and *Saccostrea cucullata* (commonly known as milky and black-lip rock oysters, respectively). The only rock oyster population known to occur on the south-western coast of WA is cultured *Saccostrea glomerata*, which was apparently transported to WA from south-east Australia and is maintained for the purposes of spawning and spat rearing in artificially heated water.

The milky oyster, *S. scyphophilla* and black-lip oyster *S. cucullata*, occur naturally in Shark Bay and their natural distribution extends at least to the Pilbara. Based on the science, milky and black-lip oysters from the Pilbara and Shark Bay are essentially genetically indistinguishable. I am therefore of the view that milky oyster and black-lip oyster spat reared from broodstock originating from within the natural distribution of the species are suitable for translocation within that same natural range.

I have also noted that the advantages of a single genetic line through genetic selection for the developing industry are significant for reasons that include economy of scale for production (multiple operators can share a single batch); a variety of locations and conditions from which broodstock may be obtained (allowing multiple conditionings and spawning opportunities per year); and the ability to optimise production through comparative growth trials.

In respect of diseases and pests, Harvest Road's aquaculture operation will operate under 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 and pest introduction and spread.

To minimise the risk of introducing diseases, sensitive molecular methods are used to detect the pathogens that cause significant notifiable diseases (*Marteilia* sp. and *Bonamia* sp.) before translocation approval of hatchery spat is granted. Spat are reared under highly controlled conditions and neither disease is vertically transmitted so there is a minimal risk of disease spread from the hatchery process. The pathogen *Perkinsus* sp. has been shown to be widespread in natural populations including in Shark Bay. The risk of translocation of new disease through spat produced from broodstock originating from outside Shark Bay to that area (or *vice versa*) is therefore low. In respect of disease development *in situ*, the Department recognises there is potential for aquaculture to provide opportunity for increased levels of existing naturally occurring pathogens (as is the case for all shellfish aquaculture) and plans to monitor for a variety of diseases during the planned controlled growout of spat at several locations, including Shark Bay.

I consider the threat of disease and pests being introduced to Shark Bay 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 shellfish to and from the site.

## 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*

For intertidal culture, Harvest Road proposes to utilise longlines set up in triplicate arrays. Each array of triplicate longlines will be supported by posts and hold 45 oyster baskets, with a total of 135 baskets placed on each trial site. Aquaculture gear for subtidal culture will comprise single longlines that follow naturally-occurring channels within the Wooramel Bank. The subtidal longlines will be suspended by floats held in place by two screw anchors. Harvest Road recognise the physical and environmental potential impacts that may arise from the deployment of aquaculture gear. The posts and anchors deployed on the seafloor will be positioned on sandy substrate to avoid contact with any identified sensitive benthic habitats.

In respect of marine fauna, I have considered that Shark Bay encompasses a wide range of marine wildlife including mammals, reptiles and birds that are protected and considered as high value within Shark Bay and the Shark Bay Marine Park. Loggerhead turtle rookeries and one-tenth of the world's dugong population can be found in this area. Shark Bay also offers breeding grounds for prawns, scallops and finfish and habitats for endangered green turtles.

I have noted comments that placement of aquaculture infrastructure may have an impact on surrounding seagrass habitats and juvenile prawns, in particular king prawns, which inhabit the sandy substrate of the Wooramel Bank. As a requirement of its MEMP, Harvest Road will monitor sediments, nutrients and seagrass conditions to evaluate any potential impacts on invertebrate and other benthic communities that may be caused by the proposed aquaculture activity.

Given the above, the risk of the proposed activity having any negative impact on seagrass habitats, invertebrate and other benthic communities arising from placement of aquaculture gear is low.

Whales, dolphins, seals, turtles and dugongs may sporadically frequent the subject area where entanglement with aquaculture gear may theoretically occur. Dugongs and turtles in particular may feed on seagrass species within close proximity to the site. Taking into account past experiences in the shellfish industry in WA, the likelihood of entanglement and interaction by marine mammals is very low due to the placement and depth of most sites. Nonetheless, Harvest Road will be required to minimise the risk of these interactions by:

- conducting dugong and turtle surveys by use of airplanes;
- installing work vessels with propeller guards or powering vessels with jet propulsion to reduce the risk of injury to marine fauna if vessel strike occurs;
- introducing go-slow zones surrounding aquaculture sites to avoid startling any marine fauna that may be foraging;
- disposing of any non-degradable debris, such as lost or discarded fishing gear and other refuse (e.g. plastic bags and bottles) off site in an approved landfill;
- following the Aquaculture Council of Western Australia's guidelines for marine structures;
- monitoring and repairing aquaculture gear as required; and

- reporting any negative interaction to the Department of Biodiversity, Conservation and Attractions (DBCA) within 24 hours of discovery of any incident.

Therefore, I consider that potential entanglement and interaction with marine fauna arising from the deployment and use of the aquaculture gear would be minimal.

*b. Removal of the aquaculture gear*

The proposed aquaculture gear for intertidal areas will include a series of longlines, set up in triplicate arrays. Each triplicate array will be supported by posts and hold 45 baskets. For subtidal areas single longlines will follow naturally-occurring channels. Longlines will be suspended by floats held in place by two screw anchors.

During the consultation phase, the Shark Bay Prawn Trawler Operator Association (SBPTOA) sought assurance that, in the event of a major cyclone that results in damage to oyster infrastructure, there is clear delineation on who is responsible for the clean-up, noting that any debris that moves offshore into the Shark Bay Prawn Fishery trawl grounds can present damage to trawl gear. I note that the proponent will be responsible for retrieving any infrastructure damaged or adrift as a result of cyclones or other natural events. This has been covered in the MEMP.

As outlined in its MEMP, in the event of decommissioning of any of the areas, Harvest Road will remove all aquaculture gear from the Wooramel Bank within three months of abandonment.

If a lease is terminated or expires, s.101 of the Act provides for the CEO to direct the former lease holder to clean up and rehabilitate the site. If the former lease holder contravenes that direction, the CEO may then clean up and rehabilitate the site and the cost of doing so is recoverable as a debt due to the State from the former lease holder.

Therefore, I consider that there is a low risk of the aquaculture gear being left on the site if the aquaculture operation ceases.

*3. Environmental impact*

DBCA commented that “the proponent should undertake suitably scoped and designed biological, physical, and water quality baseline surveys of areas affected and potentially influenced by aquaculture operations and to investigate key ecological values, functions and linkages associated with the Wooramel Bank and suggests to include the collection of information of potential risks and impacts of oyster aquaculture, for example including:

- geomorphological, sediment and bio-sedimentary alterations;
- hydrodynamic alterations (e.g. sedimentation transport, movement or accumulation of particulate organic matter in sediments)
- loss and/or degradation of habitat (e.g. seagrass and non-seagrass areas)

- loss and/or degradation of perennial and ephemeral seagrass communities and other ecologically significant marine, benthic species and communities (e.g. including reduction in light availability and primary production, etc); and
- risks and impacts on important marine fauna species and populations (e.g. entrapment and entanglement, provisioning, light and under water noise emissions).”

The Shark Bay World Heritage Advisory Committee also requested that Harvest Road should capture data on sedimentation rates and patterns around the aquaculture gear and suggested that a study of linkages between the forces which drive and connect sediment movement, deposition and bio-stabilisation on the Wooramel Bank should be conducted prior to any full-scale operation, so that an assessment of the potential impacts of the proposal can be made.

I note at the outset that it would be in the best commercial interest of Harvest Road to maintain a healthy environment and ensure any ongoing environmental impact is properly measured and evaluated. The proponent plans to develop and review monitoring programs through a committee that includes representatives of DPIRD, DBCA and the Department of Water and Environmental Regulation. In addition, Harvest Road has included hydrodynamics monitoring and stated that it will be conducting a research program in collaboration with the broader scientific community. The monitoring and management of environmental factors are dealt with in the MEMP section below.

Further, the SBPTOA commented that juvenile tiger prawns depend on the diverse seagrass areas of the Wooramel Bank and that “unlike juvenile tiger prawns, which live in seagrass meadows, juvenile king prawns inhabit the sandy substrate of Wooramel Bank until adult stage when they migrate offshore.” The SBPTOA requested that environmental monitoring should be conducted to detect any changes to seagrass and the substrate underneath and surrounding the oyster lines. I note that the proponent has confirmed that aquaculture gear will be placed on mapped sandy areas and not within or immediately adjacent to any seagrass bed. This has also been included in the MEMP. I have considered that the areas act as nursery habitat for juvenile king prawns; however, the aquaculture gear is unlikely to present a threat to juvenile prawns because it will occupy less than 0.01% of the sandy area of the Wooramel Bank. I also note that Harvest Road’s MEMP includes sediment and seagrass monitoring under aquaculture gear to allow future evaluation of potential impacts of a larger project.

I have noted that the species proposed for culture are filter-feeders that consume naturally-occurring phytoplankton. No supplementary feeds and hence no nutrients will be added to the water; consequently, any environmental impact ensuing from an increase in nutrient concentrations will be minimal. Harvest Road will also monitor sediment quality as outlined in the MEMP to evaluate potential impacts of the operation.

The collection of broodstock may negatively impact wild stock numbers in Shark Bay if there is no limit on the volume of collection. Any exemption or authorisation granted to Harvest Road to collect broodstock will include a condition limiting the

collection of broodstock to areas within the Wooramel Special Purpose Zone and restricting collection levels to maintain sustainability.

In addition, it is essential that the environment quality, namely the water and sediment quality within Shark Bay, will be maintained to the extent that either no change is detectable or levels of change are within limits of natural variation. Harvest Road will achieve this through the environmental monitoring program set out in the MEMP.

Further, I note that waste materials or biofouling organisms removed from aquaculture gear may be used as a food source by wildlife entering Harvest Road's proposed site. This provisioning of wildlife may disrupt natural foraging patterns and predator-prey relationships; therefore, it will be important for Harvest Road to avoid any deliberate or incidental provisioning of wildlife by ensuring that wildlife has limited or no access to cultured stock or waste materials. Harvest Roads' MEMP includes monitoring and management strategies that cover this issue.

WAFIC commented that stakeholders hold concerns about the large scale production of filter feeders to impact on availability of phytoplankton and nutrients and that a reduction in nutrients and phytoplankton availability could have an unknown knock-on effect for overall productivity in the ecosystem. A larger-scale project may have implications for productivity of the Wooramel Bank area and for that reason, and as a requirement of its MEMP, Harvest Road will monitor phytoplankton abundance (chlorophyll a) and productivity to evaluate impacts of any future large-scale project. The proponent also notes that in terms of relevance to the area's productivity as a nursery, the major source of productivity is likely to be benthic rather than phytoplankton and be derived from the seagrasses through a detrital process.

Importantly the MEMP has been developed with significant input from DWER and DBCA.

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

#### *4. Visual amenity and noise pollution*

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. Consistent with s 92(5) of the Act, an aquaculture licence must not be issued in relation to the Wooramel Special Purpose Zone of the Shark Bay Marine Park unless the Minister to whom the administration of the *Conservation and Land Management Act 1984* approves the granting of the licence. DBCA has been engaged throughout the process to consider the licence application and is satisfied with the relevant monitoring proposed by Harvest Road including megafauna, seagrass and sediment. In providing

The Minister for the Environment has approved the granting of authority under an aquaculture licence to aquaculture rock oysters (*Saccostrea* spp.) at the proposed areas.

**(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 application.

### **3.2 The MEMP**

Section 92A of the Act requires an applicant to lodge a MEMP when making 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.

Harvest Road has submitted a MEMP in respect of its application for an aquaculture licence. I have considered the contents of the MEMP and am satisfied that Harvest Road will manage environmental and biosecurity issues according to the standards contained in the relevant documents set out above.

As such I approve the MEMP provided by Harvest Road (**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. In this regard, I also note that Harvest Road has made a commitment that its MEMP will be made publicly available and hosted on its website at:

[www.harvestroadgroup.com](http://www.harvestroadgroup.com)

#### **4 DISCRETION TO GRANT – MERITS OF THE APPLICATION**

Section 92 of the Act provides that an aquaculture licence may be granted where the applicant has satisfied the criteria in that section.

I am satisfied that the power to grant Harvest Road an aquaculture 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 a new licence**

The potential disadvantages of the proposed new licence 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)(1) 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 generally 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 (so 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; therefore, I consider any detrimental impact arising from introduction of disease to be unlikely.

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 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 and the controls imposed, or that may be imposed, over the movement of the fish species authorised under the licence, I

consider the threat of disease being introduced to, or developing in, Shark Bay is low.

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 would be 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 through 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 endorsement 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 imposed 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 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.***

An aquaculture licence 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 site be subject to marking and lighting in

accordance with Category 3 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.

WAFIC commented that the sites may pose some risk to night-time boat traffic and requested that they are fully lit, particularly in the trial phase. The proponent has ensured that it will comply with Navigational Safety and Department requirements by fitting and maintaining the required equipment. The proponent states that the sites are predominantly in shallow water and would receive only occasional night-time vessel movements.

The SBPTOA also sought clarification on the level of boat traffic during the trial. Harvest Road explained that single small vessels will be used for transit between Carnarvon and the sites and that the vessel will provide a small proportion of total vessel movements in the area and would not interact with the prawn trawl fishery.

***(f) The possible impact on recreational fishing***

The granting of an aquaculture licence to conduct aquaculture activities at a certain area does not of itself confer any exclusive access to the area. Recreational fishing may still be carried out in the general area, noting that it is an offence for a person to remove fish from or interfere with aquaculture gear unless authorised by the owner.

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

As with recreational fishing, the granting of an aquaculture licence to conduct aquaculture activities at a certain area does not of itself confer any exclusive access to the area. Commercial fishing and other commercial activities including tourism may still be carried out in the general area, noting that it is an offence for a person to remove fish from or interfere with aquaculture gear unless authorised by the owner.

For the reasons set out above, I am of that view that the proposed aquaculture activity is unlikely to have any significant impact on existing licence holders.

## **4.2 Potential advantages of a new licence**

The potential advantages of the new licence are:

- (a) Suitability of the location for aquaculture
- (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***

Correct site selection is the single most important factor that determines the success of aquaculture ventures.

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 natural features of the site satisfy the biological and physical requirements for the aquaculture of rock oysters;
- the sea bed at the site includes sandy areas where anchoring system used to hold longlines in place will be located, thus avoiding any damage to more sensitive benthic habitats;
- the shallow nature of the site will minimise interactions with aquatic fauna;
- the area applied for appears suitable; and
- waters in the area appear to be good quality and well mixed.

I am of the view the reasons set out above show the location is suitable for the aquaculture of rock oysters.

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

The granting of an aquaculture licence over an area of water does not confer any exclusivity over that area to the licence holder. Other users, including commercial and recreational fishers, may still have unimpeded access to the area.

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***

The proposal was referred to the Department of Planning Lands and Heritage (“DPLH”), which advised that after a review of the Register of Places and Objects as well as the DPLH Aboriginal Heritage Database, the site does not intersect any known Aboriginal sites or places.

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 new licence can be managed by licence conditions and the MEMP.

**4.3 Other matters the CEO has the discretion to consider**

I will now address one other 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 licence.

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 licence.

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

It is my intention to introduce reasonable performance criteria for this operation, based on:

1. the representations made by Harvest Road 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 will be 70% of the predetermined and agreed levels of development and agreed timeframes.

It is my intention to advise the Minister for Fisheries that any associated aquaculture lease for the site includes performance criteria as conditions on the lease to ensure productive use of the site. I intend to recommend to the Minister for Fisheries that any such aquaculture lease provides for termination of the lease if the licence holder does not meet the specified performance criteria.

## **5 LICENCE CONDITIONS**

My reasoning thus far has noted that certain matters can be satisfied if they are able to be dealt with by licence conditions. Accordingly, 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 before aquaculture is conducted at the site to ensure issues such as the provision of a bank guarantee have been complied with.

- Aquaculture method and gear

Conditions in respect of aquaculture method and gear provide controls over matters such as the materials used in their manufacture and anchoring systems.

- Health management and certification

Conditions dealing with health management and certification will minimise the risk of introduction of disease, by ensuring each group of oysters 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 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 Harvest Road would not have exclusive possession of the site and waters, an officer of the 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 and routine 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 stock will be likely to identify the presence of any disease-causing organisms. A level of routine testing should be undertaken on the recommendation of the Principal Research Scientist 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 part 4.1(e) above.

- Aquaculture Gear

Conditions in respect of aquaculture gear provide controls over the materials used in their manufacture, restrictions over their maximum number and size and their placement and location to avoid sensitive benthic habitats.

- 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

- a) In the conditions on this licence –

**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 Fish Health;

**DPIRD** means the Department of Primary Industries and Regional Development.

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

- b) The following terms used in the conditions on this licence have the same meaning as in the *Fish Resources Management Act 1994* –
- aquaculture lease;
  - CEO; and
  - record.

## **2. Requirement for aquaculture lease to authorise activity**

The holder of this licence must maintain in force at all times, the legal right to use the site. No aquaculture is to be carried on at the site on or after 31 December 2019 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**

- a) Marking and lighting of the site must be installed and maintained in accordance with Category 3 as set out in the document “Guidance Statement for Evaluating and Determining Categories of Marking and Lighting for Aquaculture and Pearling Leases/ Licences (2010)”.
- b) The marking and lighting required under paragraph (a) must be installed before any aquaculture activity is undertaken at the site.

## **4. Aquaculture gear and infrastructure**

- a) Aquaculture gear must be used in such a way so as to not damage any reef, coral or seagrass bed.
- b) Upon termination or non-renewal of this licence, the licence holder must remove from the area all property, equipment, structures, navigational aids, refuse and debris of the licensee and restore the area to a condition approved by the CEO of DPIRD.

## **5. Source of stock**

Oyster juveniles must not be stocked at the site unless they have been sourced from the Albany Shellfish Hatchery or other hatchery authorised to culture the species.

## **6. Movement of fish with approval**

The licence holder must ensure that no fish are moved from the site without the prior written approval of the CEO, except where the fish are moved for the purpose of processing, sale for consumption or under a sampling plan conducted for the purpose of seafood quality testing or environmental monitoring.

## **7. Health management and certification**

- a) The licence holder must not move fish onto the site unless –
  - i. the licence holder has submitted the request form provided by the Principal Research Scientist Aquaculture and Fish Health to a Pathologist for the provision of a health certificate; and
  - ii. the licence holder has received a health certificate from a Pathologist in respect of all fish being moved from the site; and
  - iii. where the licence holder has made a request under subparagraph (a) to a Pathologist that 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.
- b) 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 a).

## **8. Disease testing**

- a) The licence holder must ensure that disease testing of fish is carried out –
  - i. during transport to or from the site; or
  - ii. while the fish is situated at the site,as required by notice in writing from the Principal Research Scientist Fish Health.
- b) The testing carried out under paragraph a) will be at the cost of the licence holder.

## **9. Biosecurity measures**

Where the licence holder -

- a) suspects that any fish at the site are affected by disease; or
- b) becomes aware of any significant or unusually high levels of fish mortality, caused by disease or otherwise, the licence holder must -
  - i. immediately notify DPIRD on 1300 278 292 (all hours) of the level of mortality or signs of disease; and
  - ii. 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. Record keeping**

The licence holder must –

- (a) make and keep in safe place a record of all identifiable mortalities, both in total and as a percentage of total stock, as and when they occur, where possible; and
- (b) upon request from time to time, provide the data to the Principal Research Scientist Aquaculture and Fish Health in a form approved by the Principal Research Scientist Aquaculture and Fish Health.
- (c) make and keep in a safe place records of all health certificates issued to it by any laboratory.
- (d) At all times records made and kept must be maintained in a secure place within the premises at the site, for a period of seven years.
- (e) The licence holder must provide records to a Fisheries and Marine Officer on demand.
- (f) Records must be made immediately after inspection, or upon receipt of the health certificate, as the case requires.

## **11. 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.

## **12. 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.

### 13. MEMP Report

The holder of the licence must:

- i. at all times comply with and implement the latest Management and Environmental Monitoring Plan (“MEMP”) prepared by the holder of the licence, and delivered to DPIRD; and
- ii. 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, I have decided to grant an aquaculture licence to Harvest Road, under s.92 of the Act, to conduct aquaculture at a site within the Wooramel Special Purpose Zone, Shark Bay, noting the site comprises nine separate areas with a combined total of 0.6 hectares.

I have also decided to approve the MEMP and impose conditions on the Licence under s.95 of the Act. The indicative (intended) substance of the licence 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

20<sup>th</sup>

day of

March

2019

I hereby give instruction for notice of the decision to grant the Licence under s.92 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*.