APPLICATIONS FOR AN AQUACULTURE LICENCE AND LEASE

by

Blue Lagoon Pearls Pty Ltd

Shark Bay

March/2022

DEPARTMENT OF PRIMARY INDUSTRIES AND REGIONAL DEVELOPMENT APPLICATIONS FOR AN AQUACULTURE LICENCE AND LEASE

LICATIONS FOR AN AQUACULTURE LICENCE AND LE

Blue Lagoon Pearls PTY LTD

Shark Bay

File Ref	fA39557
Date of Application	28/09/2021
General Location	Shark Bay-Red Cliff Bay
Total Area of Proposed New Sites	578.42 ha
Species	Bat wing pearl oyster- <i>Pteria penguin</i> Black lip pearl oyster- <i>Pinctada</i> <i>margaritifera</i> Shark Bay pearl oyster- <i>Pinctada albina</i> Rock oysters - <i>Saccostrea spp.</i> Akoya pearl oysters - <i>Pinctada fucata</i> Baler shell- <i>Melo melo</i> Conch shell- <i>Turbinella spp. Strombidae</i> spp, <i>Volutidae</i> spp. and Lobatus gigas
Culture Method	Longlines, baskets
Other Sites (within 5 n mile)	Errol Francis T/A Heritage Pearls
Further Information	Contact Nicole Watts at the Department of Primary Industries and Regional Development (DPIRD) on (08) 9203 0262 or <u>nicole.watts@dpird.wa.gov.au</u> .

Information provided by the applicant relevant to applications for an aquaculture licence and lease

Blue Lagoon Pearls Pty Ltd

March 2022

Introduction

This document provides the information for consideration by agencies, stakeholders, community, and industry groups regarding applications submitted by Blue Lagoon Pearls Pty Ltd (BLP) for an aquaculture licence and lease.

Proposal

On 28 September 2021, BLP made an application to the Department of Primary Industries and Regional Development (DPIRD) to vary aquaculture licence IDCA 1372 to add various invertebrate species onto the licenced aquaculture site at Red Cliff Bay located in Shark Bay. The licensed site comprises an area of 578.42 hectares.

In its application, BLP seeks to grow-out and harvest the following species of invertebrates:

- Rock oysters Saccostrea spp.
- Akoya pearl oysters *Pinctada* fucata
- Baler shell Melo melo
- Conch shell Turbinella spp., Strombidae spp., Volutidae spp. and Lobatus gigas

The proposed species will be farmed in a polyculture setting.

Source of Stock and Methods

BLP proposes to collect broodstock according to licence conditions permitting the placement of spat collectors within the authorised aquaculture site. The juveniles will then be attached or placed in a suitable grow-out system within the lease site.

Pearl oysters are grown in panels on sub-surface longlines, while rock oysters will be placed in baskets. Longlines are kept approximately 70 m apart and at 0.5 m depth. Lines are secured by 50 kg Stingray anchors with no chains. This anchor system has been in place at the licenced site for 28 years and is designed to have minimal impact on sensitive substrates like seagrass. Long lines will be placed in areas of sparse seagrass with a sand or mud sediment.

Baler and conch shells will be placed in non-permanent movable circular pens 3 to 5 m wide and 0.4 to 1 m high. Pens will be placed in areas of sparse seagrass with a sand or mud sediment.

Biomass will vary between species and it is proposed an increase in quantity will be staged over several years. Baseline environmental monitoring including site water quality and sediment data will be used to assess production levels that will minimise the potential environmental impact. Total quantities of adult shellfish will be limited to under 10,000 mixed shell species due to the limited nutrient and algae levels at the licensed site. BLP will also support the shellfish industry through the supply of juvenile shell.

Management and Environmental Monitoring

BLP has submitted a Management and Environmental Monitoring Plan (MEMP), which includes environmental management processes, biosecurity protocols and incident and emergency procedures. The biosecurity risk of aquaculture of the proposed invertebrate species aquaculture at the licenced site is considered low, due to the species originating from local waters and not requiring supplementary feed.

BLP's MEMP outlines proposed biosecurity and quarantine controls. The licensed site in Shark Bay is outside of the marine waters of the Shark Bay Marine Park. However, any aquaculture operations outside of the marine park are expected to demonstrate that marine park waters will not be impacted by pollution. Baseline environmental monitoring carried out at the licensed site for 28 years includes salinity, water temperature, wave and current data and assessment of benthic communities.

The benthic communities consist of large and sometimes separated expanses of seagrass with a sandy or muddy substrate. Reef and rocky substrate are avoided to prevent fouling organisms and predation. The positioning of longlines over seagrass has been carried out for 28 years and no recordable impact on the local seagrass habitat has been made. BLP intends carrying out quantitative assessments on seagrass densities, health, and area coverage.

BLP regularly carries out local beach inspections to collect any farm debris.

There is no supplementary feeding required in the proposed aquaculture. It is unlikely any of the proposed species will have a negative impact on water quality. Due to the sensitivity of the site and its proximity to a marine park, BLP proposes carrying out six-monthly water testing. Sediment quality monitoring will also be carried out on a six-monthly basis.

BLP is aware WA Shellfish Quality Assurance Program (WASQAP) requirements in the event it wishes to pursue the culture of edible oysters or clams

BLP commits to following a "Marine Mammal Entanglement Plan"

Further environmental aspects associated with BLP operational components are covered in the MEMP.

BLP will dispose of all waste materials in landfill.

Risks

The proposed aquaculture activity poses no significant environmental issues, with identified risks accommodated by BLP's MEMP.

The proposed invertebrate species occur naturally in the surrounding environment, therefore the risk of the introduction of disease is low. All larvae, juveniles or spat produced for grow-out will be the progeny of endemic broodstock or sourced from

a licenced hatchery and transferred to Aquaculture Licence Site 1372 Red Cliff Bay-Shark Bay, per the licence conditions.