

APPLICATIONS FOR AN AQUACULTURE LICENCE AND LEASE

by

Fremantle Seaweed Pty Ltd

Fremantle WA

August 2021

**DEPARTMENT OF PRIMARY INDUSTRIES AND
REGIONAL DEVELOPMENT
APPLICATIONS FOR AN AQUACULTURE LICENCE AND LEASE
FREMANTLE SEAWEED PTY LTD
FREMANTLE WA**

File Ref	L61/21
Date of Application	20 August 2021
General Location	Cockburn Sound Fremantle, WA
Total Area of Proposed New Sites	100 ha
Species	Various Seaweed sp.
Culture Method	Longlines and Anchor
Other Sites (within 5 n mile)	Harvest Road Oceans Pty Ltd
Further Information	Contact Druimé Nolan at the Department of Primary Industries and Regional Development (DPIRD) on (08) 6319 3659 or druime.nolan@dpird.wa.gov.au .

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

Fremantle Seaweed Pty Ltd

August 2021

Introduction

This document provides the information for consideration by agencies, stakeholders and community and industry groups regarding applications submitted by Fremantle Seaweed Pty Ltd for an aquaculture licence and lease.

Proposal

On 20 August 2021, Fremantle Seaweed made an application to the Department of Primary Industries and Regional Development (DPIRD) for a broodstock exemption and an aquaculture licence and lease to grow seaweed at a site located North of Cockburn Sound and South of Fremantle on Success Bank. The site comprises an area of 100 hectares.

In its application, Fremantle Seaweed seeks to establish an aquaculture operation for the grow-out and harvest of the following species of seaweed:

Asparagopsis armata
Asparagopsis taxiformis
Ecklonia radiata
Porphyria lucasii
Ulva lactuca
Caulerpa lentillifera
Pterocladia lucida
Cladosiphon filum
Eucheuma speciosum/Betaphycus speciosus
Gracilaria preissiana
Gelidiaceae
Solieria robusta
Dumontiaceae Gigartina
Sargassum spp.

The cultured and harvested seaweed will be used as a feed supplement for livestock which has been proven by FutureFeed Commonwealth Scientific and Industrial Research Organisation (CSIRO) to reduce cattle methane by up to 90% when added as a 2% feed additive. Fremantle Seaweed is planning to develop a local processing facility as part of the staged development plan.

Source of Stock and Methods

Fremantle Seaweed proposes to collect seaweed cuttings from the wild under a Ministerial Exemption, subject to approval. The cuttings will then be attached to a suitable grow-out system within the proposed lease site.

At the initial stages of the operation, Fremantle Seaweed will trial various types of culture method in a laboratory environment at Murdoch University from harvested broodstock. Grow out will be done on long lines at the aquaculture site. The *Asparagopsis* product will be freeze dried and transported to a processing facility

in South Australia (initially) before the company develops a local processing facility.

Diagram

2. Proposed farm layout:

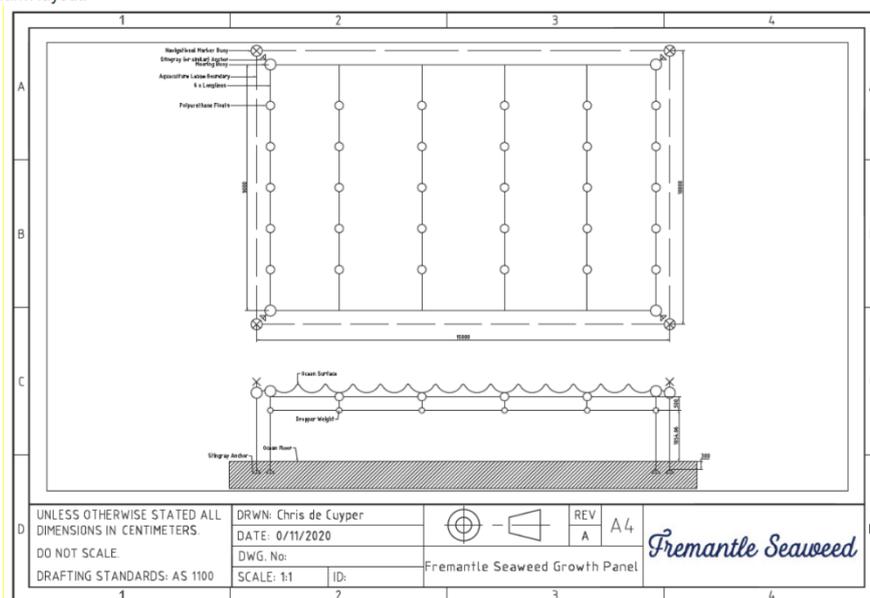


Figure 1:
Proposed farm layout.

Management and Environmental Monitoring

Fremantle Seaweed 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 seaweed aquaculture at the proposed sites is considered low, due to the species originating from local waters and not requiring supplementary feed.

Fremantle Seaweed's MEMP outlines proposed biosecurity and quarantine controls. Boat crew and divers will monitor environmental parameters during regular inspections of grow out systems and monitoring stations outside the aquaculture sites. A subsurface smart buoy will be trialed at the aquaculture lease site to measure environmental parameters such as water temperature, light, pH and turbidity levels. Qualitative health assessments of the specimens will be conducted at regular intervals.

Seagrass meadows (*Halophila* and *Posidonia*) are prevalent in the area close to the proposed aquaculture site. Fremantle Seaweed's proposed site is mostly located over sand with no impact to benthic communities. In the instance where small seagrass meadows are observed in the area, Fremantle Seaweed will only use stingray anchor systems if an anchor is required to be placed at that location. A stingray anchor system is proven to have a greater holding strength than a traditional anchor system. The growth panels will have adequate space between the rows for vessel access and to allow light to reach the benthic community. Fremantle Seaweed commit to adhere to the Aquaculture Council WA-Environmental Code of Practice for the Sustainable Management of Western Australia's Abalone Aquaculture Industry for entanglement of marine mammals.

Further environmental aspects associated with Fremantle Seaweed's operational components are covered in the MEMP.

Fremantle Seaweed will dispose of all waste materials in landfill.

The Ministerial exemption for the collection of broodstock will be subject to conditions that deal with biosecurity and environmental risks.
