

**APPLICATION FOR VARIATION OF AN AQUACULTURE
LICENCE**

by

Broome Hatcheries Pty Ltd

Broome WA

September 2017

**DEPARTMENT OF PRIMARY INDUSTRIES AND
REGIONAL DEVELOPMENT (DPIRD) - FISHERIES
APPLICATION FOR VARIATION OF AN AQUACULTURE LICENCE**

BROOME HATCHERIES PTY LTD

BROOME WA

File Ref	L1927/13
Date of Application	7 August 2017
General Location	Broome, WA
Area of Sites	0.597 hectares
Existing Species	various ornamental fish for aquaculture and display purposes
Species to be added	various species of coral, sea anemones and ornamental shrimps
Culture Method	Hatchery
Other Sites (within 5 n mile)	North Regional TAFE
Further Information	Contact Clara Alvarez at Fisheries Aquaculture Branch on (08) 6551 4346 or clara.alvarez@dpiird.wa.gov.au .

**Information provided by the applicant relevant to an application for
variation of an aquaculture licence**

Broome Hatcheries Pty Ltd

September 2017

Introduction

This document outlines the information for consideration by agencies, stakeholders and community and industry groups regarding a proposal submitted by Broome Hatcheries Pty Ltd (Broome Hatcheries) to vary its Aquaculture Licence No. 1589 (IDCA 1589).

Background

Broome Hatcheries was granted aquaculture licence no. IDCA 1589 in 2009. The licence authorises certain commercial aquaculture activity and the hatchery also operates for the purpose of tourism. The licence authorises the culture of various species of ornamental and commercial fish, including finfish and shellfish for aquaculture and public display purposes at a site in the Broome Tropical Aquaculture Park.

Broome Hatcheries also holds Exemption No. 2953 to collect various fish for broodstock purposes.

Proposed Variation

Broome Hatcheries has proposed to vary IDCA 1589 to include the species below and to apply for a broodstock exemption to enable it to collect the proposed species:

Corals	
Common name	Latin name
LPS	
Brain coral	<i>Faviidae</i>
Candy cain coral	<i>Caulastrea</i>
Elegance coral	<i>Catalaphyllia jardinei</i>
Torch coral	<i>Caryophylliidae</i>
Trumpet coral	<i>Caulastraea</i>
Hammer coral	<i>Euphyllia ancora</i>
Frogspawn coral	<i>Euphyllia divisa</i>
Pineapple coral	<i>Blastomussa</i>
Branched coral	<i>Alveopora</i>
SPS corals	
Stag horn coral	<i>Acropora</i>
Stag horn coral	<i>Anacropora</i>
Fan coral	<i>Agariciidae</i>
Chalice coral	<i>Echinophyllia</i>
Chalice coral	<i>Pectiniidae</i>
Montipora	<i>Montipora</i>
Soft coral	
Zoanthids	<i>Zoantharia</i>
Mushroom corals	<i>Fungiidae</i>
Waving hand	<i>Anthelia</i>
Pulse coral	<i>Xenia</i>
Sea Anemones	

Magnificent anemone	<i>Heteractis magnifica</i>
Bubble tip anemone	<i>Entacmaea quadricolor</i>
Gigantic carpet anemone	<i>Stichodactyla gigantea</i>
Carpet anemone	<i>Stichodactyla mertensii</i>
Ornamental shrimps	
Blood shrimp	<i>Lysmata debelius</i>
Banded shrimp	<i>Stenopus hispidus</i>
Cleaner shrimp	<i>Lysmata amboinensis</i>
Harlequin shrimp	<i>Hymenocera picta</i>
Mantis Shrimp	<i>Stomatopoda</i>
Painted Crayfish	<i>Panulirus versicolor</i>

Source of Stock and Methods

Broome Hatcheries proposes to collect broodstock under an exemption, within a 300 nautical mile radius of Broome over a period of three years. It is proposed that a maximum of 100 kg of coral will be collected per year. If stock has to be purchased, Broome Hatcheries will source it from the north-west bioregion and will be subject to translocation requirements.

Six 500 – 1000 litre tanks and two 8000 raceway tanks will be used for culturing the coral. These will be positioned outdoors under a shade cloth roof, where coral can benefit from natural lighting for photosynthesis. Corals will be produced via ‘fragging’ – fragments of mother colonies will be cut and cemented to ceramic disks and placed in grow-out tanks until the fragments reach market size.

With regard to ornamental shrimps, Broome Hatcheries is seeking to conduct research to close the life cycle of six ornamental shrimp species to enable their commercial production. Initially, Broome Hatcheries will use six 200 litre broodstock systems with six to eight broodstock per system. The system for painted crayfish, however, will have a capacity of 2,000 litres. The filtration systems will be connected to the existing broodstock systems.

Risks

This project is considered of low biosecurity risk due to the proposed species originating from local waters. Given that fish and coral do not share any diseases, there is low risk when keeping fish and coral broodstock in the same system.

Broome Hatcheries has in place a Management and Environmental Monitoring Plan (MEMP), which includes biosecurity controls such as quarantine protocols in the event of a disease outbreak. The risk of disease entering or existing the facility through coral, anemones or ornamental shrimp is therefore considered minimal.

In addition, all broodstock sourced will be endemic to the Broome region and subject to broodstock exemption conditions that deal with biosecurity and environmental risks.

DPIRD owns and maintains the saline water supply and wastewater infrastructure at the Broome Tropical Aquaculture Park. Wastewater from the facility will be treated appropriately by Broome Hatcheries in accordance with current licence conditions prior to flowing through a collective sump before it gets discharged into Roebuck Bay.
