# BIOSECURITY MEASURES PLAN LOCHNELL ALGAE FARM

Document Version Number	1.02
Date	16th September 2022
Business Number	<u>TBC</u>
Business Name	Lochnell Seaweed
Site Name	Camas Nathais West
Site Number	TBC
Biosecurity Manager	
Contact Details	
Office Number	
Mobile Number	
Email	

#### RISK. RISK MITIGATION

Site specific equipment only to be used, if any equipment is removed from site, checked, cleaned, dried, it will then be disinfected using Virkon 2% solution at correct contact time and washed in clean water. A record of treatment will be entered in disinfection logbook. All visitors are required to sign the visitor's book before accessing site. If visitors are wearing own PPE, they will be required to disinfect before accessing on to the boat.

# **SITE DESCRIPTION**

The site of the algae farm is close to Rubha Fionn-aird point close to inhospitable shore line on the Lynne of Lorn.

The site is not overlooked by any dwelling houses and not visible from public roads that pass the algae farm. The coastline is long with a small island to east side of the site, with rocky out crops at low spring tides dropping down to 16 meters on stoney muddy bottom.

#### SEAWEED SPECIES

Species for cultivation are large brown kelp
Saccharine latissima
Laminaria digitata
Laminaria hyperboles
Small red seaweed
Palmaria palmata
Osmunda pinnatifida
All species mentioned grow wild in the local area.

# IN WATER EQUIPMENT

A subsurface grid will be used similar to the grid already in use with Scottish Association for

Marine Science (SAMS). Large corner floats will be visible on surface outer farm. There will be yellow special marker buoys. The long lines are 4 X 100 metre long with yellow 15 litre floats every 10 meters. The anchoring system will be robust to ensure farm stability and reduce the farm footprint on the seabed. Seaweed line for growing will be 100 meters long 20mm in diameter and hang 1-5 metres under the surface. No equipment rope, anchored, buoys will be moving to another site and no equipment will be brought ashore at the site. Should there be a requirement to bring any equipment or rope buoys ashore they shall be checked, cleaned and dried, before being treated with 2% Virkon and washed in fresh water and recorded in disinfection logbook in accordance with Lochnell HACCP

## **SEEDING PROCESS**

Seeding stock will be sourced from (SAMS) at Dunstaffnage, the collection of algae will be very small 1 KG wet weight from around the farm site the small amount collected would be delivered to SAMS with full biosecurity procedures in place.

#### **DEPLOYMENT METHOD**

Deploying algae on seabed twine will be main deployment method for algae cultivation. Fertile algae material is allowed to settle onto thin twine wound round spools in 100 meter lengths, this is done under controlled conditions in SAMS aquarium hatchery. The spoils will be laced on to farm long lines, deployment by our own boat

## **HARVESTING PROCESS**

Regular monitoring of the algae lines will be done weekly and at the same time 1 per month eDNA water sample will be collected and E.coli tested. Harvesting will be by hand using scissors, then cut and placed into food grade bins on boat. Following harvesting HACCP and customer's requirements. Coppicing method allows 2 harvest from these rapid growing plants. The boat and equipment used for harvesting will be washed thoroughly and rope etc, will be brought ashore will be checked, cleaned, dried, washed and disinfected with 2% Virkon solution and washed with clean water and dried.

## **ONWARD PROCESSING**

To keep algae to the highest standards it will kept wet and temperature controlled until ashore and loaded onto temperature controlled vehicle following the customer's HACCP at all times

#### **EFFECTIVE DISEASE**

We do not envisage disease issues on the algae farm as all staff working for Lochnell Seaweed will be trained in identifying Non Native Invasive Species and with eDNA testing.

In the event of the positive identification of NNIS; The Fish Health Inspectorate Marine Laboratory PO Box 101 Victoria Road, Aberdeen, AB98DB would be informed immediately

The site affected will immediately restrict any access to the site and there will be no movement of items out with the site until the issue has been resolved.