



NOTICE OF DIRECTION: ISSUED PURSUANT TO SECTION 122 BIOSECURITY ACT 1993

Served by way of email and post:

BRC 2017

These directions are issued to:

Name:

Address:

Attn:

(Listed contact)

Marine Farm(s): Big Glory Bay, Stewart Island

Client No.	Location	Size (Ha approx.)	Resource Consent No.

("The marine farms")

I, ***, Inspector, appointed under section 103 of the Biosecurity Act 1993 (the Act), for the reasons described, issue the following directions pursuant to section 122 of the Biosecurity Act 1993:

1. DIRECTIONS

- 1.1. All flat oysters (*Ostrea chilensis*), also known as Dredge or Bluff oysters (including spat and juveniles) at the marine farms (listed above) are to remain and be held at the marine farms until otherwise directed or as dealt with in accordance with the depopulation and decontamination protocol ("the protocol") set out in Schedule 1.
- 1.2. All flat oysters currently being farmed are to be harvested.
- 1.3. The protocol set out in Schedule 1 must be implemented at the marine farms.
- 1.4. A plan for implementation of the protocol at the marine farms must be provided to an Inspector or authorised person and approved prior to beginning.
- 1.5. The protocol must be conducted under the supervision of an Inspector or authorised person.
- 1.6. Records detailing implementation of the protocol must be kept and a copy provided to the supervising Inspector or authorised person upon completion or at any other time upon request during implementation.
- 1.7. These directions are subject to any further directions given by an Inspector or authorised person.



- 1.8. These directions take precedence over the Controlled Area Notice BRC 2017. Nothing done in compliance and accordance with these directions constitute a breach of Controlled Area Notice BRC 2017.
- 1.9. For the avoidance of doubt Controlled Area Notice BRC 2017 remains in force at all times, notwithstanding these directions and applies to all other movements outside the scope of these directions.

2. REASONS FOR DIRECTIONS

- 2.1. These directions are issued in order to destroy and prevent the spread of the unwanted organism *Bonamia ostreae*.
- 2.2. In accordance with sections 122(1)(b) and (c) of the Act, there are reasonable grounds to believe the marine farm harbours *Bonamia ostreae* and/or these directions are necessary in order to prevent the spread of *Bonamia ostreae* on the following grounds (not exhaustive):
 - An index case marine farm in Big Glory Bay tested positive (two independent laboratories) to infection by *Bonamia ostreae*.
 - *Bonamia ostreae* spreads by distribution of infective particles in the water column.
 - Dying oysters release about 500 000 000 infective particles each and can survive for 48 hours in seawater.
 - Infection of naïve oysters is by exposure to infected particles in the water.
 - Hydrodynamic modelling of Big Glory Bay shows that most water does not exit the bay due to the tidal cycle, with a residence time of 7-13 days.
 - Big Glory Bay is an epidemiological unit, the water circulating in the bay but not being flushed.
 - *Bonamia ostreae* particles released in the Bay accumulate in the water and numbers can be expected to be high.

A copy if these Directions must be made available to all staff and contractors involved in implementation of the removal protocol.

This notice remains in force until revoked in writing by an Inspector or authorised person.

Dated at Wellington this *** day of June 2017

Inspector
Surveillance and Incursion Investigation (Aquatic and Environment Health)
Ministry for Primary Industries

Service:

Time: am/pm
Date:



INFORMATION RELATING TO DIRECTIONS UNDER SECTION 122 OF THE BIOSECURITY ACT 1993

A breach or failure to comply with a direction given under section 122 may result in the Director-General applying to the High Court for an order for payment by you of a pecuniary penalty under section 154H of the Act. Further breach or failure to comply with this notice is an offence against section 157N of the Biosecurity Act 1993. This carries a penalty in the case of an individual person, to imprisonment for a term not exceeding 3 months, a fine not exceeding \$50,000, or both and in the case of a corporation, to a fine not exceeding \$100,000.

Should you fail to comply, MPI may bring about implementation of the notice and any costs and expenses reasonably incurred in doing so may be recovered from you as a debt under section 128(3) of the Act.

Compensation

Compensation may be available under section 162A of the Act for the damage to or destruction of property where powers are exercised under the Act for the purpose of the management or eradication of any organism.

A summary of the MPI's compensation policy, Claim forms and guidance is available at:

<https://www.mpi.govt.nz/law-and-policy/legal-overviews/biosecurity/biosecurity-act-compensation/>

Claimants can contact MPI's Compensation Coordinator by:

- Telephone: 0800 00 83 33
- E-mail: compensationcoordinator@mpi.govt.nz



SCHEDULE 1

DEPOPULATION AND DECONTAMINATION PROTOCOL

1. Harvest and processing of flat oysters for human consumption or disposal:

- a. A harvest and processing plan must be created and approved by Ministry of Primary Industries (MPI).
- b. Vessels used for harvesting must have clean underwater surfaces and hulls. This includes (but is not limited to) hull surfaces, keel, engine/ballast intakes, propeller shaft and casing, propeller blades and boss, rudder, rudder shaft recess, sea chests, center plate and casing, and bow thrusters;
 - I. Either evidence that there is no level of fouling above a slime layer on the hull and other underwater surfaces, or
 - II. Evidence that the vessel antifouling system is current and suitable for the operating profile of the vessel.
- c. All oysters and associated material removed from sites must be transported, processed and disposed of in a biosecure manner. This includes, but is not limited to:
 - I. Transport occurring in covered non-porous leak proof containment,
 - II. Disposal of oysters (or associated solid waste if processed for human consumption) to covered landfill or compost, and
 - III. Containment or treatment of processing effluent.
- d. Vessels and equipment used for harvest and growing structures, must be subsequently dealt with in accordance with clause 2 below.

2. Decontamination of vessels and equipment used for harvest and processing of flat oysters

- a. A decontamination plan must be created and approved by MPI.
- b. Post-harvest, topside cleaning and decontamination of vessels and equipment used for this protocol must be carried out as follows;
 - I. All biological material must be cleaned prior to application of disinfectants.
 - II. All non-biological solid waste generated during removal process or cleaning (e.g. paper towels, plastic bags) must be bagged and sealed and removed to landfill
 - III. All hard non-porous surfaces, including the deck of the vessel, anchors and anchor chains must be disinfected.



- IV. Pipework/hoses cleaned internally by filling with 300ppm chlorine or chloramine for 24 hours, alternatively pipes may be filled with a 1% sodium hydroxide and 0.1% Teepol solution for 24 hours ; Do not use quaternary ammonium compounds.
 - V. Wooden surfaces disinfected by use of anionic surfactants (e.g. soaps, sulphated alcohols like Sodium lauryl sulphate (SLS)), followed by rinsing with freshwater soaked paper towels, a period of drying and then disinfection with peracetic acid at 2% for ≥ 60 minutes.
- c. Growing structures removed for the purposes of harvest and processing must not be re-used in the marine environment without prior approval of MPI.

Guidance: For detailed disinfection procedures see below references (not part of requirements)

- Annex 4: *Code of Good Practice Management Group (2015). The code of good practice for Scottish finfish aquaculture. Scottish Salmon Producer's Organisation, Perth, Scotland.*
<http://thecodeofgoodpractice.co.uk/chapters/annexes/>
- Georgiades, E., Fraser R., Jones, B., (2016)
<https://mpi.govt.nz/document-vault/13287>
- Department of Agriculture, Fisheries and Forestry (2008). *Operational procedures manual - decontamination (Version 1.0). In: Australian Aquatic Veterinary Emergency Plan (AQUAVETPLAN), Australian Government Department of Agriculture, Fisheries and Forestry, Canberra, ACT. 122 pp.*
<http://www.agriculture.gov.au/SiteCollectionDocuments/animal-plant/aquatic/aquavetplan/decontamination-manual.pdf>
- OIE (2016). *Aquatic Animal Health Code. Chapter 4.3. Disinfection of aquaculture establishments and equipment.*
http://www.oie.int/index.php?id=171&L=0&htmfile=chapitre_disinfection.htm

Example of a disinfection protocol is as follows; *All non-porous surfaces will be wiped down thoroughly with materials soaked in any appropriate disinfectant (choose one as per above references e.g. 0.4% peracetic acid). The surface will be left moist for a minimum of 10 minutes before being wiped clean with a freshwater soaked clean material and then left to dry, or manually dried.*