

Shellfish Hatchery and Translocation Protocol - Production and Translocation for cultivation in NSW waters of Sydney Rock Oyster (*Saccostrea glomerata*) spat produced by Athair Aquaculture Pty Ltd at Albany Shellfish Hatchery, Murray Road Torndirrup, Western Australia

Purpose

The following protocol has been developed to minimise the risk of the introduction of diseases and pests from Western Australian waters into NSW waters via the translocation of Sydney Rock Oyster (*Saccostrea glomerata*) spat (juvenile seed stock) produced by the Athair Aquaculture Pty Ltd at their hatchery at Lot 3, DP 7901 Murray Road, Torndirrup, Western Australia, 6330 (known as Albany Shellfish Hatchery) to NSW for further cultivation in NSW waters.

Note: This facility was previously known as Western Australian Shellfish Hatchery.

Scope

Sydney Rock Oyster spat produced by Athair Aquaculture Pty Ltd at Albany Shellfish Hatchery will only be permitted to be placed into NSW for further cultivation where it can be demonstrated that the spat have been produced and translocated in accordance with the following protocol.

Sydney Rock Oyster spat produced under this protocol may only be imported into NSW by persons or entities ('the shipper') authorised to farm Sydney Rock Oysters under Section 144 (Aquaculture Permit) of the *Fisheries Management Act 1994* with a special or specific permit condition on their NSW Department of Primary Industries (NSW DPI) Aquaculture Permit, that for the purpose of section 216 (1) of the *Fisheries Management Act 1994* authorises Sydney Rock Oyster spat produced by Athair Aquaculture Pty Ltd in their Albany Shellfish Hatchery at Torndirrup Western Australia to be placed onto the leases authorised by that permit (see definition for 'shipper' below).

Following the initial translocation by the shipper into waters of NSW, the Sydney Rock Oysters may only be on-sold for further cultivation within NSW, or otherwise translocated for further cultivation within NSW where that sale or other translocation is to a person/entity authorised to farm the Sydney Rock Oysters under Section 144 of the *Fisheries Management Act 1994* at that additional location, and is subject to the record keeping and reporting requirements in this protocol as well as to all conditions under the relevant Aquaculture permits and any other restrictions under the *Fisheries Management Act 1994*, the Fisheries Management (Aquaculture) Regulation 2017, the *NSW Biosecurity Act 2015* and the Biosecurity Regulation 2017.

A NSW Department of Primary Industries (NSW DPI) Fisheries Officer under the *Fisheries Management Act 1994* or Authorised Officer under the *NSW Biosecurity Act 2015* may examine batches of Sydney Rock Oyster spat shipped from the source hatchery for Athair Aquaculture Pty Ltd at any time once a shipment enters NSW to ensure that the shipment complies with this protocol, the provisions of the *NSW Biosecurity Act 2015*, the Biosecurity Regulation 2017, the *Fisheries Management Act 1994* and the Fisheries Management (Aquaculture) Regulation 2017.

Note: At any time a formal legal instrument can take effect that may override either parts of, or the entire, protocol.

Documentation requirements relating to translocation of Sydney Rock Oyster spat under this protocol must be provided to NSW Department of Primary Industries via email to oyster.import@dpi.nsw.gov.au

General Biosecurity Duty

On 1 July 2017 the NSW *Biosecurity Act 2015* commenced which provides a framework for responsibility for the biosecurity risk that is shared among the community, industry and government. The Act establishes a number of 'biosecurity duties' that include:

- a general biosecurity duty
- duties relating to Prohibited Matter, and
- a duty to notify biosecurity events.

The general biosecurity duty supports shared responsibility through its broad scope. Any person who deals with biosecurity matter or a carrier and who knows, or ought reasonably to know, the biosecurity risk posed or likely to be posed by the biosecurity matter, carrier or dealing has a biosecurity duty to ensure that, so far as is reasonably practicable, the biosecurity risk is prevented, eliminated or minimised. The general biosecurity duty can be found in Part 3 of the Act.

To ensure compliance with the general biosecurity duty, NSW DPI recommends that Athair Aquaculture Pty Ltd develops and maintains a biosecurity plan that aims to minimise biosecurity risk to Albany Shellfish Hatchery and surrounding area. More information on the Act and the general biosecurity duty can be found on the website:

<http://www.dpi.nsw.gov.au/biosecurity/biosecurity-legislation>

Definitions

Algal production cycle means the time period from which algae is acquired and cultivated for use in the larval and spat production cycle.

Closed hatchery system means an enclosed land based cultivation facility for oyster larvae and spat with biosecurity controls in place, isolated from estuarine production facilities and isolated from facilities that produce stock for any other purpose.

Competent authority means a National Association of Testing Authorities (NATA) accredited veterinary diagnostic laboratory (e.g. Elizabeth Macarthur Agricultural Institute; EMAI) approved by the NSW Chief Veterinary Officer.

Independent certifier means a competent certifier as approved by the NSW Chief Veterinary Officer.

Individual batch means a group of oyster spat produced from a single spawning event and held in a upweller system that uses the same source of water.

Larval and spat production cycle means the time period from spawning of oyster broodstock within a closed hatchery system, to cultivation of larvae, to spat prior to importation into NSW.

Oyster Shipment Logbook means a logbook in a form approved by the Secretary of the Department, including an electronic form, for purposes that include complying with Part 2, Division 3 of the Fisheries Management (Aquaculture) Regulation 2017 or of complying with the *Fisheries Management Act 1994*

Shipper means the aquaculture permit holder whose permit lists the lease(s) on which the Sydney Rock Oyster spat will be placed.

Source Hatchery means the Athair Aquaculture Pty Ltd oyster hatchery facility at Lot 3, DP 7901 Murray Road, Torndirrup, Western Australia, 6330, known as Albany Shellfish Hatchery.

Protocol

1) Broodstock Collection & Transport

- (a) Sydney Rock Oyster (*Saccostrea glomerata*) spat may only be produced from broodstock that have the written approval of the NSW Chief Veterinary Officer or their delegate prior to any translocation of the broodstock or production of spat.
- (b) For further provisions on the translocation of oyster broodstock see Shellfish Hatchery Protocol Supply of NSW oyster broodstock to an interstate hatchery, including return of that broodstock to NSW, found at: www.dpi.nsw.gov.au/fishing/aquaculture/publications/general/aquaculture-permit-protocols

Note: it is the responsibility of Adair Aquaculture Pty Ltd to ensure that the broodstock also meet all requirements, if any, of the appropriate Western Australian authorities and where relevant to communicate these requirements to NSW stakeholders prior to any NSW broodstock being translocated to Western Australia.

2) Hatchery & Larval Rearing

- (a) A quarantine “restricted entry” warning sign or similar is affixed to the external side of any entry door to the facility. Entry is restricted to essential authorised staff only. Access points are to remain locked whenever the facility is unattended.
- (b) Effective footbaths to be maintained at each entry/exit point to the facility and utilised both when entering and exiting the hatchery. Footbaths can be made using Virkon (made up to solution in accordance with manufacturer specifications) or 200 mg/L iodine solution.
- (c) A 200 mg/L iodine spray or 70% ethanol solution is to be used to sanitise hands prior to entry and exit from the facility.
- (d) Sydney Rock Oyster broodstock must remain isolated from all other molluscs and invertebrates in the hatchery at all times both physically and spatially (in separate rooms and separate water supplies) as well as operationally (complete separation of all equipment used on broodstock to ensure it never leaves the broodstock room).
- (e) Sydney Rock Oyster (*Saccostrea glomerata*) spat (juvenile oysters) are to be produced in a closed hatchery system and are at no time to be placed in, or exposed to, unfiltered Western Australian waters.
- (f) All seawater used in the hatchery system must be subject to nominal filtration 1.0 micron or less followed by ultraviolet irradiation at a dose of at least 30 mJ/cm² for the duration of the larval and spat production cycle. The hatchery must also certify that all seawater used in the larval, spat and algal production cycle has been subject to nominal filtration to 1.0 micron or less followed by ultraviolet irradiation at a dose of at least 30 mJ/cm².
- (g) All tanks, internal water supply lines, valves and culture equipment used in the larval and spat production cycle must be cleaned with chlorine (made to a minimum solution of 200ppm active effective chlorine) and washed with fresh water prior to commencing the larval and spat production cycle.
- (h) Each batch of eggs/sperm must be removed from spawning tanks/vessels containing broodstock oysters as soon as possible after stripping of gametes and be transferred to a larval rearing room, so that they remain completely

isolated from all other molluscs in the hatchery at all times both physically and spatially (in separate rooms and water supplies) as well as operationally (complete separation of all equipment used to ensure it never leaves the larval rearing room).

- (i) Batches of Sydney Rock Oyster spat that are to be imported into NSW must be the progeny solely of broodstock which have been approved in writing by the NSW Chief Veterinary Officer or their delegate.
- (j) Prior to the first Sydney Rock Oyster spat batch being imported to the NSW, and thereafter every 12 months, the independent certifier is to certify that the source hatchery meets all requirements of this protocol.

3) Pre-dispatch Diagnostic Testing

The following requirements must be met no more than 30 days but not less than two working days prior to the importation into NSW:

- (a) Every batch of spat must be stress tested at a suitable stage of development by holding them at a minimum temperature of 20°C for no less than 3 days prior to sampling for diagnostic testing.
- (b) Three¹ random samples of at least 300 spat from each individual batch (with each lot of 300 comprised of an equal number of spat collected from each upweller used to produce that batch) of Sydney Rock Oyster spat are to be forwarded for testing and examination to a competent authority for the following:
 - (i) 300 spat¹ are to be tested by polymerase chain reaction for the presence of:
 - Malacoherpesviruses; and
 - *Bonamia* spp.; and
 - *Perkinsus* spp.; and
 - *Minchinia* spp; and
 - (ii) 300 spat are to be tested through incubation in Ray's Fluid Thioglycolate Media (RFTM) for *Perkinsus* spp.; and
 - (iii) 300 spat are to be examined for a general health screen by histopathology for the presence of any prohibited matter as prescribed in Schedule 2, Part 1 of the NSW *Biosecurity Act 2015*, and any notifiable diseases as prescribed in Schedule 1, Part 2 of the Biosecurity Regulation 2017.

¹ *To be discussed prior to collection with the competent authority to ensure that the polymerase chain reaction tests can be completed on the same 300 spat sample. Arrangements must be made with the competent authority to ensure that a minimum 300 spat per batch are tested for each of the polymerase chain reaction tests listed above.*
- (c) A statement of general health and a certificate of disease status must be provided by the competent authority.
- (d) A batch of Sydney Rock Oyster spat produced at the source hatchery may only be placed into NSW where the batch of spat has been certified free of evidence of disease agents by the competent authority.

4) Shipment Documentation

Not less than 48 hours, nor more than 2 weeks prior to dispatch of each batch of Sydney Rock Oyster spat from the source hatchery to NSW:

- (a) The shipper must:
 - (i) complete a copy of the Oyster Shipment Log Book; and

- (ii) provide a completed copy of the Oyster Shipment Log Book to the source hatchery.
- (b) The source hatchery must prepare a declaration stating:
 - (i) the species of oyster shipped; and
 - (ii) that the requirements of (2) and (3) of this protocol have been met.
- (c) Copies of the:
 - (i) statement of general health and certificate of disease status at 3)(c) above; and
 - (ii) Oyster Shipment Log Book at 4)(a)(i) above; and
 - (iii) the source hatchery declaration at 4)(b) above

must accompany the Sydney Rock Oyster batch throughout shipment from the source hatchery into NSW, and must be held for a period of 12 months after the arrival of the shipment in NSW by the shipper and must also be provided to and held by any other person or entity who receives the Sydney Rock Oyster batch or any part of that batch for further cultivation in NSW during the initial 12 month period.
- (d) Copies of the:
 - (i) statement of general health and certificate of disease status at 3)(c) above; and
 - (ii) Oyster Shipment Log Book at 4)(a)(i) above; and
 - (iii) the source hatchery declaration at 4)(b) above

must be emailed to NSW DPI to the address: oyster.import@dpi.nsw.gov.au