

# Shellfish Hatchery Protocol

## Production and Translocation of Sydney Rock Oyster (*Saccostrea glomerata*) spat produced by Tasmanian Oyster Company Ltd, Tasmania

### Purpose

The following protocol has been developed to minimise the risk of the introduction of diseases and pests from Tasmanian waters into NSW waters, NSW via the translocation of Sydney Rock Oyster (*Saccostrea glomerata*) spat (juvenile seed stock) produced by Tasmanian Oyster Co Ltd at their hatchery facility at 290 Bicheno Street Clifton Beach, Tasmania 7020.

### Scope

Sydney Rock oyster spat produced by Tasmanian Oyster Company Ltd at the source hatchery will only be permitted to be placed into NSW waters where it can be demonstrated that the spat have been produced and translocated in accordance with the following protocol.

### Relevant Legislation

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 under Section 152 of the *Fisheries Management Act 1994* on their NSW Department of Primary Industries and Regional Development (NSW DPIRD) Aquaculture Permit for the following:

- That for the purpose of 216 (1) of the *Fisheries Management Act 1994* authorises Sydney Rock oyster spat produced at Tasmanian Oyster Co hatchery in Clifton Beach, Tasmania 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 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 2024, the *NSW Biosecurity Act 2015* and the Biosecurity Regulation 2017.

A NSW DPIRD 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 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 2024.

**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 and Regional Development via email to [oyster.import@dpiird.nsw.gov.au](mailto:oyster.import@dpiird.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 NSW *Biosecurity Act 2015* 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 NSW *Biosecurity Act 2015*.

More information on the NSW *Biosecurity Act 2015* and the general biosecurity duty can be found on the website:

<https://www.dpi.nsw.gov.au/fishing/aquatic-biosecurity/legislation-regulations>

## Definitions

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

**Aquaculture shipment log book (previously referred to as an Oyster Shipment Log Book)** means a log book in a form approved by the Secretary of the Department for purposes of complying with conditions imposed by this protocol and Part 2, Division 3 of the Fisheries Management (Aquaculture) Regulation 2024.

**Business day** means Monday to Friday 9am to 5pm, excluding public holidays.

**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.

**NSW DPIRD** means the New South Wales Department of Primary Industries and Regional Development, formed on 1 July 2024 (formerly known as Department of Primary Industries (NSW DPI) as part of the Department of Regional NSW).

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

**Source Hatchery** means Tasmanian Oyster Company Ltd Hatchery facility at 290 Bicheno Street Clifton Beach, TAS 7020.

**Supplier** means Tasmanian Oyster Company Ltd

## Protocol

### 1) Broodstock Collection & Transport

- (a) Sydney Rock Oyster (*Saccostrea glomerata*) spat intended for translocation into NSW for further cultivation 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 to the hatchery or production of spat

### 2) Hatchery & Larval Rearing

- (a) The source hatchery must maintain a comprehensive hatchery biosecurity plan containing details of all relevant operational measures for disease exclusion (such as broodstock management, treatment of intake water, cleaning and disinfection protocols, pest exclusion measures, visitor control procedures etc.) and which demonstrates that the supplier is able to meet all requirements of this protocol
- (b) Sydney Rock oyster spat are to be produced in a closed hatchery system and are at no time to be placed in, or exposed to, unfiltered Tasmanian waters.
- (c) 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/cm<sup>2</sup> for the duration of the larval and spat production cycle and the algal 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/cm<sup>2</sup>.
- (d) 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.
- (e) Broodstock must remain isolated from all other molluscs and invertebrates in the hatchery 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).
- (f) Each batch of eggs/sperm must be removed from spawning tanks/vessels containing broodstock oysters as soon as possible after stripping. Thereafter they must remain completely isolated both physically and spatially from all other molluscs. This should involve being reared in separate rooms, with separate water supplies and use of dedicated equipment that is not used in any other part of the facility.
- (g) A population of Pacific oyster sentinel spat of less than 10 months in age must be held within the source hatchery for the entire duration of the larval production cycle and algal production cycle for Sydney Rock Oysters intended to come to NSW. This sentinel population must:
  - (i) be cultivated under closed hatchery conditions as described in section 2) (b), (c) and (d), using the same water supply and with no additional water treatment than is used in the production of the Sydney Rock Oyster spat intended for translocation to NSW waters.
  - (ii) be held at a minimum water temperature of 21 degrees Celsius for no less than four weeks prior to pre-dispatch testing in the lead up to the intended translocation date for the Sydney Rock Oyster spat. A diurnal temperature record must be kept for this four week period demonstrating a minimum 21 degree Celsius per day.
- (h) Prior to the first production run of Sydney Rock oyster spat to be imported to NSW, and thereafter every 12 months, a hatchery audit must be performed by an independent certifier to verify that the source hatchery meets all requirements of this protocol. The outcomes of this audit must be

approved by the NSW Chief Veterinary Officer prior to production of any spat intended for translocation into NSW.

### 3) Pre-dispatch Diagnostic Testing

The following requirements must be met no more than 30 days but in time for final results to be forwarded to the shipper not less than two full business days prior to dispatch from the source hatchery into NSW:

- (a) A random sample of at least 300 Sydney Rock oyster spat from each individual batch (with an equal number of spat collected from each upweller used to produce that batch) of are to be forwarded for testing and examination to a competent authority for the following are to be examined for a general health screen by histopathology for the presence of any signs of infectious disease that may represent a biosecurity risk to NSW.
- (b) A random sample of at least 300 Pacific Oyster sentinel spat that have been held at 21 degrees Celsius for four weeks must be tested, and found to be negative, by polymerase chain reaction for the presence of Ostreid herpesvirus- $\mu$  variant—OsHV-1  $\mu$ var (OsHV1), the virus that causes Pacific Oyster Mortality Syndrome (POMS) (Laboratory advice – for viral disease testing, oysters are to be tested in pool no greater than 5 individual oysters)
- (c) A laboratory report, statement of general health and a certificate of disease status for the Sydney Rock Oyster spat must be provided by the competent authority. A laboratory report confirming results of OsHV-1 testing of Pacific Oyster sentinel spat must also be provided.
- (d) A batch of Sydney Rock oyster spat produced at the source hatchery may only be placed into NSW where the batch of Sydney Rock Oyster spat has been certified free of evidence of disease agents by the competent authority

### 4) Shipment Documentation

Prior to dispatch of each batch of Sydney Rock oyster spat from the source hatchery to NSW:

- (a) Not less than two full business days prior to the translocation shipment, the supplier must prepare and email to the shipper, a declaration stating:
  - (i) the species, approximate number and size of oyster being shipped; and
  - (ii) that the requirements under (1), (2) and (3) of this protocol have been met, and
  - (iii) That there have been no unusual mortalities of undetermined cause in the Sydney Rock Oyster or sentinel Pacific Oyster populations at the facility at any time throughout the larval and spat production cycle and no evidence of the presence of aquatic pests or diseases listed as either prohibited matter under Schedule 2 of the NSW *Biosecurity Act 2015* or notifiable matter under Schedule 1 of the Biosecurity Regulation 2017 in the source hatchery throughout that time.
  - (iv) Provide a copy of all health certifications, certificate of disease status and laboratory reports from the competent authority/ies of the tests required for both the Pacific Oyster sentinels and the Sydney Rock Oysters under section (3) of this protocol
- (b) The shipper must:
  - (i) complete a copy of the aquaculture shipment log book; and
  - (ii) provide a completed copy of the aquaculture shipment log book to the supplier.
- (c) Not more than two weeks and not less than two full business days prior to translocation, the shipper must notify NSW DPIRD of the intended oyster translocation and provide copies of the following to the NSW DPIRD email address [oyster.import@dpiird.nsw.gov.au](mailto:oyster.import@dpiird.nsw.gov.au):

- (i) all health certifications, certificate of disease status and laboratory reports from the competent authority/ies of the tests required for both the Pacific Oyster sentinels and the Sydney Rock Oysters under section (3) of this protocol; and
  - (ii) the completed aquaculture shipment log book at 4)(b)(i) above; and
  - (iii) the source hatchery declaration at 4)(a) above
- (d) All documentation listed in (4)(c) 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 any other person who receives the Sydney Rock Oyster batch or any part of that batch.
- (e) Copies of the records required under this protocol must be produced to a fisheries officer under the *Fisheries Management Act 1994*, or an authorised officer under the *NSW Biosecurity Act 2015*, on request.
- (f) If the shipper supplies any part of the Sydney Rock Oyster batch received from the source hatchery to another person/s or entity within 12 months after the arrival of the shipment in NSW, in addition to any other applicable shipment requirements, the following conditions must be adhered to:
  - (i) the shipper must supply copies of all records required to be provided to NSW DPIRD in section (4)(c) of this protocol to all persons or entities receiving any part of the batch for further cultivation in NSW, and
  - (ii) any person/s or entity who receives the batch or any part of that batch, is to retain these records for a period of 12 months and to produce copies of the records to a fisheries officer under the *Fisheries Management Act 1994*, or an authorised officer under the *NSW Biosecurity Act 2015*, on request
- (g) the requirements for the shipper in section (4)(f) of this protocol apply to all persons or entities that received part of the batch for all subsequent sales for cultivation in NSW, possession for cultivation within NSW, or movement for cultivation within NSW, of the Sydney Rock Oysters translocated to NSW under this protocol for 12 months after the arrival of the shipment in NSW.