STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

BUREAU OF NATURAL RESOURCES

DIVISION OF FISH AND WILDLIFE DIVISION OF LAW ENFORCEMENT



Aquaculture of Marine Species in Rhode Island Waters

October 29, 2015

AUTHORITY: Chapter 42-17.1 and Sections 20-1-2, 20-1-4, 20-1-5, 20-10-5c, and 20-10-12, and in accordance with Chapter 42-35, of the Rhode Island General Laws of 1956, as amended.

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1. PURPOSE

The purpose of these regulations is to describe the permits, licensing, and conditions under which aquaculture shall be conducted in Rhode Island.

2. AUTHORITY

Chapter 42-17.1, and §§; 20-1-2; 20-1-4; 20-1-5; 20-10-5c; and 20-10-12, in accordance with Chapter 42-35 of the RIGL 1956, as amended.

3. ADMINISTRATIVE FINDINGS

These regulations acknowledge that aquaculture is a form of agriculture (RIGL 2-23-4) and that cultured crops are the property of the aquaculturist and are distinct from wild stocks. Cultured crops are therefore not subject to the statutory and regulatory restrictions governing the protection of wild stocks, except that the minimum size limit established for quahaugs, *Mercenaria mercenaria*, applies to all wild and cultured quahaugs (RIGL 20-10-13.1).

4. APPLICATION

The terms and provisions of these rules and regulations shall be liberally construed to permit the Department to effectuate the purposes of state law, goals, and policies.

5. SEVERABILITY

If any provision of these Rules and Regulations, or the application thereof to any person or circumstances, is held invalid by a court of competent jurisdiction, the validity of the remainder of the Rules and Regulations shall not be affected thereby.

6. SUPERSEDED RULES AND REGULATIONS

On the effective date of these rules and regulations, all previous rules and regulations, and any policies regarding the administration and enforcement of aquaculture shall be superseded.

7. DEFINITIONS

As used in these rules and regulations, the following words and phrases have the following meanings:

<u>Adequately Iced</u> means that the amount and application of the ice is sufficient to ensure that immediate cooling begins and continues for all shellfish. If ice slurry is used and the shellfish are submerged the presence of ice in the slurry indicates adequate icing. The water source for, the production of, and the handling of the ice must be approved by DOH for the intended use of cooling shellfish.

<u>Approved waters</u> or <u>Approved shellfish growing areas</u> mean waters of the state which have been classified by the RI Department of Environmental Management (DEM) Office of Water Resources as Approved Areas, fit for the taking of shellfish for human consumption on a regular basis, according to criteria established by the National Shellfish Sanitation Program (NSSP) Manual of Operations. These

classifications may be subject to change as water quality conditions dictate.

<u>Aquaculture</u> means the cultivation, rearing, or propagation of aquatic plants or animals, hereinafter referred to as cultured crops, under natural or artificial conditions.

<u>Aquaculture facility</u> means any properly permitted aquaculture operation, either in upland areas or in the State's waters or submerged lands.

<u>Aquaculture lease</u> means the permitted area for which the Coastal Resources Management Council (CRMC) issues a lease in which aquaculture can be conducted. Leases are discretionary and granted for the express purpose of allowing aquaculture activities on the State's submerged lands or in the water column. Certain types of permitted activities, such as experimental aquaculture operations, may not require a lease.

<u>Aquaculturist</u> means the individual, firm, partnership, association, academic institution, municipality, or corporation conducting commercial, experimental or restoration aquaculture in Rhode Island.

<u>Biosecurity Board</u> means the board, within the Coastal Resources Management Council (CRMC), established pursuant to RIGL Section 20-10-1.1 and charged with assisting and advising the CRMC in carrying out its role under the provisions of RIGL Chapter 20-10.

<u>Conditionally Approved Areas</u> mean any shellfish grounds underlying waters examined and found fit for the taking of shellfish for human consumption on an intermittent basis, declared by the director as conditionally approved waters pursuant to RIGL Sections 20-8.1-3 and 20-8.1-4. Such classification may be subject to change as water quality conditions dictate.

<u>Container</u> means any bag, sack, tote, conveyance, or other receptacle used for containing shellfish for holding or transporting.

CRMC means the RI Coastal Resources Management Council.

<u>Cultured crops</u> mean aquatic or marine animals or plants: (i) that are in the location, water column or artificial conditions specified in a valid aquaculture permit issued pursuant to RIGL section 20-10-3 or that have been taken by the holder of such permit from the location, water column or artificial conditions specified in such permit, or (ii) that have been produced by aquaculture methods outside the state and have not been commingled with wild stocks that are in or have been removed from the waters of the state. Appropriate bills of sale, bills of lading and proper tags used in accordance with Rule 6.6 herein and all other applicable state and federal laws and regulations shall be prima facie evidence of the origin of cultured crops inside or outside the state.

<u>DEM</u> means the RI Department of Environmental Management.

<u>Designated Temperature Control or Thermally Impacted Area</u> means an area designated by the Department in which aquaculturists must comply with more stringent temperature controls for harvested shellfish. These areas have been determined to be Winnapaug Pond, Quonochontaug Pond, Ninigret Pond, Potter Pond, Point Judith Pond, Island Park Cove (Spectacle Cove), Hog Island Cove and Great Salt Pond.

<u>Director</u> means the Director of the RI Department of Environmental Management or his or her duly appointed agents.

DOH means the RI Department of Health.

<u>Harvest</u> means the act of removing shellstock with the intention of not returning to the water after husbandry practices. Harvest commences when the first shellfish not returned to the water is removed from the water on any given day, or is exposed by the receding tide.

<u>Husbandry</u> means any activity related to the cultivation and management of shellfish crops, including but not limited to grading, sorting, cleaning, or planting.

<u>Mechanical Refrigeration</u> means storage in a container or conveyance that is approved by the Rhode Island Department of Health and capable of cooling to, and maintaining, an ambient temperature of 45°F or less.

<u>Operational plan</u> means a written plan filed with CRMC and, approved by DEM prior to its implementation, that includes, at a minimum: description of the design and activities of the aquaculture facility, specific location and boundaries of the aquaculture lease and facility, types and locations of structures (rafts, pens, tanks, etc.), species to be cultured, source of these organisms (i.e., wild or cultured), procedures to prevent contamination, program of sanitation and maintenance, description of the water source including details of water treatment, program to maintain water quality, maintenance of records, and how shell stock will be harvested.

<u>Person</u> means an individual, firm, corporation, society, association, partnership, or private or public body.

<u>Possession of aquaculture crops</u> means the exercise of dominion or control over cultured crops commencing at the time at which a decision is made not to return the crops to the aquaculture lease or facility from which they were taken. This decision must be made at the first practical opportunity, taking into consideration the management practices set forth in the approved operational plan.

<u>Possession of wild stocks</u> means the exercise of dominion or control over wild stocks commencing at the time at which a decision is made not to return the resource to the immediate vicinity from which it was taken. This decision must be made at the first practical opportunity.

Resubmerge means, and is strictly limited to, reintroduction of shell stock into

approved waters following the removal of such stock from approved waters for husbandry purposes.

Shading means to shelter by intercepting the direct rays of the sun to protect the shellfish from heat. Shading may be accomplished by any means that effectively protects the harvested shellfish from direct sunlight and prevents excessive heat build-up in the shaded area.

Shellfish means all species of: (a) Oysters, clams or mussels, whether: (i) Shucked or in the shell; (ii) Raw, including post harvest processed; (iii) Frozen or unfrozen; (iv) Whole or in part; and (b) Scallops in any form, except when the final product form is the adductor muscle only.

Shellfish seed means, for bay quahaug, a shell size less than 20 mm (0.78" (longest axis length); for oysters, a shell size less than 32 mm (1.25") longest axis length, and for blue mussels (*Mytilus edulis*) any mussel that settled during the current calendar year.

Spat means newly settled post-metamorphic bivalve.

<u>Spat collection</u> means the use of artificial apparatus (spat collectors) to induce settlement of larval shellfish.

<u>Temperature control</u> means the use of ice or mechanical refrigeration, which is capable of lowering the temperature of the shellstock and maintaining it at 50°F or less.

<u>Wild stock</u> means natural resources, including aquatic or marine animals or plants, which grow within the waters of the state, and are not cultured in any way. Any shellfish that have settled naturally within an aquaculture facility are considered wild stock.

8. Permitting and Licensing Requirements:

- 8.1 Aquaculture shall only be conducted within the waters of the state in a manner consistent with the best public interest, with particular consideration given to the effect of aquaculture on other uses of the free and common fishery and navigation, and the compatibility of aquaculture with the environment of the waters of the state. Applications shall be reviewed for consistency with RIGL Title 20 and no license shall be issued or renewed to any person where the application is found to be in conflict with any requirement found in these statutes.
- 8.2 <u>Aquaculture License</u>: An Aquaculture license from the Director is required for an individual to sell to licensed fish and shellfish dealers cultured crops <u>utilized in</u> from an aquaculture lease or facility permitted by CRMC and operated in accordance with the aquaculturist's approved operational plan.

- 8.2.1 Application shall be made on forms as prescribed by the Director and may be submitted at any time during the year. The license shall be issued on a calendar year basis (expiring December 31) with an annual fee of two hundred dollars (\$200).
- 8.2.2 Under no circumstances shall a license be granted for species that are not endemic to Rhode Island, without prior approval from the Director with the advice of the Biosecurity Board. Determination of what species are endemic to Rhode Island shall be determined by the Director.
- 8.2.3 No license shall be renewed unless the applicant's aquaculture activities are conducted in accordance with the approved operational plan. The operational plan must be updated, resubmitted to CRMC, and approved by DEM prior to any operational changes.
- 8.3 <u>Coastal Resources Management Council (CRMC) Assent or Permit:</u> An aquaculturist must apply for and receive a Coastal Resources Management Council (CRMC) Assent or permit to conduct aquaculture in accordance with RIGL Chapter 20-10. No application shall be approved by CRMC prior to the consideration of recommendations by the Department of Environmental Management (DEM) Director, who shall consult with and obtain input from appropriate divisions and offices within the department, the Rhode Island Marine Fisheries Council and the Department of Health.
 - 8.3.1 The Director may review the application to determine whether the aquaculture activities proposed in the application are not likely to cause and adverse effect on the marine life adjacent to the area to be subject to the permit and the waters of the state, and not likely to have an adverse effect on the continued vitality of indigenous fisheries of the state, and for consistency with other state statutes as applicable.
 - 8.3.2 The RI Marine Fisheries Council (RIMFC) may review the CRMC application to determine whether the aquaculture activities proposed in the application are consistent with competing uses engaged in the exploitation of the marine fisheries. The RIMFC shall provide a recommendation to the CRMC consistent with RIGL 20-10-5.
- 8.4 As applicable or required, a R.I. Pollutant Discharge Elimination System (RIPDES) permit shall be obtained from DEM Office of Water Resources.
- 8.5_Water quality at any site used for open water aquaculture or land-based aquaculture must meet the water quality criteria appropriate to the aquaculture activity as determined by the DEM Office of Water Resources. As applicable or required, a Water Quality Certification shall be obtained from DEM Office of Water Resources.

9. Shellfish Culture Requirements

- 9.1 <u>Cultured crops exempt from wild stock regulations:</u> Aquaculturists harvesting their cultured crops, in accordance with their CRMC Assent, DEM Aquaculture license, and operational plan are exempt from the statutory and regulatory harvest restrictions governing wild stocks, including: seasons, catch or bag limits, minimum sizes, quotas, and methods of harvest. In no case may aquaculturists possess, import, transport or offer for sale for human consumption to any person bay quahaugs with a hinge width of less than one inch, unless specifically authorized to possess, import, transport, or sell legal quahaug seed.
- 9.2 <u>Shipment and importation of shellfish seed</u>: All shipments of shellfish brought into Rhode Island for aquaculture operations must be approved by the Director or his/her designee and must be labeled or tagged indicating the origin (operator/company name, license number and body of water), date of importation and destination and must be accompanied by a certificate of disease inspection.
 - 9.2.1 All persons wishing to import shellfish seed must submit a written request or email to the Aquaculture Coordinator of CRMC at least five working days prior to entry into the state. Such request to be mailed to Coastal Resources Management Council, Stedman Government Center, Suite 3, 4808 Tower Hill Road, Wakefield, RI 02879.
 - 9.2.2 Prior to shipment, the Aquaculture Coordinator will make a recommendation to the Director whether to approve or deny any request to import shellfish seed and notify DEM Division of Law Enforcement and Agriculture. The Aquaculture Coordinator may seek the advice and consent of the Aquaculture Biosecurity Board in regard to such request to import shellfish seed.
- 9.3 Only shellfish cultured in approved waters or within an approved land-based system meeting the water quality criteria for harvesting, may be sold for human consumption, and such sales may only be made to licensed RI dealers. All requirements for handling, tagging, use of shellfish containers, and temperature control, as set forth herein, as well as all other applicable DOH standards, must be adhered to.

9.4 Taking or possession of wild stock shellfish:

- 9.4.1 Aquaculturists who also hold a commercial shellfishing or multipurpose license may not take or possess wild stock shellfish while they are in possession of cultured shellfish crops.
- 9.4.2 An aquaculturist may not be in possession of wild stock shellfish while visiting their lease or tending their shellfish crops, unless they are a properly licensed shellfish dealer and the wild stock shellfish is properly tagged and being held in or at their dealer facility, buy boat, or wet storage operation.

- 9.4.3 The taking or possession of undersized wild stock shellfish is prohibited, except for spat collection within lease boundaries approved by the Director or his/her designee. If authorized, the site, species and amount must be specified by the Director or his/her designee in writing.
- 9.5 <u>Water quality changes:</u> Water quality and water quality classification of waters within the state as determined by the Office of Water Resources are subject to change due to various environmental conditions. In some cases the aquaculturist shall be required to respond to these changes. DEM shall not assume any liability for any changes in classification and shall assume no liability to the aquaculturist for damages incurred due to such actions.
- 9.6 Shellfish aquaculture in conditionally approved growing areas: When a shellfish aquaculture lease is located in a conditionally approved area, the aquaculturist is prohibited from visiting the lease to tend the shellfish crops when the area is in a closed status, unless the aquaculturist has received permission from the Director. The harvest of cultured stock from the lease when the growing area is in the closed status is prohibited.
- 9.7 <u>Transfer of seed from other than approved waters:</u> Shellfish seed cultured in other than approved waters in accordance with a CRMC permit must be transferred by the aquaculturist to an approved aquaculture lease in approved waters in accordance with the approved assent, license, and operational plan prior to the shellfish exceeding the seed size limit. If more than 10 percent of the cultured shellfish within a lot or batch exceed the seed size limit, they shall not be moved from other than approved waters to an approved growing area without prior permission of the DEM Director and the DOH.
- 9.8 Harvest of shellfish transferred from other than approved waters as seed: An aquaculturist wishing to use seed that have been produced in other than approved waters must describe in the operational plan how he/she intends to track and document the growth and harvest of these shellfish. Aquaculturists must maintain accurate and complete records of all shellfish seed culture in other than approved waters and removal of such shellfish seed to approved waters including, but not limited to, source, numbers transferred, size composition, time/dates of transfer, harvest and sale of the shellfish. These records must be maintained for a minimum of two years and must be available for inspection by agents of the DOH, DEM, or CRMC upon request. If record keeping and tracking protocols are inadequate, then the aquaculturist must only use seed from approved waters. No shellfish may be harvested until they have spent at least six (6) months in approved waters.

10. Handling of Shellfish

10.1 <u>General requirements:</u> Shellfish aquaculturists shall conduct all activities and operations involving or relating to the possession and handling of shell stock so as to prevent contamination, deterioration and decomposition of such shell stock.

- 10.2 <u>Containers</u>: Containers used for storing shell stock must be clean.
- 10.3 <u>Vessels</u>: Vessel decks and storage bins used in the harvest or transport of shell stock shall be kept clean with potable water or water from the growing area in approved classification or the open status of conditional areas. Aquaculturists using a vessel to harvest and transport shell stock shall assure that said vessel is properly constructed, operated and maintained to prevent contamination, deterioration and decomposition of shell stock. Aquaculturists using a vessel to harvest and transport shell stock shall prevent bilge water from coming into contact with shell stock.
- 10.4 <u>Bilge water:</u> Aquaculturists using a vessel to harvest and transport shell stock shall provide such vessel with effective drainage to avoid contact between bilge water and shell stock. Aquaculturists using a vessel to harvest and transport shell stock shall locate bilge pumps so that discharge shall not contaminate shell stock.
- 10.5 <u>Waste discharge prohibited:</u> It is unlawful to discharge any sewage from a vessel into the waters of the state.
- 10.6 <u>Washing:</u> Shell stock shall be washed reasonably free of bottom sediments as soon after harvesting as possible. The harvester shall be primarily responsible for washing shell stock. If shell stock washing is not feasible at the time of harvest, the dealer shall assume this responsibility. Water used for washing shall be from a potable water source, or growing area in the approved classification or open status of the conditionally approved classification.

11. Tagging of Shellfish

- 11.1 Required Use of Tagged Containers: Aquaculturists must place any and all shellfish taken by them (except those shellfish returned to the waters of the aquaculture lease or facility) into containers, and must tag each and every container with a completed harvester tag, prior to harvested shellfish being placed in the container. The approximate quantity of shellfish may be completed at the conclusion of harvest.
- 11.2 <u>Tags:</u> The harvester tag shall be durable, waterproof and sanctioned by the DOH. The tag shall contain the following indelible, legible information in the order specified below:
 - 11.2.1 Aquaculturist's license number as assigned by DEM;
 - 11.2.2 Harvest commencement time and date:
 - 11.2.3 The harvest location as identified by the CRMC Assent number;
 - 11.2.4 Type (species) of shellfish;

- 11.2.5 Approximate quantity of shellfish; and
- 11.2.6 The following statement in bold capitalized type: "THIS TAG IS REQUIRED TO BE ATTACHED UNTIL CONTAINER IS EMPTY OR IS RETAGGED AND THEREAFTER KEPT ON FILE FOR 90 DAYS"
- 11.3 <u>Commingling Prohibition and Tagging by Aquaculturists/Dealers:</u> Aquaculturists shall not place shell stock harvested from more than one growing area into the same container. When the aquaculturist is also a dealer, the aquaculturist has the option to tag the shell stock with a harvester tag or a dealer's tag meeting the requirements of the DOH regulations.
- 11.4 <u>Bulk Tagging:</u> Bulk tagging of shell stock will be permitted under the following criteria:
 - 11.4.1 When shell stock are harvested from one aquaculture lease site or facility on a single day, multiple containers may be utilized on a wrapped pallet, in a tote, in a net brailer, in a single boat, in a vehicle or other container, and the unit tagged with a single tag, provided that the tag specifies the number of individual containers in the unit or an estimate of the total weight, volume, or count; and
 - 11.4.2 A written statement is provided that "All shell stock containers in the lot have the same harvest data and area of harvest."

12. Temperature Control of Shellfish

- 12.1 <u>General requirements:</u> Aquaculturists shall not allow shell stock to deteriorate or decompose from exposure to excessive temperature and shall deliver shell stock to a licensed dealer before such deterioration or decomposition occurs.
- 12.2 <u>Harvest of oysters and quahaugs annually from September 15 through June 30 inclusive:</u> The maximum allowable time between the harvest of shell stock and delivery to a dealer shall be twelve hours. Possession of shell stock by anyone other than a licensed dealer in excess of twelve (12) hours is prohibited. This maximum allowable time may be reduced by DEM, via emergency regulation, in certain harvest areas if environmental changes necessitate such adjustment.
- 12.3 <u>Harvest of oysters and quahaugs annually from July 1 through September 14</u> inclusive:
 - 12.3.1 All oysters and quahaugs harvested shall be transferred to a licensed dealer within five (5) hours of the commencement of harvest
 - 12.3.2 All harvested oysters and quahaugs shall be subject to shading immediately upon harvest.

- 12.3.3 All oysters and quahaugs that are removed from the water for less than twelve (12) hours for husbandry purposes must be re-submerged for no less than forty-eight (48) hours before harvest.
- 12.3.4 All oysters and quahaugs that are removed from the water for twelve (12) hours or greater for husbandry purposes must be re-submerged for no less than seven days (168 hours) before harvest.
- 12.3.5 All oysters and quahaugs that are exposed to air drying must be resubmerged for no less than seven days (168 hours) before harvest.
- 12.3.6 All oysters and quahaugs harvested from a Designated Temperature Control or Thermally Impacted area shall also be harvested in compliance with one of the following requirements:
 - (A) Harvesters shall terminate all harvest activities and all harvested oysters and quahaugs must be transferred to a dealer or placed in mechanical refrigeration or adequately iced by 11:00 a.m. between the dates of July 1st and August 31st, inclusive; and by noon between September 1 and September 14th, inclusive. Upon being placed in mechanical refrigeration or adequately iced, oysters must remain under temperature control until transferred to a licensed dealer.
 - (B) Oysters and quahaugs that are harvested after the times specified in this section must be delivered to a licensed dealer within two (2) hours of the commencement of harvest; or placed in mechanical refrigeration or adequately iced within two (2) hours of the commencement of harvest until the oysters and quahaugs are transferred to a licensed dealer.

13. Enforcement

- 13.1 <u>Authority to Enter and Inspect:</u> The Director shall have the authority to enter and inspect any and all aquaculture facilities for the purposes of determining compliance with the terms and provisions of the CRMC assent or permit, DEM license, and approved operational plan (RIGL 20-10-15).
- 13.2 <u>Violations:</u> Unless otherwise provided, violations of and/or noncompliance with the regulations set forth herein shall be prosecuted under the applicable sections of RIGL Chapter 20-10. In addition to other penalties provided by law or other rule or regulation, any licensed aquaculturist who violates the provisions of these rules or any order issued by the director shall be subject to suspension, revocation or denial of his/her license and/or permit in accordance with RIGL Sections 20-2-13, 20-10-16.1, and 42-17.1-2(19).

14. Effective Date

The foregoing rules and regulations, "Aquaculture of Marine Species in Rhode Island Waters", after due notice, are hereby adopted and filed with Secretary of State in accordance with Chapter 42-17.1, and §§; 20-1-2; 20-1-4; 20-1-5; 20-10-5c; and 20-10-12, in accordance with Chapter 42-35 of the RIGL 1956, as amended.

Janet L. Coit, Director
Department of Environmental Management

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