



COASTAL RESOURCES DIVISION
ONE CONSERVATION WAY • BRUNSWICK, GA 31520 • 912-264-7218

WALTER RABON
COMMISSIONER

DOUG HAYMANS
DIRECTOR

January 30, 2026

MEMORANDUM

TO: Members, Board of Natural Resources

FROM: Doug Haymans

SUBJECT: Proposed Amendment to the Rules of the Georgia Department of Natural Resources,
Saltwater Fishing Regulations, Rule 391-2-4-.19(4)(c)(1)

The Coastal Resources Division is proposing to amend a Rule, contained in the Saltwater Fishing Regulations, 391-2-4-.19(4)(c)(1). The proposed amendment would revise Departmental procedures to approve Certified Shellfish Master Harvesters to operate for an extended period of time during an otherwise closed season.

Included in this packet are the following:

• Proposed Notice	Page	A-2
• Background and Synopsis	Pages	A-3 through 5
• Date, time and place of Board action	Page	A-5
• Explanation of the Public Participation Plan	Page	A-5
• Analysis of Small Business Impacts	Page	A-6
• Strike-thru Copy of Proposed Rule Amendment	Pages	A-7 through 18
• Exact Copy of Proposed Rule Amendment	Pages	A-19 through 30

I respectfully submit these items for your consideration. The Coastal Resources Division looks forward to presenting these at the January meeting.

DH/ja

Attachments



COASTAL RESOURCES DIVISION

ONE CONSERVATION WAY • BRUNSWICK, GA 31520 • 912-264-7218

WALTER RABON
COMMISSIONER

DOUG HAYMANS
DIRECTOR

February 2, 2026

NOTICE OF PROPOSED REGULATION CHANGES

TO: All Interested Persons and Parties

FROM: Doug Haymans

SUBJECT: Notice of Rule Making for Saltwater Fishing Regulations for Shellfish

Notice is hereby given that, pursuant to authority contained in O.C.G.A. §27-1-4, and §27-1-189, the Board of Natural Resources proposes to amend a Rule contained in the Saltwater Fishing Regulations, Rule 391-2-4-.19. The proposed amendment, when adopted, will revise requirements to participate in the harvest of molluscan shellfish during otherwise closed seasons by extending the harvest period from two (2) hours to 30 minutes before sunrise until 10:00a.m.

Written public comments will be received through Wednesday, March 4, 2026. Mailed comments must be postmarked by March 4th, and e-mailed comments will be accepted through close of business (4:30 pm) on March 4th. Comments should be legible, concise and limited to the proposed rule.

Following this comment period, the Board of Natural Resources will consider the proposed amendment on Tuesday, March 24, 2026, at 9:00 a.m. at the DNR Board Room, 2 Martin Luther King Jr. Drive. SE, Suite 1252 East, Atlanta, GA 30034.

Mail or email comments to: Dominic Guadagnoli
Coastal Resources Division
One Conservation Way
Brunswick, GA 31520
Email: dom.guadagnoli@dnr.ga.gov

Additional information is available at www.coastalgadnr.org. Click in the “News and Public Notices”.

**BACKGROUND AND SYNOPSIS OF
PROPOSED AMENDMENT TO THE RULES OF THE
GEORGIA DEPARTMENT OF NATURAL RESOURCES**

**CHAPTER 391-2
COASTAL RESOURCES**

**SUBJECT 391-2-4
SALTWATER FISHING REGULATIONS**

Background:

Through the early 1900's, Georgia had a prosperous and lucrative oyster industry. Today, Georgia's oyster harvest represents a fraction of former yields although wild oyster harvest continues to be a very sustainable fishery. New techniques for oyster mariculture, or farming, in subtidal waters of creeks and rivers have recently been deployed in Georgia, demonstrating the potential for substantial economic growth in the industry.

The effort to support new oyster mariculture opportunities began with legislative policy reform in 2019 when House Bill 501 amended O.C.G.A Title 27, Chapter 4 to provide the foundation for shellfish mariculture in balance with the environment and other public uses of coastal waters and authorized the Board of Natural Resources to promulgate rules necessary to support the oyster industry.

In 2020, the Board adopted rules for oyster mariculture that incorporated the National Shellfish Sanitation Program's "Model Ordinance" (NSSP MO) by reference and established minimum seed sizes and criteria for shellfish seed importation and siting of subtidal leases (Rule 391-2-4-.18). Subsequently, the Department produced a new Shellfish Policy Manual and an online leasing dashboard that outlines all its requirements and expectations for commercial shellfish operations.

In April 2025, the Board adopted Rule **391-2-4-.19 Commercial Shellfish; Requirements for Vibrio Control**, establishing Departmental procedures to enable Certified Shellfish Master Harvesters to harvest during an otherwise closed season. Harvest during closed season, June through September, would use strict two (2) hour time/temperature controls for the control of *Vibrio* bacteria as outlined in the Department's annual *Vibrio* Control Plan. Naturally occurring throughout estuarine waters, *Vibrio parahaemolyticus* (*Vp*) and *Vibrio vulnificus* (*Vv*) are bacteria that can cause moderate to severe gastrointestinal illness or death in those with compromised immune systems. These concerns are minimized by thoroughly cooking the shellfish; however,

consuming raw or undercooked oysters greatly increases the risk of illness from these bacteria. *Vp* and *Vv* are more prevalent during warmer months when water temperatures are highest, which is why Georgia closes the oyster harvest season, annually. However, a study conducted in 2022 by UGA and CRD demonstrated that subtidal oysters harvested within two (2) hours and before 10:00a.m. during closed season minimized the risk of producing oysters with unsafe levels of *Vibrio*. The results of this study formed the basis of the 2025 Board rule.

Following rule adoption, existing oyster farmers were certified for closed season harvest. Fortunately, no *Vibrio*-related illnesses were reported in 2025. Simultaneously, an updated study by UGA and CRD suggested subtidal oysters can also be harvested safely during the closed season over longer periods of time; specifically, 30-minutes before sunrise until 10:00a.m., while utilizing best management practices for shading and cooling.

Following the successful 2025 closed season harvest and review of the new study, the Department finds the strict two (2) hour harvest window allowed for in the current rule can be expanded while minimizing *Vibrio* risks and associated concerns for public health.

Currently there are nine (9) leases within three (3) “mariculture zones” established exclusively for subtidal oyster farms. Closed season harvest requires additional certification by the Department and the expectation is that most farmers, if not all, farmers will meet certification criteria by 2027.

More information about the shellfish mariculture industry can be found at CoastalGaDNR.org/commercialshellfishharvest.

Purpose:

The purpose of the proposed rule amendment is to amend requirements for closed season shellfish mariculture by extending time of harvest from two (2) hours to 30 minutes before sunrise until 10:00a.m., while maintaining rigorous harvest controls during *Vibrio* control months. The proposed amendment is compliant with the National Shellfish Sanitation Program’s Model Ordinance, ensuring the public’s health is paramount.

Main Features:

This is an amendment to a rule adopted in 2025 that requires the Department to produce a Georgia *Vibrio* Control Plan annually and establishes the criteria for commercial shellfish harvest during an otherwise closed season. The amendment extends time/temperature control points for closed season harvest to allow harvesters additional time to harvest and land subtidal oysters before 10:00a.m.

Date, Time, and Place of Board Action:

Board Action: Tuesday, March 24, 2026, at 9:00 a.m. at the DNR Board Room, 2 Martin Luther King Jr. Drive. SE, Suite 1252 East, Atlanta, GA 30034.

Public Participation Plan

Proposed Amendment to Saltwater Fishing Regulations, Rule 391-24-.19,

During the 2019 session, the Georgia General Assembly passed House Bill 501 to amend O.C.G.A. Title 27 Chapter 4 relating to the development of mariculture in Georgia for oysters, clams and other molluscan species. The Bill authorized the Board of Natural Resources to promulgate rules necessary to develop and cultivate the shellfish industry. The proposed rule amendment updates the Saltwater Fishing Regulations to establish requirements for closed season harvest of subtidal, maricultured oysters.

Members of the Georgia Shellfish Industry were consulted during the development of this rule and support the proposed amendment.

- January 30, 2026 - CRD presents the proposed amendment of rule 391-2-4-.19 to the Board of Natural Resources, Coastal Committee.
- February 2, 2026 - Public Notice of the proposed rule amendment is advertised through various print media, Gov Delivery and on CRD website. Additionally, the notice will be mailed to all persons who have requested in writing that they be placed upon a mailing list which shall be maintained by the agency for advance notice of its rule-making proceedings and who have tendered the actual cost of such mailing as from time to time estimated by the agency.
- March 4, 2026 – Public comment period closes.
- March 24, 2026 – Board consideration of public comments and final action on proposed rule amendment.



COASTAL RESOURCES DIVISION

ONE CONSERVATION WAY • BRUNSWICK, GA 31520 • 912-264-7218

WALTER RABON
COMMISSIONER

DOUG HAYMANS
DIRECTOR

January 30, 2026

MEMORANDUM

TO: Board of Natural Resources

FROM: Doug Haymans

SUBJECT: Economic Impact of Proposed Amended Rule on Small Businesses: Rule 391-2-4, Saltwater Fishing Regulations

The Administrative Procedure Act requires that during the formation and adoption of any rules, attempts should be made to reduce the economic impact of those rules on small businesses. This applies to businesses that are independently owned and operated, are not dominant in the field and employ 100 employees or less.

The proposed rule amendment should have no negative impact on small businesses. Currently, oyster harvest is limited in Georgia to eight months per year except to those certified by the Department to harvest subtidal oysters during a closed season following strict, two-hour harvest time limits. The proposed rule amendment provides additional time for closed season subtidal oyster harvest which should provide for a positive impact on the industry.

The Coastal Resources Division has determined that the proposed amendment to rule 391-2-4-.19 will have no negative economic impact on small businesses.

DH/ja

STRIKETHROUGH VERSION
ADDITIONS ARE UNDERLINED AND DELETIONS ARE
~~STRIKETHROUGH~~

Saltwater Fishing Regulations

Subject 391-2-4

**RULES
OF
GEORGIA DEPARTMENT OF NATURAL RESOURCES**

**CHAPTER 391-2
COASTAL RESOURCES**

**SUBJECT 391-2-4
SALTWATER FISHING REGULATIONS**

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391-2-4-.19

391-2-4-19 Commercial Shellfish; Requirements for *Vibrio* Control.

(1) Purpose. The purpose of this Rule is to implement the authority of the Board of Natural Resources to promulgate rules and regulations based on current, sound principles of wildlife research and management establishing requirements for harvest of maricultured oysters from subtidal harvest areas during *Vibrio* control months, requirements for harvester tags and shading, additional harvest controls for shellfish harvested during certain months, and procedures for amending closures and harvest controls.

(2) Definitions.

(a) “Adequately iced” means the amount and application of ice is sufficient to ensure that immediate cooling begins and continues for oysters harvested during *Vibrio* control months. If ice slurry is used and the shellfish are submerged the presence of ice in the slurry indicates adequate icing.

(b) “Adequately shaded” means measures taken to shelter shellstock from direct exposure to sunlight that may cause a significant increase in *Vibrio* growth due to an increase in temperature. Adequate shading may be accomplished by any means that effectively protects shellstock from direct sunlight and prevents excessive heat build-up in the shaded area. A gap must be maintained between the top of the shellstock and shade cover to allow for sufficient air flow.

(c) “Approved icing container” means a clean and durable receptacle fabricated from safe non-porous materials with effective drainage.

(d) “Closed season harvest record” means a document where harvesters during the *Vibrio* control months record the date, harvester name, harvest location, the time of initial harvest, the time of initial icing, the time of final harvest, quantities harvested, the time of final icing or any information as determined and approved by the Department.

(e) “Harvest” means the removal of shellstock from the water with the intention of marketing the product for consumption and not returning the shellstock to the water after husbandry practices. Harvest commences when the first shellstock not intended to be returned to the water is removed from the water, regardless of whether the shellstock is temporarily placed back into the water after culling, sorting, or other activities.

(f) “Harvester” means a person who is authorized by the Department to harvest shellfish for commercial purposes at the request of a master harvester.

(g) “Harvest area” means the designated area that has been granted to an individual to plant, grow and harvest shellfish for commercial purposes.

(h) “Harvest tag” means a durable, waterproof tag affixed by a commercial shellfish harvester to an individual container of shellstock or, if a bulk tag is used, an individual lot of shellstock, and meeting the specifications for harvester tags contained in the NSSP Model Ordinance and as required by the Department and Georgia Department of Agriculture.

(i) “Husbandry” means any activity related to the cultivation and management of shellstock prior to their harvest, including but not

limited to grading, sorting, culling, tumbling, biofouling control and cleaning, but does not include processing.

(j) "Internal temperature" means the internal temperature of the meat of any shellstock as measured using a calibrated probe thermometer. The internal temperature of shellstock is, under most circumstances, reflected by the external temperature of the space surrounding the shellstock, or the external temperature of its shell. The internal temperature of shellstock may be measured by inserting a thermometer probe into the center of the container of shellfish or by measuring the external shell temperature with an infrared thermometer. Should circumstances dictate, it may be necessary for the Department, Georgia Department of Agriculture or a harvester to open the shellstock to measure its internal temperature with a thermometer probe.

(k) "Landing" means the point of time at which shellstock are put on land or a dock at the certified dealer's facility.

(l) "Lot" means the shellstock harvested during a distinct harvest operation from a shellfish harvest area. A lot of shellstock may be identified by a single harvest tag or a single bulk harvest tag.

(m) "Master harvester" means a person who has acquired a lease with permission to grow or harvest shellfish from the state or from an owner with exclusive rights to shellfish pursuant to Code Sections 44-8-6 through 44-8-8, who has been permitted by the Department.

(n) "Mechanical refrigeration" means a mechanically refrigerated cooler which is part of a certified shellfish dealer's

facility permitted by the Georgia Department of Agriculture and which shall maintain an ambient air temperature of 45°F or below and shall be capable of achieving the time-temperature requirements of this rule.

(o) “Original dealer” means the dealer who initially received shellstock from a harvester. The original dealer may also be the master harvester, if permitted by the Georgia Department of Agriculture as a certified shellfish dealer.

(p) “Potable water” means water from a water supply that meets the requirements of the Safe Drinking Act, as administered by the US Environmental Protection Agency, and all applicable state or local requirements.

(q) “Processing” means any activity associated with the handling, shucking, freezing, packing, labeling or storing of shellfish in preparation for distribution.

(r) “Resubmergence” means the return of market-sized oysters by a harvester to their harvest area for reconditioning due to excessive time-temperature exposure from oyster husbandry activities or off-site culling or due to a recall and as prescribed by the Department and in the NSSP Model Ordinance.

(s) “Resubmergence Closed Season Logbook” means a document that clearly identifies and segregates shellstock under resubmergence and where harvesters (during the closed season harvest periods) must record the harvest area, date when oysters were removed from the site and quantities, date when oysters were returned to the harvest area for resubmergence and quantities, approximate size range, type and number of cages, reason for resubmergence (off-site culling, onsite culling e.g. exposure time

was greater than two hours, anti-fouling, etc.), date oysters were taken out of resubmergence and any other information as determined and approved by the Department.

(t) “Shellstock” means live molluscan shellfish in the shell.

(u) “Subtidal” means the area of the marine shoreline that is below mean low tide and is covered with seawater at all stages of the tide.

(v) “Temperature control” means the use of adequate icing methods or mechanical refrigeration which is capable of lowering the internal temperature of oysters to 50°F then maintaining the internal temperature of the oysters at 45°F or below, and of achieving the time-temperature requirements of this Rule.

(w) “Time of final harvest” means the time when the last oyster or clam harvested in a lot is removed from the water.

(w) “Time of initial harvest” means the time when the first oyster or clam harvested in a lot is removed from the water.

(x) “Time of final icing” means the time when the last oyster in a lot is adequately iced.

(y) “Time of initial icing” means the time when the first oyster in a lot is adequately iced.

(z) “*Vibrio* control months” means the months with heightened risk for *Vibrio* presence due to elevated air and water temperatures

that require closures to harvest or more restrictive harvest controls, as determined by the Department.

(3) Georgia *Vibrio* Control Plan.

(a) The Department shall produce an annual Georgia *Vibrio* Control Plan. The plan shall prescribe the controls and requirements for eligible master harvesters to petition the Department for the harvest of maricultured oysters from subtidal harvest areas using additional harvest controls during otherwise closed seasons corresponding to *Vibrio* control months, as determined by the Department.

(b) Months that require additional temperature controls will be specified in the most recent version of the Georgia *Vibrio* Control Plan. Specifically for this plan, shellstock shall refer to Eastern Oysters (*Crassostrea virginica*) and Hard Clams (*Mercenaria* spp.), unless otherwise specified by the Department.

(4) Shellstock Temperature Controls.

(a) Harvest When Additional Temperature Controls are Not Required. Shellstock harvested during the months that do not require additional temperature controls shall be placed under mechanical refrigeration by the certified dealer within ten (10) hours from the start of harvest.

(b) Harvest When Additional Temperature Controls are Required, But Harvest is Outside of *Vibrio* Control Months. All maricultured oysters harvested during the 30 days prior to and the 30 days following the *Vibrio* control months shall be limited to five (5) hours from harvest to mechanical refrigeration.

(c) Harvest When Additional Temperature Controls are Required and Harvest is During the *Vibrio* Control Months.

(1.) Master harvesters and their harvesters may harvest oysters during the closed season/*Vibrio* control months without the use of an approved icing method, in accordance with their approved Closed Season Shellfish Operations Plan, provided that the oysters are delivered ~~within two (2) hours of initial harvest~~ and placed into mechanical refrigeration at their certified dealer's facility before 10:00 AM on the same day. Upon receipt, the certified dealer is required to cool the oysters under mechanical refrigeration to an internal shell/meat temperature of 50°F or less within two (2) hours; or

(2.) Master harvesters and their harvesters may harvest oysters during the closed season/*Vibrio* control months provided adequate ice is used upon harvest and the oysters are placed into mechanical refrigeration at a certified dealer's facility within four (4) hours from the start of harvest. Upon receipt, the certified dealer is required to cool the oysters under mechanical refrigeration to an internal shell/meat temperature of 50°F or less within two (2) hours.

(d) Approved icing methods for all harvested oysters are:

(1.) Upon removal from the water, immediate placement of oysters into mesh bags by a harvester and placement of mesh bags between layers of wet ice into an approved icing container completely surrounded by ice; or

(2.) Upon removal from the water, immediate placement of loose oysters into an approved icing container completely surrounded by ice; or

(3.) Upon removal from the water, immediate placement of oysters into an ice and water mixture (e.g., ice slurry) at or below 45 degrees Fahrenheit and fully submerged until the temperature of the oysters is at or below 55 degrees Fahrenheit. After the oysters have been submerged and are below 55 degrees Fahrenheit, oysters must be stored in an approved icing container as prescribed in either method 1. or 2. above. The water used for the slurry must be from a potable source or from the approved growing area.

(5) Tagging Requirements for All Shellstock. All containers of commercially harvested shellstock must be tagged with a harvester tag or, if a bulk tag is used, an individual lot of shellfish, and meeting the specifications for harvester tags as prescribed in the NSSP Model Ordinance and as required by the Department and Georgia Department of Agriculture.

(6) Shading Requirements for All Shellstock. All harvested shellstock must be adequately shaded at all times using effective coverings that shade the shellstock from direct sunlight and other contaminates, such as bird waste, onboard the vessel as well as during transport in any vessel, vehicle or conveyance from the harvest area to the original dealer. A gap must be maintained between the top of the shellstock and shade cover to allow for sufficient air flow.

(7) Confirmed Illness Response. In the event that a confirmed *Vibrio vulnificus* or *Vibrio parahaemolyticus* illness outbreak, as defined in the NSSP Model Ordinance, occurs due to the

consumption of shellfish that have been commercially harvested in Georgia, the Department will follow the established protocols as defined in the most recent version of the NSSP Model Ordinance to amend shellfish growing area closures for harvest and temperature controls. Public notice of such an amendment shall be given by posting a notice at the courthouse in each coastal county and by other means as may appear feasible to inform interested persons. Such notice shall be posted at least 24 hours prior to any enforcement action taken pursuant to this rule.

(8) Requirements for Harvest During *Vibrio* Control Months.

(a) Master harvesters may annually request permission from the Department to harvest maricultured oysters from subtidal harvest areas during *Vibrio* control months. Master harvesters may be required to demonstrate their ability to meet shellstock temperature controls as described above to receive or maintain *Vibrio* control months permissions.

(b) Master harvesters must submit a Closed Season Shellfish Operations Plan to be approved by the Department prior to conducting harvesting activities during *Vibrio* control months. The plan shall include a list of trained and licensed harvesters, a resubmergence plan, husbandry plans, a routine schedule for all harvest and landing plans and all other information as required by the Department.

(c) Master harvesters that are authorized for harvest during *Vibrio* control months shall only harvest oysters that have been submerged for a minimum of 14 consecutive days prior to harvest.

(d) Resubmergence plans shall clearly identify and segregate all oysters greater than two (2) inches in the harvest area that have been put into resubmergence due to excessive time/temperature exposure. Oysters are required to remain in resubmergence for 14 consecutive days prior to harvest and must be clearly identified in a Resubmergence Closed Season Logbook.

(e) Master harvesters and their harvesters must maintain and complete a Resubmergence Closed Season Logbook for their designated harvest area. Logbooks must be maintained for a minimum of 90 days and made immediately available to the Department or a law enforcement officer upon request.

(f) Master harvesters and their harvesters shall complete a harvest tag and closed season harvest record for each lot of shellstock from the time of initial harvest through final harvest prior to leaving the harvest area. Closed season harvest records must be maintained for a minimum of 90 days and made immediately available to the department or a law enforcement officer upon request.

(g) Master Harvesters and their harvesters will be required to use only the shellstock temperature controls described above and must ensure continuous cooling is maintained during delivery and upon receipt of the oysters by the certified dealer.

(9) Minimum Eligibility Requirements for Harvest During *Vibrio* Control Months. A master harvester meeting the following minimum requirements may petition the Department for permission to harvest maricultured oysters from subtidal harvest areas during *Vibrio* control months:

(a) The master harvester must have a minimum of six (6) months of reported harvested shellstock outside of *Vibrio* control months in accordance with the Department's control plan, and

(b) The master harvester's past compliance with the provisions in O.C.G.A. § 27-4-187 through O.C.G.A. § 27-4-204 and associated Rules and Regulations will be considered by the Department in determining eligibility.

EXACT COPY

Saltwater Fishing Regulations

Subject 391-2-4

**RULES
OF
GEORGIA DEPARTMENT OF NATURAL RESOURCES**

**CHAPTER 391-2
COASTAL RESOURCES**

**SUBJECT 391-2-4
SALTWATER FISHING REGULATIONS**

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391-2-4-.19

391-2-4-19 Commercial Shellfish; Requirements for *Vibrio* Control.

(1) Purpose. The purpose of this Rule is to implement the authority of the Board of Natural Resources to promulgate rules and regulations based on current, sound principles of wildlife research and management establishing requirements for harvest of maricultured oysters from subtidal harvest areas during *Vibrio* control months, requirements for harvester tags and shading, additional harvest controls for shellfish harvested during certain months, and procedures for amending closures and harvest controls.

(2) Definitions.

(a) “Adequately iced” means the amount and application of ice is sufficient to ensure that immediate cooling begins and continues for oysters harvested during *Vibrio* control months. If ice slurry is used and the shellfish are submerged the presence of ice in the slurry indicates adequate icing.

(b) “Adequately shaded” means measures taken to shelter shellstock from direct exposure to sunlight that may cause a significant increase in *Vibrio* growth due to an increase in temperature. Adequate shading may be accomplished by any means that effectively protects shellstock from direct sunlight and prevents excessive heat build-up in the shaded area. A gap must be maintained between the top of the shellstock and shade cover to allow for sufficient air flow.

(c) “Approved icing container” means a clean and durable receptacle fabricated from safe non-porous materials with effective drainage.

(d) “Closed season harvest record” means a document where harvesters during the *Vibrio* control months record the date, harvester name, harvest location, the time of initial harvest, the time of initial icing, the time of final harvest, quantities harvested, the time of final icing or any information as determined and approved by the Department.

(e) “Harvest” means the removal of shellstock from the water with the intention of marketing the product for consumption and not returning the shellstock to the water after husbandry practices. Harvest commences when the first shellstock not intended to be returned to the water is removed from the water, regardless of whether the shellstock is temporarily placed back into the water after culling, sorting, or other activities.

(f) “Harvester” means a person who is authorized by the Department to harvest shellfish for commercial purposes at the request of a master harvester.

(g) “Harvest area” means the designated area that has been granted to an individual to plant, grow and harvest shellfish for commercial purposes.

(h) “Harvest tag” means a durable, waterproof tag affixed by a commercial shellfish harvester to an individual container of shellstock or, if a bulk tag is used, an individual lot of shellstock, and meeting the specifications for harvester tags contained in the NSSP Model Ordinance and as required by the Department and Georgia Department of Agriculture.

(i) “Husbandry” means any activity related to the cultivation and management of shellstock prior to their harvest, including but not

limited to grading, sorting, culling, tumbling, biofouling control and cleaning, but does not include processing.

(j) “Internal temperature” means the internal temperature of the meat of any shellstock as measured using a calibrated probe thermometer. The internal temperature of shellstock is, under most circumstances, reflected by the external temperature of the space surrounding the shellstock, or the external temperature of its shell. The internal temperature of shellstock may be measured by inserting a thermometer probe into the center of the container of shellfish or by measuring the external shell temperature with an infrared thermometer. Should circumstances dictate, it may be necessary for the Department, Georgia Department of Agriculture or a harvester to open the shellstock to measure its internal temperature with a thermometer probe.

(k) “Landing” means the point of time at which shellstock are put on land or a dock at the certified dealer’s facility.

(l) “Lot” means the shellstock harvested during a distinct harvest operation from a shellfish harvest area. A lot of shellstock may be identified by a single harvest tag or a single bulk harvest tag.

(m) “Master harvester” means a person who has acquired a lease with permission to grow or harvest shellfish from the state or from an owner with exclusive rights to shellfish pursuant to Code Sections 44-8-6 through 44-8-8, who has been permitted by the Department.

(n) “Mechanical refrigeration” means a mechanically refrigerated cooler which is part of a certified shellfish dealer’s

facility permitted by the Georgia Department of Agriculture and which shall maintain an ambient air temperature of 45°F or below and shall be capable of achieving the time-temperature requirements of this rule.

(o) “Original dealer” means the dealer who initially received shellstock from a harvester. The original dealer may also be the master harvester, if permitted by the Georgia Department of Agriculture as a certified shellfish dealer.

(p) “Potable water” means water from a water supply that meets the requirements of the Safe Drinking Act, as administered by the US Environmental Protection Agency, and all applicable state or local requirements.

(q) “Processing” means any activity associated with the handling, shucking, freezing, packing, labeling or storing of shellfish in preparation for distribution.

(r) “Resubmergence” means the return of market-sized oysters by a harvester to their harvest area for reconditioning due to excessive time-temperature exposure from oyster husbandry activities or off-site culling or due to a recall and as prescribed by the Department and in the NSSP Model Ordinance.

(s) “Resubmergence Closed Season Logbook” means a document that clearly identifies and segregates shellstock under resubmergence and where harvesters (during the closed season harvest periods) must record the harvest area, date when oysters were removed from the site and quantities, date when oysters were returned to the harvest area for resubmergence and quantities, approximate size range, type and number of cages, reason for resubmergence (off-site culling, onsite culling e.g. exposure time

was greater than two hours, anti-fouling, etc.), date oysters were taken out of resubmergence and any other information as determined and approved by the Department.

(t) “Shellstock” means live molluscan shellfish in the shell.

(u) “Subtidal” means the area of the marine shoreline that is below mean low tide and is covered with seawater at all stages of the tide.

(v) “Temperature control” means the use of adequate icing methods or mechanical refrigeration which is capable of lowering the internal temperature of oysters to 50°F then maintaining the internal temperature of the oysters at 45°F or below, and of achieving the time-temperature requirements of this Rule.

(w) “Time of final harvest” means the time when the last oyster or clam harvested in a lot is removed from the water.

(w) “Time of initial harvest” means the time when the first oyster or clam harvested in a lot is removed from the water.

(x) “Time of final icing” means the time when the last oyster in a lot is adequately iced.

(y) “Time of initial icing” means the time when the first oyster in a lot is adequately iced.

(z) “*Vibrio* control months” means the months with heightened risk for *Vibrio* presence due to elevated air and water temperatures

that require closures to harvest or more restrictive harvest controls, as determined by the Department.

(3) Georgia *Vibrio* Control Plan.

(a) The Department shall produce an annual Georgia *Vibrio* Control Plan. The plan shall prescribe the controls and requirements for eligible master harvesters to petition the Department for the harvest of maricultured oysters from subtidal harvest areas using additional harvest controls during otherwise closed seasons corresponding to *Vibrio* control months, as determined by the Department.

(b) Months that require additional temperature controls will be specified in the most recent version of the Georgia *Vibrio* Control Plan. Specifically for this plan, shellstock shall refer to Eastern Oysters (*Crassostrea virginica*) and Hard Clams (*Mercenaria* spp.), unless otherwise specified by the Department.

(4) Shellstock Temperature Controls.

(a) Harvest When Additional Temperature Controls are Not Required. Shellstock harvested during the months that do not require additional temperature controls shall be placed under mechanical refrigeration by the certified dealer within ten (10) hours from the start of harvest.

(b) Harvest When Additional Temperature Controls are Required, But Harvest is Outside of *Vibrio* Control Months. All maricultured oysters harvested during the 30 days prior to and the 30 days following the *Vibrio* control months shall be limited to five (5) hours from harvest to mechanical refrigeration.

(c) Harvest When Additional Temperature Controls are Required and Harvest is During the *Vibrio* Control Months.

(1.) Master harvesters and their harvesters may harvest oysters during the closed season/*Vibrio* control months without the use of an approved icing method, in accordance with their approved Closed Season Shellfish Operations Plan, provided that the oysters are delivered and placed into mechanical refrigeration at their certified dealer's facility before 10:00 AM on the same day. Upon receipt, the certified dealer is required to cool the oysters under mechanical refrigeration to an internal shell/meat temperature of 50°F or less within two (2) hours; or

(2.) Master harvesters and their harvesters may harvest oysters during the closed season/*Vibrio* control months provided adequate ice is used upon harvest and the oysters are placed into mechanical refrigeration at a certified dealer's facility within four (4) hours from the start of harvest. Upon receipt, the certified dealer is required to cool the oysters under mechanical refrigeration to an internal shell/meat temperature of 50°F or less within two (2) hours.

(d) Approved icing methods for all harvested oysters are:

(1.) Upon removal from the water, immediate placement of oysters into mesh bags by a harvester and placement of mesh bags between layers of wet ice into an approved icing container completely surrounded by ice; or

(2.) Upon removal from the water, immediate placement of loose oysters into an approved icing container completely surrounded by ice; or

(3.) Upon removal from the water, immediate placement of oysters into an ice and water mixture (e.g., ice slurry) at or below 45 degrees Fahrenheit and fully submerged until the temperature of the oysters is at or below 55 degrees Fahrenheit. After the oysters have been submerged and are below 55 degrees Fahrenheit, oysters must be stored in an approved icing container as prescribed in either method 1. or 2. above. The water used for the slurry must be from a potable source or from the approved growing area.

(5) Tagging Requirements for All Shellstock. All containers of commercially harvested shellstock must be tagged with a harvester tag or, if a bulk tag is used, an individual lot of shellfish, and meeting the specifications for harvester tags as prescribed in the NSSP Model Ordinance and as required by the Department and Georgia Department of Agriculture.

(6) Shading Requirements for All Shellstock. All harvested shellstock must be adequately shaded at all times using effective coverings that shade the shellstock from direct sunlight and other contaminates, such as bird waste, onboard the vessel as well as during transport in any vessel, vehicle or conveyance from the harvest area to the original dealer. A gap must be maintained between the top of the shellstock and shade cover to allow for sufficient air flow.

(7) Confirmed Illness Response. In the event that a confirmed *Vibrio vulnificus* or *Vibrio parahaemolyticus* illness outbreak, as defined in the NSSP Model Ordinance, occurs due to the consumption of shellfish that have been commercially harvested in Georgia, the Department will follow the established protocols as defined in the most recent version of the NSSP Model Ordinance to

amend shellfish growing area closures for harvest and temperature controls. Public notice of such an amendment shall be given by posting a notice at the courthouse in each coastal county and by other means as may appear feasible to inform interested persons. Such notice shall be posted at least 24 hours prior to any enforcement action taken pursuant to this rule.

(8) Requirements for Harvest During *Vibrio* Control Months.

(a) Master harvesters may annually request permission from the Department to harvest maricultured oysters from subtidal harvest areas during *Vibrio* control months. Master harvesters may be required to demonstrate their ability to meet shellstock temperature controls as described above to receive or maintain *Vibrio* control months permissions.

(b) Master harvesters must submit a Closed Season Shellfish Operations Plan to be approved by the Department prior to conducting harvesting activities during *Vibrio* control months. The plan shall include a list of trained and licensed harvesters, a resubmergence plan, husbandry plans, a routine schedule for all harvest and landing plans and all other information as required by the Department.

(c) Master harvesters that are authorized for harvest during *Vibrio* control months shall only harvest oysters that have been submerged for a minimum of 14 consecutive days prior to harvest.

(d) Resubmergence plans shall clearly identify and segregate all oysters greater than two (2) inches in the harvest area that have been put into resubmergence due to excessive time/temperature exposure.

Oysters are required to remain in resubmergence for 14 consecutive days prior to harvest and must be clearly identified in a Resubmergence Closed Season Logbook.

(e) Master harvesters and their harvesters must maintain and complete a Resubmergence Closed Season Logbook for their designated harvest area. Logbooks must be maintained for a minimum of 90 days and made immediately available to the Department or a law enforcement officer upon request.

(f) Master harvesters and their harvesters shall complete a harvest tag and closed season harvest record for each lot of shellstock from the time of initial harvest through final harvest prior to leaving the harvest area. Closed season harvest records must be maintained for a minimum of 90 days and made immediately available to the department or a law enforcement officer upon request.

(g) Master Harvesters and their harvesters will be required to use only the shellstock temperature controls described above and must ensure continuous cooling is maintained during delivery and upon receipt of the oysters by the certified dealer.

(9) Minimum Eligibility Requirements for Harvest During *Vibrio* Control Months. A master harvester meeting the following minimum requirements may petition the Department for permission to harvest maricultured oysters from subtidal harvest areas during *Vibrio* control months:

(a) The master harvester must have a minimum of six (6) months of reported harvested shellstock outside of *Vibrio* control months in accordance with the Department's control plan, and

(b) The master harvester's past compliance with the provisions in O.C.G.A. § 27-4-187 through O.C.G.A. § 27-4-204 and associated Rules and Regulations will be considered by the Department in determining eligibility.