



The Commonwealth of Massachusetts

Division of Marine Fisheries

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MEMORANDUM

TO: Marine Fisheries Advisory Commission (MFAC)
Massachusetts Shellfish Advisory Panel

FROM: Daniel J. McKiernan, Director 

DATE: November 9, 2023

SUBJECT: **Updates to Shellfish Sanitation, Harvest, Handling, and Management Regulations**

Overview

DMF seeks to make several minor modifications to its shellfish regulations [322 CMR 6.00 and 16.00] for the upcoming 2024 fishing season. These proposed adjustments respond to routine changes in the *Vibrio* Control Plan, observed deficiencies in the regulatory code identified during recent enforcement and compliance efforts, and housekeeping efforts to improve the organization of state regulations. In summary, the changes should improve the management of shellfish fisheries in the Commonwealth benefiting both industry and public health. DMF will also review this regulatory proposal with the Shellfish Advisory Panel (SAP) at its upcoming fall 2023 meeting. I anticipate these proposals will proceed to public hearing this winter for final MFAC approval and implementation by springtime 2024.

Proposals

Vibrio Management Plan for the Harvest and Handling of Oysters

State regulations at 322 CMR 16.07 establish the protocols and performance standards consistent with the state's *Vibrio parahaemolyticus* (*Vp*) Control Plan, required by the National Shellfish Sanitation Program and approved annually by the Massachusetts *Vibrio* Working Group (DMF, DPH and MEP) to minimize the public health risk associated with *Vp* and the consumption of raw oysters. This includes a variety of risk controls during harvest and handling designed to minimize temperature abuse to prevent elevating risk and record keeping requirements to verify compliance with risk controls and aid in illness traceback.

The existing regulations generally require oysters to be adequately iced prior to leaving the point of landing and within two hours from time of harvest or first exposure in an intertidal area. This requirement is more stringent—requiring adequate icing within one hour from time of harvest or first exposure in an intertidal area—for certain shellfish growing areas during the peak summertime period (July 1 – September 15). This is done to prevent temperature abuse and inhibit the growth and proliferation of the *Vp* bacterium in oysters.

The current regulation prescribes several methods to comply with this adequate icing requirement. This includes: (1) surrounding mesh bags of oysters with at least two inches of ice between each bag and between the bags and the sides and bottom of an icing container and applying three inches of ice on top of the mesh bags; (2) placing loose oysters into an icing container with at least two inches of ice between the loose oysters and the sides and bottom of the icing container and applying three inches of ice on top of the

loose oysters; or (3) fully submerging oysters into an icing container holding an ice slurry or cold water dip that is at or below 45°F.

In recent years, industry has worked through DMF to adopt less prescriptive standards, and in 2023, the less prescriptive standards were adopted in the *Vp* Control Plan. This included requiring: (1) mesh bags containing oysters be completely surrounded by ice, including at the bottom of the container and each level of bags, so that each bag is continuously and completely covered with ice; (2) loose oysters in a container of ice be completely surrounded by ice, including at the bottom of the container and each level of bags, so that each bag is continuously and completely covered with ice; and (3) exempting harvesters from icing requirements if the primary buyer takes on the burden of icing at the landing site and within the time-to-icing window.

Unfortunately, given the 2023 *Vp* Control Plan was not approved and implemented until May 18, 2023, DMF was unable to amend its regulations for the current *Vp* Control Season. Rather, DMF committed to industry it would update its regulations for the 2024 season. This proposal seeks to make the modifications to the icing regulations consistent with this commitment.

Night Closures

Historically, night fishing for shellfish has been prohibited to prevent non-compliance with the state's sanitary harvest and handling requirements to protect public health, as well as local and municipal controls for managing the stock. Such prohibitions restrict fishing effort to daytime hours only so that the activity can be more closely monitored and patrolled for compliance. This has been accomplished through a layering of state laws and local regulation. State law at G.L. c. 130, §68 prohibits the taking or digging of shellfish from one-half hour after sunset to one-half hour before sunrise from any waters licensed as an aquaculture site and requires an aquaculture licensee to forfeit their license site should they violate the rule. Additionally, state regulations at 322 CMR 4.06 prohibit night fishing with mobile gear, which would apply to various state managed commercial shellfish fisheries (e.g., bay quahog dredge, surf clam and ocean quahog dredge). However, there is not a corollary state rule at G.L. c. 130 or 322 CMR 16.00 that blanketly prohibits the wild harvest of shellfish during nighttime hours. Rather, we rely on municipalities to enact such management controls under their home rule authority at G.L. c. 130, §52.

With this in mind, there is some logic in adopting such a provision in the state's commercial shellfish regulations. The creation of a uniform state-wide standard for commercial fishers would enhance enforcement and compliance. Additionally, it would promote public health by allowing state criminal and civil penalties and administrative sanctions to be applied in instances of non-compliance and enabling the Massachusetts Environmental Police to enforce night commercial shellfish fishing closures.

Additionally, the citation in our bay quahog dredge regulation referencing the night fishing closure for mobile gear needs to be updated.

Sanitary Icing of Shellfish

There is some regulatory ambiguity regarding the sanitary icing of shellfish. DMF regulations at 322 CMR 16.02 define icing as meaning "to apply ice made from a DMF approved potable water source to shellfish for temperature control". Additionally, DMF regulations at 322 CMR 16.04 prohibit the icing of shellstock with ice obtained from any source other than an approved source that uses potable water and properly maintained ice machines. In their totality, the regulatory intent is for the rules to apply to all shellstock under all circumstances. The agency's interpretation is consistent with the National Shellfish Sanitation Program Model Ordinance [§II, c. VIII.02.H.(1)], which specifies "any ice used in storage or cooling of shellfish during harvest shall be made from a potable water source..." with the term 'harvest' being defined as "the act of removing shellstock from growing areas and its placement on or in a manmade conveyance or other means of transport."

However, some aquaculturists have argued the regulations should more narrowly apply to market bound shellfish only. This matter came to a head this past winter when certain aquaculture interests on Cape Cod were observed using skating rink ice for overwintering shellfish. They argued this activity was lawful because: (1) the regulatory section at 322 CMR 16.04 is titled “The Sanitary Harvest, Handling, and Transportation of Market Bound Shellfish” and this titling therefore precludes the application of the regulations therein to any culture activities; and (2) they argue that 14-day re-submergence requirement post overwintering would provide the shellstock with the opportunity to purge itself of any contaminants.

DMF responded in writing to the Massachusetts Aquaculture Association of February 1, 2023 (attached). In summary, the letter stated DMF’s definition of icing at 322 CMR 16.02 is broad and would require potable ice be applied to shellfish under all circumstances; stated that ice generated from resurfacing of a staking rink and scraped from a parking lot does not meet potable water standards; expressed concerns that such has likely been exposed to biological and industrial contaminants and other potential adulterants and that application of this ice to shellstock runs counter to safe food handling practices and could erode public confidence; the 14-day re-submergence requirements were not intended to address the purification of shellstock adulterated in this manner and there are no studies into the purification process that would safely justify a re-submergence accommodation in this scenario. Additionally, the letter stated that the use of salvaged rink ice points to a critical need to increase the availability of affordable and clean ice and DMF would work with the industry in such endeavors.

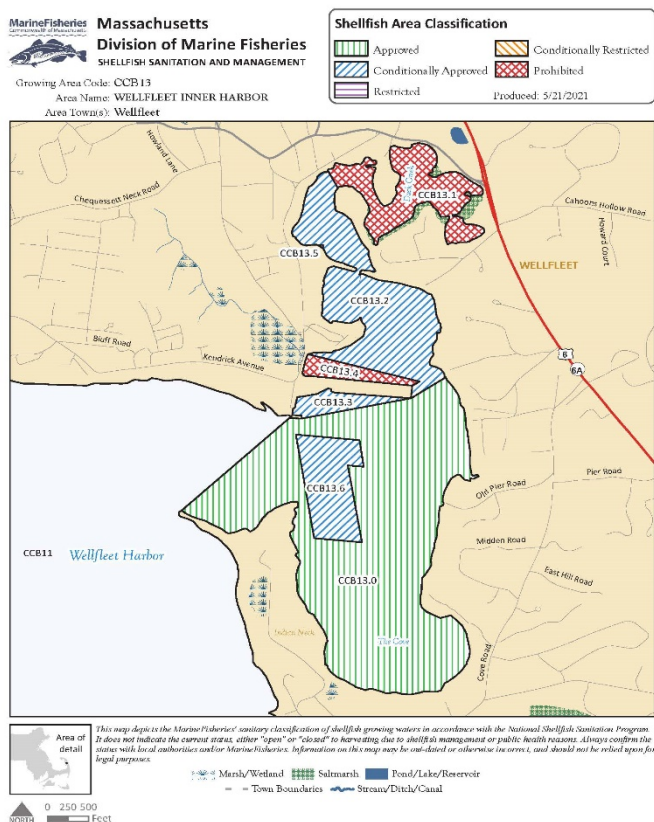
To eliminate any remaining confusion on this subject, DMF intends to amend the regulatory language at 322 CMR 16.00 so that it is clear that icing standards apply to all shellstock under all circumstances.

Shellfish Tagging

Many shellfish growing areas in our state contain sub-areas with different water quality classifications. For instance, the highly productive shellfish growing area CCB13 – Inner Wellfleet Harbor (Figure 1) contains waters that are classified as “Approved”, “Conditionally Approved”, and “Prohibited”. As such, there are three different standards affecting shellfish harvest within CCB13 depending on the precise geographical location.

With regards to harvest location, Massachusetts’ shellfish harvester tagging regulations at 322 CMR 16.05 require the harvester tag contain “the shellfish growing area name and number from where the shellfish was harvested.” This does not adequately specify that the sub-area must be identified. We attempt to further interpret the regulation through the annual [Shellfish Harvest, Handling, and Transport Affidavit](#), which all commercial shellfish permit holders must sign, that states the tag must contain the “most specific shellfish area name and number.” Even still, it is not

Fig. 1 – Cape Cod Bay 13 – Inner Wellfleet Harbor



uncommon for commercial fishers to list only the primary shellfish growing area. This unnecessarily confounds the efficacy of the shellfish tagging program and may inadvertently enhance the public health risk associated with consuming shellfish.

Accordingly, I seek to amend the regulatory language at 322 CMR 16.05 to further specify the harvester tag contain the most specific shellfish area name and number. Implementing this will require harvester add some additional information onto their shellfish tags and compliance will necessitate outreach and education by DMF, the Massachusetts Environmental Police, and local shellfish authorities. However, I think this adjustment, while minor, is critical to implementing a sound shellfish harvester tagging program that is consistent with the National Shellfish Sanitation Program Model Ordinance. Note that the Model Ordinance's guidance documents for shellstock tagging [§IV c. III.04] state the harvester tag must include, "the most precise identification of the harvest location or aquaculture site as is practicable."

Moderately Contaminated Shellfish

In Massachusetts there is a commercial fishery for soft-shell clams that occurs in certain shellfish growing areas around Boston Harbor and the Merrimack River that are classified as Conditionally Restricted. The sanitary survey for a Conditionally Restricted area demonstrates shellfish contain a limited degree of contamination at all times. This commercial fishery is conducted in accordance with state law at G.L. c. 130, §75 and DMF's implementing regulations at 322 CMR 7.02 and 10.00.

In effect, we permit Master Diggers—who are bonded to assure compliance with the regulations—and may engage in the harvest, possession, transportation, and ultimately the sale of moderately contaminated shellfish. Additionally, Master Diggers may employ and supervise permitted Subordinate Diggers authorized to harvest moderately contaminated shellfish and possess it at the landing site for sale to a Master Digger. Following harvest, the Master Digger is to arrange the transport of the moderately contaminated shellfish to DMF's depuration facility in Newburyport and then from our depuration facility for sale into commerce.

DMF manages the acquisition and throughput of moderately contaminated shellfish at the depuration plant through a plant schedule. While state regulations do not specifically require such a schedule, we enforce it through permitting rules at 322 CMR 7.02 coupled with the strict transport and holdover rules at 322 CMR 10.00. To enhance the transparency and enforceability of our regulatory program, I intend to amend 322 CMR 10.00 to specifically require Master Diggers (or their transport agents) to adhere to DMF's Shellfish Plant Digging Schedule.

Previously, DMF discussed recodifying its moderately contaminated shellfish regulations within its Shellfish Harvest and Handling regulations at 322 CMR 16.00. However, given uncertainties surrounding the fishery and the depuration plant, I am not going to endeavor to make this change at this time. Accordingly, the moderately contaminated shellfish regulations will remain at 322 CMR 10.00.