

Vibrio Control Plan Requirements – Guidance Document

The goal of a Vibrio Control or Vibrio Management Plan is to control the safety of molluscan shellfish for human consumption by preventing unnecessary growth of bacterial pathogens resulting from improper or ineffective cooling or from time to temperature abuse. DMR Regulation Chapter 115 <http://www.maine.gov/dmr/laws-regulations/regulations/index.html> specifically addresses the concerns of *Vibrio parahaemolyticus* in oysters and hard clams harvested in the Damariscotta River and the upper New Meadows River (“New Meadows Lakes”) from May 1st through October 31st.

Most *Vibrios* grow in shellfish and the rate of growth is dependent upon temperature. To minimize illness, these regulations include controls to limit exposure to warm temperatures. The controls begin at harvest and are applied at every level of processing and handling. This guidance document provides an explanation of those controls. All harvesters and certified shellfish dealers who take oysters and/or hard clams, buy or wet store oysters and/or hard clams from the Damariscotta River and the upper New Meadows River shall submit to DMR a Vp harvest/purchase plan and participate in training provided by the DMR. Harvesters and shellfish dealers may not harvest, buy or wet store oysters or hard clams during the control months without a DMR approved harvest/purchase plan and training.

- **Harvest Time to Temperature Control at the Certified Dealer**

For products harvested from the Damariscotta River:

The harvester must provide harvest records to the original shellfish dealer demonstrating compliance with the applicable time and temperature requirements. This record can be in the form of a harvester tag that includes the time of harvest and ambient air temperature or a separate document. Harvesters have only two hours from time of harvest to deliver the product to the certified dealer when the ambient air temperature is above 80°F at any time during harvest. They have up to five hours to deliver the product if the air temperature stays below 80°F. The time harvest begins when the first shellstock in a lot is taken from the water. Anything that exceeds these limits must be rejected by the dealer with the option to resubmerge or wet store the product for a duration specified in Chapter 115. In addition, all product shall be subject to shading immediately after harvest.

For products harvested from the upper New Meadows River:

All oysters and hard clams shall be subject to shading immediately after harvest and adequately iced until delivery to a certified dealer. Conveyances used to hold and transport the iced product shall have adequate drainage so that shellfish cannot sit in standing water. Product harvested from the upper New Meadows River must be delivered to the certified dealer within 18 hours and remain adequately iced from harvest to delivery.

Adequately iced means that the amount and application of ice is sufficient to ensure that immediate cooling begins and continues for all shellstock in a container. If a temporary ice slurry is used for initial cooling after harvest, and the shellstock are submerged, the presence of ice in the slurry indicates adequate icing. Potable water must be used for the production of ice used for cooling of shellstock.

- **Conveyances Used to Transport Shellstock from Harvester to Dealer**

Conveyances used to transport shellstock from the harvest area to the original dealer shall be constructed to prevent contamination, deterioration, or decomposition of the shellstock during transport. A conveyance shall have adequate drainage to prevent any shellfish inside from sitting in standing water.

Conveyance means any type of container used to transport shellfish. The controls of the National Shellfish Sanitation Program (NSSP) are intended to address the container in which the shellfish are being held during transport from landing to final consumer.

- **Dealer Requirements for Receiving Vibrio Controlled Shellstock From Harvesters**

Dealers receiving products under a vibrio control plan must verify and document that the product was harvested and transported according to the control plan. That means verification that the harvester delivered the product, and it was placed in cold storage, within the Damariscotta River control time frame; or it was adequately iced from harvest time to arrival from the upper New Meadows River. Dealers must also ensure that vibrio control products are cooled to less than 50°F internal temperature within ten hours of receiving and document those times and temperatures. Once placed under temperature control it must remain that way.

DMR Recommendation: Dealers do NOT tarp or cover product in the cooler during the initial cooling phase as direct observations have shown this to significantly increase cooling times.