

Proposal Subject: Wastewater Discharges for Addressing Viruses

Specific NSSP Guide Reference: Section II Model Ordinance
Chapter IV Shellstock Growing Areas
@. 03 Growing Area Classification

Text of Proposal/ Requested Action E. Prohibited Classification

- (5) Wastewater Discharges.
 - (a) An area classified as prohibited shall be established adjacent to each sewage treatment plant outfall or any other point source outfall of public health significance.
 - (b) The determination of the size of the area to be classified as prohibited adjacent to each outfall shall include the following minimum criteria:
 - (i) The volume flow rate, location of discharge, performance of the wastewater treatment plant and the ~~bacteriological or viral~~ microbiological quality of the effluent;
 - (ii) The decay rate of the contaminants of public health significance in the wastewater discharged;
 - (iii) The wastewater's dispersion and dilution, including sufficient dilution to mitigate the impact of viruses in the effluent, and the time of waste transport to the area where shellstock may be harvested; and
 - (iv) The location of the shellfish resources, classification of adjacent waters and identifiable landmarks or boundaries.

Public Health Significance: Changing “bacteriological or viral” to “microbiological is a fairly innocuous change, since the only biological concerns for shellfish safety in wastewater are bacteria and viruses and all of these are microorganisms. This word change will also allow for any other emerging microbiological hazards, for example, *Cryptosporidium*, *Giardia*, *Cyclosporidium*, etc.

Adding the phrase “including sufficient dilution to mitigate the impact of viruses in the effluent” in (iii) simply emphasizes in plain language the heightened current concern for viral pathogens in shellfish, which is thoroughly justified by the following facts related to enteric viral pathogens: (1) they only derive from humans and are most commonly and readily found in human sewage; (2) they are today’s most prevalent pathogenic threat to shellfish consumers; (3) they are less effectively removed or inactivated by wastewater treatment and disinfection than bacteria; (4) they survive longer at cooler temperatures in environmental waters than bacteria; (5) they reside far longer in molluscan shellfish than bacteria; (6) they are not well indexed or predicted by the NSSP bacterial indicators; (7) routine monitoring for pathogens is not an effective preventative strategy; and, (8) ensuring sufficient dilution of contaminants by receiving waters is a proven, effective strategy for ensuring against enteric pathogens in molluscan shellfish, which is the entire intent of the statement in (a).

Cost Information (if available): It is not intended that any of these wording changes require any additional testing or incur any additional cost for the Authority or the industry beyond that incurred by the current Model Ordinance wording.

Action by 2013 Task Force I Recommended adoption of Proposal 13-106 as amended.

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**Action by 2013
General Assembly**

Adopted recommendation of 2013 Task Force I on Proposal 13-106.

**Action by FDA
May 5, 2014**

Concurred with Conference action on Proposal 13-106.