



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENTAL CONTROL
SHELLFISH & RECREATIONAL WATER PROGRAM

285 Beiser Boulevard, Suite 102, Dover, Delaware 19904
302-739-9939

Vibrio parahaemolyticus (Vp) Control Plan

for Eastern Oysters (*Crassostrea virginica*)
Harvested from Delaware Bay (GA-1)

Effective June 1, 2024 through August 31, 2024
Unless Revised & Reissued

Issue #24-1-O-1
Issued May 1, 2024

CONTENTS:

	<u>Page</u>
SECTION I. INTRODUCTION	1
1. Purpose	1
2. Background	2
3. Authority	2
4. Scope	2
5. Application	2
6. Severability	2
SECTION II. CONTROL MEASURES	2
1. Harvest Closure	2
2. Removal of Oysters	2
3. Resubmergence	2
SECTION III. ENFORCEMENT	2
1. Inspections	2
2. Records	2
3. Non-Compliance	2
SECTION IV. PLAN EVALUATION & MODIFICATION	3
1. Plan Evaluation	3
2. Plan Modification	3

SECTION I. INTRODUCTION

- 1. PURPOSE:** The purpose of this *Vibrio parahaemolyticus* (Vp) Control Plan is to protect public health by reducing the risk of Vp illnesses from oysters harvested from Delaware Bay from June 1, 2024 through and including August 31, 2024.
- 2. BACKGROUND:** Oysters pose a significant and unique risk of foodborne illness because they are filter feeders that concentrate pathogens that may cause human illness from surrounding waters and because they are commonly eaten whole and raw or partially cooked. Many of the pathogens that may be concentrated inside oyster tissue can be controlled via shellfish growing area classification or other means; however, the bacterium

Vibrio parahaemolyticus is naturally-occurring and present in all seawater and shellfish, and at far higher levels when waters are warm. Therefore, post-harvest temperature control and other Vp control measures are necessary to preclude an unacceptable risk of illness to consumers. Delaware and other states are federally required to comply with the National Shellfish Sanitation Program (NSSP), which includes requirements that states must conduct a risk evaluation that considers particular criteria in assessing whether Vp infection from consumption of bivalve shellfish from each growing area is likely to occur, and if so develop and implement a Vp Control Plan that establishes control measures to reduce Vp illness risk and procedures for plan evaluation and modification. DNREC has performed the Vp risk evaluation per NSSP criteria and determined that Vp illness is reasonably likely to occur in oysters harvested from Delaware Bay from June 1 through August 31, unless control measures are implemented.

3. **AUTHORITY:** This Vp Control Plan is implemented under the authority of the National Shellfish Sanitation Program Section II. Model Ordinance and under the authority of the Delaware Administrative Code Title 7: 7402 Shellfish Sanitation Regulations, Section 4.3.4.3.
4. **SCOPE:** The requirements herein apply to oysters which appear, in the opinion of DNREC, to be intended for harvest. This Plan does not apply to oysters which appear, in the opinion of DNREC, to be appear intended for shellfish enhancement or for transfer between harvest sites prior to resubmergence and later harvest. These activities are subject to other requirements established by DNREC.
5. **APPLICATION:** The terms and provisions of this Plan shall be liberally construed to allow DNREC to effectuate the purposes of this Plan, National Shellfish Sanitation Program requirements, and state law and regulations.
6. **SEVERABILITY:** Should any section, paragraph, sentence, clause, or phrase of this Plan be declared invalid for any reason, the remainder of the Plan shall not be affected thereby.

SECTION II. CONTROL MEASURES

1. **HARVEST CLOSURE:** No harvest of oysters, whether from public beds or private leases, shall occur from June 1 through and including August 31.
(NOTE: The DNREC Division of Fish & Wildlife already establishes harvest seasons for oysters, including both oysters from public beds and private leases, as from April through May and from September through December. From a Vibrio control and public health perspective, it would be possible to permit oyster harvest from June through August if control measures were implemented. Because existing harvest seasons do not occur from June through August, this V.p. Control Plan is not the primary force closing oyster harvest during these months.)
2. **REMOVAL OF OYSTERS:** No removal of oysters for any reason from public beds or private leases shall occur unless pre-authorized in writing from the DNREC Shellfish & Recreational Water Program. Removal of oysters from Delaware Bay shall be subject to conditions stipulated by the DNREC Shellfish & Recreational Water Program.
3. **RESUBMERGENCE:** All oysters, including seed and spat-on-shell, planted on private beds shall be submerged for at least 14 days below the mean low tide to allow natural depuration of Vibrio within the oyster tissue back to the level of the surrounding water. Harvesters shall document such resubmergence of oysters prior to harvest, retain records for a period of 2 years, and make such records available for inspection by DNREC.

SECTION III. ENFORCEMENT

1. **INSPECTIONS:** DNREC may conduct reasonable unannounced inspections to determine compliance with the requirements of this Plan at harvester boats, landing sites, and shellfish dealer facilities.
2. **NON-COMPLIANCE:** Any oysters determined by DNREC to be out of compliance with the requirements of this Vp Control Plan shall be considered unfit for consumption and subject to embargo, seizure, destruction,

and/or other action at the discretion of DNREC, in accordance with Section 3.1.3 of the State of Delaware 7402 Shellfish Sanitation Regulations. Significant non-compliance with the requirements of this Plan constituting a public health hazard may result in suspension or revocation by DNREC of harvester licensure and/or shellfish dealer certification or in other penalties.

SECTION IV. PLAN EVALUATION & MODIFICATION

- **PLAN EVALUATION:** This Plan will be evaluated over the course of its implementation by the DNREC Natural Resources Police and the DNREC Shellfish & Recreational Water Program, which will communicate and coordinate to ensure that the Plan is adequate to meet the desired objectives of protecting public health and ensuring NSSP compliance, and that industry compliance with the Plan is generally good.
- **PLAN MODIFICATION:** If the evaluation of this Plan shows that it is ineffective in controlling Vp risk, the Plan will be modified and reissued by DNREC as soon as possible. The Plan will also be modified if new information or technology becomes available and makes modification prudent as determined by DNREC.