

COMMONWEALTH of VIRGINIA

Department of Health Division of Shellfish Safety

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CHESAPEAKE BAY: LITTLE CREEK TO LYNNHAVEN BAY Growing Area # 069 Shoreline Sanitary Survey City of Virginia Beach

Date: 31 January 2020, *Revised 4 February 2020* **Survey Period**: October 10, 2019 – November 26, 2019

Total Number of Properties Inspected and Near-Shore Samples Collected: 29

Surveyors: I.M. Geeson & E.M. Yeargan

SECTION A: GENERAL

This survey area extends from Reference Point 70 at the jetty on the east side of the mouth of Little Creek to Reference Point 71 at the west side of the mouth of Lynnhaven Inlet at the Lesner Bridge, including the Chesapeake Bay shoreline between these two points. The area includes a narrow strip of shoreline between the two reference points.

The entire survey area, including the four islands of the Chesapeake Bay Bridge Tunnel system are served by the Hampton Roads Sanitation District sewerage system with final treatment at the Chesapeake-Elizabeth Treatment Plant located on Shore Drive. HRSD, in cooperation with DEQ and local municipalities, has developed a Sanitary Sewer Overflow Response System to notify VDH and other stakeholders of spills and releases.

The U.S. Department of Defense and the U.S. Navy are the largest employers in the area. Outside of the bases, the area is mostly residential. There is little relief in topography. Elevations rise to approximately 10' at the highest points. The soil consists of sand and sandy loam.

Copies of Bacteriological, Hydrographic and Shellfish Closure data are available at the area office for review. Copies of the current condemnation notices and maps are available via the Internet at http://www.vdh.virginia.gov/shellfish.

At the beginning of the survey, inspectors reviewed the available literature from prior reports, public works and online resources to characterize land use, drainage patterns, and establish nearshore seawater stations. Properties identified in the previous survey as having sanitary deficiencies or other environmental significance were revisited to evaluate their current status. All roadways and navigable shoreline within the survey boundary were visually inspected to identify potential pollution sources requiring further investigation.

Nearshore seawater stations were established to survey the full extent of waters beyond routine classification stations. Stations were created in closer proximity to the shoreline



than routine stations and are intended to evaluate drainage entry points of potential pollution sources. Station data were analyzed to compare relative concentrations of fecal indicator bacteria within the waterway to identify potential onshore sources of contamination. No areas of elevated concentrations were identified in the current survey. Had it been deemed necessary, areas with elevated concentrations of fecal indicator bacteria were to be surveyed onshore using a property-by-property approach.

A total precipitation of 5.76 inches fell over the survey period. A monthly breakdown is as follows: October 10-31 3.30" November 1-26 2.46"

Hydrographic data, sampling times and range of enterococcus concentrations measured are shown in the table below.

G	Frowing A	Rainfall in Inches					
Sample High dates Tide		Ebb Current	Sampling Time	Enterococcus range (MNP/100mL)	Day of	Previous 24 hours	Prev ious 7 days
10/29/2019	9:44	12:10	10:36-11:53	<10-30	0	0	0.22
10/30/2019 10:31 12		12:58	11:20-12:26	<10-20	0.08	0	0.22

This report lists only those properties that have either a sanitary deficiency or have other environmental significance. "*DIRECT*" indicates that the significant activity or deficiency has a direct impact on shellfish waters. Individual field forms with full information on properties listed in this report are on file in the Richmond Office of the Division of Shellfish Safety and are available for reference until superseded by a subsequent survey of the area. Data in report are also made available to local health departments and other agencies to address items that may be out of compliance with their regulatory programs.

Hampton Roads Sanitation District's Chesapeake-Elizabeth Wastewater Treatment Plant is located just west in Growing Area # 068 on Shore Drive with an outfall located offshore also in Growing Area # 068. Copies of VPDES Permits and inspections are available at the Department of Environmental Quality, Tidewater Regional Office (DEQ/TRO). Copies of the current condemnation notices and maps are available via the Internet at http://www.vdh.virginia.gov/shellfish.

SECTION B: SEWAGE POLLUTION SOURCES

OBJECTID	GA #	Field #	Inspection Date	Deficiency or Pollution Type	Latitude	Longitude	Address	Pollutant Remarks	Septic System Type	Structure Type	Contact	Overall Site Remarks	Locality	DSS Staff	Date of Correction	Correction Notes

SECTION C: NONSEWAGE WASTE SITES

OBJECTID	GA #	Field #	Inspection Date	Deficiency or Pollution Type	Latitude	Longitude	Address	Pollutant Remarks	Septic System Type	Structure	Contact	Overall Site Remarks	Locality	DSS Staff
1	69	G17	1/6/2020	INDUSTRIAL WASTES, direct	36.966386	-76.112530	Island, Virginia	Facility collects wash down, storm water and runoff from the 4 tunnel islands into 6 individual sumps where it is discharge into the Chesapeake Bay. VPDES permit # VA0006203 from DEQ.	NA			Owner: Chesapeake Bay Bridge Tunnel, 32386 Lankford Highway, Cape Charles, VA 23310	Virginia Beach	n IG

Shoreline Survey # 069 SECTION D: BOATING ACTIVITY

OBJEC	Field #	Inspection Date	Deficiency or Pollution Type	Latitude	Longitude	Address	Pollutant Remarks	Septic System Type	Structure Type	Contact	Overall Site Remarks	Locality	Boating Activity Type	Number of Wet Slips	BOATS	Evidence of Live- Aboards	DSS Staff

SECTION E: CONTRIBUTES ANIMAL POLLUTION

OBJECTID	GA #	Field #	Inspection Date	Deficiency or Pollution Type	Latitude	Longitude	Address	Pollutant Remarks	Septic System Type	Structure Type	Contact	Overall Site Remarks	Locality	DSS Staff

SUMMARY

Growing Area # 069

Chesapeake Bay: Little Creek to Lynnhaven Bay 31 January 2020, Revised 4 February 2020

SECTION B: SEWAGE POLLUTION SOURCES

- 1. SEWAGE TREATMENT WORKS
 - 0 DIRECT None.
 - 0 INDIRECT None.
 - 0 B.1. TOTAL
- **2. ON-SITE SEWAGE DEFICIENCIES** Correction of deficiencies in this section is the responsibility of the local health department.
 - 0 CONTRIBUTES POLLUTION, DIRECT None.
 - 0 CONTRIBUTES POLLUTION, INDIRECT None.
 - 0 CP (Kitchen or Laundry Wastes), DIRECT None.
 - 0 CP (Kitchen or Laundry Wastes), INDIRECT None.
 - 0 NO FACILITIES, DIRECT None.
 - 0 NO FACILITIES, INDIRECT None.
 - 0 B.2.TOTAL
- **3. POTENTIAL POLLUTION** Periodic surveillance of these properties will be maintained to determine any status change.
 - 0 Potential Pollution None.

SECTION C: NON-SEWAGE WASTE SITES

- 1. INDUSTRIAL WASTE SITES
 - 0 DIRECT None.
 - 0 INDIRECT None.
 - 0 C.1. TOTAL
- 2. SOLID WASTE SITES
 - 0 DIRECT None.
 - 0 INDIRECT None.
 - 0 C.2. TOTAL
- 3. STORMWATER
 - 1 DIRECT # G17.
 - 0 INDIRECT None.
 - 1 TOTAL

SECTION D: BOATING ACTIVITY

- 0 MARINAS None.
- 0 OTHER PLACES WHERE BOATS ARE MOORED None.
- <u>0 –</u> UNDER SURVEILLANCE None.
- 0 D. TOTAL

SECTION E: CONTRIBUTES ANIMAL POLLUTION

- 0 DIRECT None.
- <u>0</u> INDIRECT None.
- 0 E. TOTAL



