

**HB 2322: Update on the Status of Plan to Transition  
Septic Pump-Out Oversight and Enforcement  
in the Rural Coastal Virginia Community Enhancement Authority.**

**December 20, 2019**

**Virginia Department of Health  
Office of Environmental Health Services**

## **Introduction**

During the 2019 Session, the General Assembly approved [Chapter 429 of the Acts of the Assembly](#) (HB 2322), directing the Department of Health (Department) to develop a plan for the oversight and enforcement by the Department of requirements related to the inspection and pump-out of onsite sewage systems (OSS) pursuant to the Chesapeake Bay Preservation Act (CBPA). The plan is limited to counties eligible for participation in the Rural Coastal Virginia Community Enhancement Authority (RCVCEA) pursuant to Chapter 76 (§ 15.2-7600 et seq.) of Title 15.2 of the Code of Virginia (the Code). The RCVCEA covers the 12 counties within the Northern Neck, Middle Peninsula, and Accomack-Northampton planning districts: Accomack, Essex, Gloucester, King and Queen, King William, Lancaster, Mathews, Middlesex, Northampton, Northumberland, Richmond, and Westmoreland.

Pursuant to HB 2322, the Department is required to present the plan to the Chairmen of the House Committee on Health, Welfare and Institutions and the Senate Committee on Education and Health prior to implementing the plan. The Department is currently working with a diverse set of stakeholders to develop a plan to transition oversight and enforcement of the pump-out program as requested in HB 2322, and would like to update the General Assembly on our progress.

## **Background**

The Department's Office of Environmental Health Services (OEHS) is the agency lead on developing the plan pursuant to HB 2322. OEHS is tasked with developing and revising agency regulations and policy on a wide range of programs, including the onsite sewage program. The Department's 35 Health Districts implement those regulations and policies at a local level, with offices in every locality of the Commonwealth.

In 1988, the General Assembly enacted the Chesapeake Bay Preservation Act (CBPA), followed in 1989 by the Chesapeake Bay Preservation Area Designation and Management Regulations (CBPADM Regulations). The CBPADM Regulations require the 84 local governments defined as “Tidewater Virginia” to amend existing ordinances, regulations, and enforcement mechanisms to meet certain performance criteria for the protection of water quality, including a requirement that OSS located within locally designated Chesapeake Bay Preservation Areas be either pumped-out or inspected at least once every five years. The specific requirements for each locality are established and enforced via local government ordinances.

Due to the diversity of Tidewater localities, the ability of local governments to implement and enforce the OSS pump-out or inspection requirements varies greatly. In addition, some local governments have designated jurisdiction-wide CBPAs, whereas others have designated areas that are more limited. The Department does not have authority to require reporting of pump outs, except in cases where the local health department has agreed to implement the local Bay Act pump-out program as part of their Local Government Agreement.

Under the Chesapeake Bay Total Maximum Daily Load, OSS pump-outs are one of three septic Best Management Practices (BMP) used to attain required nitrogen reductions. Phase I of the Watershed Implementation Plan states conventional OSS are assumed to load 8.92 pounds of nitrogen per person per year at the edge of the drainfield.<sup>1</sup> Each pump out provides a credit of 5% reduction of nitrogen for 5 years. A successful pump-out program will reduce nitrogen inputs from OSS and help Virginia meet its total maximum daily load (TMDL) goals.

### **Status of Implementation**

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<sup>1</sup> A “conventional onsite sewage system” is a treatment works consisting of one or more septic tanks with gravity, pumped, or siphoned conveyance to a gravity distributed subsurface drainfield. (12VAC5-613-10)

OEHS met with DEQ and the Planning District Commissions (PDC) of the Northern Neck, Middle Peninsula, Accomack and Northampton Counties to explore the demand, needs, challenges, and obstacles of transitioning oversight and enforcement of the pump out program from localities in the RCVCEA to the Department.<sup>2</sup> OEHS has also reached out to local health districts for their thoughts in the development of the plan to transition oversight and enforcement, and attended a September 18, 2019, Rappahannock River Basin Commission meeting to discuss development of the plan.

During the meetings with the three PDCs, the vast majority of the localities stated an interest in transitioning oversight and enforcement of the pump-out programs to the Department. Many of the localities stated that it makes sense for the Department to handle the pump-out program along with all other OSS program functions. In many cases, a local government employee without background knowledge of OSS currently implements the pump-out program. These employees are usually handling pump-out requirements on top of their primary roles and responsibilities. However, transitioning the pump-out program to the Department within the RCVCEA would require either legislation to provide additional authority or amendments to Local Government Agreements with RCVCEA partners.

The meetings helped the Department identify several significant hurdles that must be addressed for the successful implementation and enforcement of a pump-out program. In order for the program to be successful, the Department will need a complete and up-to-date data set of all OSS within the project CBPA areas designated by the localities. As the permitting authority, the Department has electronic records for all OSS beginning in 2003, while records prior to 2003

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<sup>2</sup> On July 24, 2019, the Department met with the Accomack-Northampton PDC. On July 29, 2019, the Department met with the Northern Neck PDC. On July 31, the Department met with the Middle Peninsula PDC.

are typically in hard copy format. The Department does not currently have sufficient resources to input the information contained in historical hard copy records into the electronic database. For this reason, localities administering the pump-out program have not had direct access to the Department's electronic records. A complete and reliable data set is essential to a successful pump-out program, because every property owner with an OSS located within a CBPA must receive notification about septic tank pump out requirements. As the permitting agency, stakeholders stated the Department is best suited with ensuring a complete dataset is available.

Stakeholders have noted that many property owners in rural coastal Virginia cannot afford the costs associated with having their septic tanks pumped or inspected. Often times, pumping a septic tank reveals a failing OSS, leaving the property owner further financial burden of a septic system repair or replacement. Some localities have sought funding to assist in addressing these issues; however, currently available funding is insufficient to meet the full demand. Additionally, the Department has authority concerning the requirements for repairs of failing septic systems. Therefore, the Department would need to explore additional funding options and resources in order to ensure a successful pump-out program. Furthermore, having the Department administer the program would provide additional enforcement mechanisms, benefiting the ultimate success of the program.

The number of licensed operators and sewage haulers in these rural coastal Virginia localities may also be insufficient for the estimated number of pump-outs. This is an existing issue that could affect the program, whether administered by localities or the Department. Once the operators pump the septic tanks, they haul the septage to an accepting wastewater treatment plant. The term "septage" typically refers to the contents of a septic tank rather than "sewage" due to the extremely high levels of Biochemical Oxygen Demand (BOD<sub>5</sub>), Total Suspended

Solids (TSS), and Total Nitrogen (TN). The table below shows a comparison of typical municipal influent to a wastewater treatment plant compared to septage from OSS.

<b>Parameter</b>	<b>Municipal Influent</b>	<b>Septage</b>
<b>BOD<sub>5</sub>, mg/L</b>	190	6,480
<b>TSS, mg/L</b>	210	12,862
<b>TN, mg/L</b>	40	588

Source: Domestic wastewater medium strength from Metcalf & Eddy 4<sup>th</sup> Edition, Table 3-15.  
Septage from EPA Onsite Manual Table 4-15 – Average Values.

Many wastewater treatment plants are hesitant to receive septage because treating it is taxing on the treatment processes of the plants. The Department estimates there to be 80,000 OSS in the counties eligible for participation in the RCVCEA. During a five-year cycle, as required by DEQ's CBPA Designation and Management Regulations, approximately 16,000 OSS each year would be required to have a pump-out of their septic tank accomplished. A typical septic tank for residential OSS is capable of holding 1,000 gallons of septage. The Department estimates that rural coastal communities would need to dispose of 16,000,000 gallons of septage each year at wastewater treatment plants to achieve 100% compliance with the pump-out requirement; however, this is not a one-to-one ratio. Wastewater treatment plants would need to be capable of handling not only the volume, but also the high strength of septage waste.

Based on the responses from stakeholders and the need to address significant hurdles in implementation, the Department requires additional time to work with stakeholders to develop a complete plan that can be successful. The Department's goal is to present a final plan to the

General Assembly by November 2020, which includes solutions for addressing hurdles identified throughout this process.

### **Conclusion**

The Department's goal is to provide the General Assembly a final plan for the transition of oversight and enforcement of the pump-out program in the RCVCEA by November 2020.

The final plan will address the following:

- The history and importance of a septic tank pump-out program;
- The Department's proposed plan for transitioning implementation oversight across the RCVCEA;
- The Department's authority and enforcement options for transitioning the program;
- Suggested metrics for measuring and ensuring the success of the Department pump-out program;
- Options for addressing data needs for the Department's pump-out program;
- Options to address financial assistance needs for pump outs and repairs;
- Ideas for incentivizing septic pump outs, and
- A plan for ensuring the Department has adequate resources provided to implement the transition.

The final report will also highlight concerns raised by stakeholders regarding other aspects of the onsite sewage program that, while not directly related to the pump-out program, also have significant and unique impacts in the RCVCEA. This includes the damage to OSS in low laying areas due to sea level rise, and the need for holistic approaches to assist people

impacted by coastal flooding. Innovative solutions to these issues will help protect local economies, public health, and water quality in rural coastal Virginia.