



# Virginia Department of Planning and Budget **Economic Impact Analysis**

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**9 VAC 25-790 Sewage Collection and Treatment Regulations**  
**Department of Environmental Quality**  
**Town Hall Action/Stage: 6231/10401**  
August 30, 2024

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The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with § 2.2-4007.04 of the Code of Virginia (Code) and Executive Order 19. The analysis presented below represents DPB’s best estimate of the potential economic impacts as of the date of this analysis.<sup>1</sup>

## **Summary of the Proposed Amendments to Regulation**

The State Water Control Board (Board) proposes to amend the *Sewage Collection and Treatment* [SCAT] *Regulations* to add a requirement that would ensure a more accurate count of nutrient reductions. Adding this requirement would implement one item in the Commonwealth’s overall plan to restore the Chesapeake Bay.

## **Background**

On Dec. 29, 2010, the U.S. Environmental Protection Agency (EPA) established the Chesapeake Bay Total Maximum Daily Load (TMDL), a comprehensive cleanup plan to guide federal, state and local actions as their communities clean up the Chesapeake Bay and the connected streams, creeks and rivers.<sup>2</sup> In Virginia, the TMDL calls for a 20.5 percent reduction in nitrogen, 25.2 percent reduction in phosphorus and 20.8 percent reduction in sediment delivered to the bay; this will be accomplished by having best management practices in place by

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<sup>1</sup> Code § 2.2-4007.04 requires that such economic impact analyses determine the public benefits and costs of the proposed amendments. Further the analysis should include but not be limited to: (1) the projected number of businesses or other entities to whom the proposed regulatory action would apply, (2) the identity of any localities and types of businesses or other entities particularly affected, (3) the projected number of persons and employment positions to be affected, (4) the projected costs to affected businesses or entities to implement or comply with the regulation, and (5) the impact on the use and value of private property.

<sup>2</sup> See <https://www.deq.virginia.gov/home/showpublisheddocument/5441/638154486040700000>.

2025. The Department of Environmental Quality (DEQ) reports that Watershed Implementation Plans (WIPs) are roadmaps for attaining the Chesapeake Bay TMDL that were agreed to be developed and implemented in three phases. Thus, the Chesapeake Bay TMDL Phase III WIP, which was completed in 2019, represents the Commonwealth's final plan to achieve nutrient and sediment reductions needed to restore the Chesapeake Bay and its tidal tributaries.<sup>3</sup>

Initiative 53 of the Chesapeake Bay TMDL Phase III WIP states that, “the Commonwealth will initiate a regulatory action to amend the existing Sewage Collection and Treatment Regulations (9VAC25-790-10 et seq.) to include a reporting requirement for all septic systems (or other on-site sewage disposal systems) taken off-line and connected to sewage collection systems.”<sup>4</sup> Accordingly, the Board proposes to add a requirement that every permitted sewage treatment works within the Chesapeake Bay Watershed shall report, to the best of their knowledge, the number of on-site sewage systems that were taken off-line and connected to sewerage systems that convey sewage to their facility during each calendar year by February 1<sup>st</sup> of the following year. DEQ reports that the proposed language is intended to encourage tracking and reporting without being punitive, and that the phrase “to the best of their knowledge” provides some flexibility to the regulants. It should also be noted that on-site sewage systems are permitted by the Virginia Department of Health; therefore, DEQ does not directly have data on on-site sewage systems that are discontinued.

Further, DEQ reports that sewage treatment works have been upgraded to improve nutrient removal capability and are subject to discharge limitations through the department's Virginia Pollutant Discharge Elimination System (VPDES) permit program. Thus, implementing this change would ensure a more accurate count of nutrient reductions that result from diverting sewage from septic tanks and other on-site sewage systems to central sewage treatment works. Lastly, DEQ reports that there is no overarching state-level policy to divert onsite sewage systems towards permanent connections to sewage treatment works and that property owners typically choose to do so when continuing to maintain and operate an on-site sewage system becomes too financially burdensome.

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<sup>3</sup> See <https://www.deq.virginia.gov/our-programs/water/chesapeake-bay/phase-iii-wip>.

<sup>4</sup> See page 80 in <https://www.deq.virginia.gov/home/showpublisheddocument/4481/638428104627430000>

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## **Estimated Benefits and Costs**

DEQ reports that there are 316 sewage treatment works in the 96 localities that fall within the Chesapeake Bay watershed in Virginia. DEQ anticipates that the sewage treatment works, which have VPDES permits, will report the required data (to the best of their knowledge) annually via email or letter. DEQ has not created any specific reporting tool, leaving it to the treatment works to determine how best to collect, maintain, and report the number of new connections they receive as a result of an on-site sewage system being taken offline. DEQ does not anticipate that collecting and reporting this information will have any significant cost for the permittees. Further, some treatment works may already be collecting this data and would only incur the relatively small additional cost of reporting the data to DEQ.

The benefits of the proposed amendment would be to more accurately measure any reductions in nutrient loads in the Chesapeake Bay that result from the diversion of sewage from septic tanks and other on-site sewage systems to treatment works. This would further benefit Virginia to the extent that it contributes to the overall progress being made towards the Chesapeake Bay TMDLs, and the resulting beneficial outcomes in terms of water quality, watershed management, sustainable fisheries, habitat conservation, and climate resiliency.

## **Businesses and Other Entities Affected**

As mentioned previously, the proposed amendment would primarily affect the 316 sewage treatment works that fall within the Chesapeake Bay watershed in Virginia. Of these, 107 sewage treatment works are privately owned; these licensees include residential communities, private schools, retreat and conference centers, hotels, camps, and campgrounds. The other 209 sewage treatment works are publicly owned; these licensees include localities, correctional facilities operated by the Department of Corrections or the Department of Juvenile Justice, rest stops operated by the Virginia Department of Transportation, and certain public schools and colleges. The proposed amendment would create a new reporting requirement for sewage treatment works in the Chesapeake Bay watershed, which would require some initial planning for administrators of those treatment works and ongoing annual reporting. However, given the flexibility in implementation and the relatively low frequency of the report, these costs are unlikely to be significant.

The Code of Virginia requires DPB to assess whether an adverse impact may result from the proposed regulation.<sup>5</sup> An adverse impact is indicated if there is any increase in net cost or reduction in net benefit for any entity, even if the benefits exceed the costs for all entities combined.<sup>6</sup> Although the proposed amendment would create a new requirement for the regulated entities, with a small implementation cost, the proposal is mandated by Virginia's Phase III WIP. Thus, an adverse economic impact is not indicated.

### **Small Businesses<sup>7</sup> Affected:<sup>8</sup>**

#### Types and Estimated Number of Small Businesses Affected

Some of the 107 privately owned sewage treatment works affected by the proposed requirement may be small businesses; however, the number of small businesses that would be affected is unknown since the VPDES permit system does not collect this information.

#### Costs and Other Effects

Affected sewage treatment works that are small businesses may face small costs associated with collecting, maintaining and reporting the required information to DEQ.

#### Alternative Method that Minimizes Adverse Impact

There are no clear alternative methods that both reduce adverse impact and meet the intended policy goals.

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<sup>5</sup> Pursuant to Virginia Code § 2.2-4007.04(D): In the event this economic impact analysis reveals that the proposed regulation would have an adverse economic impact on businesses or would impose a significant adverse economic impact on a locality, business, or entity particularly affected, the Department of Planning and Budget shall advise the Joint Commission on Administrative Rules, the House Committee on Appropriations, and the Senate Committee on Finance.

<sup>6</sup> Statute does not define "adverse impact," state whether only Virginia entities should be considered, nor indicate whether an adverse impact results from regulatory requirements mandated by legislation. As a result, DPB has adopted a definition of adverse impact that assesses changes in net costs and benefits for each affected Virginia entity that directly results from discretionary changes to the regulation.

<sup>7</sup> Pursuant to § 2.2-4007.04 of the Code of Virginia, small business is defined as "a business entity, including its affiliates, that (i) is independently owned and operated and (ii) employs fewer than 500 full-time employees or has gross annual sales of less than \$6 million."

<sup>8</sup> If the proposed regulatory action may have an adverse effect on small businesses, Code § 2.2-4007.04 requires that such economic impact analyses include: (1) an identification and estimate of the number of small businesses subject to the proposed regulation, (2) the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the proposed regulation, including the type of professional skills necessary for preparing required reports and other documents, (3) a statement of the probable effect of the proposed regulation on affected small businesses, and (4) a description of any less intrusive or less costly alternative methods of achieving the purpose of the proposed regulation. Additionally, pursuant to Code § 2.2-4007.1, if there is a finding that a proposed regulation may have an adverse impact on small business, the Joint Commission on Administrative Rules shall be notified.

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## **Localities<sup>9</sup> Affected<sup>10</sup>**

The proposed amendments would affect local governments that operate publicly owned sewage treatment works in the Chesapeake Bay watershed to the extent that they may be indirectly responsible for ensuring that the treatment works comply with the new reporting requirements. The Chesapeake Bay watershed covers 96 localities in Virginia: Accomack, Northampton, Augusta, Bath, Highland, Rockbridge, Rockingham, Buena Vista, Harrisonburg City, Lexington City, Staunton City, Waynesboro City, Amelia, Buckingham, Cumberland, Nottoway, Prince Edward, Dinwiddie, Prince George, Colonial Heights City, Hopewell City, Petersburg City, Caroline, King George, Spotsylvania, Stafford, Fredericksburg City, Isle Of Wight, James City, Surry, York, Chesapeake City, Hampton City, Newport News City, Norfolk City, Poquoson City, Portsmouth City, Suffolk City, Virginia Beach City, Williamsburg City, Essex, Gloucester, King And Queen, King William, Mathews, Middlesex, Giles, Montgomery, Lancaster, Northumberland, Richmond, Westmoreland, Clarke, Frederick, Page, Shenandoah, Warren, Winchester City, Arlington, Fairfax, Loudoun, Prince William, Alexandria, Fairfax City, Falls Church City, Manassas City, Manassas Park City, Culpeper, Fauquier, Madison, Orange, Rappahannock, Amherst, Appomattox, Bedford, Campbell, Lynchburg City, Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent, Powhatan, Richmond City, Alleghany, Botetourt, Craig, Roanoke, Covington City, Albemarle, Fluvanna, Greene, Louisa, Nelson, and Charlottesville City.

## **Projected Impact on Employment**

The proposed amendments are not expected to affect total employment.

## **Effects on the Use and Value of Private Property**

The proposed amendments would not substantively affect the value of private property. Real estate development costs would not be affected.

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<sup>9</sup> "Locality" can refer to either local governments or the locations in the Commonwealth where the activities relevant to the regulatory change are most likely to occur.

<sup>10</sup> Virginia Code § 2.2-4007.04 defines "particularly affected" as bearing disproportionate material impact.