## Virginia Department of Health - Office of Drinking Water

## Economic Review Form

March 2023

Agency name	Virginia Department of Health	
Virginia Administrative Code (VAC) Chapter citation(s)	12 VAC 5-600	
VAC Chapter title(s)	Waterworks Operation Fee	
Action title	Amend and Update the Waterworks Operation Fee Regulations	
Date this document prepared	April 20, 2023	
Regulatory Stage (including Issuance of Guidance Documents)	Proposed (Action 5867 / Stage 9465)	

#### **Cost Benefit Analysis**

Complete Tables 1a and 1b for all regulatory actions. You do not need to complete Table 1c if the regulatory action is required by state statute or federal statute or regulation and leaves no discretion in its implementation.

Table 1a should provide analysis for the regulatory approach you are taking. Table 1b should provide analysis for the approach of leaving the current regulations intact (i.e., no further change is implemented). Table 1c should provide analysis for at least one alternative approach. You should not limit yourself to one alternative, however, and can add additional charts as needed.

Report both direct and indirect costs and benefits that can be monetized in Boxes 1 and 2. Report direct and indirect costs and benefits that cannot be monetized in Box 4. See the ORM Regulatory Economic Analysis Manual for additional guidance.

Table 1a. Costs and Denemis of the Proposed Changes (Primary Option)		
(1) Direct &	Direct Costs:	
Indirect Costs &		
Benefits	Costs to the Virginia Department of Health's Office of Drinking Water	
(Monetized)	(ODW) relating to changing the Waterworks Operation Fee: \$40,000	
	• The number of invoices to waterworks will more than double	
	from 1,248 to 2,817.	

#### Table 1a: Costs and Benefits of the Proposed Changes (Primary Option)

<ul> <li>In addition to the increased fees expected to be assessed to waterworks owners under the proposed regulatory amendment, which are discussed below as direct benefits to ODW, the proposed regulatory amendments include authority for the Virginia Department of Health (VDH) to assess a convenience fee, at the prevailing credit vendor convenience rate fee, to waterworks paying their fee by credit card. The exact cost of this to the regulated community would depend on the number of waterworks that choose to pay by credit card and the amount of the prevailing credit vendor convenience rate fee.</li> <li>Additional costs to VDH related to issuance of operation fee invoices that will be incurred regardless of whether the Waterworks Operation Fee regulations are amended include:</li> <li>Currently, VDH is using a MS Access database, Excel spreadsheets, and mail merge to invoice waterworks. This appears to not meet VITA requirements. Consequently, VDH will be required to purchase compliant software that will meet this need. VDH does not have a purchase price on the software as it would require extensive evaluation and staff time. It is anticipated that the software will cost not less than \$150,000 in the first year and then drop off in subsequent years.</li> <li>Expenses in subsequent years will reflect a decrease in staff time with efficiencies and a software licensing fee estimated at \$150,000. This amount is not reflected in costs due to this proposed regulatory action because these costs will be incurred regardless of whether this regulatory action is undertaken.</li> </ul>	<ul> <li>For the billing cycle 2022, costs to complete invoicing (staff, printing, postage) totaled \$20,318. ODW is expecting these costs to more than double to around \$60,000 per year considering a doubling of the number of invoices and increased cost of staff and materials. Further, in the first year of using the new billing software there will be increased staff time for training and process development.</li> <li>Increased costs for invoicing of approximately \$40,000 for a new total of approximately \$60,000.</li> </ul>
<ul> <li>that will be incurred regardless of whether the Waterworks Operation Fee regulations are amended include:</li> <li>Currently, VDH is using a MS Access database, Excel spreadsheets, and mail merge to invoice waterworks. This appears to not meet VITA requirements. Consequently, VDH will be required to purchase compliant software that will meet this need. VDH does not have a purchase price on the software as it would require extensive evaluation and staff time. It is anticipated that the software will cost not less than \$150,000 in the first year and then drop off in subsequent years.</li> <li>Expenses in subsequent years will reflect a decrease in staff time with efficiencies and a software licensing fee estimated at 10% of the original cost.</li> <li>Total first-year cost for additional software is estimated at \$150,000. This amount is not reflected in costs due to this proposed regulatory action because these costs will be incurred regardless of whether this regulatory action is undertaken.</li> <li>Total cost in subsequent years for additional invoicing and software is estimated at \$15,000. This amount is not reflected in costs due to this proposed regulatory action because these costs will be incurred regardless of whether this regulatory action is not reflected in costs due to this proposed regulatory action because these costs will be incurred regardless of whether this regulatory action is and software is estimated at \$15,000. This amount is not reflected in costs due to this proposed regulatory action because these costs will be incurred regardless of whether this regulatory action is</li> </ul>	owners under the proposed regulatory amendment, which are discussed below as direct benefits to ODW, the proposed regulatory amendments include authority for the Virginia Department of Health (VDH) to assess a convenience fee, at the prevailing credit vendor convenience rate fee, to waterworks paying their fee by credit card. The exact cost of this to the regulated community would depend on the number of waterworks that choose to pay by credit card and the amount of the prevailing credit
undertaken. Indirect Costs: \$0	<ul> <li>that will be incurred regardless of whether the Waterworks Operation Fee regulations are amended include:</li> <li>Currently, VDH is using a MS Access database, Excel spreadsheets, and mail merge to invoice waterworks. This appears to not meet VITA requirements. Consequently, VDH will be required to purchase compliant software that will meet this need. VDH does not have a purchase price on the software as it would require extensive evaluation and staff time. It is anticipated that the software will cost not less than \$150,000 in the first year and then drop off in subsequent years.</li> <li>Expenses in subsequent years will reflect a decrease in staff time with efficiencies and a software licensing fee estimated at 10% of the original cost.</li> <li>Total first-year cost for additional software is estimated at \$150,000. This amount is not reflected in costs due to this proposed regulatory action because these costs will be incurred regardless of whether this regulatory action is undertaken.</li> <li>Total cost in subsequent years for additional invoicing and software is estimated at \$15,000. This amount is not reflected in costs due to this proposed regulatory action because these costs will be incurred regardless of whether this regulatory action because these costs will be incurred regardless of whether this regulatory action because these costs will be incurred regardless of whether this regulatory action because these costs will be incurred regardless of whether this regulatory action because these costs will be incurred regardless of whether this regulatory action is undertaken.</li> </ul>

	<ul> <li>Indirect costs for staff time are accounted for in the expenses above, estimating the number of hours required.</li> <li>Direct Benefits to ODW: \$142,947</li> <li>ODW estimates that the waterworks operation fee will generate additional annual revenue due to the proposed regulatory change in the amount of \$142,947. This benefit to ODW will be paid by the regulated community on account of the additional fees that would be assessed under the proposed amendment to the regulations.</li> <li>Indirect Benefits: \$0</li> <li>There are no monetizable indirect benefits associated with this change.</li> </ul>	
(2) Present Monetized Values	Direct & Indirect Costs (a) Year 1: \$40,000 Year 2+: \$40,000	Direct & Indirect Benefits (b) Year 1: \$142,947 Year 2+: \$142,947
(3) Net Monetized Benefit	Year 1: \$102,947 Year 2+: \$102,947	
(4) Other Costs & Benefits (Non- Monetized)	<ul> <li>Costs: <ul> <li>(1) Waterworks owners may elect to pass on additional costs for the waterworks operation fee to their customers.</li> </ul> </li> <li>Benefits: <ul> <li>(1) The proposed amendments will allow ODW to continue providing substantial technical assistance to waterworks regulated under the Safe Drinking Water Act in order to protect public health.</li> <li>(2) The existing fee structure has not been materially modified since 2012, and the fee paid by nontransient noncommunity waterworks has not been modified since the regulation was adopted in 1993. Transient noncommunity waterworks, which comprised 44% of all regulated waterworks in 2021, have been receiving non-compliance technical assistance services from the Office of Drinking Water (17,150 ODW staff hours valued at around \$1.07 million in 2021) but have not been paying a technical assistance fee, unlike the community and nontransient noncommunity waterworks in the state. Assessing a fee to transient noncommunity waterworks will ensure that no one</li> </ul></li></ul>	

	<ul> <li>classification of waterworks is fully subsidizing assistance to other classifications of waterworks.</li> <li>(3) A portion of the revenues from this regulatory change will be used to purchase billing software that meets state requirements. The current billing process uses local copies of Access databases and Excel spreadsheets, is inefficient, and does not integrate with VDH financial software. Billing software will integrate with standard financial systems and will allow for improved budgeting and tracking of receivables. The software is necessary regardless of any regulatory amendment.</li> </ul>
(5) Information Sources	Billing data from VDH-Shared Business Services for FY2022 2022 list of all regulated community, nontransient noncommunity, and transient noncommunity waterworks including Public Water System Identification Number, owner information, numbers of reported service connections, waterworks type, water source. This was pulled from the Safe Drinking Water Information System, which is the electronic information management system developed by the U.S. Environmental Protection Agency for states to manage information for regulated waterworks.

# Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)

(1) Direct &	Direct Costs: \$0	
Indirect Costs & Benefits (Monetized)	• Without the regulatory changes, no additional costs will be incurred on account of the status quo being maintained. However, ODW will still have to bear the costs associated with upgrading noncompliant billing software as described in Table 1a.	
	Indirect Costs: \$0	
	• There are no indirect costs incurred as a result of not changing the regulation. ODW will bear costs associated with upgrading noncompliant billing software as described elsewhere, and indirect costs for staff time related thereto are accounted for in the prior discussion of this expense, estimating the number of hours required.	
	Direct Benefits: \$0	
	• There are no new direct benefits associated with maintaining the status quo.	
	Indirect Benefits: \$0	
	• There are no indirect benefits to maintaining the status quo. Maintaining the status quo will perpetuate the provision of free	

	services to transient noncommunity waterworks and subsidized services to all other regulated waterworks.	
(2) Present Monetized Values	Direct & Indirect Costs (a) Year 1: \$0 Year 2+: \$0	Direct & Indirect Benefits (b) Year 1: \$0 Year 2+: \$0
(3) Net Monetized Benefit	Year 1: \$0 Year 2+: \$0	
(4) Other Costs & Benefits (Non- Monetized)	Non-monetizable costs of maintaining the status quo include negatively impacting ODW's ability to continue to sufficiently meet the need for technical assistance to waterworks, while not more equitably distributing the fee among the types of waterworks that most need technical assistance. Without adequate funding, ODW will remain challenged with making decisions on which waterworks will be provided assistance. If these choices cause waterworks to receive less or no technical assistance in preventing or resolving water quality and supply issues, water-borne illness and health impacts are possible.	
(5) Information Sources	Same as Table 1a above.	

### Table 1c: Costs and Benefits under Alternative Approach(es)

	Denentes under Anternative Approach(es)
(1) Direct &	There are no viable regulatory alternatives to fee increases as contained
Indirect Costs &	in these proposed regulations. Code of Virginia § 32.1-171.1.A requires
Benefits	that the State Board of Health "adjust the fee schedule so that the
(Monetized)	revenues from such fees cover the costs necessary to operate the
	Waterworks Technical Assistance Program required by this section."
	Consequently, the Board is required to assess a fee and adjust it
	appropriately.
	In 2022, the Virginia Department of Health and the Department of
	Planning and Budget published a "Review of the Budget and Structure of
	the Office of Drinking Water as required in Item 296 of the 2022
	Appropriation Act." Among the possibilities discussed is applying the
	\$160,000 cap on fees on a per waterworks basis, rather than a per owner
	basis. Applying the cap on a per waterworks basis is consistent with the
	current Waterworks Operation Fee regulations. ODW intends to pursue
	this approach and no regulatory change is required for ODW to do so.
	Accounting for this increased revenue stream was included in developing
	the proposed amendments to the regulations. The budget report,
	however, does not present a change in how the fee cap is applied as

	<ul> <li>being a one-stop solution to ODW's budgetary issues when it comes to fees collected. The budget report discusses several other possible options to address ODW's budget issues, which include options that would require direction from the General Assembly.</li> <li>(https://rga.lis.virginia.gov/Published/2022/RD805/PDF; see pages 12-18 in particular.) These options include: <ul> <li>Increasing the \$160,000 cap.</li> <li>Removing the \$160,000 cap, which would result in an estimated annual revenue increase of approximately \$1.93 million.</li> <li>Increasing the fee per connection, which is currently set at \$3 maximum, by \$1 to \$3 with or without the removal of the \$160,000 cap. For example, an increase from \$3 to \$5.13 would result in an increase in annual revenue of almost \$765,000.</li> </ul> </li> <li>Direct Costs: an estimated seven waterworks would pay higher fees totaling an estimated \$177,405 if the cap on fees is applied on a per waterworks basis, rather than a per owner basis. Additional costs to the regulated community from options set forth in the budget report are dependent upon direction from the General Assembly.</li> <li>Indirect Costs: dependent upon direction from the General Assembly.</li> <li>Direct Benefits: additional possible sources of revenue from fees as addressed in the budget report are dependent upon direction from the General Assembly. Application of the cap on fees on a per waterworks basis would result in benefits to ODW equal to the additional costs to the regulated community.</li> </ul>	
	Indirect Benefits: dependent upon direction from the General Assembly.	
(2) Present		
Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) \$177,405 incurred by the regulated community without further change in statute or regulation.	(b) Unknown to the extent options other than changing how ODW applies the fee cap require direction from the General Assembly. Only changing how ODW applies the fee cap would result in a benefit of \$177,405 to ODW on account of the increase in fees.
(3) Net Monetized Benefit	Unknown to the extent that options other than changing how ODW applies the fee cap require direction from the General Assembly. As for changing the application of the fee cap by itself, it would result in direct benefits to ODW as the recipient of the fee payment that are equal to the increase in fees paid due to the change.	

(4) Other Costs & Benefits (Non- Monetized)	Additional funding from modifying the method by which ODW applies the \$160,000 fee cap would increase ODW's ability to provide technical assistance services, even if modifying how the cap is applied is not indicated in the budget report as being a complete solution for the budget issue by itself.
(5) Information Sources	The Virginia Department of Health and the Department of Planning and Budget "Review of the Budget and Structure of the Office of Drinking Water as required in Item 296 of the 2022 Appropriation Act."

#### **Impact on Local Partners**

Use this chart to describe impacts on local partners. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

(1) Direct &	Direct Costs: local partners that own waterworks would experience direct		
(1) Direct & Indirect Costs & Benefits (Monetized)	costs based on the number and classification of waterworks they own. The additional cost could be up to \$2,500 for each wholesale waterworks with fewer than 15 end-user accounts owned by a local partner, an additional \$60 for each TNC waterworks owned by a local partner, and an additional \$30 for each NTNC waterworks owned by a local partner. Additionally, if a local partner chooses to pay its invoice by credit card it will be assessed a convenience fee at the prevailing credit vendor convenience rate fee. The exact cost of this to the regulated community as a whole would depend on the number of local partners that own waterworks that choose to pay by credit card and the amount of the prevailing credit vendor convenience rate fee. Indirect costs: administrative costs for processing the invoice, likely minimal, for each waterworks that was not previously subject to a fee now having to pay a fee.		
	Direct benefits: none.		
	Indirect benefits: none.		
(2) Present			
Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits	
	(a) Unknown – see above for general discussion as the per owner costs would vary based on the type of waterworks.	(b) \$0	

### **Table 2: Impact on Local Partners**

(3) Other Costs & Benefits (Non- Monetized)	If the technical assistance program is adequately funded, then all waterworks can continue receiving these necessary services from ODW.
(4) Assistance	None.
(5) Information Sources	Staff input.

## **Impacts on Families**

Use this chart to describe impacts on families. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 5: Impact on	rannies		
(1) Direct & Indirect Costs & Benefits (Monetized)	Direct Costs: Families that are customers of a wholesale waterworks may be affected by the pass-through of the additional costs to the end user. The waterworks owner currently has authority to adjust water rates to ensure water expenses are borne by the customer. It is likely that any amount that the waterworks might decide to pass on to the customer will be minimal.		
	Families that go to businesses that have a regulated waterworks (transient noncommunity waterworks) might be affected by the regulation in that the owner of the business may choose to pass the additional business expenses on to the customer. Owners of businesses that own a nontransient noncommunity waterworks may do likewise. This would likely be a minor increase since the maximum fee to transient noncommunity waterworks will be \$60 per year, and the fee for nontransient noncommunity waterworks would increase by \$30 under the proposed amendment to the regulations. For purposes of this Form, VDH has assumed that all monetizable costs will be borne by the waterworks.		
	Indirect Costs: none.		
	Direct Benefits: none.		
	Indirect Benefits: none.		
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits	
	(a) \$0 (see explanation above)	(b) \$0 (see explanation above)	

(3) Other Costs &	ODW would be able to continue providing technical assistance, with
Benefits (Non-	resulting health benefits, to waterworks that provide potable water to
Monetized)	families and other entities. A lack of technical assistance to waterworks
(4) Information	can result in a negative impact on the health of families and others.
Sources	Staff input.

# **Impacts on Small Businesses**

Use this chart to describe impacts on small businesses. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

able 4: Impact on Small Businesses				
(1) Direct &	Direct Costs: Transient noncommunity waterworks are typically small			
Indirect Costs &	businesses. The amount of the proposed fee (\$60/year) would be borne			
Benefits	by the business. They would have the option to pass that cost on to their			
(Monetized)	customer.			
	Likewise, the fee for wholesale waterworks with less than 15 end-user accounts would now be \$2,500 and nontransient noncommunity waterworks would see an increase of \$30 in their annual fee. Additionally, if a small business that owns a waterworks chooses to pay its invoice by credit card it will be assessed a convenience fee at the prevailing credit vendor convenience rate fee. The exact cost of this would depend on the number of such waterworks that choose to pay by credit card and the amount of the prevailing credit vendor convenience			
	rate fee.			
	Many of these waterworks have small businesses as part of their larger customer base. They would have the option to pass along the cost to their entire customer base. They currently have authority to do this with other expenses through rate adjustments. Waterworks owners are not expected to pass along any fee increase to small businesses in an amount that is greater than any fee passed along to other customers.			
	Indirect Costs: administrative costs for processing the invoice, likely minimal, for each waterworks that was not previously subject to a fee now having to pay a fee.			
	Direct Benefits: none.			
	Indirect Benefits: none.			

(2) Present Monetized Values	Direct & Indirect Costs (a) See box (1) above for the fee increases on a per waterworks basis. It is unknown what quantity of such waterworks are considered	Direct & Indirect Benefits (b) \$0
(3) Other Costs & Benefits (Non- Monetized)	to be owned by "small businesses."Non-monetized benefits to small businesses include that this fee will support technical assistance through the Office of Drinking Water to these waterworks in support of their compliance with the Safe Drinking Water Act and the Virginia Waterworks Regulations. Consistent compliance with these regulations will support their other business functions through provision of safe drinking water to staff and customers. ODW would be able to continue to provide the level of technical assistance that waterworks have used and enjoyed in the past.	
(4) Alternatives	Maintaining the status quo would reduce the small financial burden on certain waterworks but could have unintended regulatory consequences if a waterworks is unable to stay in compliance with regulations.	
(5) Information Sources	Staff input.	

### **Changes to Number of Regulatory Requirements**

#### Table 5: Regulatory Reduction

For each individual action, please fill out the appropriate chart to reflect any change in regulatory requirements, costs, regulatory stringency, or the overall length of any guidance documents.

Change in Regulatory Requirements

VAC Section(s) Involved	Initial Count	Additions	Subtractions	Net Change
12VAC5-600-55	N/A	3	N/A	+3
12VAC5-600-65	N/A	2	N/A	+2
12VAC5-600-100	1	1	0	+1
12VAC5-600-120	N/A	4	N/A	+4

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
12VAC5-600- 55	Fee for wholesale waterworks	Annual fee of \$3 per customer account	\$2,500 annual flat fee if the waterworks has fewer than 15 end-user accounts	Up to \$2,500 additional cost for each wholesale waterworks with fewer than 15 end- user accounts. This is expected to result in a total fee increase of approximately \$52,407 to wholesale waterworks as a whole.
12VAC5-600- 60	Fee for nontransient noncommunity waterworks	\$90 annual fee per nontransient noncommunity waterworks	\$120 annual fee per nontransient noncommunity waterworks	\$30 annual fee increase per nontransient noncommunity waterworks. This is expected to result in a total fee increase of approximately \$15,480 to nontransient noncommunity waterworks as a whole.
12VAC5-600- 65	Fee for transient noncommunity waterworks	\$0 – this is a new cost	\$60 annual fee per transient noncommunity waterworks; Estimated \$40,000 annual cost to agency related to additional invoices.	\$60 annual fee per transient noncommunity waterworks. This is expected to result in a total fee increase of approximately \$75,060 to transient noncommunity waterworks as a whole. These fees would be paid to the agency, which

				is expected to incur approximately \$40,000 in additional costs related to additional invoices.
12VAC5-600- 100	Convenience fee charged for use of a credit card to pay fee	\$0 – this is a new cost	Charged at prevailing credit card vendor convenience fee rate.	Depends on the credit card vendor convenience fee rate and how many waterworks choose to pay by credit card.

Other Decreases or Increases in Regulatory Stringency (if applicable)

Other Decreases or Increases in Regulatory Stringency (if applicable)				
VAC Section(s) Involved	VAC Section(s) Involved   Description of Regulatory			
	Change	or Increases Regulatory		
		Burden		
12VAC5-600-50	Increases the fee threshold to be able to pay on a quarterly basis, as opposed to a lump sum, from over \$400 to over \$1,600.	Under the proposed regulatory amendments, waterworks must pay the assessed fee in a lump sum by August 1 if the fee is \$1,600 or less. Under the current regulation, a waterworks could pay in quarterly installments, with the first quarter payment due on August 1, if the fee was more than \$400.		
12VAC5-600-60	Moves the date by which nontransient noncommunity waterworks must pay their waterworks operation fee from November 1 to August 1.	The proposed regulatory amendment gives owners of nontransient noncommunity waterworks three fewer months to pay the fee.		
12VAC5-600-120	Adds a new section stating actions that VDH may take for non-payment of the waterworks operation fee that is in addition to seeking recovery of that fee. The options include limiting technical assistance to a waterworks to the state's legal requirement, limiting access to financial assistance, collecting	Provides for the possibility of non-monetary penalties that the agency can impose on a waterworks that fails to pay its waterworks operation fee.		

financial records of the	
waterworks, and requiring the	
waterworks to submit a	
Waterworks Business	
Operation Plan.	