

Office of Regulatory Management  
Economic Review Form

<b>Agency name</b>	Virginia Waste Management Board
<b>Virginia Administrative Code (VAC) Chapter citation(s)</b>	9 VAC 20-81
<b>VAC Chapter title(s)</b>	Solid Waste Management Regulations
<b>Action title</b>	Amendment in response to Chapter 503 of the 2023 Virginia Acts of Assembly and Citation Update
<b>Date this document prepared</b>	September 8, 2023
<b>Regulatory Stage (including Issuance of Guidance Documents)</b>	Final Exempt Action

**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 Benefits of the Proposed Changes (Primary Option)**

<p>(1) Direct &amp; Indirect Costs &amp; Benefits (Monetized)</p>	<p><b>This is a final exempt regulatory action. No changes are proposed other than incorporation of requirements in response to Chapter 503 of the 2023 Virginia Acts of Assembly (SB 1050) and corrections of technical errors (updating citation references) as a result of the recodification of the Regulated Medical Waste Management Regulations, 9VAC20-121, effective March 15, 2023. As described below, at present Chapter 503 of the 2023 Virginia Acts of Assembly only affects one entity; that entity did not oppose the bill in its final form when it was considered by the General Assembly.</b></p> <p>Direct Costs: The new law requires, as a condition of DEQ issuing a solid waste permit for a new coal ash landfill in Planning District 8 (Northern Virginia), that the applicant provide municipal water supply service and any requested service connections, at its expense, to any residence located within one mile of the proposed facility boundary. At present, the law only impacts one proposed coal ash landfill; however, any future coal ash landfill proposed within Planning District 8 would also be subject to these requirements. Costs associated with such activities for the one presently affected facility include:</p> <ul style="list-style-type: none"> <li>• Survey of residential areas within one mile that are not served by municipal water (The affected applicant previously completed a survey of water supply wells within 1.5 miles of a facility in Planning District 8 in compliance with Chapter 625 of the 2020 Acts of Assembly, identifying 57 residential wells; however, some additional work and unknown costs may be necessary).</li> <li>• Printing, envelopes, and stamps to mail correspondence to notify residents of an offer to connect to municipal water supply.</li> <li>• Engineering, survey, and construction work to extend municipal water lines to affected residential areas and residents. This is difficult to estimate without having information about the length of waterline extensions required and area conditions. Based on work in DEQ’s petroleum remediation tanks program, an approximate estimate for such work is around \$2 million per mile of water line extension.</li> <li>• Locality-based developer connection rates and fees for municipal water line extension and residential connections. An estimate based on fee schedules is included below, but actual costs are difficult to accurately estimate without specific project details.</li> </ul> <p>There are no new direct costs associated with the corrections of the technical errors addressed in this action.</p>
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	<p><b>Indirect Costs:</b> Residents with a non-municipal water supply are not currently subject to public utility water rates. Use of municipal water supply following connection will subject these residents to local water usage rates. Costs will be based on each resident’s usage. The industry standard average daily usage per residential unit is 250 gallons per day (7,500 gallons per month).</p> <p><b>Direct Benefits:</b> No direct benefits were identified as a result of the final exempt regulatory change required by the statute except that it is necessary to comply with current state law. As explained in Table 1b, existing federal and state requirements ensure protection of human health and the environment.</p> <p><b>Indirect Benefits:</b> Residents with private wells constructed in a shallow aquifer or experiencing low flow may see improved water flow and/or quality following connection to the municipal water supply. No conclusive statements can be made about specific, indirect monetary benefits of this regulation.</p>
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(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	<p>(a) <b>Residential Water Well Survey:</b> \$0 (previously completed)</p> <p><b>Residential Notification:</b> Printing: \$0.68/page, Envelopes: \$0.15 each Stamps: \$0.63 each ≈ \$83.22 for 57 previously identified residential properties</p> <p><b>Engineering, Survey, and Construction:</b> associated with municipal water line extension, \$2 million per mile at estimated 1.5 miles ≈ \$3 million</p> <p><b>Service Authority Developer Rates &amp; Fees:</b> Assumes 1.5 miles of waterline extension (7,920 linear feet), includes plan review, inspection, as-built, and base charge fees ≈ \$63,000 per current PWCSA Developer Rates and Fees</p> <p><b>Residential Connections:</b> 57 connections; application fee, final inspection fee, water availability fee, meter and installation fee</p>	<p>(b) N/A</p>

	<p>per connection ≈ \$292,000 per current PWCSA Developer Rates and Fees</p> <p><b>Residential User Costs:</b> \$7.10 (Monthly Service Fee); \$3.60 per 1000 gallons (Volume Charge – Water, average usage of 7,500 gallons/month) ≈ \$410 per year</p> <p>Total: \$3.5 million</p>
(3) Net Monetized Benefit	\$0
(4) Other Costs & Benefits (Non-Monetized)	N/A. There are no other costs and benefits associated as a result of the final exempt regulatory change.
(5) Information Sources	<ul style="list-style-type: none"> <li>September 2020 HB1641 Well Survey Report by AECOM for Dominion Energy. Report identified 68 residential wells within one-half (1.5) miles of Possum Point; reduced to 57 upon further investigation.</li> <li>Printing (<a href="http://www.office.fedex.com">www.office.fedex.com</a>); Envelopes (<a href="http://www.envelopes.com">www.envelopes.com</a>); Mailing (<a href="http://www.usps.com">www.usps.com</a>)</li> <li>Prince William County Service Authority Developer Rates &amp; Fees: <a href="https://www.pwcsa.org/sites/default/files/Developer%20Rates%20%20Fees_April%202023.pdf">https://www.pwcsa.org/sites/default/files/Developer%20Rates%20%20Fees_April%202023.pdf</a></li> <li>Prince William County Service Authority Residential Water Rates: <a href="https://pwcsa.dcatalog.com/v/CustomerHandbook">https://pwcsa.dcatalog.com/v/CustomerHandbook</a></li> <li>Regulated Medical Waste Management Regulations, 9VAC20-121</li> </ul>

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

(1) Direct & Indirect Costs & Benefits (Monetized)	<p>Direct Costs:</p> <p>The final Coal Combustion Residuals (CCR) rule established national criteria to ensure the safe disposal of CCR in landfills by subjecting such units to location standards; composite liner requirements; fugitive dust control; stormwater run-on/run-off controls; groundwater monitoring and corrective action standards; closure and post-closure care requirements; and recordkeeping and reporting requirements. Based on the U.S. Environmental Protection Agency’s (EPA’s) Regulatory Impact Analysis (RIA), the present value cost for a single CCR landfill to comply with these requirements is estimated to be \$270.8 million.</p> <p>In addition to complying with the CCR rule, CCR landfills must have a solid waste permit. Current permit application fees include a Part A Application Fee of \$4,180, and Part B Application Fee of \$18,680. A public comment period is also required and the cost of publication in a newspaper of local circulation is also associated with permit costs in the</p>
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existing regulation (estimated at \$200). In addition, an annual fee is also required for CCR landfills (a type of captive industrial landfill) which is a flat fee based on whether the landfill disposes of more or less than 100,000 tons per year. The small captive industrial landfill annual fee is \$3,315 and the fee for a large captive industrial landfill is \$9,946 (CY2022 fee). The annual fee is adjusted annually by the Consumer Price Index. Most permit applications also require the cost of a topographic survey at the time of application (estimated between \$5,000 to \$16,000 depending on landfill size).

The CCR Rule also imposes requirements on state agencies, including a paperwork review of impoundment structural integrity inspections (performed by Virginia's Department of Conservation and Recreation's Dam Safety Program); groundwater corrective action; and reporting and recordkeeping. EPA's RIA indicates a present value of such state costs, which when scaled to Virginia's universe of CCR units, is about \$935,000.

**Indirect Costs:**

Pursuant to § 10.1-1402.03 of the Code of Virginia, all costs associated with required closure of CCR units at the four facilities in the Chesapeake Bay watershed (which includes Planning District 8) are recoverable through a rate adjustment clause authorized by the State Corporation Commission, capped at \$225 million in any 12-month period. Thus, these costs are passed onto the consumer, but are not included in the cells that follow as it would double count the costs associated with complying with the CCR Rule and existing state statutes.

Residents with a non-municipal water supply well likely have minimal costs associated with periodic maintenance and water testing of their private well. These costs are subject to the type of water supply and preferences of the resident and are unable to be calculated.

**Direct Benefits:**

The regulation's primary direct benefit is ensuring that the location, design, operation, monitoring, and closure of these facilities meet federal and state requirements through a state permit program with direct DEQ oversight of facility compliance to ensure the protection of human health and the environment.

EPA's RIA for the CCR Rule monetized several human health, environmental, and economic benefit categories, including reduced future CCR impoundment releases and groundwater contamination; increased CCR beneficial use; reduced cancer and avoided IQ losses; along with air and water quality benefits. Present value environmental and human health benefits of the CCR final rule were estimated at \$11.2 billion (adjusted to

	<p>2023 dollars), resulting in approximately \$10.7 million in estimated monetized benefits per CCR unit.</p> <p>Indirect Benefits: The regulation’s primary, indirect benefit is the protection of public health, safety and welfare of the citizens of the Commonwealth and to protect the Commonwealth’s environment and natural resources from pollution, impairment or destruction.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	<p>(a) CCR Landfill to comply with CCR Rule Requirements: \$270.8 million; Part A Permit: \$4,180; Part B Permit: \$18,680; Annual Fee: \$9,946 (CY2022 Annual fee for large captive industrial landfill, includes CCR landfill); Public Notice: \$200 (average publication cost); Topo Survey: \$16,000; State Cost: \$935,000 Total Direct: \$271.7 million</p>	<p>(b) \$10.7 million</p>
(3) Net Monetized Benefit	(\$261.0 million)	
(4) Other Costs & Benefits (Non-Monetized)	<p>EPA’s RIA for the CCR Rule identified non-monetized benefits including reduced investment risk, reduced fear of citizens residing near CCR impoundments, reduced community nuisance due to dust, reduced cancer and non-cancer health effects, reduced sediment contamination and water treatment costs, and improvement in property values, among other benefits.</p>	
(5) Information Sources	<p>Economic Review Form for Amendment 9 of the Solid Waste Management Regulations (9VAC20-81), August 31, 2022</p> <p>Regulatory Impact Analysis for EPA’s Final Coal Combustion Residuals Rule, December 2014: <a href="https://www.regulations.gov/document/EPA-HQ-RCRA-2009-0640-12034">https://www.regulations.gov/document/EPA-HQ-RCRA-2009-0640-12034</a></p>	

**Agency Note: This is a final exempt regulatory action necessary only to conform to changes in Virginia statutory law and to correct technical errors (updating citation references ) as a result of the recodification of the Regulated Medical Waste Management Regulations, 9**

VAC20-121, effective March 15, 2023. Therefore, Table 1c is not required and has been removed.

**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.

**Agency Note: Chapter 503 of the 2023 Acts of Assembly only impacts Planning District 8 which consists of the Counties of Arlington, Fairfax, Loudoun, and Prince William; the Cities of Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park; and the Towns of Dumfries, Herndon, Leesburg, and Vienna.**

**Table 2: Impact on Local Partners**

<p>(1) Direct &amp; Indirect Costs &amp; Benefits (Monetized)</p>	<p><b>This is a final exempt regulatory action. No changes are proposed other than to conform to Virginia statutory law and to correct technical errors (updating citation references) as a result of the recodification of the Regulated Medical Waste Management Regulations, 9VAC20-121, effective March 15, 2023.</b></p> <p>Direct Costs: The municipal water authority for the one currently affected facility within Planning District 8 will have costs associated with working with the owner or operator of the proposed landfill to extend the municipal water line as required. As outlined in Table 1a, the water authority has a fee structure to cover and/or recoup a portion of their costs associated with working the owner/operator. Actual costs are unable to be determined.</p> <p>Indirect Costs: N/A. There are no new indirect costs associated with conformance to the statute and corrections of technical errors.</p> <p>Direct Benefits: N/A. There are no new direct benefits associated with conformance to the statute and corrections of technical errors.</p> <p>Indirect Benefits: N/A. There are no new indirect benefits associated with conformance to the statute and corrections of technical errors.</p>	
<p>(2) Present Monetized Values</p>	<p>Direct &amp; Indirect Costs</p>	<p>Direct &amp; Indirect Benefits</p>

	(a) 0	(b) 0
(3) Other Costs & Benefits (Non-Monetized)	N/A. There are no other costs and benefits associated with conformance to the statute and corrections of technical errors.	
(4) Assistance	N/A	
(5) Information Sources	Prince William County Service Authority Developer Rates & Fees: <a href="https://www.pwcsa.org/sites/default/files/Developer%20Rates%20%20Fees_April%202023.pdf">https://www.pwcsa.org/sites/default/files/Developer%20Rates%20%20Fees_April%202023.pdf</a>	

### **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 3: Impact on Families**

(1) Direct & Indirect Costs & Benefits (Monetized)	<p><b>This is a final exempt regulatory action. No changes are proposed other than to conform to Virginia statutory law and to correct technical errors (updating citation references) as a result of the recodification of the Regulated Medical Waste Management Regulations, 9VAC20-121, effective March 15, 2023.</b></p> <p>Direct Costs: N/A. There are no new direct costs associated with conformance to the statute and corrections of technical errors.</p> <p>Indirect Costs: As described in Table 1b, pursuant to § 10.1-1402.03 of the Code of Virginia, all costs associated with required closure of CCR units at the four facilities in the Chesapeake Bay watershed (includes Planning District 8) are recoverable through a rate adjustment clause authorized by the State Corporation Commission, capped at \$225 million in any 12-month period. Thus, these costs are passed onto the consumer, but are not included in the cells that follow as it would be double count the costs associated with complying with the CCR Rule and existing state statutes included in Table 1b.</p>
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	<p>Direct Benefits: N/A. There are no new direct benefits associated with conformance to the statute and corrections of technical errors. As explained in Table 1b existing federal and state requirements ensure protection of human health and the environment.</p> <p>Indirect Benefits: N/A. There are no new indirect benefits associated with conformance to the statute and corrections of technical errors.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) N/A	(b) N/A
(3) Other Costs & Benefits (Non-Monetized)	N/A. There are no other costs and benefits associated with conformance to the statute and corrections of technical errors.	
(4) Information Sources	Subsection H of <a href="https://law.lis.virginia.gov/vacode/10.1-1402.03/">https://law.lis.virginia.gov/vacode/10.1-1402.03/</a>	

**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.

**Table 4: Impact on Small Businesses**

(1) Direct & Indirect Costs & Benefits (Monetized)	<p><b>This is a final exempt regulatory action. No changes are proposed other than to conform to Virginia statutory law and to correct technical errors (updating citation references) as a result of the recodification of the Regulated Medical Waste Management Regulations, 9VAC20-121, effective March 15, 2023.</b></p> <p>Direct Costs: N/A. There are no new direct costs to small businesses associated with conformance to the statute and corrections of technical errors.</p> <p>Indirect Costs: N/A. There are no new indirect costs to small businesses associated with conformance to the statute and corrections of technical errors.</p> <p>Direct Benefits:</p>
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	<p>N/A. There are no new direct benefits to small businesses associated with conformance to the statute and corrections of technical errors.</p> <p>Indirect Benefits:  N/A. There are no new indirect benefits to small businesses associated with conformance to the statute and corrections of technical errors.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) 0	(b) 0
(3) Other Costs & Benefits (Non-Monetized)	N/A. There are no other costs and benefits to small businesses associated with conformance to the statute and corrections of technical errors.	
(4) Alternatives	N/A	
(5) Information Sources	N/A	

**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.

**Agency Note: This is a final exempt regulatory action necessary only to conform to changes in Virginia law as a result of Chapter 503 of the 2023 Virginia Acts of Assembly and to correct technical errors (updating citation references) as a result of the recodification of the Regulated Medical Waste Management Regulations, 9 VAC20-121, effective March 15, 2023.**

*Change in Regulatory Requirements*

VAC Section(s) Involved	Authority of Change	Initial Count	Additions	Subtractions	Net Change
9VAC20-81-10	<b>Statutory:</b>	0	0	0	0
	<b>Discretionary:</b>	0	0	0	0
9VAC20-81-90	<b>Statutory:</b>	3	0	0	0
	<b>Discretionary:</b>	0	0	0	0
9VAC20-81-140	<b>Statutory:</b>	31	0	0	0
	<b>Discretionary:</b>	0	0	0	0
9VAC20-81-460	<b>Statutory:</b>	3	+1	0	+1
	<b>Discretionary:</b>	0	0	0	0

**Agency Note: This is a final exempt regulatory action necessary only to conform to changes in Virginia law as a result of Chapter 503 of the 2023 Virginia Acts of Assembly and to correct technical errors (updating citation references) as a result of the recodification of the Regulated Medical Waste Management Regulations, 9 VAC20-121, effective March 15, 2023.**

*Cost Reductions or Increases (if applicable)*

VAC Section(s) Involved	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
9VAC20-81-460	As required by Chapter 503 of the 2023 Virginia Acts of Assembly, before DEQ issues a solid waste permit for a new coal ash landfill in Planning District	\$0	\$3.5 million (see Table 1a)	\$3.5 million increase (all required by Chapter 503 of the 2023 Virginia Acts of Assembly).

	8 (Northern Virginia), the applicant must provide municipal water supply service and any requested service connections, at its expense, to any residence located within one mile of the proposed facility boundary.			

*Other Decreases or Increases in Regulatory Stringency (if applicable)*

<b>VAC Section(s) Involved</b>	<b>Description of Regulatory Change</b>	<b>Overview of How It Reduces or Increases Regulatory Burden</b>
N/A		

*Length of Guidance Documents (only applicable if guidance document is being revised)*

<b>Title of Guidance Document</b>	<b>Original Length</b>	<b>New Length</b>	<b>Net Change in Length</b>
N/A			