

Office of Regulatory Management
Economic Review Form

Agency name	Department of Environmental Quality
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC20-170
VAC Chapter title(s)	Transportation of Solid and Medical Wastes on State Waters
Action title	Periodic Review and Small Business Impact Review
Date this document prepared	November 15, 2022

Cost Benefit Analysis

Table 1a must be completed for all actions. Tables 1b and 1c must be completed for actions (or portions thereof) where the agency is exercising discretion, including those where some of the changes are mandated by state or federal law or regulation. Tables 1b and 1c are not needed if **all** changes are mandated, and the agency is not exercising any discretion. In that case, enter a statement to that effect.

- (1) Direct Costs & Benefits: Identify all specific, direct economic impacts (costs and/or benefits), anticipated to result from the regulatory change. (A direct impact is one that affects entities regulated by the agency and which directly results from the regulatory change itself, without any intervening steps or effects. For example, the direct impact of a regulatory fee change is the change in costs for these regulated entities.) When describing a particular economic impact, specify which new requirement or change in requirement creates the anticipated economic impact. Keep in mind that this is the proposed change versus the status quo. One bullet has been provided, add additional bullets as needed.
- (2) Quantitative Factors:
 - (a) Enter estimated dollar value of total (overall) direct costs described above.
 - (b) Enter estimated dollar value of total (overall) direct benefits described above.
 - (c) Enter the present value of the direct costs based on the worksheet.
 - (d) Enter the present value of the direct benefits based on the worksheet.
- (3) Benefits-Costs Ratio: Calculate d divided by c OR enter it from the worksheet.
- (4) Net Benefit: Calculate d minus c OR enter it from the worksheet.
- (5) Indirect Costs & Benefits: Identify all specific, indirect economic impacts (costs and/or benefits), anticipated to result from the regulatory change. (An indirect impact is one that results from responses to the regulatory change, but which are not directly required by the regulation. Indirect impacts of a regulatory fee change on regulated entities could include a change in the prices they charge, changes in their operating procedures or employment levels, or decisions to enter or exit the regulated profession or market. Indirect impacts also include responses by other entities that have close economic ties to the regulated entities, such as suppliers or partners.) If there are no indirect costs or benefits, include a specific statement to that effect.

- (6) Information Sources: Describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why they are not.
- (7) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

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

(1) Direct Costs & Benefits	<ul style="list-style-type: none"> This is a periodic review. No changes are proposed at this time. <p>Direct Costs: None.</p> <p>Direct Benefits: None.</p>		
(2) Quantitative Factors	Estimated Dollar Amount	Present Value	
Direct Costs	(a) 0	(c) 0	
Direct Benefits	(b) 0	(d) 0	
(3) Benefits-Costs Ratio	N/A	(4) Net Benefit	0
(5) Indirect Costs & Benefits	This is a periodic review. No changes are proposed at this time.		
(6) Information Sources	N/A		
(7) Optional			

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

This table addresses current requirements and the implications of not making any changes. In other words, describe the costs and benefits of maintaining the current regulatory requirements as is.

(1) Direct Costs & Benefits	<ul style="list-style-type: none"> The current regulatory requirement for a solid waste management facility requires a permit certification fee (9VAC20-170-190). Each certification for a permit by rule or each certification for a modification to a permit by rule is a
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separate action and shall be assessed a separate fee. An inspection fee will also be collected annually and its amount is based on the costs associated with the inspections program conducted by the department on at least a quarterly basis.

Direct Costs: A solid waste receiving facility permit application for an initial certification contains a permit fee of \$6,200. A facility permit modification with a closure plan amendment contains a permit fee of \$2,500. A facility permit fee modification without a closure plan amendment contains a permit fee of \$1,250. The annual inspection fee is \$10,000. There are currently no waste receiving facilities operating under this regulation at this time.

Direct Benefits: The current regulatory requirement prevents off-loading of solid waste or regulated medical waste to an unpermitted receiving facility. A facility utilized to receive nonhazardous solid waste (except scrap metal, dredged material, recyclable construction demolition debris being transported directly to a processing facility for recycling or reuse, and source-separated recyclables), municipal and industrial sludge, or regulated medical waste from a ship, barge or other vessel arriving at the facility upon the navigable waters of the Commonwealth, is a solid waste management facility and no facilities shall receive wastes from a ship, barge or other vessel without a permit.

- **The current regulatory requirement for a permit by rule requires the owner or operator of the solid waste receiving facility to pay publishing charges for a public notice. (9VAC20-170-180).**
- Direct Costs: Before initiation of any construction of a new receiving facility or operation of an existing facility, the owner or operator shall publish a notice as a display ad in a major local newspaper of general circulation informing the public that he intends to construct and/or operate a facility eligible for a permit by rule. The average cost of publication of a public notice is \$450.
- Direct Benefits: the current regulatory requirement of public notice promotes public participation in the permit certification procedures for a new or existing receiving facility.
- **The current regulatory requirement is for waste monthly fees to be collected by the receiving facility from any owner or operator of any ship, barge or other vessel off-loading waste (9VAC20-170-195).**

	<ul style="list-style-type: none">• Direct Costs: The waste collection fee shall be based on the accurate weight of waste received at the receiving facility. If scales are unavailable, the maximum volumetric capacity of the container multiplied by 0.50 tons per cubic yard may be used as an alternative to accurate weighing of the waste. If the volumetric alternative is used, accurate and complete records of the volume of each container of such waste must be maintained in addition to the calculated weight records described in this part. The fee for each ton or partial ton of waste (the weight of the waste subject to the fee does not include the weight of the empty container itself) off-loaded at the facility is \$1.00. <p>If the ship, barge or other vessel that off-loads no more than 50 tons of waste per month in total at all facilities, then the owner or operator of the ship, barge or other vessel is exempt from the assessment and payment of operating fees and related requirements set out in this section, except for the maintenance of records.</p> <ul style="list-style-type: none">• Direct Benefits: the current regulatory requirement of collecting waste monthly fees from the owner or operator of any ship, barge or other vessel carrying, loading or off-loading waste to the receiving facility is beneficial because it funds the administrative and enforcement costs associated with the receiving facility operations, including inspection and monitoring of ships, barges and other vessels, and for funding activities to abate pollution caused by barging of waste, to improve water quality, or for other waste-related purposes. Additionally, the fees collected for this regulation are deposited into a separate account within the Virginia Waste Management Board Permit Program Fund and may only be used for funding purposes to abate pollution caused by barging of waste, to improve water quality, or for other-waste related purposes.• The current regulatory requirement is for owners and operators of ships, barges and other vessels transporting solid wastes or regulated medical wastes upon the navigable waters of the Commonwealth, to establish and demonstrate financial responsibility to cover liability of the owner or operator arising from the deposit of solid wastes or regulated medical wastes into state waters, as a condition of operation (9VAC20-170-270).• Direct Costs: the owner and operator of a vessel transporting solid wastes or regulated medical waste upon the navigable waters of the Commonwealth shall obtain one or a combination of financial mechanisms in order to ensure that the costs associated with protecting public health, welfare and property from the consequences of a deposit of solid wastes or medical wastes is
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recovered from the owner and operator of a vessel transporting the waste. Each owner or operator of a vessel transporting solid wastes shall demonstrate financial responsibility in the amount of \$1 million or \$300 per gross ton of such vessel, whichever is larger. If the owner or operator owns or operates more than one vessel transporting waste, the amount of financial responsibility shall equal \$1 million or \$300 per gross ton of the owned or operated vessel with the largest transporting capacity, whichever is larger.

As of the date of this periodic review, only one barge vessel owner/operator has been required to demonstrate financial responsibility under this regulation. The barge owner elected to demonstrate financial assurance using a surety bond and standby trust agreement. The annual cost for the surety bond was \$25,434 and the standby trust agreement with the bank was \$1,500 to set up and \$2,500 for the trust's annual administration fee. The Department released the barge owner/operator from the financial assurance obligation in January 2021 because it no longer needed to transport waste on state waters.

Each owner and operator of a vessel transporting regulated medical waste or a combination of regulated medical waste and solid waste shall demonstrate financial responsibility in the amount of \$5 million or \$300 per gross ton of such vessel. If the owner or operator owns or operates more than one vessel transporting waste, the amount of financial responsibility shall equal \$5 million or \$300 per gross ton of the owned or operated vessel with the largest transporting capacity, whichever is larger.

- Direct Benefits: the regulations requiring owners and operators of ships, barges and other vessels transporting wastes to demonstrate financial responsibility are beneficial because they: 1) take into consideration the risk of potential damage or injury to state waters and the impairment of beneficial uses that may result from spillage or leakage from the ship, barge or vessel; 2) estimate the potential costs of containment and cleanup; and 3) help identify the nature and degree of injury or interference with general health, welfare and property that may result from the deposit of solid waste and/or regulated medical waste into state waters.
- **The current regulatory requirement is for owners and operators of ships, barges and other vessels transporting solid wastes or regulated medical wastes upon the navigable waters of the Commonwealth, to establish and demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden and/or nonsudden accidental**

	<p>occurrences arising from a deposit of solid wastes and/or regulated medical waste into the navigable waters of the Commonwealth (9VAC20-170-330).</p> <ul style="list-style-type: none"> • Direct Costs: the owner and operator of a vessel shall establish and maintain liability coverage of \$1 million per occurrence with an annual aggregate of \$2 million annual aggregate (exclusive of legal defense costs) for sudden and/or nonsudden accidental occurrences arising from the deposit of solid wastes from a vessel into the navigable waters of the Commonwealth. <p>The owner or operator of a vessel shall establish and maintain liability coverage of at least \$3 million per occurrence with an annual aggregate of \$6 million (excluding legal defense costs) arising from sudden and/or nonsudden accidental occurrences from the deposit of regulated medical wastes, or a combination of solid wastes and regulated medical wastes, from a vessel into the navigable waters of the Commonwealth.</p> <p>Liability coverage shall include coverage for waste deposits that occur from loading and unloading the vessels.</p> <p>As of the date of this periodic review, only one barge vessel owner/operator has been required to demonstrate liability coverage for sudden and/or nonsudden accidental occurrences arising from the deposit of solid wastes from a vessel into the navigable waters of the Commonwealth under this regulation. The barge owner’s liability coverage for this regulation was included with the company’s Marine General Liability Policy and had an annual premium of \$495,622. The Department released the barge owner/operator from the financial assurance obligation in January 2021 because it no longer needed to transport waste on state waters.</p> <ul style="list-style-type: none"> • Direct Benefits: the regulations are beneficial because they require owners and operators of ships, barges and other vessels transporting wastes to demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden and/or nonsudden accidental occurrences arising from the deposit of solid waste and/or regulated medical waste into state waters.
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(2) Quantitative Factors	Estimated Dollar Amount	Present Value
Direct Costs	(a) \$541,706: see below; Facility permit fee: \$6,200 Annual Inspection: \$10,000 Public Notice: \$450	(c) \$0; there are currently no waste receiving facilities operating under this regulation at this time. The Department also released the barge owner/operator

	Bond Premium: \$25,434 Trust Set up and Annual Fee: \$4,000 Marine Liability: \$495,622 Total: \$541,706	from the vessel financial assurance obligation in January 2021 because it no longer needed to transport waste on state waters.	
Direct Benefits	(b) 0	(d) 0	
(3) Benefits-Costs Ratio	0	(4) Net Benefit	\$0
(5) Indirect Costs & Benefits	No conclusive statements can be made about specific, indirect costs of this regulation. 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.		
(6) Information Sources	Publishing fees charged by newspapers with general circulation within the Commonwealth of Virginia		
(7) Optional	§ 10.1-1454.1 of the Code of Virginia directs the Virginia Waste Management Board to adopt regulations governing commercial transport, loading and off-loading of nonhazardous solid waste, municipal and industrial sludge, and regulated medical waste by ship, barge or other vessel upon the navigable waters of the Commonwealth. The statute excludes the following items from being considered solid waste when transported on state waters: scrap metal, dredged material, recyclable construction demolition debris when they are being transported directly to a processing facility for recycling or reuse, and source-separated recyclables. This regulation was adopted by the Virginia Waste Management Board and became effective on November 19, 2003.		

Table 1c: Costs and Benefits under an Alternative Approach

This table addresses an alternative approach to accomplishing the objectives with different requirements. These alternative approaches may include the use of reasonably available alternatives in lieu of regulation, or information disclosure requirements or performance standards instead of regulatory mandates.

(1) Direct Costs & Benefits	<ul style="list-style-type: none"> • This is a periodic review. The Department considered the alternative of repealing the regulation but determined that the regulation is still needed to protect public safety, health, and welfare. The Department also considered the alternative of amending the regulation, but determined that no amendments are necessary at this time. <p>Direct Costs: None.</p>
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	Direct Benefits: None.		
(2) Quantitative Factors	Estimated Dollar Amount	Present Value	
Direct Costs	(a) 0	(c) 0	
Direct Benefits	(b) 0	(d) 0	
(3) Benefits-Costs Ratio	N/A	(4) Net Benefit	0
(5) Indirect Costs & Benefits	None		
(6) Information Sources	N/A		
(7) Optional			

Impact on Local Partners

- (1) Describe the direct costs and benefits (as defined on page 1) for local partners in terms of real monetary costs and FTEs. Local partners include local or tribal governments, school divisions, or other local or regional authorities, boards, or commissions. If local partners are not affected, include a specific statement to that effect and a brief explanation of the rationale.
- (2) Quantitative Factors:
 - (a) Enter estimated dollar value of total (overall) direct costs described above.
 - (b) Enter estimated dollar value of total (overall) direct benefits described above.
- (3) Indirect Costs & Benefits: Describe any indirect benefits and costs (as defined on page 1) for local partners that are associated with all significant changes. If there are no indirect costs or benefits, include a specific statement to that effect.
- (4) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why they are not.
- (5) Assistance: Identify the amount and source of assistance provided for compliance in both funding and training or other technical implementation assistance.
- (6) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 2: Impact on Local Partners

(1) Direct Costs & Benefits	No localities are known to be particularly impacted by the regulation. Localities will continue to have a role in local decisions regarding the siting and permitting of solid waste receiving facilities.
(2) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) 0
Direct Benefits	(b)0
(3) Indirect Costs & Benefits	None
(4) Information Sources	N/A
(5) Assistance	N/A
(6) Optional	

Economic Impacts on Families

- (1) Describe the direct costs and benefits (as defined on page 1) to a typical family of three (average family size in Virginia according to the U. S. Census) arising from any proposed regulatory changes that would affect the costs of food, energy, housing, transportation, healthcare, and education. If families are not affected, include a specific statement to that effect and a brief explanation of the rationale.
- (2) Quantitative Factors:
 - (a) Enter estimated dollar value of direct costs.
 - (b) Enter estimated dollar value of direct benefits.
- (3) Indirect Costs & Benefits: Describe any indirect costs and benefits (as defined on page 1) to a typical family of three that are most likely to result from the proposed changes.
- (4) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why not.

(5) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 3: Impact on Families

(1) Direct Costs & Benefits	Families will not be particularly impacted by the regulation and the regulation does not impose specific, direct costs to families or provide specific, direct benefits to families.
(2) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) 0
Direct Benefits	(b) 0
(3) Indirect Costs & Benefits	No conclusive statement can be made about specific, indirect costs or benefits of this regulation. However, families generally benefit from protection of the Commonwealth’s environment and natural resources from pollution, impairment or destruction.
(4) Information Sources	N/A
(5) Optional	

Impacts on Small Businesses

- (1) Describe the direct costs and benefits (as defined on page 1) for small businesses. For purposes of this analysis, “small business” means the same as that term is defined in § 2.2-4007.1. If small businesses are not affected, include a specific statement to that effect and a brief explanation of the rationale.
- (2) Quantitative Factors:
 - (a) Enter estimated dollar value of direct costs.
 - (b) Enter estimated dollar value of direct benefits.
- (3) Indirect Costs & Benefits: Describe the indirect benefits and costs (as defined on page 1) for small businesses that are most likely to result from the proposed changes.
- (4) Alternatives: Add a qualitative discussion of any equally effective alternatives that would make the regulatory burden on small business more equitable compared to other affected business sectors, and how those alternatives were identified.

- (5) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why not.
- (6) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 4: Impact on Small Businesses

(1) Direct Costs & Benefits	Small business will not be affected by these regulations as the regulations pertain to facilities receiving nonhazardous solid waste, municipal and industrial sludge, and regulated medical waste from a ship, barge or other vessel transporting such wastes upon the navigable waters of the Commonwealth.
(2) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) 0
Direct Benefits	(b) 0
(3) Indirect Costs & Benefits	No conclusive statement can be made about specific, indirect costs or benefits of this regulation. There is no reason to expect that indirect costs would burden small businesses more than other affected business sectors.
(4) Alternatives	N/A
(5) Information Sources	N/A
(6) Optional	

Changes to Number of Regulatory Requirements

For each individual VAC Chapter amended, repealed, or promulgated by this regulatory action, list (a) the initial requirement count, (b) the count of requirements that this regulatory package is adding, (c) the count of requirements that this regulatory package is reducing, (d) the net change in the number of requirements. This count should be based upon the text as written when this stage was presented for executive branch review. Five rows have been provided, add or delete rows as needed.

Table 5: Total Number of Requirements

Agency Note: this is a periodic review and no changes to the regulation are being proposed.

	Number of Requirements			
Chapter number	Initial Count	Additions	Subtractions	Net Change
9VAC20-170	0	0	0	0