

Office of Regulatory Management
Economic Review Form

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-31 9VAC25-32
VAC Chapter title(s)	Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulation (9VAC25-31) Virginia Pollution Abatement (VPA) Permit Regulation (9VAC25-32)
Action title	Amendments to biosolids permit requirements in response to Chapter 280 of the 2025 Acts of Assembly
Date this document prepared	5/6/2025
Regulatory Stage (including Issuance of Guidance Documents)	Final exempt

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 & Indirect Costs & Benefits (Monetized)</p>	<p>Background:</p> <p>Chapter 280 of the 2025 Acts of Assembly (Del. Runion, HB 2517) amends § 62.1-44.19:3 of the Code of Virginia to exempt institutions of higher education¹ in Virginia from the permitting requirements for land application of sewage sludge when such land application is for a research project on land that is owned and operated by an institution of higher education in the Commonwealth. The bill also requires the institution of higher education to notify adjacent landowners 30 days prior to land application and to adhere to setback and recordkeeping requirements contained in the DEQ regulations. Currently this activity requires a permit from the Virginia Department of Environmental Quality (DEQ), which includes setback and recordkeeping requirements.</p> <p>Section 62.1-44.19:3 A 2 of the Code of Virginia states that “Sewage sludge shall be treated to meet standards for land application as required by Board regulation prior to delivery at the land application site.” Sewage sludge that has received an established treatment for required pathogen control and is treated or managed to reduce vector attraction to a satisfactory level and contains acceptable levels of pollutants, such that it is acceptable for use for land application, marketing or distribution in accordance with 9VAC25-31 or 9VAC25-32 is known as “biosolids.” See 9VAC25-20-10, 9VAC25-31-10, and 9VAC25-32-10. Because of this distinction between “sewage sludge” and “biosolids,” all other references in this form to material that will be land applied will be to “biosolids.”</p> <p>This rulemaking updates the Virginia Pollutant Discharge System (VPDES) Permit Regulation (9VAC25-31) and Virginia Pollutant Abatement (VPA) Permit Regulation (9VAC25-32) to be consistent with the change to state law.</p> <p>Direct Costs:</p> <p>There are approximately 44 public colleges and universities in the Commonwealth. The extent of direct costs to an institution of higher education will depend on whether the institution opts to land apply biosolids, and if it does, whether the land application is for a research project on their property. In the case of land application for a research project on its property, the institution of higher education will not have to apply for a permit to conduct</p>
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¹ The amendments to § 62.1-44.19:3 include the statement, “‘institution of higher education’ means a public institution of higher education, as that term is defined in § 23.1-100 of the Code of Virginia.” Consistent with the definition, throughout this form, “institution of higher education” means “public institution of higher education.”

	<p>these activities. As a result, there are no direct costs associated with this change in the law and resulting regulation.</p> <p>Indirect Costs: There are no indirect costs associated with this change in the law and resulting regulation.</p> <p>Direct Benefits: This change in the law and resulting regulation provides institutions of higher education with greater flexibility to conduct biosolids research, reduce the time required to prepare for a research project involving land application of biosolids, and make it easier to meet project deadlines. The exemption from permitting requirements may also increase the number of biosolids research projects, increasing the amount of scientific data regarding the impacts and benefits associated with land application of biosolids. This change will result in an indeterminate benefit to institutions of higher education conducting research related to land application of biosolids.</p> <p>Indirect Benefits: There are three ways to manage the solids that result from treatment of wastewater: incineration, disposal in landfills, and land application. Because the solids contain nutrients that are beneficial to plants, having more and better information about implications and methods for land application may result in less material being landfilled, saving space in landfills for other solid waste, and preventing air emissions from incineration. Use of biosolids also reduces the need for commercial fertilizers.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) None.	(b) Indeterminate direct and indirect benefits from improved biosolids management, handling, and land application practices developed through research.
(3) Net Monetized Benefit	Indeterminate but positive.	
(4) Other Costs & Benefits (Non-Monetized)	Beneficial use of solids as soil nutrients, less demand for landfill space, and avoiding incineration and resulting air pollution.	
(5) Information Sources	Virginia Department of Environmental Quality, https://www.univstats.com/states/virginia/	

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

<p>(1) Direct & Indirect Costs & Benefits (Monetized)</p>	<p>This regulatory amendment is in response to state law where no agency discretion is involved. Retaining the status quo is not an option.</p> <p>Direct Costs:</p> <p>DEQ’s current biosolids land application permitting program requires public institutions of higher education to complete the following steps to obtain a permit to land apply biosolids (if they choose to take such action, including land application for a research project):</p> <ul style="list-style-type: none"> • Submit a permit application with maps and supporting data for the land application sites; • Submit a permit fee and land application fee per dry ton of biosolids applied unless the land application is for the purpose of biosolids research; • Pay for newspaper notice of the public comment period to receive comments on the draft permit; • Test and monitor biosolids and soils; • Conduct monthly and annual reporting; • Conduct recordkeeping; • Prepare and implement a nutrient management plan, operations and maintenance plan, and odor control plan; • Notify the locality and DEQ 100 days before land application, at least 14 days before land application, at least 5 days before land application, and in the 24-hour period immediately before land application, with increasing detail for each notification. • Post signs at each site least 5 days before land application; • Follow biosolids transport restrictions; • Follow staging and storage restrictions; • Comply with site restrictions, including setbacks; • Demonstrate pollution liability coverage; and • Comply with requirements for certified land appliers; <p>Public institutions of higher education are currently not assessed a permit application fee but are required to prepare and submit a permit application to conduct research activities pertaining to land application of biosolids. As part of the permit application process, public institutions of higher education are required to pay for noticing the permit in a local newspaper. The average cost of newspaper notice for the public comment period is approximately \$500 and can vary depending on the location.</p>
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	<p>The cost of permit application preparation, testing and monitoring of biosolids and soils, reporting, recordkeeping, plan preparation and maintenance, notifications, sign postings, and site management restrictions will vary depending upon the number of biosolids sources utilized, the amount of biosolids land applied, and the size and number of requested land application sites.</p> <p>Indirect Costs: N/A</p> <p>Direct Benefits: N/A</p> <p>Indirect Benefits: N/A</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Unable to be estimated but costs would be incurred for preparation of permit applications and for publication in a local newspaper of the notice for a public comment period.	(b) None identified.
(3) Net Monetized Benefit	None identified.	
(4) Other Costs & Benefits (Non-Monetized)	None identified.	
(5) Information Sources	See Table 1a.	

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

This action is mandated by state statute. There are no alternative approaches.

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.

Table 2: Impact on Local Partners

(1) Direct & Indirect Costs &	This amendment exempts institutions of higher education from the biosolids land application permitting requirements.
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Benefits (Monetized)	<p>Direct Costs: No direct costs specific to local partners are associated with the regulation amendments.</p> <p>Indirect Costs: No indirect costs specific to local partners are associated with the regulation amendments.</p> <p>Direct Benefits: No direct benefits specific to local partners are associated with the regulation amendments.</p> <p>Indirect Benefits: Indirect benefits specific to local partners (landfill capacity, impacts associated with incineration, etc.) are discussed in Table 1a.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) None identified.	(b) Indeterminate but positive. See discussion in Table 1a
(3) Other Costs & Benefits (Non-Monetized)	None identified.	
(4) Assistance	None identified.	
(5) Information Sources	See Table 1a.	

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>Direct Costs: No direct costs specific to families are associated with the regulation.</p> <p>Indirect Costs: No indirect costs specific to families are associated with the regulation.</p>	
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	<p>Direct Benefits: The amendments require institutions of higher education that land apply biosolids for research to notify adjacent landowners.</p> <p>Indirect Benefits: No indirect benefits to families are anticipated as a result of this regulatory action.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) None identified.	(b) None identified.
(3) Other Costs & Benefits (Non-Monetized)	None identified.	
(4) Information Sources	See Table 1a.	

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>This regulatory change only impacts public institutions of higher education.</p> <p>Direct Costs: No direct costs specific to small businesses have been identified as a result of this regulatory action.</p> <p>Indirect Costs: No indirect costs specific to small businesses have been identified as a result of this regulatory action.</p> <p>Direct Benefits: See Table 1a.</p> <p>Indirect Benefits: No indirect benefits have been identified as a result of this regulatory action.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits

	(a) None identified.	(b) None identified.
(3) Other Costs & Benefits (Non-Monetized)	None identified.	
(4) Alternatives	None identified.	
(5) Information Sources	See Table 1a.	

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*	Authority of Change	Initial Count	Additions	Subtractions	Total Net Change in Requirements
9VAC25-31-10	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-31-440	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	4	1	0	+1
	(D/R):	0	0	0	0
9VAC25-32-10	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-32-305	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	4	1	0	+1
	(D/R):	0	0	0	0
				Grand Total of Changes in Requirements:	(M/A): 0
					(D/A): 0
					(M/R): +1^A
					(D/R): 0

^A The amendments to 9VAC25-31-440 and 9VAC25-32-305 allow a public institution of higher education to land apply biosolids on its property for research purposes without getting a permit (land application for any other purpose requires a permit from DEQ). However, if a public institution of higher education land applies biosolids on its property for research purposes, it is required to provide the department and surrounding property owners notice at least 30 days before land application begins. Since the notice requirement is the same in both regulations and only one regulation will be applicable, it is being counted as one mandatory requirement (i.e., if there will be a discharge to waters of the state, the VPDES reg (9VAC25-31) is applicable; if there will not be a discharge, the VPA reg (9VAC25-32) is applicable – most land application of biosolids is permitted under the VPA reg).

Key:

Please use the following coding if change is mandatory or discretionary and whether it affects externally regulated parties or only the agency itself:

(M/A): Mandatory requirements mandated by federal and/or state statute affecting the agency itself

(D/A): Discretionary requirements affecting agency itself

(M/R): Mandatory requirements mandated by federal and/or state statute affecting external parties, including other agencies

(D/R): Discretionary requirements affecting external parties, including other agencies

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved*	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
9VAC25-31-440.	Adding exemption from biosolids permitting requirements for an institution of higher education	Time/effort to develop permit application: undetermined + estimated newspaper public notice fee: \$500	\$0	Institutions of higher education will save the costs associated with preparing permit application or permit modifications-unable to be qualified. They would no longer be required to pay the cost for publication of the newspaper notice, an estimated savings of \$500 per permit.
9VAC25-32-305.	Adding exemption from biosolids permitting requirements for an institution of higher education	Time/effort to develop permit application: undetermined + estimated newspaper public notice fee: \$500	\$0	Institutions of higher education will save the costs associated with preparing permit application or permit modifications-unable to be qualified. They would no longer be required to pay

				the cost for publication of the newspaper notice, an estimated savings of \$500 per permit.
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Other Decreases or Increases in Regulatory Stringency (if applicable)

VAC Section(s) Involved*	Description of Regulatory Change	Overview of How It Reduces or Increases Regulatory Burden
9VAC25-31-440.	Adding exemption from biosolids permitting requirements for institutions of higher education	Exempts an institution of higher education from the requirement to obtain a permit when it land applies biosolids for a research project on land it owns and operates
9VAC25-32-305.	Adding exemption from biosolids permitting requirements for institutions of higher education	Exempts an institution of higher education from the requirement to obtain a permit when it land applies biosolids for a research project on land it owns and operates

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

Title of Guidance Document	Original Word Count	New Word Count	Net Change in Word Count
N/A			

*If the agency is modifying a guidance document that has regulatory requirements, it should report any change in requirements in the appropriate chart(s).