

Office of Regulatory Management
Economic Review Form

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9 VAC 25-880
VAC Chapter title(s)	General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Construction Activities
Action title	CH880 – 2024 Amendment and Reissuance of the VPDES Stormwater Construction General Permit Regulation
Date this document prepared	01/08/2024 revised 2/9/2024
Regulatory Stage (including Issuance of Guidance Documents)	Final

Background

This regulatory action amends and reissues the existing General VPDES Permit for Discharges of Stormwater from Construction Activities (CGP) which expires on June 30, 2024. The CGP authorizes the discharge of stormwater from construction activities equal to or greater than one acre of land disturbance or less than one acre of land disturbance within a larger common plan of development or sale. This regulatory action is needed for existing and new construction activities to be covered under this general permit regulation. The revisions to the CGP made through this regulatory action focused on changing citations and references to be consistent with the new Virginia Erosion and Stormwater Management Regulation (9VAC25-875, effective July 1, 2024); improving the clarity and readability of language in the permit; updating provisions to be consistent with other recently reissued VDPES permits; and amending and adding language and new provisions to be consistent with the reissued 2022 EPA Construction General Permit. Additional amendments to the CGP listed in Table 1 as “Changes” respond to comments received on the proposed regulation that the State Water Control Board approved on June 22, 2023.

VPDES general permits expire every five years and must be re-issued in order for permit coverage to be available to new permittees and existing covered permittees. If the CGP is not re-issued, the regulated community will need to obtain an individual permit to conduct the regulated activity. For this reason, the costs associated with obtaining an individual permit are compared with the costs associated with general permit coverage. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity.

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>Regulating stormwater discharges to state waters that are related to construction activity through the reissuance of a general permit regulation is an alternative streamlined approach that is used to regulate entities that conduct similar activities. A benefit of the CGP is its lower cost to permittees relative to the cost of obtaining an individual permit. The permit fee for owners to obtain coverage under the CGP ranges from \$290 to \$9,600 (average \$4,432) based on total acreage of land disturbance. In this document, the average permit fee is used to estimate permit fee costs to the regulated community. If the CGP was not available, owners would be required to obtain an individual VPDES permit. The permit fee for an individual permit for Discharges of Stormwater from Construction Activities is \$15,000. There are currently 6,416 construction sites covered under the CGP that is effective from July 1, 2019, to June 30, 2024. If the CGP option was not available, each site would be required to pay the \$15,000 individual permit fee instead of the average \$4,432 permit fee. The CGP represents a total savings of approximately \$67.8M for the permit sector in permit fee costs (\$10,568 x 6,416 sites).</p> <p>These costs do not account for the applicant cost to prepare the application, annual maintenance fees, advertisement costs, and the longer lead time to obtain an individual permit. Approximately 22% of the current permits were issued by the department with the remainder issued through local stormwater management program authorities. The costs do not include the increased burden on department staff resources that would result if individual permits were the only permit option available as all individual permits are issued by DEQ.</p>
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Change #1: Qualified personnel.

EPA’s 2022 CGP updates the requirements for operators to assemble a stormwater team that is responsible for carrying out activities that are necessary to comply with the permit. These new requirements include greater detail about training requirements for stormwater team members. The department addressed these requirements in the 2024 CGP by adding “qualified personnel” as a defined term and carried that term throughout the general permit regulation to identify these personnel as those responsible for activities necessary to comply with the permit. In addition, the definition specifies the certificates of competence and trainings that must be used to be considered a “qualified personnel.” The definition was expanded in the final CGP based on comments received during the public comment period to include a Qualified Personnel Certificate issued by either the department or the Virginia Department of Transportation to provide additional flexibility and options to the regulated community.

Direct Costs: There are no direct costs associated with this change because the department has provided at least one option for obtaining the appropriate certifications that is free. Other options provided range from \$0 to \$605.

Indirect Costs: The indirect costs associated with this change are the time involved for operators to ensure that there are employees with the necessary certifications.

Direct Benefits: The direct benefits associated with this change are improved clarity about who is responsible for stormwater activities at a construction site and clear information for operators about the types of training and certification that those individuals must have.

Indirect Benefits: The indirect benefit associated with this change is improved operation of stormwater controls at the construction site that result from having appropriately trained personnel overseeing these controls.

Change #2: Construction dewatering discharge.

EPA’s 2022 CGP includes a new section for turbidity benchmark monitoring for construction dewatering discharges to sensitive waters. EPA further explains that this benchmark is not intended to be an effluent limitation but is meant to function as an indicator that dewatering controls may not be working to protect water quality.

The 2024 CGP includes requirements for turbidity benchmark monitoring for construction dewatering discharges into sediment impaired or exceptional waters. Consistent with EPA's 2022 CGP, this benchmark is not an effluent limitation; it functions as an indicator that dewatering controls may not be working to protect water quality. To provide more options and flexibility to the regulated community, the final CGP includes one additional benchmark threshold and the ability for the operator to request an alternative benchmark threshold. Both options were added to the regulation based on comments received during the public comment period.

Direct costs: The direct costs associated with this change are the cost of purchasing a turbidity meter for operators that do not currently have one, and the cost of any maintenance, repairs, or additional controls that may be necessary if the turbidity benchmark is exceeded.

Indirect costs: The indirect costs associated with this change are the time it takes to perform the turbidity test, take any necessary corrective act, and to train personnel on the use of a turbidity meter.

Direct benefits: The primary direct benefit of this change is greater effectiveness of dewatering discharge controls due to increased monitoring.

Indirect benefits: The indirect benefit of this change is improved water quality that may result from ensuring that dewatering discharge controls are installed, maintained, and functioning properly.

Change #3: Documentation requirements.

To be consistent with EPA permit requirements, the 2024 CGP requires permittees to document areas where stormwater treatment chemicals are used or stored, locations of construction dewatering discharge, and locations where stormwater controls have repeatedly failed.

Direct costs: There are no direct costs from these changes because the new language only requires documenting existing parts of the construction site.

Indirect costs: The primary indirect cost of these changes is the additional time it will take for personnel to document these areas.

Direct benefits: The direct benefit of these changes is increased knowledge of the locations and types of activities at a construction site that may result in pollutant discharges.

Indirect benefits: The indirect benefit of these changes is increased effectiveness of controls due to greater knowledge of where controls are needed on the site and situations where they repeatedly fail. Improving the effectiveness of controls may have the benefit of improving water quality.

Change #4: Inspection requirements.

The 2024 CGP includes new requirements for inspecting all stormwater discharge locations, construction dewatering discharge locations, and additional items to be included in the inspection report.

Direct costs: There are no direct costs from these changes because the new language only requires inspecting and reporting on existing parts of the construction site. These requirements do not require the purchase of any new equipment or undertake any additional control measures.

Indirect costs: The primary indirect cost of these changes is the additional time it will take for personnel to inspect and report on all discharge locations.

Direct benefits: The direct benefit of these changes is improved monitoring of all stormwater discharges and construction dewatering discharges associated with the construction site. These changes also ensures that the inspection report provides documentation on locations that indicate the discharge of pollutants.

Indirect benefits: The indirect benefit of these changes is increased effectiveness of controls due to greater monitoring of where controls are needed on the site and situations where they repeatedly fail. Improving the effectiveness of controls may have the benefit of improving water quality.

(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Cost of Turbidity Meter: \$970 - \$1,870 (b) Cost of Qualified Personnel Certificate: \$0 - \$605	(c) Unable to monetize direct and indirect benefits.
(3) Net Monetized Benefit	NA	
(4) Other Costs & Benefits (Non-Monetized)	In general, re-issuance of the CGP may indirectly benefit economic development since it provides a streamlined approach to obtaining a permit to conduct a specified activity. Industries interested in operating	

	in Virginia may be able to obtain coverage under the CGP, in lieu of obtaining an individual permit. These indirect benefits are unable to be monetized by DEQ.
(5) Information Sources	9VAC25-20 Fees for Permits and Certificates Turbidity meter cost is from EPA’s Incremental Cost Impact Analysis for the 2022 Construction General Permit

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

(1) Direct & Indirect Costs & Benefits (Monetized)	<p>Direct Costs: The direct costs of maintaining the status quo are that the regulation expires on June 30, 2024. Without renewing general permit coverage through a regulatory action, all construction activity in Virginia that equals or exceeds 1 acre of land disturbance and is either continuing or commencing after July 1, 2024 would need to obtain coverage for stormwater discharges through an individual permit. If the State Water Control Board adopted a regulation that is the same as the current regulation (i.e., no change except the effect date), it would not be in compliance with EPA’s 2022 construction general permit, risking the state’s ability to implement the VPDES program. It would also fail to incorporate important defined terms, maintain requirements that are unnecessary or less flexible, and keep language that is less readable and less clear about requirements. This would create a regulation that is less user friendly and lacks important details and flexibility, potentially resulting in increased costs for operators.</p> <p>Indirect Costs: The indirect costs of maintaining the status quo are that it would exclude new provisions that may provide greater water quality protection.</p> <p>Direct Benefits: The primary direct benefit of maintaining the status quo is that it would not require operators to purchase specialized equipment needed to perform tests not required under the existing permit or train and employ “qualified personnel” to oversee compliance with stormwater requirements at the construction site.</p> <p>Indirect Benefits: The primary indirect benefits of maintaining the status quo are that it would save operators the time and personnel costs associated with new certifications and new inspection and reporting requirements.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) No monetized direct or indirect costs associated with the status quo.	(b) Unable to monetize direct and indirect benefits.

(3) Net Monetized Benefit	N/A
(4) Other Costs & Benefits (Non-Monetized)	N/A
(5) Information Sources	N/A

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

<p>(1) Direct & Indirect Costs & Benefits (Monetized)</p>	<p>Allowing the general permit regulation to lapse and issuing individual permits would increase costs to the sector by approximately \$67.8M.</p> <p>During the development of the 2024 CGP, alternative approaches were considered for addressing the EPA’s new turbidity benchmark monitoring requirements. The two primary alternatives that were considered are as follows:</p> <p>Alternative approach #1: Secondary controls for construction dewatering.</p> <p>During the TAC meetings, an alternative approach to turbidity benchmarking was considered that would not require turbidity testing or create a benchmark. Instead, this approach would operate as a technology-based standard requiring automatic installation of secondary controls for all construction dewatering locations. Under this approach, an operator would be considered compliant if they installed and properly maintained secondary controls. Ultimately, the department decided not to proceed with this approach. The department felt that this approach does not address the EPA’s desire for regular monitoring and the use of a benchmark as an indicator that dewatering controls are working to protect water quality.</p> <p>Direct Costs: The primary direct cost of this approach is the cost of installing and maintaining secondary controls at every dewatering location.</p> <p>Indirect Costs: The indirect costs of this approach are the time it would take to install secondary controls and the lack of data on the efficacy of the controls that have been installed.</p> <p>Direct Benefits: The direct benefit of this approach is the protection created by a secondary level of controls that would be installed at every dewatering location.</p> <p>Indirect Benefits: The indirect benefit of this approach is that it is for operators to understand and does not require additional training.</p> <p>Approach #2: Total Suspended Solids (TSS) Benchmark.</p> <p>Another approach that was considered for addressing EPA’s turbidity benchmark monitoring requirements was to create a TSS benchmark. This benchmark would function like the turbidity benchmark but, rather than requiring a test that can be performed by trained personnel at the construction site, grab samples would have to be collected and sent to a</p>
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	<p>lab for testing. This approach was considered for two reasons: (1) TSS is a metric that is used in other VPDES permits, so there is familiarity with it; and (2) the department believed that TSS could function as an acceptable stand-in for turbidity that would still address the EPA’s desire for regular monitoring and the use of a benchmark as an indicator that dewatering controls are working to protect water quality. Ultimately, the department decided not to use this approach because the TAC voiced concerns about the logistical difficulties of getting samples to a lab for testing and the time required for the lab to return results.</p> <p>Direct costs: The primary direct costs of this approach would be the transportation and lab fee costs of getting a sample tested and any costs associated with potential corrective actions that had to be taken.</p> <p>Indirect costs: The indirect cost of this approach is the time and personnel to take the sample and get them to a lab for testing.</p> <p>Direct benefits: The primary direct benefit of this approach is greater effectiveness of dewatering discharge controls due to increased monitoring.</p> <p>Indirect benefits: The indirect benefit of this approach is improved water quality that may result from ensuring that dewatering discharge controls are functioning properly.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	<p>Approach #1: Unable to monetize direct and indirect costs.</p> <p>Approach #2: Cost of lab testing- less than \$50.00 per sample.</p>	(b) Unable to monetize direct and indirect benefits.
(3) Net Monetized Benefit	N/A	
(4) Other Costs & Benefits (Non-Monetized)	N/A	
(5) Information Sources	<p>9VAC25-20 Fees for Permits and Certificates Cost estimate for Approach #2 is based on relative cost of a TSS test using EPA-NERL method 160.2. This information comes from that National Environmental Methods Index (NEMI): https://www.nemi.gov/methods/method_summary/5213/</p>	

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 & Benefits (Monetized)	<p>Direct Costs: There are no direct costs to local partners because this action does not change the existing responsibilities of local governments under the permit.</p> <p>Indirect Costs: The indirect cost associated with reissuing the CGP is any impact to local economic development that may result if compliance costs cause a slowdown in construction.</p> <p>Direct Benefits: The direct benefit to local partners from reissuing the CGP is improved access to information necessary for carrying out inspections.</p> <p>Indirect Benefits: The indirect benefit associated with reissuing the CGP is the improved local water quality that may result from improved pollutant discharge controls.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) No monetized direct or indirect costs associated with reissuing the CGP.	(b) Unable to monetize direct and indirect benefits.
(3) Other Costs & Benefits (Non-Monetized)	N/A	
(4) Assistance	None.	
(5) Information Sources	N/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>Direct and Indirect Costs: There are no direct or indirect costs that impact families associated with reissuing the CGP.</p> <p>Direct Benefits: There are no direct benefits that impact families associated with reissuing the CGP.</p> <p>Indirect Benefits: The indirect benefits for families associated with reissuing the CGP is the improved local water quality that may result from improved pollutant discharge controls.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) No monetized direct or indirect costs associated with reissuing the CGP.	(b) Unable to monetize direct and indirect benefits.
(3) Other Costs & Benefits (Non-Monetized)	N/A	
(4) Information Sources	N/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>Small businesses would have the same impact as described in 1a above.</p> <p>General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Without the CGP, an individual permit would be required to conduct the regulated activity at a cost of approximately \$10,568 more for each small business covered under the general permit. DEQ does not have access to information necessary to determine how many of the facilities covered under the CGP qualify as small business as defined under the Administrative Process Act, but it is safe to assume that there are some.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Cost of Turbidity Meter: \$970 - \$1,870	(b) Unable to monetize direct and indirect benefits.

(3) Other Costs & Benefits (Non-Monetized)	N/A
(4) Alternatives	N/A
(5) Information Sources	Turbidity meter cost is from EPA's Incremental Cost Impact Analysis for the 2022 Construction General Permit. 9VAC25-20 Fees for Permits and Certificates

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
9VAC25-880-1	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-880-10	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-880-15	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	1	0	0	0
	(D/R):	0	0	0	0
9VAC25-880-20	(M/A):	1	0	0	0
	(D/A):	0	0	0	0
	(M/R):	0	0	0	0
	(D/R):	0	0	0	0
9VAC25-880-30	(M/A):	4	0	0	0
	(D/A):	0	0	0	0
	(M/R):	4	0	0	0

	(D/R):	1	0	0	0
9VAC25-880-40	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	1	0	0	0
	(D/R):	0	0	0	0
9VAC25-880-50	(M/A):	0	0	0	0
	(D/A):	0	0	0	0
	(M/R):	3	1	0	+1
	(D/R):	0	0	0	0
9VAC25-880-60	(M/A):	1	0	0	0
	(D/A):	0	0	0	0
	(M/R):	4	0	0	0
	(D/R):	0	0	0	0
9VAC25-880-70	(M/A):	2	0	0	0
	(D/A):	0	0	0	0
	(M/R):	61	18	1	+17
	(D/R):	0	0	0	0
Grand Total of Changes in Requirements:					(M/A): 0 (D/A): 0 (M/R): +18 (D/R): 0

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

All of the requirements being added to the regulation are required for consistency with the Environmental Protection Agency's 2022 Construction General Permit.

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
9VAC25-880-entire chapter	Cost of individual permit vs general permit regulation	Individual permit cost if general permit is not reissued- \$15,000 (Does not include the time and costs for the applicant to prepare the individual permit application.)	Average general permit cost \$4,432 (General permit fees range from \$290 to \$9,600 based on total acreage of land disturbance)	The general permit represents a savings of \$10,568 per construction site or a total of \$67.8M based on the 6,416 construction sites currently covered by the general permit which represents a 70% cost savings over the cost of an individual permit.
9VAC25-880-entire chapter	Reissuance of the general permit reduces the time required to obtain permit coverage	Average amount of time to issue individual permit (FY2021 data*) - 322 days	Average amount of time to issue general permit coverage (FY2021 data*) – 79 days	Permittee obtains permit coverage on average 243 days sooner under the general permit. This represents a 75% reduction in the time required to obtain permit coverage.

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
n/a	n/a	The regulatory burden of reissuing the general permit is much reduced compared to requiring an individual permit.

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

Title of Guidance Document	Original Length	New Length	Net Change in Length
NA			

