

Office of Regulatory Management
Economic Review Form

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-890
VAC Chapter title(s)	General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems
Action title	Reissuance of a general permit for the discharge of stormwater from small municipal separate storm sewer systems
Date this document prepared	9/1/2023
Regulatory Stage (including Issuance of Guidance Documents)	Final

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.

VPDES general permits expire every 5 years and must be re-issued in order for permit coverage to be available to new permittees and existing covered permittees. If the general permit 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.

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

<p>(1) Direct & Indirect Costs & Benefits (Monetized)</p>	<p><u>Direct Costs:</u></p> <p>Municipal separate storm sewer systems (MS4s) are required by federal law to obtain federal National Pollutant Discharge Elimination System (NPDES) permit coverage. DEQ has delegated permitting authority from the U.S. Environmental Protection Agency (EPA) to implement the NPDES program in Virginia as the Virginia Pollutant Discharge Elimination System (VPDES) permit program.</p> <p>Registration for new MS4s under the general permit costs \$16,000 over a complete five-year VPDES permit cycle (\$4,000 initial application fee and \$3,000/year maintenance fee for the final 4 years of coverage). Reissuance of coverage under the general permit fee costs \$15,000 over a complete five-year VPDES permit cycle (\$0 application fee and \$3,000/year maintenance fee over 5 years).</p> <p>There is an indeterminate direct cost for each permittee to comply with the conditions imposed by the general permit. Because of the programmatic nature of MS4 permits, actual costs depend on choices the permittee makes about how to comply.</p> <p><u>Direct Benefits:</u></p> <p>Regulating discharges of stormwater from MS4s through the reissuance of a general permit regulation is an alternate streamlined approach that is used to regulate entities that conduct similar activities. A benefit of this general permit is its lower cost to permittees relative to the cost of obtaining an individual permit.</p> <p>If this general permit were not available, MS4s would be required to obtain an individual VPDES permit. Coverage of new MS4s under an individual permit costs approximately \$32,900 in permit and maintenance fees over a complete five-year VPDES permit cycle (\$8,000 application fee, \$6,000/year maintenance fee for the final 4 years of coverage and approximately \$900 for publication of a public notice). Reissuance of an individual permit costs \$30,900 over a complete five-year VPDES permit cycle (\$0 application fee, \$6,000/year maintenance fee over 5 years and approximately \$900 for publication of a public notice).</p> <p>The availability of the general permit represents a cost savings in permit application and maintenance fees costs of approximately 51% compared to coverage under an individual permit (\$16,000 vs. \$32,900 for a new facility and \$15,000 vs \$30,900 for reissued coverage).</p>
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There are currently 100 MS4 facilities covered under this general permit representing a total savings of approximately \$1.6 million for the regulated community during the five-year permit term (\$15,900 x 100 facilities). The incorporation of 2020 Census maps in the general permit regulation potentially requires the permitting of up to 9 new jurisdictions; however, a final determination of how many jurisdictions are impacted cannot be made until site inspections have been made to establish the existence of an MS4. For any newly permitted MS4 the general permit reflects a cost savings of \$16,900 in permit and application fees during the first permit cycle.

These costs do not account for the longer lead time to obtain an individual permit and the increased burden on DEQ staff resources that would result.

There is an indeterminate benefit to permittees because it is easier to apply for coverage under the general permit than the process to submit an application for an individual permit. There are individual MS4 permits in Virginia, but they are all large jurisdictions (population greater than 250,000) so it would not be representative to compare their application costs to the application cost to obtain coverage under this general permit to calculate a numerical monetary benefit.

There is an indeterminate benefit to permittees because it is easier to comply with the conditions in the general permit than those that would be imposed in an individual permit. Several changes in the general permit add specificity and compliance options to existing requirements, increasing certainty for MS4 permittees and simplifying the cost of compliance. For example, the previous permit required public education and outreach on high-priority issues, the new permit provides additional examples of high-priority issues that permittees can choose to use, while still allowing permittees flexibility to select alternative topics.

Direct costs and benefits of individual modifications to the current general permit include:

- 9VAC25-890-40 – Annual Reporting – Added requirement to utilize the electronic reporting platform specified by the Department as required by EPA’s electronic reporting initiative.

Direct Costs: No direct economic cost to regulated entities expected beyond additional administrative time permittees may spend to adjust reporting procedures.

	<p>Direct Benefits: Permittees may see benefits from switching from a paper-based reporting format to a completely electronic format, in materials cost as well as time spent preparing and submitting reports and registration statements.</p> <p>Indirect Costs: None to the permittee</p> <p>Indirect Benefits: The electronic reporting format eliminates the necessity for producing a hard copy report saving resources.</p> <ul style="list-style-type: none"> • 9VAC25-890-40 Part I.E.1 – Public Education and Outreach – Added specific options for traditional and non-traditional permittees in selecting high-priority issues. <p>Direct Costs: No direct increase in economic cost to regulated entities (the public education and outreach requirement is an existing requirement).</p> <p>Direct Benefits: The additional options provide permittees with increased certainty and flexibility, reducing compliance costs.</p> <p>Indirect Costs: None to the permittee</p> <p>Indirect Benefits: None to the permittee.</p> <ul style="list-style-type: none"> • 9VAC25-890-40 Part I.E.2 – Public Involvement and Participation – Added a requirement to update the permittees’ stormwater webpage with TMDL information as well as reporting requirements if specific activities were undertaken regarding climate change. This requirement was added based on comments from EPA. <p>Direct Costs: No direct economic cost to regulated entities.</p> <p>Direct Benefits: No direct economic benefit to regulated entities.</p> <p>Indirect Costs: None to the permittee</p> <p>Indirect Benefits: None to the permittee.</p> <ul style="list-style-type: none"> • 9VAC25-890-40 Part I E.3 – Illicit Discharge Detection and Elimination (IDDE) – Added requirement for maps to be submitted in a GIS format specified by DEQ and to update screening checklists.
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	<p>Direct Costs: Most MS4s are owned by local governments that have switched to GIS-based systems. For those that have not there may be marginal increased costs.</p> <p>Direct Benefits: This requirement will result in more accurate information being available to permittees and DEQ.</p> <p>Indirect Costs: There may be operating procedures that change because of GIS and screening changes.</p> <p>Indirect Benefits: DEQ will use maps and outfall tables provided by MS4 permittees to review MS4 program annual reports, to assist in identifying illicit discharges, and during local TMDL development. For permittees within the Chesapeake Bay watershed the maps will be used to delineate the MS4 service area as part of Chesapeake Bay watershed modeling efforts.</p> <ul style="list-style-type: none"> • 9VAC25-890 Part I.E.4 – Construction site stormwater runoff and erosion and sediment control – Added a requirement that the MS4’s employees and contractors in the MS4’s erosion and sediment control program must be certified. All localities are required by state law to operate an erosion and sediment control program, and those employees or contractors are already required to have proper certifications. This requirement simply aligns the MS4 general permit with currently existing state law and regulatory requirements for erosion and sediment control programs. <p>Direct Costs: None to the permittee.</p> <p>Direct Benefits: No direct economic benefits to regulated entities.</p> <p>Indirect Costs: None to the permittee.</p> <p>Indirect Benefits: None to the permittee.</p> <ul style="list-style-type: none"> • 9VAC25-890 Part. I E.5 – Post-Construction stormwater management for new development and development on prior developed lands - Added a requirement that the MS4’s employees and contractors in the MS4’s stormwater management program must be certified. All localities that own or operate an MS4 are required by state law to operate a stormwater management program, and those employees or contractors are already required to have proper certifications. This requirement simply aligns the MS4 general permit with currently existing state law and regulatory requirements for stormwater management programs.
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	<p>Direct Costs: None to the permittee.</p> <p>Direct Benefits: No direct economic benefits to regulated entities.</p> <p>Indirect Costs: None to the permittee.</p> <p>Indirect Benefits: None to the permittee.</p> <ul style="list-style-type: none"> • 9VAC25-890 Part I.E.6 – Pollution prevention and good housekeeping – Added new language for written good housekeeping procedures, 2020 census expanded areas, Stormwater Pollution Prevention Plan (SWPPP), and nutrient management plan development. <p>Direct Costs: There may be some costs associated with the development of SWPPPs and nutrient management plans because of the EPA requirement to address the 2020 Census expanded urban areas within permittee MS4 service areas.</p> <p>Direct Benefits: None to the regulated entities.</p> <p>Indirect Costs: There may be operating and administrative procedures that change because of the changed language.</p> <p>Indirect Benefits: None for the permittee.</p> <ul style="list-style-type: none"> • 9VAC25-890 Part II.A – Chesapeake Bay TMDL – Updated the pollutant reduction requirements, added language because of the EPA requirement to address the 2020 Census expanded urban areas, and removed the Total Suspended Solids (TSS) pollutant reduction requirements. <p>Direct Costs: The Commonwealth’s plan to address urban and suburban stormwater runoff in Phase I, II, and III Chesapeake Bay Watershed Implementation Plans (WIPs) has been to use an iterative programmatic approach through its MS4 permits. The intention from the beginning of this process has been that during the third round of MS4 permits (i.e., this general permit) 100% of the required reductions would be achieved. While there will be costs for MS4s to achieve these reductions during this five-year permit term, these are costs that are required by the WIP and have been anticipated for several years.</p> <p>Direct Benefits: While it is difficult to assess individual permittee benefits for the removal of the TSS pollutant reduction</p>
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	<p>requirements, as a sector, DEQ expects that MS4s will see a significant benefit.</p> <p>Indirect Costs: There may be operating and administrative procedures that change because of the changed language.</p> <p>Indirect Benefits: None for the permittee.</p> <ul style="list-style-type: none"> 9VAC25-890 Part II.B – Local TMDLs – Added new requirements to updating TMDL action plans, and annual reporting. <p>Direct Costs: No direct economic cost to regulated entities expected beyond additional administrative time permittees may spend to adjust reporting procedures.</p> <p>Direct Benefits: None to regulated entities.</p> <p>Indirect Costs: None to the regulated entities.</p> <p>Indirect Benefits: None for the permittees.</p> <ul style="list-style-type: none"> 9VAC25-890 Part II.C – Inspection and Maintenance of ecosystem restoration projects – Added language to ensure that ecosystem restoration projects implemented to comply with TMDLs are inspected and maintained. Pursuant to federal requirements, VPDES general permits must account for TMDLs. This requirement ensures compliance with that federal requirement. <p>Direct Costs: No direct economic cost to regulated entities.</p> <p>Direct Benefits: No direct economic benefit to regulated entities.</p> <p>Indirect Costs: None to the permittee</p> <p>Indirect Benefits: None to the permittee.</p>
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(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) See above	(b) See above

(3) Net Monetized Benefit	See above
(4) Other Costs & Benefits (Non-Monetized)	
(5) Information Sources	9VAC25-870-800 (application fees) and 9VAC25-870-830 (maintenance fees).

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

(1) Direct & Indirect Costs & Benefits (Monetized)	<p>Direct Costs: Maintaining the current requirements would have no direct additional economic cost to regulated entities. However, this would be inconsistent with federal and state law because it would not reflect current federal and state law requirements, and therefore the general permit would not be approved by EPA.</p> <p>Indirect Costs: Maintaining the current requirements would result in a general permit that would be inconsistent with current federal law requirements, which could lead to EPA rejecting the general permit, which would mean that permittees would have to obtain individual permits. As noted in Table 1a, individual permits are more costly to obtain and implement.</p> <p>Direct Benefits: Maintaining the current requirements would have no direct economic benefits to the regulated entities.</p> <p>Indirect Benefits: Maintaining the current requirements would have no indirect economic benefits to regulated entities.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Not applicable	(b) Not applicable
(3) Net Monetized Benefit	Not applicable	
(4) Other Costs & Benefits (Non-Monetized)	Not applicable	
(5) Information Sources	Not applicable	

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

(1) Direct & Indirect Costs & Benefits (Monetized)	Direct Costs and Benefits: DEQ is not aware of any alternatives to the current proposal other than (1) attempting to reissue of the current general permit with no modifications (which would be inconsistent with federal and state law because it would not reflect current federal and state law requirements, and therefore would not be approved by EPA) or (2) allowing the general permit regulation to lapse and issuing individual permits. As noted in Table 1a, individual permits are more costly to obtain and implement.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Not applicable	(b) Not applicable
(3) Net Monetized Benefit	Not applicable	
(4) Other Costs & Benefits (Non-Monetized)	Not applicable	
(5) Information Sources	Not applicable	

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)	This general permit regulates localities that operate MS4 facilities. Localities are subject to the same direct costs and benefits from the reissuance of the permit as detailed in Table 1a.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) See Table 1a	(b) See Table 1a

(3) Other Costs & Benefits (Non-Monetized)	See Table 1a
(4) Assistance	Not applicable
(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)	There is no potential impact of the proposed regulatory action on the institution of the family and family stability.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Not applicable	(b) Not applicable
(3) Other Costs & Benefits (Non-Monetized)	Not applicable	
(4) Information Sources	Not applicable	

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)	Not applicable. This general permit regulates public entities and no small businesses are regulated under this general permit.
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(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Not applicable	(b) Not applicable
(3) Other Costs & Benefits (Non-Monetized)	Not applicable	
(4) Alternatives	Not applicable	
(5) Information Sources	Not applicable	

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	Net Change
9VAC25-890-40 Part I C	Statutory:	15	0	0	0
	Discretionary:	0	0	0	0
9VAC25-890-40 Part I D	Statutory:	10	2	1	+1
	Discretionary:	0	0	0	0
9VAC25-890-40 Part I E 1	Statutory:	17	3 ^A	0	+3
	Discretionary:	0	0	0	0
9VAC25-890-40 Part I E 2	Statutory:	21	4 ^B	1	+3
	Discretionary:	0	0	0	0
9VAC25-890-40 Part I E 3	Statutory:	47	6 ^C	1	+5
	Discretionary:	0	0	0	0
9VAC25-890-40 Part I E 4	Statutory:	10	2	1	+1
	Discretionary:	0	0	0	0
9VAC25-890-40 Part I E 5	Statutory:	37	2	15 ^D	-13
	Discretionary:	0	0	0	0
9VAC25-890-40 Part I E 6	Statutory:	56	29 ^E	10	+19
	Discretionary:	0	0	0	0
9VAC25-890-40 Part II A	Statutory:	22	33 ^F	7	+26
	Discretionary:	0	0	0	0
9VAC25-890-40 Part II B	Statutory:	25	7	0	+7
	Discretionary:	0	0	0	0
9VAC25-890-40 Part II C	Statutory:	0	2	0	+2
	Discretionary:	0	0	0	0
9VAC25-890-40 Part III	Statutory:	0	17 ^G	0	+17
	Discretionary:	0	0	0	0

^A Additional requirements recommended and approved by EPA Region 3 provide clarity by distinguishing between traditional and nontraditional MS4s and giving more information about public information and outreach efforts to DEQ and the public in annual reports.

^B Two additional requirements annual reporting requirements recommended and approved by EPA Region 3. Two additional requirements were needed to comply with Virginia’s Phase III Chesapeake Bay Watershed Implementation Plan.

^C Additional requirements are associated with EPA Region 3 approved data format standards for shapefiles that make up the MS4 service area map. DEQ is specifying that permittees must use GIS-compatible formats for maps to ensure programmatic consistency.

^D Fourteen requirements related to information about best management practices were moved to 9VAC25-890-40 Part III, accounting for the increase there.

^E Additional requirements recommended and approved by EPA Region 3 for written good housekeeping procedures, 2020 Census, SWPPP development, nutrient management plans (DCR is the approving authority), and rationale for high-priority facilities.

^F Added requirements to be consistent with Virginia’s Phase III Chesapeake Bay Watershed Implementation Plan.

^G These requirements were previously in 9VAC25-890-40 Part I E 5 and have been moved to the new Part III for clarity.

All of the requirements being added to the regulation are required for consistency with federal NPDES program requirements, state law and regulations, and the Commonwealth’s commitments in the Chesapeake Bay Watershed Implementation Plan (WIP).

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
9VAC25-870-800 and 9VAC25-870-830	Cost of individual permit vs general permit regulation.	Individual permit application and maintenance fee costs if this general permit is not reissued: \$32,900.	General permit application and maintenance fee costs: \$16,000.	The general permit represents a savings of \$16,900 in application and maintenance fees costs per facility, or a \$1.6 million savings in application and maintenance fees costs for the

				regulated community during the five-year permit term based on the 100 facilities currently covered by the general permit.
9VAC25-890-30	Cost to complete the registration statement for the general permit.			There is an indeterminate benefit to permittees because it is easier to apply for coverage under the general permit than the process to submit an application for an individual permit. There are individual MS4 permits in Virginia, but they are all large jurisdictions (population greater than 250,000) so it would not be representative to compare their application costs to the application cost to obtain coverage under this general permit to calculate a numerical monetary benefit.
9VAC25-890-40	Cost to comply with the conditions			There is an indeterminate benefit to permittees

	imposed by the general permit.			<p>because it is easier to comply with the conditions in the general permit than those that would be imposed in an individual permit.</p> <p>The additional provisions required by the renewed general permit would also be included in any individual permits issued so they do not represent an increase in requirements/costs over the individual permit alternative.</p>
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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
n/a	n/a	The regulatory burden of reissuing the general permit is much reduced compared to requiring an individual permit. See 1a above.

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

Title of Guidance Document	Original Length	New Length	Net Change in Length
n/a			