

Office of Regulatory Management

Economic Review Form

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-190
VAC Chapter title(s)	Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Nonmetallic Mineral Mining
Action title	2024 Amendment and Reissuance the Existing General Permit Regulation
Date this document prepared	10/3/2023, Revised 12/14/2023, 3/8/2024, 3/21/2024
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.

VPDES general permit regulations expire every 5 years and must be re-issued in order for permit coverage to be available to new permittees and existing permittees that do not submit a registration statement in a timely manner. 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>Presently there are 181 of regulated entities covered by this general permit. Reissuance of this general permit allows them to continue coverage when the current GP expires on June 30, 2024, and new entities to be able to obtain coverage for conducting this regulated activity. Regulatory changes that are necessary to reissue the general permit regulation are very limited, and include:</p> <ul style="list-style-type: none"> • Added a North American Industry Classification (NAIC) code requirement to the registration statement to be consistent with existing requirements in the VPDES Regulation, 9VAC25-31-100 G; • Added an “ownership type” requirement to the registration statement making application requirements consistent with the existing VPDES regulation, 9VAC25-31-100 G 4; • Replaced the existing registration statement and DMR submittal requirements with conditional electronic reporting requirements (effective following notice and a three-month period). The new language facilitates electronic reporting, which is required under federal regulations at 40 CFR Part 3 (requiring states to allow electronic reporting) and 40 CFR Part 127, and state regulations (9VAC25-31-950 et seq., electronic reporting requirements for VPDES permits, effective July 26, 2017, which incorporated the federal electronic reporting rule); • Clarified that where alternate pH standards exist the most stringent technology-based or water quality based pH limits apply (this is an update to an existing requirement, not a new or additional requirement that clarifies which standards for pH apply where Water Quality Standards, 9VAC-25-260, are in effect for a discharge); • Revised the Total Maximum Daily Load (TMDL) language such that at reissuance a demonstration is required that the applicable wasteload is being met (federal NPDES requirements (EPA’s NPDES regulation, 40 CFR § 122.44(d), requires permits be consistent with TMDL wasteload allocations), state VPDES requirements (9VAC25-31-220), and other VPDES general permits); • Added Special Condition 18, discharge requirements for emergency dewatering during flooded conditions. This provision
---	---

is in response to concerns raised by the technical advisory committee that extreme storms can flood the mine pit and impair the ability to operate. The current permit does not provide options for dewatering under extreme conditions., This provision provides an alternative to permittees by allowing greater flexibility to dewater while protecting water quality. The impact of this provision should be limited since very large storms are rare and water quality remains protected through BMPs and an alternative TSS limit. The 100 mg/L limit is an exception to the daily maximum limitation of 60 mg/L, providing greater flexibility under limited, exceptional conditions.

- Supplemented the language triggering review and amendment of the SWPPP to include any other process, observation, or event that results in a determination that modifications to the SWPPP are necessary. Review is also required where the department notifies the permittee that a TMDL has been developed and applies to the permitted facility. These reflect corrective action language that is part of the SWPPP requirements in EPA’s 2021 Multi-Sector General Permit, which is the federal basis for the NMMM GP.

Direct Costs: Unknown. Expected to be minimal. No existing available cost analysis is broken down at the necessary level of detail.

Direct Benefits: The re-issuance of this general permit provides the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity while continuing to be protective of human health and the environment.

In terms of industrial stormwater costs generally, the U.S. Environmental Protection Agency (EPA) estimated the average annual cost of complying with the 2021 MSGP is from \$1,690 to \$3,157 per facility over the 5-year permit term. This cost is comparable to the 2015 MSGP estimate of \$2,750 per facility. EPA also found that the requirements of the 2021 MSGP are economically practicable under Best Practicable Control Technology (BPT) criteria and economically achievable under Best Available Technology (BAT) criteria (U.S. Environmental Protection Agency NPDES Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activity – Fact Sheet, page 32 (2021)). The 2021 MSGP is generally relevant because it covers stormwater discharges from nonmetallic mineral mining and comprises the most recent general MSGP cost estimate. No quantitative cost estimate data for the regulation of nonmetallic mineral mining process wastewater have been identified. General permits impose lower administrative costs on permittees compared with individual permits. (See, Table 1.c).

No existing quantitative benefit estimates applicable to the nonmetallic mineral mining general permit have been identified. However, in

assessing BPT for the 2021 MSGP, EPA did consider the reasonableness of the relationship between the costs of application of technology in relation to the effluent reduction benefit derived, and found the requirements were economically achievable. (U.S. Environmental Protection Agency NPDES MSGP for Stormwater Discharges Associated with Industrial Activity – Fact Sheet, page 32 (2021)).

This general permit already is coordinated with Virginia mining regulations to the greatest extent practicable. For example, this general permit does not require that the facility meet pre-mining requirements in the MSGP since Virginia Energy regulations address similar activities.

New Special Condition 18 provides an alternative to facilities whose operations are impacted by an extreme storm to re-start operations more quickly. This was done in response to concerns raised by the Technical Advisory Committee (TAC) that worked with DEQ to reissue the general permit. TAC members stated that extreme storms can flood an active mining pit and impair the mine’s ability to operate. Adding this provision provides greater flexibility to dewater following extreme storms, subject to notification, a less stringent TSS discharge limit, and conditions including best management practices designed to protect water quality. Emergency dewatering pursuant to Part I B 18 is an alternative to meeting the more stringent limitations in Table 1 of Part I A 1.

Indirect Benefits: The reissuance of the general permit may indirectly benefit economic development because it allows for the issuance of a general permit that is protective of human health and the environment that is less burdensome on the regulated community than an individual VPDES permit. Regulating discharges into state waters benefits tourism and the seafood industry. Cleaner waters may also increase tourism related to recreational uses of state waters.

(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) See above regarding direct costs. No indirect costs or benefits are expected due to the limited extent of changes being made to the general permit regulation.	(b) See above regarding direct and indirect benefits. No indirect costs or benefits are expected due to the limited extent of changes being made to the general permit regulation.
(3) Net Monetized Benefit		

(4) Other Costs & Benefits (Non-Monetized)	
(5) Information Sources	U.S. Environmental Protection Agency National Pollutant Discharge Elimination System (NPDES) Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activity – Fact Sheet (2021) https://www.epa.gov/sites/default/files/2021-01/documents/2021_msgp_fact_sheet.pdf

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

(1) Direct & Indirect Costs & Benefits (Monetized)	Available general cost and benefit data is provided in Table 1.a. Given the general character of this data, it would also be applicable to the general permit under the status quo (i.e., no change to the regulation).	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) See information in table 1a.	(b) See information in table 1a.
(3) Net Monetized Benefit		
(4) Other Costs & Benefits (Non-Monetized)		
(5) Information Sources	See table 1a.	

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

(1) Direct & Indirect Costs & Benefits (Monetized)	<p>Point source discharges of pollutants and industrial stormwater from nonmetallic mineral mines must be authorized by a VPDES permit under the federal Clean Water Act and State Water Control Law. Thus, no non-regulatory options were determined to be available.</p> <p>Regulating activities through the issuance of general permit regulations is an alternative 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 VPDES permit. The permit fee for operators to obtain coverage under this general permit is \$600. Thus, the application fee total for five years of coverage for 181 facilities is \$108,600. If this general permit were not available these operators would be required to obtain an individual VPDES permit, and the initial application fee would be \$3,300 (assumes industrial minor, standard limits). An annual permit maintenance fee of \$1,969 would also</p>
--	--

	<p>apply (the application and maintenance fee total would be \$11,176 per permittee/ 5-year permit term). Thus, individual permits for 181 facilities would cost \$2,022,856 over five years. This does not account for the longer lead time to obtain an individual permit and the increased burden on DEQ staff resources that would result.</p> <p>For electronic submission of registration statement and Discharge Monitoring Reports (DMRs), no regulatory alternatives were considered during this phase of general permit reissuance. This is because the electronic submission of these items is required under federal and state regulations (40 CFR Part 127 and 9VAC25-31-1020).</p> <p>EPA developed cost and benefit estimates for electronic reporting. Upon full implementation, EPA estimates that the net savings for authorized NPDES programs will be \$22.6 million and \$0.5 million for regulated entities. (Economic Analysis of the National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Final Rule, Enforcement Targeting and Data Division, Office of Compliance, Office of Enforcement and Compliance Assurance, U.S. EPA, DCN 0197, September 14, 2015, Page xii, Docket No. EPA-HQ-OECA-2009-0274). EPA acknowledges that there will be up-front costs and predicts the break-even point in the fourth year.</p> <p>The Virginia Department of Environmental Quality is not adopting several new provisions in the EPA 2021 MSGP. These include “report only” monitoring for pH, Total Suspended Solids and Chemical Oxygen Demand (COD) for all operators not subject to specified benchmarks, additional implementation measures, public sign requirement, revisions to impaired waters monitoring, a revised benchmark monitoring schedule, and consideration of enhanced stormwater control measures for facilities that could be impacted by major storm events. EPA estimates the incremental cost of these additional items is \$338-\$632 per operator per year. Reference: Cost Analysis for the U.S. Environmental Protection Agency’s (EPA) National Pollutant Discharge Elimination System (NPDES) 2021 Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activity, U.S. EPA, January 2021, pg. 2.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a)	(b)
(3) Net Monetized Benefit		
(4) Other Costs & Benefits (Non-Monetized)		

(5) Information Sources	<p>Economic Analysis of the National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Final Rule, Enforcement Targeting and Data Division, Office of Compliance, Office of Enforcement and Compliance Assurance, U.S. EPA, DCN 0197, September 14, 2015, Page xii, Docket No. EPA-HQ-OECA-2009-0274. https://www.epa.gov/sites/default/files/2015-09/documents/npdesea.pdf</p> <p>Cost Analysis for the U.S. Environmental Protection Agency’s (EPA) National Pollutant Discharge Elimination System (NPDES) 2021 Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activity, U.S. EPA, January 2021.</p> <p>9VAC25-20-110. Fee schedules for individual VPDES and VPA new permit issuance, and individual VWP, SWW, and GWW new permit issuance and existing permit reissuance.</p> <p>9VAC25-20-130. Fees for filing registration statements or applications for general permits issued by the board.</p> <p>9VAC25-20-142. Permit maintenance fees.</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)	No cost or benefit impacts on local partners are expected due to the limited extent of changes being made to the general permit regulation. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Without this general permit regulation, an individual permit would be required to conduct the regulated activity.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a)	(b)
(3) Other Costs & Benefits (Non-Monetized)		
(4) Assistance		

(5) Information Sources	
-------------------------	--

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)	No indirect costs or benefit impacts on families are expected due to the limited extent of changes being made to the general permit regulation. Single family residences do not typically conduct an activity that would be regulated by this general permit.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a)	(b)
(3) Other Costs & Benefits (Non-Monetized)	Families could potentially benefit from industry’s use of general permits. If this general permit did not exist, individual permits would be required for these activities, and the additional costs would likely be passed on to consumers, which would potentially include families.	
(4) Information Sources		

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)	No indirect costs or benefit impacts on small businesses are expected due to the limited extent of changes being made to the general permit regulation. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Without this general permit regulation, an individual permit would be required to conduct the regulated activity.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a)	(b)

(3) Other Costs & Benefits (Non-Monetized)	No costs or benefit impacts on small businesses are expected due to the limited extent of changes being made to the general permit regulation. If this general permit did not exist, individual permits and their associated fees and application process would be required for these activities.
(4) Alternatives	
(5) Information Sources	

Changes to Number of Regulatory Requirements

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
9VAC25-190-15	Statutory:	1	0	0	0
	Discretionary:	0	0	0	0
9VAC25-190-20	Statutory:	0	0	0	0
	Discretionary:	0	0	0	0
9VAC25-190-50	Statutory:	2	0	0	0
	Discretionary:	0	0	0	0
9VAC25-190-60	Statutory:	11	3	0	+3
	Discretionary:	0	0	0	0
9VAC25-190-70	Statutory:	191	1	0	+1
	Discretionary:	0	1	0	+1 ^A
Total Net Change of Statutory Requirements:					+4
Total Net Change of Discretionary Requirements:					+1

^A Added a discretionary requirement at Part I B 12 for discharges to waters with an approved TMDL. Providing a demonstration that the TMDL is being met simplifies the process of reissuing the NMMM GP for both the permittee and DEQ. This approach implements a water quality-based effluent limit to demonstrate compliance through discharge monitoring and the submittal of discharge monitoring reports (DMRs).

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved*	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
9VAC25-190-entire chapter-see table 1a for further explanation	This is the reissuance of a general permit. If the general permit	\$11,176 per permittee/ 5-year permit term for an individual permit	\$600 for 5 year general permit coverage	Currently 181 regulated entities covered by this general permit. Cost savings of

	regulation did not exist, individual permits would be required to be obtained for these regulated activities.			\$10,576 per permittee covered by the general permit. Cost savings to the regulated community- \$1,914,256 over 5 year permit term which represents a 95% cost savings over the cost of an individual permit.
9VAC25-190-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.

*Processing time data obtained from General Assembly Report RD848 - Permit Fee Program Evaluation – January 2022

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
NA	NA	

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			

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