



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES &
ENVIRONMENTAL CONTROL
DIVISION OF WATER
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Surface Water Discharges Section

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GENERAL PERMIT FOR STORM WATER DISCHARGES FROM
NEW SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS IN THE
STATE OF DELAWARE

PHASE II MS4 TIER II GENERAL PERMIT FACT SHEET

NPDES Permit Number: DE 0051217

State Permit Number: WPCC 3033/20

Permit Effective Date: **DATE**

Permit Expiration Date: **DATE**

The State of Delaware has developed a National Pollutant Discharge Elimination System (NPDES) General Permit for storm water discharges from Small Municipal Separate Storm Sewer Systems (MS4s). The General Permit addresses the federal requirements under Section 402 of the Clean Water Act (CWA) to reduce polluted storm water runoff that is contributed by the MS4 and which ultimately discharges to local rivers and streams without treatment.

This fact sheet provides details on permit history, statutory authority, water quality, the MS4 Remand Rule and the Storm Water Management Program's six minimum control measures, contact information and procedures for submitting comments.

Background and Permit History

The State of Delaware NPDES Phase II MS4 Tier II General Permit (GP) will provide coverage for those entities that have been identified as small MS4s under the criteria provided in 40 C.F.R.122.32 and do not currently maintain coverage under an individual Phase II MS4 permit.

Prior to the issuance of this Tier II General Permit, the State of Delaware permitted four Phase II small MS4s to discharge storm water: the City of Newark (DE 0051152), the City of Dover (DE 0051161), the Town of Middletown (DE 0051209), and the Delaware Department of Transportation (DeIDOT) for infrastructure maintained and operated in urbanized portions of Kent County (DE 0051144). The Department issued individual permits to Newark, Dover, and DeIDOT in 2003 and issued an individual permit to the Town of Middletown in 2013. All four of

these individual permits have since expired, but have been administratively extended pursuant to State and Federal regulations and are enforceable. These four individual Phase II permits provided the foundation on which this General Permit was formed.

The Phase II Final Rule requires permit coverage for all small MS4s that are located within the boundaries of a Bureau of the Census-defined “urbanized area” (UA) based on the latest decennial Census [40 C.F.R. § 122.32(a)]. (If a small MS4 is not located entirely within an urbanized area, only the portion that is within the urbanized area is regulated; *id.*). Under the 2010 Census, fourteen new MS4s in Delaware were identified as requiring permit coverage.

To address the differences between the four currently permitted small MS4s and the municipalities identified as new small MS4s, Delaware’s General Permit is divided into two tiers: permittees with an existing Phase II MS4 permit (Tier I) and new permittees that were identified under the 2010 Census (Tier II).

Under this tiered system, the Tier I GP provides discharge authorization to all existing Phase II MS4 permittees. The Tier II GP will be issued as an initial Phase II MS4 permit to those entities identified as new small MS4s through the results of data from the 2010 census that were not granted a waiver from NPDES coverage (see Appendix D). It will also be used for additional new MS4s requiring permit coverage as they are identified in future decennial censuses. Permittees that obtain coverage under the Tier II permit must apply for a Tier I permit after the first 5-year permit cycle.

Statutory Authority and Notice of Intent

The Delaware Department of Natural Resources and Environmental Control (Department) proposes to issue this Tier II General Permit to those designated entities subject to the discharge limitations, terms and conditions outlined in the permit. Section 402 of the Federal CWA of 1977, as amended by the Water Quality Act of 1987 and as subsequently modified, and 7 Del. C., Chapter 60 provide the statutory authority for permit issuance.

The operator of a regulated MS4 must submit a Notice of Intent (NOI) for coverage to the Department within 60 days after the effective date this General Permit, unless granted an extension in writing by the Department. The NOI must include the name of the discharging entity, the operator responsible for the management of the MS4 program, and descriptive information about the waters to which the MS4 drains. This information must include the names of all known waters that receive a discharge from the MS4, as well as the designated use and the impairment status of each of these waterbodies. A copy of the NOI form is provided on the Department’s website at:

<https://dnrec.alpha.delaware.gov/water/surface-water/npdes/municipal-storm-sewers/>

The Department may require future NOI submittals to be executed electronically in accordance with 40 CFR Part 127. Upon written notification from the Department all permittees and co-permittees must transition to eNOI submission in lieu of hardcopy submittals. The eNOI must be electronically signed.

Small MS4 Definition

Permittees seeking coverage under this permit include those entities that own or operate and maintain a portion of a municipal separate storm sewer system (MS4) that is either located in an urbanized area as determined by the decennial Census or is designated by the Department and do not have an existing MS4 permit. EPA defines “municipal separate storm sewer system” as “...a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) owned or operated by a State, city, town, borough, county, parish, district, association, or other public body...having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes...; (ii) Designed or used for collecting or conveying storm water;” [40 C.F.R. § 122.26(b)(8)]. Under this definition, any area that a regulated jurisdiction “owns or operates” infrastructure that conveys runoff can be covered under this NPDES MS4 permit.

Regulatory History of Storm Water Management and Water Quality

Section 402 of the Federal CWA, 33 U.S.C. § 1342, prohibits the discharge of any pollutant to waters of the United States from a point source, unless that discharge is authorized by a NPDES permit. Similarly, 7 Del. C., Chapter 60, § 6003(a)(2), prohibits the undertaking of any activity “in a way which may cause or contribute to the discharge of a pollutant into any surface or ground water” without first having obtained a permit from the Secretary of the Department.

Efforts to improve water quality under the NPDES program have traditionally focused on reducing pollutants in discharges of industrial process wastewater and municipal sewage. As pollution control measures have been implemented for these discharges, it has become evident that diffuse sources of water pollution (*i.e.*, those occurring over a wide area) are also major contributors to water quality degradation. Research has shown that storm water runoff from urban and industrial areas typically contain the same general types of pollutants that are often found in industrial wastewater discharges, with similar impacts on surface water quality. Pollutants commonly found in storm water runoff include nutrients, heavy metals, pesticides, herbicides, and synthetic organic compounds such as fuels, waste oils, solvents, lubricants and grease. These compounds can have damaging effects on both human health and aquatic ecosystems. In addition, the high volumes of storm water discharged from municipal separate storm sewer systems in areas of rapid urbanization have had significant impacts on aquatic ecosystems due to physical modifications such as bank erosion and widening of channels.

With the growing concern and realization that storm water runoff, including both urban storm water and runoff from industrial sites, greatly contributes to surface water quality impairment, Congress added specific provisions to the CWA in 1987 (the Water Quality Act of 1987) to address storm water. To view these provisions, see section 402(p) of the CWA, 33 U.S.C. § 1342(p). Congress directed the EPA to develop regulations and require NPDES permits for discharges of storm water from sites of industrial activities and from large and medium sized urbanized areas.

In 1990, EPA published Phase I of its municipal storm water regulations for medium and large cities or certain counties with populations of 100,000 or more (55 Fed. Reg. 47990 [Nov. 16, 1990]). The Phase II MS4 program, issued in 1999, requires small MS4s in urbanized areas, as well as small MS4s outside urbanized areas that are designated by the permitting authority, to obtain NPDES permit coverage for their storm water discharges (64 Fed. Reg. 68722 [Dec. 8, 1999]).

Phase II Remand Rule

On December 9, 2016, EPA published regulatory changes affecting NPDES small MS4 General Permits, known as the “Remand Rule” (81 FR 89,320). The new rule was promulgated in response to a remand from the U.S. Court of Appeals for the Ninth Circuit in *Environmental Defense Center et al. v. EPA*. The Court determined that provisions of the Phase II regulations (64 FR 68,722) lacked an opportunity for public comment on NOIs submitted by MS4 permittees. In addition, the Court found that Phase II regulations must be revised to preclude permittees from determining on their own the actions necessary to meet the MS4 permit standard. The Court emphasized that the permitting authority is responsible for establishing requirements that meet the standard of reducing pollutants to the maximum extent practicable (MEP). The Remand Rule under 40 CFR § 122.34(a) specifies that “the NPDES permitting authority must include permit terms and conditions to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality and satisfy the appropriate water requirements of the Clean Water Act.” In addition, this regulation specifies that permit requirements “must be expressed in clear, specific, and measurable terms.” To address the regulatory changes in the Remand Rule and associated guidance, the Department has developed this Tier II General Permit to meet the “Comprehensive General Permit” option as provided in 40 CFR §122.28(d)(1). This approach allows the Department to offer a general permit with clear, specific, and measurable terms and conditions.

The Remand rule applies to permit terms and conditions established for the six minimum control measures (MCMs), evaluation and reporting requirements, and water quality-based requirements. This can be expressed as either narrative, numeric, or other types of requirements. MEP is the statutory standard that describes the level of pollutant reduction that MS4 operators must achieve, but also includes a recognition that the effort may need to be increased under some circumstances.

Pursuant to 40 CFR §122.44(k), the Tier II General Permit requires MS4 operators to control storm water discharges through BMPs, including development and implementation of a comprehensive storm water management program (SWMP) as the mechanism to achieve the required pollutant reductions.

EPA views the MEP standard in the CWA as an iterative process. MEP should continually adapt to current conditions and BMP effectiveness. To satisfy this requirement, the Tier II GP includes requirements for tracking data collected through implementation of the six MCMs. MS4 Operators must analyze this information to identify trends, patterns, areas of concern and common problems. Based on the analysis, operators can then effectively adjust the program to

focus their resources on areas of greatest concern. For example, the permit requires MS4 operators to collect and track information on illicit discharges and annually evaluate the information to focus their efforts on areas with the greatest number of past illicit discharges and also on the sources of illicit discharges most commonly found. As information on sources of illicit discharges becomes available, additional public outreach should be focused on these areas and illicit discharge sources.

Permit Term and Conditions

The Department proposes to issue this Tier II General Permit to eligible small MS4 entities for a period not to exceed five (5) years, unless administratively extended, subject to the discharge goals, limitations, monitoring requirements, and operational requirements as outlined in the permit.

Conditions of this permit require eligible entities to possess the legal authority to: (1) control non-point source pollutants that enter the storm sewer system, (2) monitor storm water discharges, (3) provide mapping of the storm sewer system, and (4) develop and implement management programs to minimize the pollutant contribution to and from the MS4.

The Department developed the terms and conditions of this Permit to further the purposes of Title 7, Del. C., Chapter 60 and to achieve the water quality protection goals of the federal CWA and its implementing regulations.

The statutory provisions governing discharges from MS4s are contained in Section 402(p)(3)(B) of the CWA, 33 U.S.C. § 1342(p)(3)(B), as amended. In general, Congress provided that permits for discharges from MS4s:

- may be issued on either a system-wide or jurisdiction-wide basis;
- shall effectively prohibit any non-storm water discharges into the MS4s; and
- shall require controls to reduce the discharge of pollutants from MS4s to the MEP.

Clear, Specific, and Measurable Requirements

This permit largely follows the Phase II regulations put forth in 40 C.F.R. 122.34 and is based on the implementation of six MCMs. Any permittee receiving coverage under this Tier II General Permit shall develop, update, and report progress on working toward these measures in MS4 annual reports. Annual reports will show continual progress toward program goals and shall demonstrate full implementation of all permit requirements by the end of the five-year permit term. It is anticipated that during the course of this permit cycle, annual reports will be submitted electronically through an eReporting mechanism. The Department will provide details on eReporting as more information is available.

This Tier II General Permit also includes provisions that require permittees to maintain both adequate legal authority to control discharges to and from the MS4 and sufficient resources –

financial, staff, equipment and support –to implement the storm water management program and administer it effectively. In addition, permittees must undertake appropriate monitoring and reporting to assess progress and overall program effectiveness.

The Department may specify additional requirements or compliance schedules for any and all components of the permittees' comprehensive storm water management program (SWMP) to meet the intent of the NPDES MS4 program and to achieve the level of implementation and progress deemed necessary to achieve water quality protection. This would include any area specific or site-specific requirements identified through the Department's whole-basin or watershed assessment activities.

Storm Water Management Program Plan

Permittees under this Tier II General Permit must develop and implement a SWMP plan and will be required to update their plan to meet the permit requirements. An initial draft SWMP plan shall be submitted to the Department **within six (6) months** of the permit effective date. The Department will provide comments and recommendations on the SWMP plan within **60 days** of receipt from the permittee. The final SWMP plan shall be submitted to the Department within **twelve (12) months** from the permit effective date. Annual reports detailing the implementation, assessment, and evaluation of the SWMP plan are to be submitted to the Department by July 1 of each year.

The General Permit includes the requirement to update, continue to implement and assess the six MCMs of the SWMP plan as required in 40 CFR §122.34. A description of each measure and permittee requirements are detailed in the following sections.

Public Education and Outreach

Permittees are required to develop and implement a written public education and outreach program to reduce the discharge of pollutants caused by storm water runoff [40 CFR §122.34(b)(1)]. The permit contains specific requirements to assist the permittee with successfully implementing this program element, including:

- Establish a process by which the public can report water quality complaints that must include a phone number.
- Determine the target audience within the MS4 jurisdiction and develop materials to educate the audience on the impact of storm water pollution.
- Conduct at least one (1) educational event or campaign per year that may include distributing educational materials describing the impacts of storm water discharges on receiving waters and methods of reducing storm water pollution.
- Develop an employee training program that addresses appropriate topics to prevent or reduce discharge of pollutants into the storm drain system.

- Describe in annual reports to the Department how the educational programs complement and strengthen other programs of the MS4 GP.

The education and outreach program should be integrated with the other program elements and adjusted to address issues brought to the permittee from the public and from lessons learned in implementing other program elements.

Public Involvement and Participation

Public involvement in the permitting process and participation in storm water pollution prevention projects benefits the program by raising community awareness, sustaining pollution prevention practices, and saving valuable resources through volunteerism. Permittees are required to develop and implement a public involvement and participation program [40 CFR §122.34(b)(2)]. The permit contains specific requirements to assist the permittee with successfully implementing this program element, including:

- Comply with all State and federal public notice requirements for any regulated activity associated with this permit.
- Promote and perform two (2) public participation events annually within the jurisdiction such as adopt-a-stream program, storm drain stenciling, stream clean-ups, litter pick-up days, tree plantings, volunteer water quality monitoring and other pollution prevention events.
- Determine the target audiences within the MS4 jurisdiction to promote public involvement and participation activities. Identify key individuals and groups - public and private, who are interested in or affected by the SWMP plan.
- Allow public access to the annual progress reports and consider incorporating public comments when making improvements to the storm water management program.

Illicit Discharge Detection and Elimination

An illicit discharge is any discharge to a municipal separate storm sewer that is not composed entirely of storm water except that which is sanctioned by a NPDES permit under 40 CFR §122.34(b)(3) and Part 2.D.3 of the permit. Adequately preparing for, identifying, responding to, and mitigating illicit discharges will minimize the risk to water quality and human health.

Permittees are required to develop and implement a program to identify and eliminate illicit storm drain system connections and non-storm water discharges. Permittees must include public education and outreach activities aimed at reducing pollution from entering the MS4. The permit contains specific requirements to assist the permittee with successfully implementing this program element, including:

- Develop a map of the permittee's storm drain system identifying all outfalls, inlets, storm water management structures, and State waters that receive storm water discharges.
- Field verify outfall locations and map new conveyances, outfalls, and storm water management facilities as they are constructed or newly discovered.
- Adopt an ordinance or other regulation that prohibits illicit discharges into the storm drain system.
- Develop standard operating procedures that specify prioritizing outfall screening locations, inspection frequency and checklists, spill control, and illicit discharge investigation and elimination procedures.
- Conduct dry weather field screening for 20% of different outfalls each year. Prioritize field screening work based on the identified areas of higher likelihood of discharges
- Eliminate illicit discharges whenever possible.
- Develop a system for the public to report illegal dumping or spills and procedures to inform the public of the occurrence of an illegal discharge or improper waste disposal.
- Develop procedures for finding and reporting illicit discharges from sanitary sewer overflows.
- Maintain documentation of illicit discharge screening efforts and investigations.
- Report follow up investigations and status as a result of any suspected illicit discharge.
- Report remedial actions to address any water quality problems identified during illicit discharge screening efforts.

Construction Site Storm Water Runoff Control

Storm water discharges from construction activity can cause significant discharges of sediment and other pollutants to State waterbodies if not properly controlled.

Permittees are required to develop and implement a construction site storm water runoff control program [40 CFR §122.34(b)(4)]. This program is intended to ensure consistency with Delaware's Sediment and Stormwater Regulations and Title 7, Delaware Code, Chapter 40, through controlling storm water runoff from construction activities.

The Department has delegated the authority to administer the program to Delegated Agencies, listed on the Department website here: <https://dnrec.alpha.delaware.gov/watershed-stewardship/sediment-stormwater/delegated-agencies/>

The permittee shall implement and enforce a program to reduce the discharge of pollutants from active construction sites that result in land disturbance of greater than 5,000 square feet. The permittee may fulfill this requirement through a cooperative agreement with a Delegated Agency in accordance with Delaware Administrative Code 5101, Sediment and Stormwater Regulations. If the permittee chooses to rely on a Delegated Agency, it must indicate this in the SWMP plan and ensure that the fully executed cooperative agreement with the Delegated Agency clearly describes each of the participant's responsibilities to coincide with 40 CFR Part 122 and that the cooperative agreement is appended to the SWMP.

Any modifications or updates to state regulations shall be implemented as required. The permittees must develop their SWMP plan to meet all the requirements of the Sediment and Stormwater regulations. The permit contains specific requirements to assist the permittee with successfully implementing this program element, including:

- Requirements for the review and approval of Sediment and Stormwater Plans to ensure compliance with standards in the Delaware Sediment and Storm Water Regulations (7 Del. C. Ch. 40) and Special Conditions for Storm Water Discharges Associated with Construction Activities (7 Del. C. Ch. 60).
- Requirements for the use and maintenance of appropriate structural and nonstructural sediment and erosion controls and other BMPs to reduce polluted discharges to the MS4 during the time when construction is underway.
- Requirements and procedures for the inspection and enforcement of sediment and erosion controls and BMPs during construction to ensure that polluted runoff from the construction site is not occurring during active construction; and enforcement if necessary.
- Requirements for construction site operators to control wastes such as discarded construction or building materials, concrete truck washout, chemicals, litter, oil, and sanitation waste in consideration of potential water quality impacts.
- Requirements to ensure adequate training of site contractor in accordance with the current Delaware Sediment and Storm Water Regulations (DE Admin Code 5101) and Special Conditions for Storm Water Discharges Associated with Construction Activities (7 Del. C. Ch. 60).
- Inspection requirements to ensure that BMPs are properly constructed and installed.
- Procedures for receipt and consideration of information submitted by the public.

Post-Construction Storm Water Management

Inspection, proper operation, and maintenance of post-construction control structures will keep them functioning properly to protect State waterbodies from pollution. Permittees are required

to develop and implement a post construction storm water management program [40 CFR §122.34(b)(5)]. This program is intended to ensure consistency with Delaware's Sediment and Stormwater Regulations and Title 7, Delaware Code, Chapter 40, to address long term postconstruction storm water discharges from new construction and redeveloped sites.

The Department has delegated the authority to administer portions of the Post-Construction Stormwater Management program to Delegated Agencies throughout the state. The permittee may fulfill this requirement through a cooperative agreement with a Delegated Agency in accordance with Sediment and Stormwater Regulations. If the permittee chooses to rely on a Delegated Agency, it must indicate this in the SWMP plan and ensure that the fully executed cooperative agreement with the Delegated Agency clearly describes each of the participant's responsibilities to coincide with 40 CFR Part 122 and that the cooperative agreement is appended to the SWMP plan.

The Delaware Sediment and Stormwater Regulations specify the requirements for any construction activity that disturbs 5,000 square feet or more of earth. Since Delaware's program regulates more earth disturbing activities than the NPDES storm water program, the Department considers compliance with the State statute to be a qualifying local program and in compliance with this MCM. The permit contains specific requirements to assist the permittee with successfully implementing this program element, including:

- Conduct annual visual inspections of all publicly and privately owned post-construction BMPs and develop a maintenance program to prioritize repairs.
- Conduct a comprehensive inspection of at least 10% of stormwater management systems in such a manner as to ensure proper function. This may be a wet weather inspection after several consecutive days with rain and/or an in-depth evaluation of any signs of erosion, obstruction, pipe separation, or similar deficiencies that impede the facility's ability to function. Submit a summary of inspections and findings in the annual report. All such systems are to be inspected in this manner at least once during the term of this permit.
- Develop, implement, and enforce a program to address post-construction runoff from new development and redevelopment projects to ensure adequate long-term operation and maintenance of post-construction BMPs.
- Ensure staff is appropriately trained in proper BMP design, performance, inspection, and routine maintenance.

These measures are intended to ensure that stormwater maintenance systems are inspected and maintained sufficiently to preserve their functionality and prevent major system failures.

Pollution Prevention and Good Housekeeping

Efficient operations and properly planned and tracked maintenance of municipal facilities and work activities will help to protect receiving water quality by ensuring equipment and storm water structures are operating as intended. Pollution prevention and good housekeeping can also create cost savings for the MS4 operator by reducing repair and replacement costs of equipment and storm water control structures.

Permittees are required to develop and implement pollution prevention and good housekeeping techniques and procedures to reduce pollutants from all municipal operations (40 CFR §122.34(b)(6)). Components of this MCM include updating or developing new policies and procedures to effectively reduce pollutant discharges to the storm drain system from activities located at municipal properties such as water and wastewater treatment facilities, fleet yard operations, maintenance garages, parks and recreation sites, street and infrastructure maintenance operations, and grounds maintenance. The permit contains specific requirements to assist the permittee with successful implementation of this program element, including:

- Ensure that staff and contractors receive appropriate training designed to address the importance of water quality protection through pollution prevention and good housekeeping measures.
- Develop and implement pollution prevention plans at all facilities that outline good housekeeping procedures to detect and correct any pollutant discharge, release, leak, or spill on site.
- Street sweeping and catch-basin cleaning and inspections
- Document any spill, discharge, or release and efforts related to containment and clean up.
- Track and quantify efforts to reduce fertilizers, pesticides, and winter deicing materials.
- Ensure the permittee maintains proper coverage under the General Permit for Stormwater Discharges Associated with Industrial Activity. As a result, municipal facilities may require additional NPDES permit coverage beyond this MS4 permit.
- Consider the feasibility of incorporating cost effective runoff reduction techniques and green infrastructure when upgrading storm water systems.

SWMP Assessment and Evaluation Requirements

As part of the annual report, the permittee shall evaluate progress towards achieving compliance with all permit requirements and review the appropriateness of implemented BMPs as required by 40 CFR § 122.34(g). Based on the evaluation, permittees shall review all programs, BMPs, and MCMs outlined in the SWMP plan to determine their effectiveness and make program adjustments as necessary. The permittee is required to document any areas where additional measures or BMPs are needed and submit an implementation schedule.

Alternative Compliance Clause

Non municipal permittees who do not have the authority or ability to fulfill all permit requirements may request alternative protocols for compliance with those specified elements, such as a cooperative agreement with other agencies. Such requests should be made in writing to the Surface Water Discharges Section, Richardson and Robbins Building, 89 Kings Highway, Dover DE 19901. The department will review the request and provide a written determination of exemptions and/or alternative compliance arrangements within 30 days.

Waiver Program

The federal Phase II MS4 regulations specify that the permitting authority may waive permit coverage for small MS4s designated under the nationwide designation under certain conditions [40 CFR § 122.32(c)]. The Department has preemptively used the federal waiver criteria to evaluate several categories of small MS4s for applicability to the waiver process.

Waiver Criteria and Analysis

In Delaware's TMDLs, the Department discusses the sources of nutrient and bacteria pollutants. In the case of urban land uses, those sources consist primarily of sedimentation and erosion from construction, septic systems, wildlife and pet waste, and lawn fertilizers. Structural and nonstructural BMPs can intercept these pollutants and prevent them from washing into surface water. Structural BMPs for nutrients and bacteria include vegetated stream buffers, infiltration trenches, and grassed swales. Nonstructural BMPs include actions like pumping septic systems, educating the public to avoid over fertilizing their lawns, and properly managing pet waste.

The Department has established State-wide *Sediment and Stormwater Regulations* (7 DE Admin. Code 5101) for land disturbance on an area equal to or greater than one acre. The Department also delegated authority for reviewing construction plans conducting inspections to

NAME	Town Population	Town Area(acres)	Watershed	Watershed area (acres)	Ratio of Town area to watershed area	Watershed nonpoint source N load (lbs/yr)*	Watershed nonpoint source P load (lbs /yr)*	N Load from town (lbs/yr)**	Required TN load reduction for the Watershed per TMDL (lbs)	Required TN load reduction for the town per TMDL (lbs)	Ratio of N load reduction from town to N load reduction from the watershed
Viola	157	116	Murderkill	68,339	0.17%	507,141	8,833	3,483	152,142	1045	0.69%
Woodside	181	105	Murderkill	68,339	0.15%	507,141	8,833	3,139	152,142	942	0.62%
Magnolia	225	76	St. Jones	57,625	0.13%	523,349	38,331	2,286	209,340	914	0.44%
Frederica	774	179	Murderkill	68,339	0.26%	507,141	8,833	5,381	152,142	2152	1.41%
Blades	1241	356	Nanticoke	92,333	0.39%	1,829,745	43,435	10,667	548,924	3200	0.58%
Felton	1,298	380	Murderkill	68,339	0.56%	507,141	8,833	11,413	152,142	3424	2.25%
Wyoming	1,313	445	St. Jones	57,625	0.77%	523,349	38,331	13,339	209,340	5336	2.55%
Cheswold	1,380	488	Leipsic	67,039	0.73%	340,301	37,704	14,644	136,120	5858	4.30%
Delmar	1,597	433	BroadCreek/Pocomoke	62,720	0.69%	881,417	23,895	12,981	264,425	3894	1.47%
Clayton	2,918	733	Smyrna	40,930	1.79%	452,721	35,161	22,002	181,088	8801	4.86%
Camden	3,464	1,460	St. Jones	57,625	2.53%	523,349	38,331	43,794	209,340	17517	8.37%
Laurel	3,708	817	Broad Creek	40,320	2.03%	799,017	18,967	24,500	239,705	7350	3.07%
Smyrna	10,023	2,678	Smyrna	40,930	6.54%	452,721	35,161	80,326	181,088	32130	17.74%
Seaford	6,928	3,848	Nanticoke	92,333	4.17%	1,829,745	43,435	115,452	548,924	34636	6.31%

* Load as calculated during TMDL development process
** Towns loads assumed to be an average value used for the Chesapeake Bay Model

counties, county conservation districts, certain municipalities, and DeIDOT. As the NPDES permitting authority, the Department believes that the implementation of these *Regulations* meets the construction and post-construction storm water runoff control requirements of §122.34 (b)(4) and (5) and the establishment by a MS4 permittee of a construction and postconstruction runoff control program would be duplicative of that State-wide program. In addition, the Department calculated estimated load allocations for the remaining sources of TP, TN and bacteria that cause impairment by small new MS4s with a population under 1,000 residents and determined that the contributions are all less than 1% of the allocation for the watershed in each case.

As the permitting authority, the Department has concluded that these discharges are not substantial and storm water controls are not needed based on waste load allocations in the State’s TMDLs. These small new MS4s are therefore waived under the Tier II General Permit:

- Frederica
- Magnolia
- Viola
- Woodside

In order to qualify for a waiver, small new MS4s with a population between 1,000 and 10,000 residents must pass threshold criteria of controlling TP, TN and bacteria through the implementation of a construction/post-construction sediment and stormwater control program and the replacement of onsite septic systems with centralized wastewater treatment. The

Department has determined that under the following circumstances, a MS4 municipality may be waived from the Tier II General Permit, where:

1. the MS4 contributes less than 5% of the total load of nutrients and bacteria to the watershed, and
2. the MS4 does not drain to a waterbody that is classified as ERES, and
3. new construction and post-construction stormwater standards are ensured through the application of the statewide Sediment and Stormwater Regulations by the delegated agency, and
4. the MS4 is served by a centralized wastewater treatment system that has its own National Pollutant Discharge Elimination System (NPDES) permit or State of Delaware spray irrigation and biosolids permits.

The Department has calculated the estimated contributions of the small new MS4s and found that the following communities discharge less than 5% of the waste load allocation and finds that they qualify for a waiver because storm water controls are not needed and future discharges do not have the potential to result in exceedances of water quality standards:

- Cheswold
- Clayton
- Felton
- Frederica
- Wyoming

For small new MS4s with populations below 10,000 residents, which discharge to an ERES waterbody, the permitting authority waives MS4s where:

1. the MS4 community contributes less than 1% of the load of nutrients and bacteria to the watershed, and
2. new construction and post-construction stormwater standards are ensured through the application of the statewide Sediment and Stormwater Regulations by the delegated agency, and
3. the MS4 municipality is served by a centralized wastewater treatment system that has its own National Pollutant Discharge Elimination System (NPDES) permit or State of Delaware spray irrigation and biosolids permits.

DNREC has calculated an estimate of the contributions of small new MS4s with outfalls in ERES waters and is waiving:

□ Blades

In the process of evaluating the impacts of small new MS4s to receiving waters, the Department considered not only stream classifications but also watersheds and downstream impacts. In the case of Delmar, a greater portion of the receiving Broad Creek/Pocomoke watershed lies within the State of Maryland than in Delaware and the Maryland Department of the Environment (MDE) has waived Delmar, Maryland from the Maryland MS4 General Permit. MDE found that a local TMDL analysis performed for Johnson Pond showed that the total urban load contribution to the pond was 10% and the Town of Delmar's portion of that load was insignificant. Based on these modeling results, MDE determined that the Town's stormwater discharge does not impact local TMDLs. In addition, MBSS data collected from 2007 to 2016 showed that local streams have consistently met aquatic life criteria for fish and other stream biota during this ten-year sampling period. These data indicated that Delmar is eligible for a waiver.

The Department, in considering the MS4 permit waiver determination of the downstream state, has concluded that Delmar, Delaware is waived on the basis that water quality controls are not needed based on waste load allocations and future discharges do not have the potential to result in downstream water quality exceedances.

Under Delaware's MS4 Permitting Program, each of these waived MS4s are still required to submit a Notice of Intent to accept a waiver from the GP to comply with state and federal regulations.

While the Department has made a determination regarding waiver eligibility, the Department reserves the right to retract a waiver if we become aware of information that counters our conclusion regarding water quality impacts of the communities proposed to be waived in this document. Those communities that have been waived during this cycle will be reviewed following the 2020 Census results and upon each reissuance of this permit by the Department to determine if conditions have changed.

Public Notice and Process for Reaching a Final Decision

The public notice of the Department's issuance of the Tier II General Permit outlined herein were published in the Wilmington News Journal and the Delaware State News on July 8, 2020. Interested persons were invited to submit their written views on the permit and the tentative determinations made with respect to this permit. The Department did not hold a public hearing on this application as the Department did not receive a meritorious request to do so. A public hearing request shall be deemed meritorious if it exhibits a familiarity with the application and a reasoned statement of the permit's probable impact. The request for a public hearing shall be in writing and shall state the nature of the issues to be raised at the hearing. All comments received by the close of

business at 4:30 pm on September 6, 2020, were considered by the Department in preparing the final permit.

Response to Public Comments

During the public comment period the Department received extensive comments. The Department determined that some changes were substantive enough to justify a second public notice and comment period.

The Department has carefully considered all comments received and has made modifications to the Draft Permit in response to many of them. This section will address only provisions that are new and notably different from the 2020 Draft Permit.

The following sections of the permit have been modified from the publicly reviewed version. The Department's commentary on the rationale for the modifications are in italics. The original Fact Sheet and Draft General Permit from 2020 is posted on the DNREC website.

Part I. Coverage under this General Permit

E. Storm Water Management and Water Quality

1. Reduce pollutants to the maximum extent practicable to the MS4
2. Effectively reduce pollutants in stormwater discharges or other unauthorized discharges into MS4 as necessary to achieve Delaware's Surface Water Quality Standards to the maximum extent practicable
3. Comply with all other provisions and requirements contained in this General Permit

In reference to maximum extent practicable (MEP): The federal Clean Water Act (CWA) provides the National Pollutant Discharge Elimination System (NPDES) permits for Municipal Separate Storm Sewer Systems (MS4) must require municipalities to reduce pollutants in their storm water discharges to the MEP. CWA 402(p)(3)(B)(iii). MS4 permits "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants." The draft permit has been updated with the term maximum extent practicable to be in line with this standard.

Part II. Storm Water Management Program Plan

A. Schedule for Implementing Plan for New Permittees

Upon Department approval of the NOI, the permittee shall develop and provide adequate resources to fully implement the SWMP plan according to the following submission deadlines.

1. An initial draft SWMP plan consisting of an outline of the basic program elements shall be submitted to the Department for review within six (6) months of the permit effective date. The Department will provide comments and recommendations on the SWMP plan within 60 days of the receipt from the permittee
2. The final comprehensive SWMP plan shall be submitted to the Department within twelve (12) months of the permit effective date and after receiving a review response from the Department.
3. This Tier II General Permit includes milestones for developing the SWMP plan that shall be implemented prior to finalization of the SWMP plan. A table of milestones is listed in Appendix A.

The deadline for SWMP submission was extended from 60 days from submission of the NOI to six (6) months from the permit effective date. The intent is for new MS4s to submit their SWMP plan for review, though not for approval, per the Remand Rule. The SWMP plan will not be an enforceable document.

4. Illicit Discharge Detection and Elimination (IDDE)

- c. develop, maintain, implement, and enforce a written Illicit Discharge Detection and Elimination (IDDE) program that shall include the following elements:
 - 2) Develop and implement a written dry weather field outfall screening program to assist in detecting and eliminating illicit discharges. Dry weather field screening must consist of field screening of outfalls and, as needed, field evaluations. Starting in the **first (1) year** of the permit effective (**by DATE**), the permittee shall conduct dry weather field screening for 20% of different outfalls each year. Prioritize field screening work based on the identified areas of higher likelihood of discharges.
 - 7) Within ninety (**90**) days of the Permit effective (**DATE**), the permittee shall develop procedures to recognize and report any sanitary sewer overflows or leaking on-site sewage disposal systems that discharge into the small MS4 and submit those procedures to the Department for review and approval.

For any SSO that enters the MS4 or that has the potential to impact the MS4, a written report shall be provided to the Department's Surface Water Discharges Section at the address noted in this permit within **five (5) days** of the release.

Dry weather field outfall screening is a central component of a comprehensive IDDE program. Requiring field screening for 20% of outfalls, prioritizing those with a high risk of illicit discharge, ensures adequate diligence in monitoring for dry weather flow and unreported illicit discharges. Requiring a different 20% each year ensures that all outfalls will be inspected during the course of this permit. Subsequently, as a Tier I permittee outfall inspection can be selected entirely based on risk assessment using data collected over the course of the Tier II permit term.

The threshold quantity of 50 gallons in the draft permit has been changed to any quantity in recognition that any amount of sewage discharged to the MS4 is by definition an illicit discharge. Any incidence of an

SSO that discharges sewage to the MS4 is an illicit discharge and will be addressed under the permittees IDDE protocols.

5. Post Construction Storm Water Management

- c. The permittee shall identify and map all stormwater management systems which may discharge to the MS4 and each year conduct a comprehensive inspection of at least 10% of these stormwater management systems in such a manner as to ensure proper function. A summary of the inspections and findings shall be submitted in the annual report. All stormwater management systems are to be inspected in this manner at least once in the term of this permit.

The Department will require permittees to inspect 10% of their stormwater management systems comprehensively to maintain, clear, specific and measurable standards. A revision to the draft permit was made to provide permittees with the ability to develop their own risk based inspection and maintenance programs while maintaining a minimum standard for annual inspections. The intent is to ensure that stormwater facilities are being inspected and maintained sufficiently using standard procedures, requiring 10% each year ensures that there is never a year when no facilities are inspected without rigidly scheduling the pace of annual inspections.

6. Pollution Prevention and Good Housekeeping

- c. Within three (3) years of the permit effective date (by **DATE**), quantify and report pollution prevention efforts related to the following activities.
 - 1) Permittees that own, operate, or maintain roads shall develop a street sweeping program which shall be described within the SWMP. Permittees must demonstrate by research, modeling, or otherwise appropriate scientific literature that substantiates the adequacy for pollutant removal and improved water quality. The SWMP shall also describe procedures for the proper disposal of street sweeping debris and waste. All street sweeping activities should be summarized in an annual report and include information about size, location, and frequency of area swept. All curbed streets with storm drains owned or operated by the permittee shall be swept a minimum of four times annually, weather and surface conditions permitting, unless and until it is demonstrated that pollutant removal and improved water quality would be adequately achieved otherwise.
 - 2) If the permittee's MS4 contains catch basins, the permittee shall maintain a catch basin program that ensures routine cleaning and maintenance of catch basins. A map of the locations of catch basins and a summary of the volume of solids removed and maintenance performed to comply with this permit shall be included in the annual report. All catch basins must be inspected and maintained as necessary and at a minimum of once during the term of this permit.

Street sweeping is a highly effective and therefore critically important measure in pollutant removal and water quality improvement. This element requires permittees to develop an effective street sweeping program and establishes a minimum standard of effort.

The Department considers catch basin maintenance to be an integral part of Good Housekeeping and will require an effective catch basin maintenance program to be followed. This element was revised in the draft permit allow permittees to develop their own risk-based program while requiring that the program be sufficiently effective.

Part IV. Standard Permit Conditions

B. Alternative Compliance Clause

Non municipal permittees who do not have the authority or ability to fulfill all permit requirements may request alternative protocols for compliance with those specified elements, such as a cooperative agreement with other agencies. Such requests should be made in writing to the Surface Water Discharges Section, Richardson and Robbins Building, 89 Kings Highway, Dover DE 19901. The department will review the request and provide a written determination of alternative compliance arrangements within 30 days.

This clause is added to the draft permit to accommodate non-municipal permittees such as DeIDOT, Universities, and other entities who do not have enforcement authorities or other mechanisms to implement specific permit requirements.

Second Public Notice and Process for Reaching a Final Decision

The public notice of the Department's issuance of the Tier II General Permit outlined herein will be published in the Wilmington News Journal and the Delaware State News on June 8th, 2022. Interested persons are invited to submit their written views on the permit and the tentative determinations made with respect to this permit. The Department will not hold a public hearing on this application unless the Department receives a meritorious request to do so or unless the notice of this proposal generates substantial public interest. A public hearing request shall be deemed meritorious if it exhibits a familiarity with the application and a reasoned statement of the permit's probable impact. The request for a public hearing shall be in writing and shall state the nature of the issues to be raised at the hearing. All comments received by the close of business at 4:30 pm on July 8th, 2022, will be considered by the Department in preparing the final permit.

Department Contact for Additional Information

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