



STATE OF DELAWARE
**DEPARTMENT OF NATURAL RESOURCES AND
 ENVIRONMENTAL CONTROL**

COMMERCIAL &
 GOVERNMENT SERVICE

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NPDES PESTICIDE GENERAL PERMIT (PGP)
 GENERAL PERMIT FOR POINT SOURCE DISCHARGES FROM
 THE APPLICATION OF PESTICIDES TO THE WATERS OF THE STATE
AQUATIC PESTICIDES DISCHARGES GENERAL PERMIT FACT SHEET

NPDES Aquatic Pesticide Permit No. DE0051241
 Permit Effective Date:
 Permit Expiration Date:

Point Sources that Discharge to Waters of the State shall have a NPDES pesticide discharge permit issued by DNREC under both State and Federal permitting authority.

The State of Delaware has developed a National Pollutant Discharge Elimination System (NPDES) General Permit for point source discharges from the application of pesticides to the waters of the state. The General Permit addresses both the state and federal requirements under Section 402 of the Clean Water Act (CWA).

This fact sheet provides details on permit history, statutory authority, water quality, types of pest control, best management practices, contact information and procedures for submitting comments.

Background and Permit History

History of Pesticide Application Regulation

EPA regulates the sale, distribution and use of pesticides in the United States under the statutory framework of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to ensure that when used in conformance with FIFRA labeling directions, pesticides will not pose unreasonable risks to human health and the environment. All new pesticides, for which registration is required, must undergo a registration procedure under FIFRA during which EPA assesses a variety of potential human health and environmental effects associated with use of the product. Under FIFRA, EPA is required to consider the effects of pesticides on the environment by determining, among other things, whether a pesticide "will perform its intended function without unreasonable adverse effects on the environment," and whether "when used in accordance with widespread and commonly recognized practice [the pesticide] will not generally cause unreasonable adverse effects on the environment." 7 U.S.C. 136a(c)(5). In performing

this analysis, EPA examines the ingredients of a pesticide, the intended type of application site and directions for use and supporting scientific studies for human health and environmental effects and exposures. The applicant for registration of the pesticide must provide specific data from tests done according to EPA guidelines.

When EPA approves pesticides for a particular use, the Agency imposes restrictions through labeling requirements governing such use. The restrictions are intended to ensure that the pesticide serves an intended purpose and avoids unreasonable adverse effects. It is illegal under section 12(a)(2)(G) of FIFRA to use a registered pesticide in a manner inconsistent with its labeling. States have primary authority under FIFRA to enforce “use” violations, but both the states and EPA have ample authority to prosecute pesticide misuse when it occurs.

Statutory Authority

The Department of Natural Resources and Environmental Control (the Department) proposes to issue this Aquatic Pesticides Discharges 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 provides the statutory authority for permit issuance.

Section 301(a) of the Clean Water Act (CWA) provides that “the discharge of any pollutant by any person shall be unlawful” unless the discharge is in compliance with certain other sections of the Act. 33 U.S.C. 1311(a). The CWA defines “discharge of a pollutant” as “(A) any addition of any pollutant to navigable waters from any point source, (B) any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft.” 33 U.S.C. 1362(12). A “point source” is any “discernible, confined and discrete conveyance” but does not include “agricultural stormwater discharges and return flows from irrigated agriculture.” 33 U.S.C. 1362(14).

The term “pollutant” includes, among other things, “garbage... chemical wastes, biological materials ...and industrial, municipal, and agricultural waste discharged into water.” One way a person may discharge a pollutant without violating the section 301 prohibition is by obtaining authorization to discharge (referred to herein as “coverage”) under a section 402 NPDES permit (33 U.S.C. 1342). Under section 402(a)(1), EPA may “issue a permit for the discharge of any pollutant, or combination of pollutants, notwithstanding section 1311(a)” upon certain conditions required by the Act.

Proposed Effluent Limitations and Coverage of PGP

The Department proposes to issue this NPDES Pesticide General Permit for a period not to exceed five (5) years, subject to the effluent limitations in the general permit. The following are the basis for the proposed limitations.

The provisions of the PGP are designed to improve protection of our nation’s water quality by minimizing discharges of pesticides to water of the United States. Each permittee is authorized to discharge in accordance with the conditions set forth in this permit from the date noticed of permit coverage, lasting through the expiration date of this General Permit. Only Operators meeting the eligibility requirements outlined in the PGP may be covered under the permit described in Part 9.8.3 who: 1) apply biological pesticides or chemical pesticides that leave a residue (hereinafter collectively “pesticides”) for Pesticide Use Patterns described below; and (2) do so directly to Waters of the State or indirectly to systems that discharge into Waters of the

State (i.e. stormwater wet ponds), and excludes pesticide applications for Federal Facilities Under CWA section 502(14), agricultural stormwater and irrigation return flow are exempt from NPDES permits. Furthermore, applications that do not reach waters of the United States do not need permit coverage.

If an Operator does not meet the eligibility provisions of the PGP, the operator's point source discharges to waters of the United States from the application of pesticides will be in violation of the CWA, unless the Operator has obtained coverage under another permit or the CWA exempts these discharges from NPDES permit requirements. Violations of any of the following Effluent Limitations may result in enforcement action unless the Secretary determines that a discharge is an "Upset" in accordance with Part 9.8.16.10 of this permit.

The activities covered by this permit generally include the use patterns and types of pest control activities described in the vacated 2006 NPDES Pesticides Rule. Thus, the PGP covers the discharge of pesticides (biological pesticides and chemical pesticides which leave a residue) to waters of the United States resulting from the following use patterns:

i. Mosquito and Other Flying Insect Pest Control

This use pattern includes the application, by any means, of chemical and biological insecticides and larvicides into or over water to control insects that breed or live in, over, or near waters of the United States. Applications of this nature usually involve the use of ultra-low volume sprays or granular larvicides discharged over large swaths of mosquito breeding habitat and often are performed several times per year. For mosquitoes and other flying insect pests, the annual treatment area threshold has been set at 6,400 acres. EPA understands that the vast majority of mosquito control and abatement districts in the United States manage areas significantly larger than this threshold and may reasonably expect to exceed it during any given year.

ii. Weed and Algae Pest Control

This use pattern includes the application, by any means, of contact or systemic herbicides to control vegetation and algae (and plant pathogens such as fungi) in waters of the United States and at water's edge, including ditches and/or canals. Applications of this nature typically are single spot pesticide applications to control infestations or staged large scale pesticide applications intended to control pests in several acres of waterway. Pesticide applications in a treatment area may be performed one or more times per year to control the pest problem. For weeds and algae, the annual treatment area threshold has been set at 80 acres or 20 linear miles of pesticide application to canals and other waters of the United States. This threshold has been set to capture Operators treating relatively large portions of surface waters and watersheds, such as water management districts, wildlife and game departments, and some homeowner and lake associations.

iii. Animal Pest Control

This use pattern includes the application, by any means, of pesticides into waters of the United States to control a range of animal pests for purposes such as fisheries management, invasive species eradication, or equipment operation and maintenance. Applications of this nature are often made over an entire or large portion of a waterbody as typically the target pests are mobile. Multiple pesticide

applications to a waterbody for animal pest control are often made several years apart. Invasive and nuisance aquatic animals are most commonly treated by public agencies such as departments of fish and game, or utilities such as water management districts that manage areas of surface water in excess of 80 acres or 20 linear miles. The high mobility and prolific breeding abilities that necessitate control of aquatic animals usually mean that pesticide applications most often occur in the entirety or large portions of the water bodies they inhabit.

iv. Forest Canopy Pest Control

This use pattern includes pest control projects in, over, or to forest canopies (aerially or from the ground) to control pests in the forest canopy where waters of the United States exist below the canopy. Applications of this nature usually occur over large tracts of land and are typically made in response to specific pest outbreaks. EPA understands that for this use pattern pesticides will be unavoidably discharged into waters of the United States while controlling pests over a forest canopy as a result of pesticide application. These pests are not necessarily aquatic (e.g., airborne non-aquatic insects) but are detrimental to industry, the environment, and public health. Note: EPA recognizes that mosquito adulticides are applied to forest canopies, and this application is covered under the "Mosquito and Other Flying Insect Pest Control" use pattern.

Forest canopy pest suppression programs are designed to blanket large tracts of terrain, throughout which operators may not be able to see waters of the United States beneath the canopy. EPA has set the annual treatment area threshold at 6,400 acres for this use pattern with the understanding that this will exclude only the smallest applications from the NOI requirement. These smaller applications generally occur on private lands. Therefore, the threshold appropriately captures most Operators engaging in this use pattern, particularly public agencies managing large tracts of land.

Notice of Intent (NOI)

Submittal of a Notice of Intent (NOI) serves as notification of the intention of the facility or individual identified on the NOI seeking permit coverage under the PGP and intends to adhere to the provisions of *The Regulations Discharges from the Application of Pesticides to Waters of the State*. The Pesticide Application Operator (Operator) must submit a Notice of Intent (NOI) for coverage to the Department within Ninety (90) 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 pesticide applications and descriptive information about the waters to which the applications are to be applied. The NOI application must be submitted electronically on the Department's website at [eNOI - Notice of Intent](#)

Operator Responsibilities

Operators are required to comply with all other applicable federal or state laws and regulations that pertain to application of pesticides. At minimum, all Operators must minimize the discharge of pesticides to Waters of the State from the application of pesticides through the use of Pest Management Measure defined in 9.8.2. Regular maintenance activities shall be practiced and improper pesticide mixing and equipment loading must be avoided. When Operators prepare pesticides for application they must mix them correctly and prepare only the amount of material needed.

The pesticide mixing area must be carefully chosen and areas where a spill will discharge into waters of the United States must be avoided. Some basic practices Operators must consider are:

- Inspect pesticide containers at purchase to ensure proper containment;
- Maintain clean storage facilities for pesticides;
- Regularly monitor containers for leaks;
- Rotate pesticide supplies to prevent leaks that may result from long term storage; and
- Promptly deal with spills following manufacturer recommendations.

To minimize discharges of pesticides, Applicators must ensure that the rate of application is calibrated (*i.e.* nozzle choice, droplet size, etc.) to deliver the appropriate quantity of pesticide needed to achieve greatest efficacy against the target pest. Improperly calibrated pesticide equipment may cause either too little or too much pesticide to be applied. This lack of precision can result in excess pesticide being available or result in ineffective pest control. When done properly, equipment calibration can assure uniform application to the desired target and result in higher efficiency in terms of pest control and cost. It is important for Applicators to know that pesticide application efficiency and precision can be adversely affected by a variety of mechanical problems that can be addressed through regular calibration. Sound maintenance practices to consider are:

- Choosing the right spray equipment for the application
- Ensuring proper regulation of pressure and choice of nozzle to ensure desired application rate
- Calibrating spray equipment prior to use to ensure the rate applied is that required for effective control of the target pest
- Cleaning all equipment after each use and/or prior to using another pesticide unless a tank mix is the desired objective and cross contamination is not an issue
- Checking all equipment regularly (*e.g.*, sprayers, hoses, nozzles, etc.) for signs of uneven wear (*e.g.*, metal fatigue/shavings, cracked hoses, etc.) to prevent equipment failure that may result in inadvertent discharge into the environment
- Replacing all worn components of pesticide application equipment prior to application.

Pesticide Discharge Management Plan (PDMP)

A Pesticide Discharge Management Plan (PDMP) must be developed only by the following operators:

- (1) All State of Delaware operators who perform pesticide application under the realm of this Subsection as part of their job duties; or,
- (2) Operators that are considered to be a Large Entity (as defined in 9.8.2) exceeding the Annual Treatment Thresholds (as defined in 9.8.2).

Applicable operators as described above, have the responsibility to prepare an up-to-date PDMP for the duration of coverage. The PDMP documents how operators will implement the non-numeric effluent limitations, including the evaluation and selection of Pest Management Measures to meet those non-numeric effluent limitations in order to minimize discharge. If

operators rely upon other documents to comply with the non-numeric effluent limitations, such as a pre-existing pest management plan, the operator(s) must attach to the PDMP a copy of any portions of any documents that are used to document the implementation of the non-numeric effluent limitations. The PDMP itself does not contain effluent limitations; rather it constitutes a tool both to assist the Operator in documenting what pest management measures it is implementing to meet the effluent limitations, and to assist the permitting/compliance authority in determining whether the effluent limitations are being met. The operator will be required to develop a PDMP consistent with the deadlines outlined in Table 1 below:

Table 1. Pesticide Discharge Management Plan Deadline	
Category	PDMP Deadline
Operators who know prior to commencement of discharge that they will meet the criteria of being a Large Entity.	Within 90 days of regulatory promulgation or prior to first pesticide application covered under this permit.
Operators who do not know until after commencement of discharge that they will exceed the thresholds associated with becoming a Large Entity, as identified in 9.8.2.	Prior to exceeding thresholds associated with becoming a Large Entity.
Operators commencing discharge in response to a Declared Pest Emergency as defined in 9.8.2 that will cause the Operator to exceed thresholds associated with becoming a Large Entity.	No later than 90 days after responding to Declared Pest Emergency.

Contents of PDMP

Each permittee required to submit and implement a PDMP must meet specific requirements under Part 9.8.10.3 of the general permit. Permittees must document the following: (1) location and address of where PDMP, records, and associated documents are kept (2) a pesticide discharge management team; (3) problem identification, (4) a general location map that identifies geographic boundaries of the areas to which the plan applies and locations of the Waters of the State; (5) a description of pest management options evaluation; (6) response procedures for spill response and adverse incident response; and (7) any eligibility considerations under other federal laws.

Recordkeeping and Annual Reporting

The PGP requires all operators and applicators to maintain certain records to help them assess performance of Pest Management Measures and to document compliance with permit conditions. Recordkeeping and reporting requirements apply from the time any authorized operator begins discharging under the PGP and are consistent with Federal regulations at 40 CFR 122.41(j). Part 9.8.12 of the PGP describes the requirements for a basic set of records to be maintained by all operators and applicators, as well as specific requirements depending on the type of operator (*i.e.*, Applicator, For-Hire Applicators, NOI submitting Decision-maker that is a small entity and NOI submitting Decision-maker that is a large entity). Operators can rely on records and documents developed for other programs, such as requirements under FIFRA, provided all requirements of the permit are satisfied.

Annual Reports

In addition to recordkeeping, EPA requires Operators who are required to submit a NOI and are large entities to submit annual reports that contain basic information on their pesticide discharges to waters of the United States. Operators that are required to have a PDMP, as outlined in 9.8.10, must submit an annual report to the Department. Once an operator meets the obligation to submit an annual report, the operator must submit the annual report each calendar year thereafter for the duration of coverage under the general permit, whether or not the operator has discharges from the application of pesticides in any subsequent calendar year. The annual report must be submitted no later than February 1 of the following year for all pesticide activities covered under Part 9.8.13.1 of the permit, occurring during the previous calendar year. Annual Reports shall be submitted electronically at Annual Reports shall be submitted electronically on the Department's website at [eNOI - Notice of Intent](https://enoι.dnrec.delaware.gov) (<https://enoι.dnrec.delaware.gov>) unless otherwise instructed by the Department.

This information in the annual report will be used by EPA to assess permit compliance and to determine whether additional controls on pesticide discharges are necessary to protect water quality. For example, these data will help the Agency identify where pesticide discharges are occurring, and the types of pesticides being discharged. The annual report provides specific information concerning the scope and nature of discharges permitted under the PGP.

The annual report is a summary of the pest control activities for each applicable use pattern. For the 2026 PGP, additional information will be required including mapping coordinates, watershed chronology and electronic reporting. The report must contain:

- a. Operator's name and contact information;
- b. NPDES permit tracking number(s);
- c. Contact person name, title, e-mail address (if any), and phone number; and
- d. For each treatment area, report the following information:
 - i. Description of treatment area, including location (Longitude and Latitude) and size (acres or linear feet) of treatment area, the watershed (www.dnrec.delaware.gov/watershed-stewardship/assessment) in which the treatment area is located and identification of any waters of the United States, either by name or by location, to which pesticide(s) are discharged;
 - ii. Pesticide use pattern(s) (*i.e.*, mosquito and other flying insects, weed and algae, animal pest, or forest canopy) and target pest(s);
 - iii. Company name(s) and contact information for pesticide Applicator(s), if different from the Decision-maker;
 - iv. Total amount of each pesticide product applied for the reporting year by the EPA registration number(s) and by application method (*e.g.*, aerially by fixed-wing or rotary aircraft, ground based spray, etc.);
 - v. Whether this pest control activity was addressed in a PDMP prior to pesticide application;
 - vi. If applicable, any adverse incidents as a result of these treatment(s), for incidents, as described in Part 9.8.11.2; and
 - vii. If applicable, description of any corrective action(s), including spill responses, resulting from pesticide application activities and the rationale for such action(s).
 - viii. Annual Reports shall be submitted electronically by email to Aquatic.Pesticides@delaware.gov unless otherwise directed by the Department.

Notice of Termination (NOT)

To terminate coverage under the permit, any Operator who submitted a NOI to obtain permit coverage is required to submit a Notice of Termination (NOT) in accordance with the information identified in Part 9.8.7 and thereof shall be submitted on the Department's eNOI system formally approved. Failure to submit a complete and accurate NOT form will result in the facility being denied termination.

More Information

Application of pesticides regulations, applicability, the current permit, reporting, forms and related links are available on DNREC's website at www.dnrec.delaware.gov/water/commercial-government/npdes/aquatic-pesticides/

Public Notice and Process for Reaching a Final Decision

The public notice of the Department's General Pesticide Application NPDES permit including all applicable supporting permit documentation will be published in the Delaware State News and The News Journal and posted on DNREC's website. After this General Permit is issued, the Department will proceed with public noticing groups of accepted NOI's that have met all the requirements to be covered under this General Permit. The Department will continue with this process until all facilities which are required to be under the permit are covered.

Department Contact for Additional Information

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