



State of New Jersey

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

Division of Water Quality
Water Pollution Management Element
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SHAWN M. LATOURETTE
Commissioner

Via Email Only
January 3, 2025

Re: Draft Surface Water Master General Permit Renewal
Category: PGP - Pesticide Application (PGP) Discharge (GP)
NJPDES Permit No. NJ0178217

Dear Interested Parties:

Enclosed is a **draft** NJPDES permit action identified above which has been issued in accordance with N.J.A.C. 7:14A. This master general permit serves to renew the existing Master Pesticide Application Discharge General Permit. This permit renewal authorizes the application of biological and chemical pesticides in, over, including near the surface waters of the State where such application results in discharge to waters of the United States through the Federal Insecticide, Fungicide, and Rodenticide Act (“FIFRA”). This general permit will regulate the following pesticide applications: nuisance insect control (mosquito and fly control), aquatic pest control (i.e., weeds, algae), aquatic nuisance animal control, aerial treatment of forest canopy, treatment for agriculture activities, and utility transmission and distribution line vegetation control. A full copy of the master PGP general permit is available on the Department’s website at https://dep.nj.gov/dwq/permitting_information/permits_application_forms_and_checklists/-DSW.

Notice of this draft permit action appeared in the January 2, 2025, *DEP Bulletin*. The *DEP Bulletin* is available on the internet at <http://www.state.nj.us/dep/bulletin>. In addition, notice of this draft permit will appear in the major Northern, Central, and Southern New Jersey newspapers listed below. In accordance with N.J.A.C. 7:14A-15.10(c)1i, the public comment period will close thirty days after the latest newspaper’s publication date.

Newspaper	County
<i>Courier Post</i>	Burlington, Camden, and Gloucester
<i>The Daily Record</i>	Morris
<i>The Press of Atlantic City</i>	Atlantic, Cumberland, and Ocean
<i>The Star Ledger</i>	Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, and Warren
<i>The Times</i>	Mercer
<i>South Jersey Times</i>	Salem

As detailed in the *DEP Bulletin* and aforementioned newspapers, written comments or a request that the Department hold a non-adversarial public hearing on the draft document must be submitted in writing to Brett Callanan, Chief, Mail Code 401-02B, Bureau of Surface Water and Pretreatment Permitting, P.O. Box 420, Trenton, NJ 08625-0420 by the close of the public comment period. Comments via email are also acceptable and can be sent to dwq_bswp@dep.nj.gov. All persons, including the applicant, who believe that any condition of this draft document is inappropriate or that the Department's tentative decision to issue this draft document is inappropriate, must raise all reasonable arguments and factual grounds supporting their position, including all supporting materials, during the

public comment period. The Department will respond to all significant and timely comments upon issuance of the final document. The permittee and each person who has submitted written comments will receive notice of the Department's final decision to issue, revoke, or redraft the document.

If you have questions or comments regarding the draft action, please contact Kirstin Victorella or Teresa Guloy either by phone at (609) 292-4860 or email at pesticidegp@dep.nj.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Dwayne Kobesky".

Dwayne Kobesky, Environmental Specialist 4
Bureau of Surface Water and Pretreatment Permitting

Enclosures

c: Permit Distribution List
Masterfile #: 39609; PI #: 50577

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List of Acronyms

ACR	Acute to Chronic Ratio
AL	Action Level
AML	Average Monthly Limitation
BMP	Best Management Practices
BPJ	Best Professional Judgement
CAP	Capacity Assurance Program
CFR	Code of Federal Regulations
CV	Coefficient of Variation
CWEA/CWA	Clean Water Enforcement Act/Clean Water Act
Department	New Jersey Department of Environmental Protection
DGW	Discharge to Groundwater
DMR	Discharge Monitoring Report
DRBC	Delaware River Basin Commission
DSN	Discharge Serial Number
DSW	Discharge to Surface Water
EDP/M	Effective Date of the Permit/Permit Modification
EEQ	Existing Effluent Quality
ELG	Effluent Limitation Guideline
g/d or g/day	Grams per Day
IEC	Interstate Environmental Commission
IPP	Industrial Pretreatment Program
kg/d or kg/day	Kilograms per Day
LTA	Long Term Average
MA1CD10 or 1Q10	Minimum average one day flow with a statistical recurrence interval of ten years
MA7CD10 or 7Q10	Minimum average seven consecutive day flow with a statistical recurrence interval of ten years
MA30CD5 or 30Q5	Minimum average 30 consecutive day flow with a statistical recurrence interval of five years
mg/L	Milligrams per Liter
MDL	Maximum Daily Limitation
MGD	Million Gallons per Day
MRF	Monitoring Report Form
NAICS	North American Industry Classification System
NOAEC	No Observable Adverse Effect Concentration
NPDES/NJPDES	National/New Jersey Pollutant Discharge Elimination System
NJR	New Jersey Register
PCB	Polychlorinated Biphenyls
PMP	Pollutant Minimization Plan
POTW	Publicly Owned Treatment Works
RPMF	Reasonable Potential Multiplying Factor
RTR	Residuals Transfer Report
RQL	Recommended Quantification Levels
RWBR	Reclaimed Water for Beneficial Reuse
SIC	Standard Industrial Classification
SIU	Significant Indirect User
SQAR	Sludge Quality Assurance Regulations
SSTM	Sufficiently Sensitive Test Methods
SWQS	Surface Water Quality Standards
TMDL	Total Maximum Daily Load
TR	Total Recoverable
TRIR	Toxicity Reduction Implementation Requirements
USEPA TSD	USEPA Technical Support Document for Water Quality Based Toxics Control (EPA/505/2-90-001, March 1991)
µg/L	Micrograms per Liter
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UV	Ultraviolet
WCR	Wastewater Characterization Report
WER	Water Effects Ratio
WLA	Wasteload Allocation
WWTP	Wastewater Treatment Plant
WQBEL	Water Quality Based Effluent Limitation

New Jersey Department of Environmental Protection
Division of Water Quality
Bureau of Surface Water and Pretreatment Permitting

PUBLIC NOTICE

Notice is hereby given that the New Jersey Department of Environmental Protection (Department) proposes to renew the New Jersey Pollutant Discharge Elimination System (NJPDES) Discharge to Surface Water (DSW) Master Pesticides Application Discharges General Permit (Category PGP) NJ0178217 in accordance with N.J.A.C. 7:14A-1 et seq., and by authority of the Water Pollution Control Act at N.J.S.A. 58:10A-1 et seq.

This NJPDES/DSW Renewal Master PGP General Permit is issued to continue to authorize the application of biological and chemical pesticides in, over, or near the surface waters of the State where such application results in discharge to waters of the United States through the Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA"). This general permit will continue to regulate the following pesticide applications: nuisance insect control (mosquito and fly control), aquatic pest control (i.e., weeds, algae), aquatic nuisance animal control, aerial treatment of forest canopy, treatment for agriculture activities, and utility transmission and distribution line vegetation control. The Department has determined that these types of point sources require the same operating conditions, require the same or similar monitoring conditions, and are more appropriately controlled under a general permit than under an individual permit. A full copy of the Master PGP General Permit is available on the Department's website at:

https://dep.nj.gov/dwq/permitting_information/permits_application_forms_and_checklists/-DSW

Modification provisions as cited in the permit may be initiated in accordance with the provisions set forth in Part I and upon written notification from the Department.

This renewal draft NJPDES Master PGP General Permit has been prepared for this facility based on the administrative record which is on file at the offices of the Department, located at 401 East State Street, Trenton, New Jersey. It is available for inspection, by appointment, Monday through Friday, between 8:30 A.M. and 4:00 P.M. Appointment for inspection may be requested through the Office of Records Access. Details are available online at www.nj.gov/dep/opra, or by calling (609) 341-3121.

Written comments or a request that the Department hold a non-adversarial public hearing on the draft document must be submitted in writing to Brett Callanan, Chief, Mail Code 401-02B, Bureau of Surface Water and Pretreatment Permitting, P.O. Box 420, Trenton, NJ 08625-0420 by the close of the public comment period, which closes thirty calendar days after publication of this notice in the newspaper. Comments via email are also acceptable and can be sent to dwq_bswp@dep.nj.gov. All persons, including the applicant, who believe that any condition of this draft document is inappropriate or that the Department's decision to issue this draft document is inappropriate, must raise all reasonable arguments and factual grounds supporting their position, including all supporting materials, during the public comment period.

The Department will respond to all significant and timely comments upon issuance of the final document. The permittee and each person who has submitted written comments will receive notice of the Department's permit decision.

New Jersey Department of Environmental Protection
Division of Water Quality
Bureau of Surface Water and Pretreatment Permitting

FACT SHEET

Masterfile #: 39609

PI #: 50577

This fact sheet sets forth the principle facts and the significant factual, legal, and policy considerations examined during preparation of the draft permit. This action has been prepared in accordance with the New Jersey Water Pollution Control Act and its implementing regulations at N.J.A.C. 7:14A-1 et seq. - The New Jersey Pollutant Discharge Elimination System.

PERMIT ACTION: Surface Water Master General Permit - Renewal
Master Pesticides Application Discharges
General Permit Category PGP – NJPDES No. NJ0178217

The New Jersey Department of Environmental Protection (the Department or NJDEP) is proposing to renew the Master General Permit for Pesticides Application Discharges.

1 Description of Master General Permit for Pesticide Application Discharges (PGP)

Prior to October 31, 2011, the United States Environmental Protection Agency (USEPA) regulated the applications of pesticides to target pests that are present in, over, or near the water where such application results in discharge to waters of the US through the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). In addition, on November 27, 2006, USEPA issued the 2006 NPDES Pesticide Rule, specifying circumstances in which a National Pollutant Discharge Elimination System (NPDES) permit was not required to apply pesticides to or around water.

On January 19, 2007, USEPA received petitions for review of the 2006 NPDES Pesticides Rule from environmental and industry groups. Petitions were filed in eleven circuit courts and the case, *National Cotton Council, et. Al., v. EPA*, was assigned to the Sixth Circuit Court of Appeals. On January 9, 2009, the Sixth Circuit vacated USEPA's 2006 NPDES Pesticides Rule under a plain language reading of the CWA *National Cotton Council, et. Al., v. EPA*, 553 F.3d 927 (6th Cor., 2009). The Court held that the Clean Water Act (CWA) unambiguously includes "biological pesticides" and "chemical pesticides" with residuals within its definition of "pollutant." Specifically, an application of chemical pesticides that leaves no excess portion is not a discharge of a pollutant, and the applicator need not obtain a NPDES permit. However, chemical pesticide residuals are pollutants as applied if they are discharged from a point source for which NPDES permits are required. Biological pesticides, on the other hand, are always considered a pollutant under the CWA regardless of whether the application results in residuals or not, and require a NPDES permit for all discharges from a point source. In accordance with N.J.A.C. 7:9B-1.4, a point source is defined as a discernable, confined and discrete conveyance. Trucks and helicopters that spray pesticides are point sources under the CWA. Therefore, as of this January 9, 2009, ruling, NPDES permits are required for such discharges, and it is no longer sufficient to regulate these applications solely under FIFRA. As a result of the Court's decision to vacate the 2006 NPDES Pesticide Rule, beginning November 1, 2011, New Jersey Pollutant Discharge Elimination System (NJPDES) permits will be required for discharges to surface waters of the State of biological pesticides and chemical pesticides that leave a residue.

The New Jersey Pollutant Discharge Elimination System (NJPDES) Master General Permit for Pesticides Application Discharges (NJPDES No. NJ0178217) serves to authorize the applications of biological and chemical pesticides in water when such applications are made in, over, or near surface waters of the State. This NJPDES general permit is issued to ensure compliance with the CWA and does not supersede and/or replace any permits issued by NJDEP's Pesticide Control Program. This NJPDES permit also does not negate the requirements under any other federal, state, and local laws and regulations including, but not limited to FIFRA, Pinelands Commission Certificate of Filing,

Aquatic Pesticide Permit, Mosquito/Fly Control Permit, and Reporting to the National Response Center. This permit does not negate the requirements under FIFRA and its implementing regulations to use registered pesticides consistent with the product's labeling, including contacting the local fish and wildlife service if required.

Application of herbicides to waterbodies in the Pinelands, with the exception of lakes and ponds, requires the Operator to apply and receive a Pinelands Commission Consistent Certificate of Filing prior to submitting an application to the Department for a NJPDES Pesticide Application Discharge permit. This is consistent with the terms of the June 1991 Memorandum of Agreement between the Commission and the Pesticide Control Program.

In accordance with N.J.A.C. 7:14A-6.13, the Department may issue a general permit for categories of discharges that discharge the same types of waste. Given the vast number of pesticide applicators requiring NJPDES permit coverage, the Department, in accordance with the USEPA guidance, decided the most efficient way to regulate these types of discharges is to issue a general permit. Issuance of a master general permit serves to simplify and streamline the NJPDES permitting process for these similar types of discharges.

2 Coverage Under the Master General Permit

A. Eligible Activities:

This master general permit authorizes the application of biological and chemical pesticides made directly to surface waters of the State in order to control pests, when such applications are made in, over, or near surface waters of the State.

1. Pesticide Use Patterns

Pesticide use patterns were developed to include discharges that are similar in type and nature, and therefore, represent the type of discharges and expected nature of the discharges covered under this general permit. This general permit is required when pesticide application is for one of the following six pesticide use patterns:

- a. Mosquito and Other Flying Insect Pest Control: to control public health/nuisance and other flying insect pests that develop or are present during a portion of their life cycle in or above standing or flowing water. Public health/nuisance and other flying insect pests in this use category include, but are not limited to, mosquitoes and black flies.
- b. Aquatic Weed and Algae Control: to control weeds, algae, and pathogens that are pests in water and at water's edge, including ditches and/or canals.
- c. Aquatic Nuisance Animal Pest Control: to control animal pests in water and at water's edge. Animal pests in this category include, but are not limited to, fish, lampreys, insects, mollusks, and pathogens.
- d. Forest Canopy Pest Control: to control the population of a pest species (e.g., insect or pathogen) where a portion of the pesticide unavoidably will be applied over and deposited to water in order to target the pests effectively. These pests are not necessarily aquatic (e.g., airborne non-aquatic insects) but are detrimental to industry, the environment, and public health. Note: USEPA 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.
- e. Agricultural Activities: application of pesticides into, over, or near surface waters (as defined in Appendix A of this permit) of the State used in the operation of agricultural activities.
- f. Utility Transmission and Distribution Line Vegetation Control: application of pesticides into, over, or near waters of the State to selectively eliminate vegetation which may potentially short circuit overhead conductors, significantly restrict physical access on the right-of-way, is necessary for other related uses, or

is required by the New Jersey Board of Public Utilities Vegetation Management Standards for Transmission Line Maintenance.

2. Application Thresholds

The USEPA stated in the Fact Sheet of the 2021 NPDES Pesticide General Permit that the focus of the federal permit will be on the largest applications of pesticides to waters of the United States. The Department has determined that it is appropriate to use the same approach. When considering the factors in N.J.A.C. 7:14A-6.13(d)7, the Department gave weight to the volume of discharges and the estimated number of discharges to be covered by the permit, and has adopted the same threshold categories and values (see Table 1 in Appendix C of this permit), as proposed by the USEPA in their 2021 NPDES Draft Pesticides General Permit (PGP). Should USEPA revise the threshold categories and/or values, the Department may modify this master general permit to be consistent with the USEPA PGP.

In determining the appropriate threshold values for submission of an application, the USEPA's Office of Pesticides, Pollution, and Toxic Substances, and Regional Offices engaged in discussions with the United States Department of Agriculture (USDA), the states as co-regulators, and industry representatives, including pesticide registrants, applicators, and land managers. Based on these discussions and best professional judgment, the USEPA developed the following annual treatment area thresholds that differentiate between applications to smaller areas of land and those to larger areas of land. Treatments to larger areas of land are believed to have greater potential for impacting waters of the State.

USEPA's rationale, which the Department is utilizing in this permit, for the annual treatment area threshold for each use pattern is as follows:

a. Mosquito and Other Flying Insect Pest Control:

For mosquitoes and other flying insect pests, the annual treatment area threshold has been set at 6,400 acres. USEPA 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. For instance, information from the state of Florida on 49 independent mosquito control districts shows that 48 of the 49 districts annually apply to more than 6,400 acres, which indicates that applications exceeding this area are quite typical. Similarly, data provided in USEPA's 2011 *Economic Achievability Analysis of the Pesticide General Permit (PGP) for Point Source Discharges from the Application of Pesticides* and included in the administrative record for this permit, show similar findings as in Florida. Furthermore, the effective control of other aquatic breeding, flying insects, such as the blackfly, necessitates applications that approach or exceed this threshold. Therefore, the threshold appropriately captures most decision-makers engaging in this use pattern. USEPA also believes that even those mosquito control districts that treat areas below the threshold should be required to submit a permit application, as these entities were created specifically for the control of pests should provide notice to the Department of their activities. As such, the permit requires all mosquito control districts, as well as any other Operator treating over the annual treatment area threshold, to submit a permit application. The USEPA has determined this appropriately captures those two classes of entities that either (1) are established with a specific purpose of pest control or that (2) treat large enough areas to warrant notice to the USEPA.

b. Aquatic Weed and Algae Control:

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. Therefore, the threshold appropriately captures the relatively large applications, but excludes a significant number of small applications. Similar to mosquito control, weed control districts, or similar pest control districts

created specifically for the control of pests that treat areas below the threshold, should be required to submit an application. As such, the permit requires all weed control districts or similar pest control districts, as well as any other Operators treating over the annual treatment area threshold, to submit an application. The USEPA has determined that this appropriately captures those two classes of entities that either (1) are established with a specific purpose of pest control or that (2) treat large enough areas to warrant notice to the USEPA.

c. Aquatic Nuisance Animal Pest Control:

For animal pest control, 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. 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. 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. USEPA expects that for this reason, only spot applications to eradicate small emergent populations of sessile animals or applications to very small water bodies might be excluded from the application submission requirement. Therefore, the threshold appropriately captures the relatively large Operators engaging in this use pattern.

d. Forest Canopy Pest Control:

For forest canopy pest control, the annual treatment area threshold has been set at 6,400 acres of pesticide application to waters of the United States. 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. USEPA has set the annual treatment area threshold for this use pattern with the understanding that this will exclude only the smallest applications from the application submission 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.

The Department's rational for the annual treatment area threshold for the following use patterns:

e. Agricultural Activities:

The Department believes that the annual threshold value of 100 acres will capture the majority of large farming operations and will exclude smaller operations from the application submission requirement, consistent with the approach taken by the USEPA for the other use patterns. Also, since the method for determining the threshold value requires counting each treatment area only once regardless of the number of pesticide applications made to the site during the year, smaller farms are less likely to exceed the threshold value.

f. Utility Transmission and Distribution Line Vegetation Control:

Based on the information provided to the Department's Bureau of Pesticide Compliance through the Aquatic Use Permit application, there are only a few utility companies in New Jersey that apply pesticides to surface waters. Since only a handful of Operators would be covered under this use pattern, all are considered large entities. The Department has determined that it is appropriate to require these Operators to submit an application.

Pesticide applications must be approved by the Department through individual general permit authorizations to be covered under this master general permit. The applicant becomes authorized for application of a product and resultant discharge under this general permit once a final individual general permit authorization has been issued by the Department.

The Department reserves the right to deny or revoke authorization to discharge pesticides in any area where significant adverse impacts due to documented pesticide applications are occurring.

B. Eligible Permit Applicants:

The Department acknowledges that there may be more than one party implementing the conditions of this master general permit. The Operator is responsible for coverage under this permit and assumes full responsibility for permit compliance. In accordance with N.J.A.C. 7:14A-1.2, and as defined in Appendix A, the Department defines an Operator as any person who alone or along with the other persons has primary management and operational decision-making authority over any part of the activity.

Coverage under this master general permit is for the Operator who filed the application, including its employees, contractors, subcontractors, and other agents, for all activities identified on the application for the duration of this general permit, unless coverage is terminated upon expiration of the permit, in accordance with N.J.A.C. 7:14A-4.2(e) or via revocation of the permit, in accordance with 7:14A-16.3.

The following Operators are required to submit an application (NJPDES Form-1 and PGP Supplemental Form) to obtain coverage under this general permit for discharges to surface waters of the State resulting from the application of pesticides:

1. If the Operator is in control over the financing for, or over the decision to perform pest control activities that will result in a discharge and know or reasonably should have known that those activities will exceed one or more of the annual (i.e., calendar year) treatment area thresholds listed in Table 1 in Appendix C for the “treatment area,” (defined in Appendix A); or
2. If an entity for which pest management for land resource stewardship is an integral part of the organization’s operation and the Operator will be performing pest control activities that will result in a discharge; or
3. If the Operator applies pesticides that result in a discharge and know or reasonably should have known that those activities will exceed one or more of the pesticide application annual (i.e., calendar year) treatment area thresholds listed in Table 1 in Appendix C for the “treatment area” (defined in Appendix A). To determine whether an entity’s activities will exceed one or more of the annual treatment area thresholds, the entity should exclude from its calculation any pesticide application activities conducted under another entity’s application required above; or
4. If the Operator applies pesticides to waters classified as Pinelands (PL) or FW1, in accordance with N.J.A.C. 7:9B-1.15, exemption from submission of an application based on annual treatment area thresholds does not apply to these waters. Surface water classifications are listed in the New Jersey Surface Water Quality Standards at N.J.A.C. 7:9B and can be found on the Department’s website at http://www.nj.gov/dep/rules/rules/njac7_9b.pdf. The Department will specify the surface water classifications and corresponding designated uses for the waterbodies that are being authorized in the general permit authorization (GPA).

C. Permit by Rule:

Operators whose application of pesticides will not exceed one or more of the annual (i.e., calendar year) treatment area thresholds listed in Table 1 in Appendix C for the “treatment area” (defined in Appendix A), are automatically authorized to discharge after the effective date of the Master General Permit, in compliance with the requirements of this permit without submission of an application. Permit by rule does not apply to Operators that (1) have a significant role in pest control for public health and environmental protection since the USEPA and NJDEP believe that they should be expected to provide notice of such activities or (2) discharge to PL or FW1 waters.

D. Activities Exempted:

Irrigation return flows and agricultural stormwater runoff do not require NJPDES permits, even when they contain pesticides or pesticide residues, as the CWA specifically exempts these categories of discharges from requiring NJPDES permit coverage. Other stormwater runoff is either already required to obtain NJPDES permit coverage as established in Section 402(p) of the CWA or classified as a non-point source discharge for which NJPDES permit coverage is not required. Stormwater runoff that may contain pesticides would not be eligible for coverage under this permit and is not required to obtain NJPDES permit coverage unless it was already required to do so prior to the Sixth Circuit decision, or the Department designates a source for future stormwater permitting.

E. Activities Not Covered:

Applications of biological and chemical pesticides to surface waters of the State if the water is identified as impaired by a substance which either is an active ingredient in that pesticide or is a degradate of such an active ingredient are not eligible for authorization under this general permit. For purposes of this permit, impaired waters are those that have been identified by the Department pursuant to Section 303(d) of the CWA as not meeting applicable State water quality standards. Please see <https://www.nj.gov/dep/wms/bears/generalinfo.htm>.

As an exception to the above, the Department has decided to allow the use of Temephos for mosquito control in waters impaired for phosphorus due to the fact that an alternative product is considered more toxic to the environment and is not recommended. In addition, both biological and chemical pesticides are used on a rotating basis in order to prevent pest resistance. Therefore, the chemical pesticide, Temephos, will not be the only pesticide used for mosquito control, and will only be used occasionally when necessary.

3 Types of Waters or Pollutants Regulated by this Permit

A. Chemical Pesticides:

The Sixth Circuit Court determined that if a chemical pesticide leaves any excess or residue after performing its intended purpose, such excess or residue would be considered a pollutant under the CWA. The USEPA assumes that all chemical pesticides will leave a residual once the product has performed its intended purpose as explained below:

1. If the application of a chemical pesticide is made over a surface water of the US to control pests over the water, any amount of the pesticide that falls into the water is “excess” pesticide and would require coverage by a NPDES permit. Based on field studies of pesticide applications, the USEPA expects that some portion of every application of a pesticide made over surface water will fall directly into such waters and thus assumes that applications will trigger the requirement for a NPDES permit. A permit is not necessary if no portion of a chemical pesticide applied over waters will fall into those waters.
2. If the application of a chemical pesticide is made into a surface water of the US to control pests, once the pesticide no longer provides any pesticidal benefit, any amount of the pesticide that remains in the surface water is a “residual” and would require coverage by a NPDES permit. Additionally, as the Sixth Circuit reasoned, the residual is discharged at the time of a pesticides initial application. Based on field studies, pesticides applied into water, the USEPA expects that some portion of every application of a pesticide made into surface water will leave a residual in the surface water and thus assumes every application will trigger the requirement for a NPDES permit.
3. Only point source discharges of pollutants to Waters of the US require a permit, and it is beyond the scope of this fact sheet to identify all specific activities that do or do not require a permit. However, to the extent that activities fall within the covered categories require a permit; they can be authorized by this general permit if all eligibility requirements are met.

B. Biological Pesticides:

For the purposes of this permit, the Department is relying on existing regulatory definitions in 40 CFR 174.3 and 158.2100(a) developed under FIFRA to define the term “biological pesticides”. For the purposes of this permit, the Department identifies biological pesticides (also called “biopesticides” under FIFRA regulations) to include microbial pesticides and biochemical pesticides and plant incorporated protectants.

The Sixth Circuit Court also found that, unlike chemical pesticides, not only would the residue and excess quantities of a biological pesticide be considered a pollutant, but so too would the biological pesticide itself under the CWA.

4 Administrative Process

Authorization to discharge under this master general permit is granted in two ways. One way to obtain coverage under this permit is through the submission of a permit application. To obtain authorization under this master general permit, an Operator must seek a permit for a pesticide use pattern identified in eligible activities Table 1 in Appendix C. The Department will review the permit application and grant written approval called the General Permit Authorization (GPA) when appropriate.

The second way to obtain coverage under this master general permit is through the permit by rule. Operators that meet the criteria under permit by rule will be automatically authorized to apply pesticides according to the conditions of this permit on the effective date of this Master General Permit. The Operator does not need to submit and permit application, and no specific written approval will be provided by the Department.

Applicants must notify the Department of their intent to be covered under this master general permit for discharges from its pesticide application by submitting a completed and signed NJPDES application electronically to the Bureau of Surface Water and Pretreatment Permitting. Applications are required to be submitted at least thirty (30) days prior to the pesticide application via email to pesticidegp@dep.nj.gov. Operators are authorized to discharge under this permit consistent with Table 2 in Appendix D. Application forms are available at: https://www.nj.gov/dep/dwq/forms_surfacewater.htm.

The following information shall be included on the NJPDES Form-1 and/or PGP supplemental form:

1. Contact information and license number of the Operator;
2. Contact information and license number of the for-hire Applicator (when applicable);
3. Description of the waterbody;
4. Size of treatment area (acres and/or linear miles);
5. Pesticide Use Pattern(s); and
6. Aquatic Pesticide Submittal Summaries for each discharge location (when applicable).

Any operator that is required to submit an application and is a large entity is required to also develop a written Pesticide Discharge Management Plan (PDMP).

The Operator authorizing the activity be authorized by this general permit must sign the NJPDES Form-1 and PGP Supplemental Form, in accordance with N.J.A.C. 7:14A-4.9, certifying that the application will comply with all the conditions of this general permit.

Authorization under this master general permit allows the application of pesticides to the specified waterbody listed in the initial permit application. If a permit applicant requests authorization for additional waterbodies not listed in the initial permit application, a PGP Supplemental Application Form must be submitted to the Department at least thirty (30) days prior to each additional waterbody application. The permit applicant becomes authorized for the additional waterbody application when a modification to the individual GPA has been issued by the Department.

The NJPDES category for this master general permit is “PGP”. An individual authorization issued under the Master Pesticides Application Discharge General Permit will be given two NJPDES numbers. The NJPDES number on the individual GPA beginning in “NJG” is specific to the applicant, whereas the NJPDES number NJ0178217 is for the master general permit. Upon finalization of this master general permit, all applicants will have the same expiration date and will follow the same permit cycle. In accordance with N.J.A.C. 7:14A-2.7, all NJPDES permits shall be issued for fixed terms not to exceed five (5) years.

A GPA renewal application shall be submitted 180 days before the expiration date. A general permit revocation request form shall be submitted to the Department if the applicant no longer requires authorization under this general permit.

Based on review of the application or other information, the Department may delay authorization for further review or may determine whether additional technology-based and/or water quality-based effluent limitations are necessary, or may deny coverage under this general permit and require submission of an application for an individual NJPDES permit.

5 Summary of Permit Conditions

A. Basis for Permit Conditions - General:

In accordance with N.J.A.C. 7:14A-2.3 and 6.1(b), specific rules from the New Jersey Administrative Code have been incorporated either expressly or by reference in Part I - A.

The conditions in this permit have been developed to ensure compliance with the following:

1. NJPDES Regulations (N.J.A.C. 7:14A),
2. New Jersey Surface Water Quality Standards (N.J.A.C. 7:9B),
3. New Jersey's 2018/2020 Integrated Water Quality Monitoring and Assessment Report (includes 305(b) Report and 303(d) List),
4. Requirements of the Highlands Commission (N.J.S.A. 13:20-1 et seq),
5. Permit limitations in accordance with N.J.A.C. 7:9B-1.5(d) (antidegradation requirements),
6. Statewide Water Quality Management Planning Rules (N.J.A.C. 7:15).

In accordance with N.J.A.C. 7:14A-2.3 and 6.1(b), specific rules from the New Jersey Administrative Code have been incorporated either expressly or by reference in Part I and Part II.

B. Basis and Derivation for Permit Conditions – Specific:

1. Technology Based Effluent Limitations (Applicable to all Operators):

The technology-based effluent limitations (TBELs) imposed in the PGP in accordance with N.J.A.C. 7:14A-13 are non-numeric and constitute the levels of control that reduce the area and duration of impacts caused by the discharge of pesticides to surface waters of the State in a treatment area. In addition, these effluent limitations provide for protection of water quality standards, including protection of beneficial uses of receiving waters inside the treatment area following completion of pest management activities.

The Department's decision to include non-numeric TBELs in this general permit is consistent with USEPA's approach as described in the 2021 NPDES Pesticides General Permit Fact Sheet.

Numeric effluent limitations are not always feasible because the discharges of pollutants pose challenges not presented by other types of NJPDES-regulated discharges of pollutants. The TBELs are retained from the previous permit. The TBELs in this permit are non-numeric and based on the following:

- a. The point in time for which a numeric effluent limitation would apply is not easily determinable. For discharges of pollutants from the application of pesticides, the discharges of pollutants can be highly intermittent with those discharges of pollutants not practically separable from the pesticide application itself. For example, the discharge from the application of a chemical pesticide to waters of the United States is a discharge of pollutants when there is a residual remaining in the ambient water after the pesticide is no longer serving its intended purpose (i.e., acting as a pesticide against targeted pests in the applied medium). This discharge of pollutants also will have combined with any other discharges of pollutants to that waterbody (be it from other point sources, non-point source runoff, air deposition, etc.). Given this situation, it is not clear what would be measured for a numeric limit or when.
- b. For discharges from the application of pesticides, there are often many short durations, highly variable, pollutant discharges to surface waters from many different locations for which it would be difficult to establish a numeric limitation at each location. This variability makes setting reasonable and fair numeric effluent limitations for pesticide applications extremely difficult. Even in a normal plant specific setting, the Department takes into account the variability of pollutant removal performance at a facility operated in compliance with applicable statutory and regulatory requirements to derive technology-based limitations. In the water-quality based effluent limitations context, the Department takes into account ambient conditions of the waterbody which can require complex modelling and formulas to derive what discharge of pollutant level is necessary, without being overly stringent, to protect water quality. In the context of pesticide application, the numbers of variables that would affect such a calculation becomes unworkable. In this situation, requiring the use of standard control practices (i.e., narrative non-numeric effluent limitations), provides a reasonable approach to control pesticide discharges of pollutants.
- c. The precise location for which a numeric effluent limitation would apply is not clear. Discharges from the application of pesticides are different from discharges of pollutants of process wastewater from a particular industrial or commercial facility where the effluent is more predictable and easily identified as an effluent from a conveyance (e.g., pipe or ditch), can be precisely measured for compliance prior to discharge, and can be more effectively analyzed to develop numeric effluent limitations.
- d. Information needed to develop numeric effluent limitations is not available at this time. To develop numeric TBELs, USEPA must evaluate factors outlined in 40 CFR 125.3, such as the age of equipment and facilities involved, the process employed, the potential process changes, and non-water quality environmental impacts. In addition, USEPA estimates that more than 400 active pesticide ingredients contained in over 3,500 pesticide products may be covered under this permit.

TBELs in this permit are presented specific to each pesticide use pattern to reflect the variations in procedures and expectations for the use and application of pesticides. These non-numeric effluent limitations are expected to minimize environmental impacts by reducing the discharge of pesticides to waters of the State, thereby protecting the receiving waters, including the extent necessary to meet applicable water quality standards. This permit uses the term "Pest Management Measures" to better describe the range of pollutant reduction practices that may be employed when applying pesticides, whether they are structural, non-structural, or procedural, and includes Best Management Practices (BMPs) as one of the components.

The effluent limitations in this permit are expressed as specific pollution prevention requirements for minimizing the pollutant levels in the discharge. The Department has determined that the combination of pollution prevention approaches and structural management practices required by these limits are the most environmentally sound way to control the discharge of pesticide pollutants to meet the effluent limitations.

2. Water Quality Based Effluent Limitations (Applicable to all Operators):

In addition to the TBELs, the PGP also contains water quality based effluent limitations (WQBELs). In this permit, the Department has included a narrative statement that addresses WQBELs. The WQBEL is as follows:

Your discharge shall be controlled as necessary to meet applicable numeric and narrative state water quality standards (see Appendix B or N.J.A.C. 7:9B-1.14(d)J. If at any time you become aware, or NJDEP determines, that your discharge causes or contributes to an excursion of applicable water quality standards, you shall take corrective action and document and report the excursion(s) to NJDEP.

The first sentence includes the general requirement to control discharges as necessary to meet water quality standards, while the second sentence implements this requirement in more specific terms by imposing on Operators a responsibility to take corrective action in response to an excursion of applicable water quality standards, whether discovered by the Department or by the Operator. Failure to take such corrective action is a violation of the permit. Additionally, the permit includes a provision that specifies that the Department may determine that additional technology-based and/or water quality-based effluent limitations are necessary or may deny coverage under this permit and require submission of an application for an individual NJPDES permit. Please be advised that the processing time for an individual permit is approximately six (6) months.

Each Operator is required to control its discharge as necessary to meet applicable water quality standards. As explained in USEPA's 2021 NPDES Pesticide General Permit Fact Sheet (Section 3), generally, compliance with the other conditions in this permit (e.g., TBELs, corrective actions, etc.) will result in discharges that are controlled as necessary to meet applicable water quality standards based on the cumulative effect of the following factors:

- a. Under FIFRA, USEPA evaluates risk associated with pesticides and mitigates unreasonable ecological risk. Compliance with FIFRA is required.
- b. In developing the PGP, USEPA evaluated national-scale ambient monitoring data, as well as the frequency of the identification of specific pesticides as the cause of water impairments, to assess whether pesticide residues are currently present in waters at levels that would exceed water quality standards. The monitoring data, although limited in scope, show that, in most samples, most pesticides were below ambient water quality criteria or benchmarks developed by USEPA's Office of Pesticide Programs (OPP).
- c. TBELs in the PGP provide further protections beyond compliance with existing FIFRA requirements.
- d. Biological pesticides discharged to waters, by regulatory definition, do not work through a toxic mode of action. For chemical pesticides, the discharges of pollutants covered under the PGP are the residues after the pesticide has performed its intended purpose. Thus, the residue will be no higher than, and in many instances, lower than, the concentration of the pesticide as applied.
- e. The PGP excludes pesticide applications that result in discharges of any pollutant to (1) waters impaired for an active ingredient of that pesticide or a degradate of such an active ingredient, or (2) any Tier 3 waters (i.e., outstanding national resource waters) except for pesticide applications made to restore or maintain water quality or to protect public health or the environment that either do not degrade water quality or only degrade water quality on a short-term or temporary basis
- f. USEPA has no evidence in the record that implementation of previously issued PGPs has resulted in documented water quality problems.

This permit requires Operators to control discharges as necessary to meet applicable water quality standards. When the Operator or the Department determines a discharge will cause or contribute to an excursion above any water quality standards, including failure to protect and maintain existing designated uses of receiving waters, the Operator shall take corrective action to ensure that the situation is eliminated and will not be repeated in the future. If additional pest management measures are required, the Department expects the Operator to vigilantly and in good-faith follow and document, as applicable, the process for pest management measure selection, installation, implementation and maintenance, and cooperate to eliminate the identified problem within the timeframe in the permit.

3. Minimize Pesticide Discharges to Surface Waters of the State (Applicable to all Operators):

All Operators, regardless of whether they are required to submit an NJPDES application, shall minimize the discharge of pollutants resulting from the application of pesticides as a means to meet the technology-based and/or water quality-based requirements in this section. The Operator shall implement site-specific control measures that minimize discharges of pesticides to surface waters of the State as follows:

- a. Use only the amount of pesticide and frequency of pesticide application necessary to control the target pest, using equipment and application procedures appropriate for this task;
- b. Maintain application equipment in proper operating condition, including requirement to calibrate, clean, and repair such equipment and prevent leaks, spills, or other unintended discharges; and
- c. Assess weather conditions (e.g. temperature, precipitation, and wind speed) in the treatment area to ensure application is consistent with all applicable federal requirements.

The discharge shall be controlled as necessary to meet applicable numeric and narrative SWQS to meet water quality based effluent limitation requirements

If at any time the Operator becomes aware, or the Department determines, that the discharge causes or contributes to an excursion of applicable SWQS, the Operator shall take corrective action as required, including ceasing the discharge, if necessary.

4. Monitoring Requirements:

Monitoring is required in any NJPDES permit specifically for the purpose of demonstrating compliance with the permit conditions. The monitoring requirements of this permit are narrative and demonstrate compliance with permit conditions by using currently established pesticide use routines for monitoring pest control. For instance, the permit requires routine visual inspections (described below) to be conducted as part of the pest treatment activity or as part of post-application pest surveillance and calls for records of the pesticide discharge volume to be kept. The monitoring requirements of the permit are reasonable measures if good pest management practice that the conscientious Operator should be currently employing to ensure environmental health and safety and optimal control of pest organisms.

Monitoring of pesticide discharges poses several challenges not generally encountered in “traditional” NJPDES permitting situations. For example, there is no “wastewater discharge”, per se, from pesticide applications that is analogous to end-of-pipe discharges. A manufacturing plant would, for example, typically direct its wastewater through a treatment system to remove pollutants, and then would direct the effluent through a pipe into a receiving waterbody. However, for chemical pesticide applications, at the time of application the pesticide contains both the portion serving its intended purpose and as well as the potential residual for which monitoring data would be appropriate. Thus, monitoring the “outfall” in this case would merely provide data on the amount of product as applied (information already known through the FIFRA registration process) and would not be useful for comparing with any type of effluent limitation or water quality standard.

The Department also considered requiring ambient water quality monitoring. However, it was determined that it was infeasible for the following reasons:

- a. Ambient water quality monitoring would generally not be able to distinguish between the amount coming from the pesticide application and the amount of some other upstream source.
- b. State water quality standards do not exist at this time for a vast majority of constituents in the products authorized for use under this permit.
- c. Difficulty of residue sampling for chemical pesticides: For chemical pesticides, the “pollutant” regulated by this permit is the residue that remains after the pesticide has completed its activity, and it is this residue that would be the subject of any water quality monitoring requirement. However, the point at which only “residue” remains is not practically discernible at this time for all pesticides.

Given the questionable ability of ambient water quality data to demonstrate permit compliance, the Department has determined that there are suitable alternative monitoring activities to determine permit compliance, other than ambient water quality monitoring, for this permit.

The Department also considered Whole Effluent Toxicity (WET) testing as a possible option for assessing Operator compliance with permit conditions. However, WET testing in a NJPDES permit program is best used to monitor whether an Operator's discharge is toxic and not whether a receiving stream (i.e., the ambient environment), that may be influenced by a number of different discharges from different Operators and different sources is toxic. In addition, WET testing would not indicate the actual source of the toxicity. If a waterbody is found to be toxic or to contain pollutants above water quality standards, it can be quite complex to identify the source of the toxicity, which may or may not be from the pesticide application.

Therefore, the monitoring program that is required in this permit had been tailored to accommodate the unique situations related to pesticide applications. Visual monitoring is required to determine if any pesticide use practices need to be revised to ensure that avoidable adverse impacts to the environment do not occur. Monitoring records required by Operators who submit an application will establish a history that may indicate if or when practices need to be reconsidered.

The Operator and/or for-hire Applicator is prohibited from performing any pesticide application if an adverse incident is observed during any pre-application monitoring.

I. Visual Monitoring for All Operators or for-hire Applicators:

The Operator or for-hire Applicator is prohibited from performing any pesticide application if dead or visibly distressed non-target organisms and/or stunted, wilted, or desiccated non-target submerged or emergent aquatic plants are observed during any pre-application monitoring.

During any pesticide application with discharges authorized under this permit, all Operators or for-hire Applicators must, when considerations for safety and feasibility allow, visually assess the area to and around where pesticides are applied for possible and observable adverse incidents, as defined in Appendix A, including the unanticipated death or distress of non-target organisms and disruption of wildlife habitat, recreational or municipal water use.

Additionally, the following scenarios often preclude visual monitoring during pesticide application:

1. Applications made from an aircraft.
2. Applications made from a moving road vehicle when the applicator is the driver.
3. Applications made from a moving watercraft when the applicator is the driver.
4. Applications made from a moving off-road wheeled or tracked vehicle when the applicator is the driver.

During any post application visual monitoring of any pesticide application with discharges authorized under this permit, all Operators or for-hire Applicators must visually assess the area to and around where pesticides were applied for possible and observable adverse incidents, as defined in Appendix A, including the unanticipated death or distress of non-target organisms and disruption of wildlife habitat, recreational or municipal water use.

II. Post Application Visual Monitoring for Operators or for-hire Applicators Discharging to Waterbodies Classified as PL or FW1:

Applicators or Operators discharging to PL or FW1 classified waters on any given calendar day shall choose one of the Pinelands or FW1 waterbodies treated on that day to conduct post application visual monitoring for possible and observable adverse incidents, as defined in Appendix A, including the unanticipated death or distress of non-target organisms and disruption of wildlife habitat, recreational or

municipal water use. The waterbody that received the highest quantity of pesticides shall be the one chosen for post application monitoring.

5. Avoidance of Adverse Impacts:

It is a condition of this permit that the permittee take all necessary and practicable steps to avoid adverse incidents to the federally listed or candidate New Jersey plant species listed below. The permittee may use the FIFRA label as a guide in determining whether the pesticide application has the potential to cause adverse impacts to endangered and threatened plants. Application of pesticides in a manner that results in such adverse incidents is a violation of this permit and a violation of state and/or federal endangered species statutes and subject to applicable penalties.

- *Aeschynomene virginica* (sensitive joint-vetch) – Federally threatened
- *Amaranthus pumilus* (seabeach amaranth) – Federally threatened
- *Helonias bullata* (swamp pink) – Federally threatened
- *Isotria medeoloides* (small whorled pogonia) – Federally threatened
- *Narthecium americanum* (bog asphodel) – Federal candidate
- *Panicum hirstii* (Hirst brothers' panic grass) – Federal candidate
- *Rhynchospora knieskernii* (Knieskern's beaked-rush) – Federally threatened
- *Schwalbea americana* (American chaffseed) – Federally endangered

It is a condition of this permit that the permittee take all necessary and practicable steps to avoid adverse incidents to state and federally listed endangered and threatened wildlife. The permittee may use the FIFRA label as a guide in determining whether the pesticide application has the potential to cause adverse impacts to endangered and threatened wildlife. Application of pesticides in a manner that results in such adverse incidents is a violation of this permit and a violation of state and/or federal endangered species statutes and subject to applicable penalties. The list of federally endangered or threatened wildlife species occurring in New Jersey is provided below:

- Indiana Bat, *Myotis sodalis*
- Black Right, Whale *Balaena glacialis*
- Blue Whale, *Balaenoptera musculus*
- Fin Whale, *Balaenoptera physalus*
- Humpback Whale, *Megaptera novaeangliae*
- Sei Whale, *Balaenoptera borealis*
- Sperm Whale, *Physeter macrocephalus*
- Piping Plover, *Charadrius melodus*
- Roseate Tern, *Sterna dougallii*
- Bog Turtle, *Glyptemys muhlenbergii*
- Atlantic Green Turtle, *Chelonia mydas*
- Atlantic Hawksbill, *Eretmochelys imbricata*
- Atlantic Leatherback, *Dermochelys coriacea*
- Atlantic Loggerhead, *Caretta caretta*
- Atlantic Ridley, *Lepidochelys kempi*
- Shortnose Sturgeon, *Acipenser brevirostrum*
- American Burying Beetle, *Nicrophorus mericanus*
- Northeastern Beach Tiger Beetle, *Cincindela d. dorsalis*
- Mitchell's Satyr, *Neonympha m. mitchellii*
- Dwarf Wedgemussel, *Alasmodonta heterodon*

6 Pest Management Measures

This permit requires Operators to implement pest management measures to meet the TBELs. It also provides Operators with important considerations for the implementation of their specific pest management measures. Some Operators will have to document how such factors were considered in the implementation of their pest management measures. The Department recognizes that not all these considerations will be applicable to every pest management area, nor will they always affect the choice of pest management measures. If Operators find their pest management measures are not minimizing discharges of pesticides adequately, the pest management measures shall be modified as expeditiously as practicable.

Because there is variability in the pest management measures that can be used to meet the effluent limitations, the Department is not mandating the specific pest management measures Operators shall implement to meet the limitations. This is analogous to other NJPDES discharge to surface water permits that contain numeric effluent limitations, but the Department would not specify what technology should be employed to meet that limitation. For pesticides, namely mosquitocides, for example, mosquito control Operators are required to consider mechanical/physical methods of control or source reduction to eliminate or reduce mosquito habitat. How this is achieved will vary by Operator: For some, this may be achieved through elimination of development habitat (e.g. filling low areas, dredging, etc.) while for others these measures will not be feasible. Thus, a given pest management measure may be acceptable and appropriate in some circumstances but not in others. In this respect, the non-numeric effluent limitations in this permit are similar to numeric effluent limitations, which also do not require specific control technologies as long as the limitations are met.

Pest management measures can be actions (including processes, procedures, schedules of activities, prohibitions on practices and other management practices), or structural or installed devices to prevent or reduce water pollution. The key is determining what measure is appropriate for the Operator's situation in order to meet the effluent limitation. In this permit, Operators are required to implement site-specific pest management measures to meet these effluent limitations. The permit along with this fact sheet provides examples of pest management measures, but Operators shall tailor these to their situations as well as improve upon them as necessary to meet effluent limits.

The approach to pest management measures in this permit is consistent with the CWA as well as its implementing regulations at 40 CFR 122.44(k) (4). Section 402(a) (2) of the CWA states: "The administrator shall prescribe conditions for such permits to assure compliance with the requirements in paragraph (1)...including conditions on data and information collection, reporting and such other requirements as he deems appropriate." (Section 402(a) (1) includes effluent limitation requirements.) This statutory provision is reflected in the CWA implementing regulations, which state that pest management measures can be included in permits when, "the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA." In accordance with 40 CFR 122.44(k) (4).

Pest Management Measures (PMM) apply to any Operator that is required to submit an application, including any pesticide applicator hired by such entity or any other employee, contractor, subcontractor, or other agent. Any Operator that is required to submit an application and is a large entity is required to also develop a written Pesticide Discharge Management Plan (PDMP) to document measures taken to meet the effluent limits. The Pest Management Measures, as described below, shall be attached to the PDMP, kept at the address specified on the application form, and made available to the Department upon request.

Prior to the first pesticide application covered under this permit that will result in a discharge into, over, or near surface waters of the State, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the Operator shall select and implement, for each pest management area, efficient and effective means of pest management that minimize discharges resulting from application of pesticides to control mosquitoes or other flying insect pests, thereby reducing risks to the environment, including water quality. In developing these pest management measures for each pest management area, the Operator shall evaluate the following management options, including a combination of these management options, considering impact to non-target organisms, feasibility, and cost effectiveness:

1. No Action
2. Prevention
3. Mechanical or Physical Methods
4. Cultural Methods
5. Biological Control Agents
6. Pesticides

If the discharge of pollutants results from the application of a pesticide that is being used solely for the purpose of “pesticide research and development,” as defined in Appendix A, the Operator is not required to fully implement the following measures for such a discharge, but shall implement these measures to the extent that its requirements do not compromise the research design

A. Mosquito and Other Flying Insect PMM (Applicable to Operators Required to Submit an Application):

This section applies to discharges from the application of pesticides for mosquito and other flying insect pest control. Prior to the first pesticide application covered under this permit that will result in a discharge into, over, or near surface waters of the State, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the following shall be done for each pest management area, as defined in Appendix A:

1. Establish densities for larval and adult mosquito or flying insect pest populations or identify environmental condition(s), either current or based on historical data, to serve as action threshold(s) for implementing pest management measures;
2. Identify target pest(s) to develop pest management measures based on developmental and behavioral considerations for each pest;
3. Identify known breeding sites for source reduction, larval control program, and habitat management;
4. Analyze existing surveillance data to identify new or unidentified sources of mosquito or flying insect pest problems as well as sites that have recurring pest problems; and
5. In the event there is no data for the pest management area in the past calendar year, use other available data as appropriate to meet the permit conditions.

If a pesticide is selected to manage mosquitoes or flying insect pests and application of the pesticide will result in a discharge into, over, or near surface waters of the State, the Operator shall:

1. Conduct larval and/or adult surveillance in an area that is representative of the pest problem or evaluate existing larval surveillance data, environmental conditions, or data from adjacent areas prior to each pesticide application to assess the pest management area and to determine when the action threshold(s) is met;
2. Reduce the impact on the environment and on non-target organisms by applying the pesticide only when the action threshold has been met;
3. In situations or locations where practicable and feasible for efficacious control, use larvicides as a preferred pesticide for mosquito or flying insect pest control when larval action threshold(s) has been met; and
4. In situations or locations where larvicide use is not practicable or feasible for efficacious control, use adulticides for mosquito or flying insect pest control when adult action threshold(s) has been met.

B. Aquatic Weed and Algae PMM (Applicable to Operators Required to Submit an Application):

This section applies to discharges from the application of pesticides to control weeds, algae, and pathogens. Prior to the first pesticide application covered under this permit that will result in a discharge into, over, or near surface waters of the State, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year the Operator shall do the following for each pest management area, as defined in Appendix A:

1. Identify areas with pest problems and characterize the extent of the problems, including, for example, water use goals not attained (e.g. wildlife habitat, fisheries, vegetation, and recreation);
2. Identify target pest(s);
3. Identify possible factors causing or contributing to the pest problem (e.g., nutrients, invasive species, etc);
4. Establish any pest and site-specific action threshold for implementing the pest management options above; and
5. In the event there is no data for the pest management area in the past calendar year, use other available data as appropriate to meet the permit conditions.

If a pesticide is selected to manage aquatic weeds or algae and application of the pesticide will result in a discharge to surface waters of the State, the Operator shall:

1. Conduct surveillance in an area that is representative of the pest problem prior to each pesticide application to assess the pest management area and to determine when the action threshold(s) is met; and
2. Reduce the impact on the environment and non-target organisms by applying the pesticide only when the action threshold has been met.

C. Aquatic Nuisance Animal PMM (Applicable to Operators Required to Submit an Application):

This section applies to discharges from the application of pesticides for aquatic animal pest control. Prior to the first pesticide application covered under this permit that will result in a discharge into, over, or near surface waters of the State, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the Operator shall do the following for each pest management area, as defined in Appendix A:

1. Identify areas with pest problems and characterize the extent of the problems, including, for example, water use goals not attained (e.g. wildlife habitat, fisheries, vegetation, and recreation);
2. Identify target pest(s);
3. Identify possible factors causing or contributing to the problem (e.g., nutrients, invasive species);
4. Establish any pest and site-specific action threshold(s) for implementing the pest management options above; and
5. In the event there is no data for the pest management area in the past calendar year, use other available data as appropriate to meet the permit conditions.

If a pesticide is selected to manage pests and application of the pesticide will result in a discharge to surface waters of the State, the Operator shall:

1. Conduct surveillance in an area that is representative of the pest problem prior to each application to assess the pest management area and to determine when the action threshold(s) is met; and
2. Reduce the impact on the environment and non-target organisms by evaluating site restrictions, application timing, and application method in addition to applying the pesticide only when the action threshold(s) has been met.

D. Forest Canopy PMM (Applicable to Operators Required to Submit an Application):

This section applies to discharges from the application of pesticides for forest canopy pest control. Prior to the first pesticide application covered under this permit that will result in a discharge into, over, or near surface waters of the State, and at least once each calendar year thereafter prior to the first pesticide application in that calendar year, the Operator shall do the following for each pest management area, as defined in Appendix A:

1. Establish any pest and site-specific action threshold for implementing b below; and
2. Identify target pest(s) to develop pest management measures based on developmental and behavioral considerations for each pest;

3. Identify current distribution of the target pest and assess potential distribution in the absence of pest management measures; and
4. In the event there is no data for the pest management area in the past calendar year, use other available data as appropriate to meet the permit conditions in this Section.

If a pesticide is selected to manage forestry pests and application of the pesticide will result in a discharge into, over, or near surface waters of the State, the Operator shall:

1. Conduct surveillance in an area that is representative of the pest problem prior to each application to assess the pest management area and to determine when the pest action threshold is met;
2. Reduce the impact on the environment and non-target organisms by evaluating the restrictions, application timing, and application methods in addition to applying pesticide only when the action threshold(s) has been met; and
3. Evaluate using pesticides against the most susceptible developmental stage.

E. Agricultural PMM (Applicable to Operators Required to Submit an Application):

This section applies to discharges from the application of pesticides into, over, or near Surface waters of the State (as defined in Appendix A), which are used in the operation of agricultural activities. The use of pest management measures involves knowledge of the crop, the pest, the ecosystem, and the relationships between these factors. The ultimate goal of pest management measures is to ensure the production of an abundant, high-quality crop in an environmentally sound manner, by relying on field scouting, proper pest identification, prevention, cultural and biological practices, and if necessary the use of pesticides that are the least toxic to the environment and beneficial organisms. The pest management measures avoid the use of calendar-based pesticide spraying. The Operator shall:

1. Scout the pest management area for insects, disease, and weeds at each crop stage for detection of a problem in the early stages of development and ensure accurate identification of pest(s);
2. Evaluate pest management strategies that minimize the use of pesticides, such as use of resistant or tolerant cultivars, plant spacing, proper pruning, weed removal at the base of plants, use of beneficial insects, surface mulch, etc.;
3. Determine the conditions that would require the use of pesticides.

If a pesticide is selected to manage pests and application of the pesticide will result in a discharge into, over, or near surface waters of the State, the Operator shall:

1. Ensure that the conditions that require the use of pesticides are present and the pest(s) has been accurately identified;
2. Choose a pesticide that is pest specific to protect beneficial organisms that may be present;
3. Use pesticides at the optimum time for control (i.e. the stage that the pest is most vulnerable).

F. Utility Transmission and Distribution Line PMM:

This section applies to discharges from the application of pesticides into, over, or near Surface waters of the State for Utility Transmission and Distribution Line Vegetation Control. Pest Management Measures reduce the risk to the environment, including water quality, by minimizing the need for pesticides, while effectively managing vegetation along distribution and transmission lines and other electric utility facilities and rights of way. The Operator shall:

1. Assess each pest management area's vegetation characteristics, such as height, density, type, size, condition, hazard status, and clearance from conductors. Identify target pests.

To define action thresholds, the Operator shall establish any pest and site-specific action threshold(s) for implementing pest management measures.

If a pesticide is selected and application of the pesticide will result in a discharge into, over, or near surface waters of the State, the Operator shall:

1. Reduce the impact on the environment and non-target organisms by applying the pesticide only when the action threshold has been met.

7 Pesticide Discharge Management Plan (Applicable to Operators required to submit an Application and is a Large Entity)

A Pesticide Discharge Management Plan (PDMP) must be prepared for any Operator who is required to submit an application and is a large entity. Some sections of the PDMP will require input from the pesticide applicator. Operators who are not a large entity and/or are not required to submit an application are not required to prepare a PDMP.

If the Operator is a large entity and is required to submit an application, they shall prepare a PDMP for their pest management area. The Operator shall keep the plan up-to-date thereafter for the duration of coverage under this general permit, even if the discharges subsequently fall below the applicable acreage threshold. The Operator shall develop a PDMP by the time the application is submitted.

The PDMP records how the Operator will comply with the permit conditions, including the evaluation and selection of pest management measures to meet those effluent limitations and minimize discharges. In the PDMP, the Operator may incorporate by reference any procedures or plans in other documents that meet the requirements of this permit. If the Operator relies upon other documents to describe how they will comply with the effluent limitations in this permit, such as a pre-existing pest management plan, they shall attach a copy of any portions of any documents that they are using to document compliance of the effluent limitations to the PDMP. All Operators subject to the effluent limitations described above shall implement pest management measures to satisfy the effluent limitations. This includes the Operator who submitted the application as well as any employees, contractors, subcontractors, or other agents. The pest management measures implemented shall be documented and the documentation shall be kept up-to-date.

The PDMP shall be modified whenever necessary to address any of the triggering conditions for corrective action or when a change in pest control activities significantly changes the type or quantity of pollutants discharged. Changes to the PDMP shall be made before the next pesticide application that results in a discharge, if practicable, or if not, no later than 90 days after any change in pesticide application activities.

A copy of the current PDMP is required to be retained along with all supporting maps and documents, at the address provided on the application. The PDMP and all supporting documents shall be readily available, upon request, and copies of any of these documents provided, upon request, to the Department or a local agency governing pesticide application within their respective jurisdictions.

A. Contents of the Pesticide Discharge Management Plan (PDMP):

The PDMP shall identify Pesticide Discharge Management Team members which must include any written agreement(s) between the applicant and any other Operator(s), such as a for-hire pesticide applicator, that specify the division of responsibilities between Operators as necessary to comply with the provisions of this permit. The applicant must identify all the persons (by name and contact information) that compose the team as well as each person's individual responsibilities, including:

1. Person(s) responsible for managing pests in relation to the pest management area;
2. Person(s) responsible for developing and revising the PDMP;
3. Person(s) responsible for developing, revising, and implementing corrective actions and other effluent limitation requirements; and
4. Person(s) responsible for pesticide applications (NJDEP certified applicators not Operators as defined by NJDEP Pesticide Regulations). If the pesticide applicator is unknown at the time of plan development,

indicate whether or not a for-hire applicator will be used and when it is anticipated that they will be identified.

The PDMP shall identify each problem by documenting the following:

1. Pest problem description: Document a description of the pest problem at the pest management area, including identification of the target pest(s), source of the pest problem, and source of data used to identify the problem;
2. Action Threshold(s): Describe the action threshold(s) for the pest management area, including data used in developing the action threshold(s) and method(s) to determine when the action threshold(s) has been met;
3. General location map: In the plan, include a general location map (e.g., USGS quadrangle map, a portion of a city or county map, or other map) that identifies the geographic boundaries of the area to which the plan applies and location of the surface waters of the State; and
4. Water quality standards: Document any FW1 and PL waterbodies and any State waterbodies identified as impaired by a substance which either is an active ingredient or a degradate of such an active ingredient. A list of the State's impaired waterbodies and the surface waterbodies that are classified as FW1 and PL can be found at <https://www.nj.gov/dep/wms/bears/generalinfo.htm>.

Operators must document the evaluation of the pest management options, including a combination of pest management options, to control the target pest(s) in the PDMP. Pest management options include the following: No action; prevention; mechanical and/or physical methods; cultural methods; biological control agents, and pesticides. In the evaluation, Operators must consider the impact to water quality, impact to non-target organisms, feasibility, cost effectiveness, and any relevant previous Pest Management Measures. Operators must document the following procedures in the PDMP:

1. At a minimum, procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases to waters of the State. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of the PDMP team;
2. At a minimum, procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies;
3. At a minimum, procedures for responding to any adverse incident resulting from pesticide applications;
4. At a minimum, procedures for notification of the adverse incident, both internal to the Operator's agency/organization and external. Contact information for state/ federal permitting agency, nearest emergency medical facility, and nearest hazardous chemical responder must be in locations that are readily accessible and available.

Operators must sign, date, and certify the PDMP, and if applicable the revised PMPD, in accordance with N.J.A.C. 7:14A-4.9.

8 Corrective Action

The purpose of including corrective action requirements in this permit is to assist this new universe of NJPDES permittees with effectively meeting technology-based and water quality-based effluent limitations and implementing pest management measures in this permit. Corrective action requirements apply from the time any authorized Operator begins discharging under this permit. These requirements are not tied to the submission of an application. Corrective actions in this permit are follow-up actions an Operator shall take to assess and correct problems. They require review and revision of pest management measures and pesticide application activities, as necessary, to ensure that these problems are eliminated and will not be repeated in the future. This permit makes clear that the Operator is expected to assess why a specific problem has occurred and document what steps were taken to eliminate the problem. The Department believes that this approach will help Operators in complying with the requirements and may be corrected immediately simply by following already established procedures, therefore, are not considered problems that trigger corrective action provisions of the permit.

It should be noted that a situation triggering corrective action is not necessarily a permit violation and, as such, may not necessarily trigger a modification of pest management measures to meet effluent limitations. However, failure to conduct (and document) corrective action reviews in such cases does constitute a permit violation.

A. Situations Requiring Revision of Control Measures:

All Operators must comply with the provisions of this section for any discharges authorized under this permit, with compliance required upon beginning such discharge. Operators must review and, as necessary, revise the evaluation and selection of Pest Management Measures for the following situations:

1. An unauthorized release or discharge associated with the application of pesticides (e.g., spill, leak, or discharge not authorized by this or another NJPDES permit) occurs;
2. Operators become aware, or the Department concludes, that the control measures are not adequate/sufficient for the discharge to meet applicable water quality standards;
3. Operators become aware or the Department concludes, that the control measures are not adequate/sufficient to avoid adverse incidents to state and/or federally listed endangered and threatened plant and wildlife species;
4. Any monitoring activities indicate failure to meet applicable technology based effluent standards;
5. An inspection or evaluation of activities by a NJDEP official, or local, state, or federal entity reveals that modifications to the Pest Management Measures are necessary to meet the effluent standards in this permit;
6. Any Operator observes or is otherwise made aware of an adverse incident as defined in Appendix A that has been determined to be caused by the application of pesticides.

If an Operator determines that changes to Pest Management Measures are necessary to eliminate any situation identified above, such changes shall be made before or, if not practicable, as soon as possible after the next pesticide application that results in a discharge.

The occurrence of a situation identified above may constitute a violation of the permit. Correcting the situation does not absolve the Operator of liability for any original violation. However, failure to comply constitutes an additional permit violation. The Department will consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations.

B. Corrective Action Documentation:

For situations other than for adverse incidents, spills, leaks, or other unpermitted discharges, Operators must document the situation triggering corrective action and planned corrective action within thirty (30) days of becoming aware of the situation and retain a copy of this documentation. This documentation must include the following information:

1. Identification of the condition triggering the need for corrective action review, including any ambient water quality monitoring that assisted in determining that discharges did not meet water quality standards;
2. Brief description of the situation;
3. Date the problem was identified;
4. Brief description of how the problem was identified, how the Operator learned of the situation, and date the Operator learned of the situation;
5. Summary of corrective action taken or to be taken, including date initiated and date completed or expected to be completed; and
6. Any measures to prevent reoccurrence of such an incident, including notice of whether PDMP modification is required as a result of the incident.

The Department or a court may impose additional requirements and schedules of compliance, including requirements to submit additional information concerning the condition(s) triggering corrective action or schedules and requirements more stringent than specified in this permit. Those requirements and schedules will supersede those above if such requirements conflict.

9 Reporting

A. Adverse Incident, Reportable Spill and Leaks, and Other Unpermitted Discharge Notification:

If an Operator or for-hire Applicator observe or are otherwise made aware of an adverse incident, reportable spill or leak, as defined in Appendix A, or any other unpermitted discharge, they shall immediately notify the NJDEP Hotline at 1-877-WARN-DEP. This notification shall be made by telephone immediately but no later than two (2) hours of the Operator or for-hire Applicator becoming aware of the incident and shall include at least the following information:

1. The caller's name and telephone number;
2. Operator and, if applicable, then for-hire Applicator's contact information;
3. If the Operator received a General Permit Authorization, the NJPDES permit number;
4. The name and telephone number of a contact person, if different than the person providing the 24-hour notice;
5. How and when Operator and/or for-hire Applicator became aware of the adverse incident, spill, leak, or other unpermitted discharge;
6. Location of the adverse incident, spill, leak, or other unpermitted discharge;
7. Description of the adverse incident, spill, leak, or other unpermitted discharge identified, and the pesticide product name, EPA pesticide registration number, and amount of each product that was applied, spilled, leaked, or discharged in the affected area;
8. Description of any steps taken or will take to correct, repair, remedy, cleanup, or otherwise address any adverse effects; and
9. If known, the identity of any other Operators authorized for coverage under this permit.

If the Operator and/or for-hire Applicator are unable to notify the Department within two (2) hours, they shall do so as soon as possible and provide rationale for why they were unable to provide such notification.

The adverse incident notification and reporting requirements are in addition to what the registrant is required to submit under FIFRA Section 6(a)(2) and its implementing regulations at 40 CFR Part 159. Reporting of adverse incidents is not required in the following situations:

1. The Operator has been notified in writing by the Department that the reporting requirement has been waived for this incident or category of incidents; and
2. An adverse incident occurs to pests that are similar in kind to potential target pests identified on the FIFRA label.

B. Written Report:

If it has been determined by the Department that the incident is a result of the Operator's and/or for-hire Applicator's activity, the Operator is required to provide a written report to the Department within ten (10) business days of a reportable spill or leak, or other unpermitted discharge to the Bureau of Pesticide Compliance at pesticidegp@dep.nj.gov. The Operator shall report adverse incidents even for those instances when the pesticide labeling states that adverse effects may occur. The incident report shall include at least the following information:

1. Information required to be provided to the NJDEP Hotline, as specified above;
2. Date and time the NJDEP hotline was contacted notifying the Department of the incident, the employee who received the notification, and any instructions received from the Department;
3. Location of incident, including the names of any waters affected and appearance of those waters (sheen, color, clarity, etc);
4. A description of the circumstances of the incident including species affected, estimated number of individual and approximate size of dead or distressed organisms;
5. Magnitude and scope of the affected area (e.g. aquatic square area or total stream distance affected);

6. Pesticide application rate, intended use site (e.g., banks, above, or direct to water), method of application, and name of pesticide product, amount applied, and EPA registration number;
7. Description of the habitat and the circumstances under which the incident occurred (including any available ambient water data for pesticides applied);
8. If laboratory tests were performed, indicate what test(s) were performed, and when, and provide a summary of the test results within five (5) days after they become available if not available at the time of submission of this report;
9. Actions to be taken to prevent recurrence of adverse incident, spill or leak, or other unpermitted discharge; and
10. Signed and dated in accordance with N.J.A.C. 7:14A-4.9.

C. Annual Reporting for Operators Who are Required to Submit an Application:

If the Operator is required to submit an application and reported an adverse incident(s) in the previous calendar year as described above, the Operator shall submit an annual report to the Department via email at pesticidegp@dep.nj.gov, no later than December 31st of the following year. The annual report shall include the following:

1. Operator's name and contact information;
2. NJPDES permit number(s);
3. Contact person name, title, e-mail address (if any), and phone number;
4. A summary report of all adverse incidents that occurred during the previous calendar year; and
5. A summary of any corrective actions, including spill responses, in response to adverse incidents, and the rationale for such actions.

D. Annual Reporting Requirements for Discharges to Waters Designated as PL or FW1:

The Department requires all Operators discharging to PL or FW1 waters to submit an annual report that details the findings of the post application monitoring. This information will be used by the Department to assess permit compliance and to determine whether additional controls on pesticide discharges are necessary to protect water quality.

The annual report must include information for the calendar year, with the first report required to include activities for the portion of the calendar year after the effective date of the permit authorization. If the effective date of the permit authorization is after December 1st, the Operator is not required to submit an annual report for that first partial year, but must submit annual reports thereafter, with the first report submitted also including information from the first partial year. When an Operator terminates permit coverage, the Operator must submit an annual report for the portion of the year up through the date of termination. The annual report is due no later than forty-five (45) days after the termination date.

Operators discharging to PL or FW1 waters shall submit an annual report to pesticidegp@dep.nj.gov no later than December 31st of the following year. The annual report shall include the following:

1. Operator's name;
2. NJPDES permit number(s);
3. Contact person name, title, e-mail address (if any), and phone number;
4. Brief description of what was observed at the post application monitoring, including identification of any waters of the State, either by name or watershed, date, and time;
5. A summary report of any adverse incidents, spills, leaks, or any other unpermitted discharge that occurred during the previous calendar year; and
6. A summary of any corrective actions taken, and the rationale for such actions.

10 Reporting

A. General Recordkeeping:

Operators shall keep written records as required in this permit. These records shall be accurate, complete, and sufficient to demonstrate compliance with the conditions of this permit. Operators can rely on records and documents developed for other obligations, such as requirements under FIFRA, and state or local pesticide programs, provided all requirements of this permit are satisfied. All Operators shall keep the following records:

1. A copy of this permit (an electronic copy is also acceptable);
2. A copy of any adverse incident, spill, leak, or other unpermitted discharge reports;
3. Rationale for any determination that reporting of an identified adverse incident is not required consistent with allowances identified in the written report; and
4. A copy of any corrective action documentation.

The Department recommends that the Operators required to submit an application keep records of acres or linear miles treated for all applicable use patterns covered under this general permit. The records should be kept up-to-date to help determine if they will meet the annual treatment area threshold during any calendar year.

All required records shall be prepared as soon as possible, but no later than fourteen (14 days) following completion of the associated activity. Operators shall retain copies of these documents for a period of at least five (5) years from the date their coverage under this master general permit expires or is terminated, in accordance with N.J.A.C. 7:14A-6.6. In accordance with N.J.A.C. 7:14A-2.11, the Operator shall allow an authorized representative of the Department access to any records that are required to be kept under the conditions of this master general permit.

B. Specific Recordkeeping for All Applicators Including For-Hire Applicators:

Any Operator who is an applicator or is a fore-hire Applicator as defined in Appendix A, must retain the following records:

1. Documentation of equipment calibration; and
2. Information on each treatment area, including location and size (acres or linear feet) of treatment area and identification of any waters, either by name or by watershed, to which pesticide(s) are discharged;
3. Pesticide use pattern(s);
4. Target pest(s);
5. Name of each pesticide product used including the EPA registration number;
6. Quantity of each pesticide product applied to each treatment area;
7. Pesticide application date(s); and
8. Whether or not visual monitoring was conducted during pesticide application and/or post application and if not, why not and whether monitoring identified any possible or observable adverse incidents caused by application of pesticides.

C. Recordkeeping for Any Operator Required to Submit an Application and is a Small Entity:

Any Operator who is a small entity and is required to submit an application must maintain the following records at the address provided on the application:

1. A copy of the application submitted to the Department, any correspondence exchanged between the Operator and the Department specific to coverage under this permit, and a copy of the Pesticide General Permit Authorization;
2. Documentation of equipment calibration (only if Operator is also the applicator);

3. Description of treatment area, including location and size (acres or linear feet) of treatment area and identification of any Waters of the State, either by name or by watershed, to which pesticide(s) are discharged;
4. Pesticide use pattern(s);
5. Target pest(s) and explanation of need for pest control;
6. Description of pest management measure(s) implemented prior to the first pesticide application;
7. Company name and contact information for pesticide applicator, if any;
8. Name of each pesticide product used, including the EPA registration number;
9. Quantity of each pesticide product applied to each treatment area;
10. Pesticide Application Start Date;
11. Pesticide Application End Date; and
12. Whether or not visual monitoring was conducted during pesticide application and/or post application and if not, why not and whether monitoring identified any possible or observable adverse incidents caused by application of pesticides.

D. Recordkeeping for Any Operator Required to Submit an Application and is a Large Entity:

Any Operator required to submit an application that is defined as a large entity must retain the following records at the address provided on the application:

1. Copy of the application submitted to the Department, any correspondence exchanged between the Operator and the Department specific to coverage under this permit, and a copy of the Pesticide General Permit Authorization;
2. A copy of the PDMP, including any modifications made to the PDMP during the term of this permit;
3. Copy of annual reports submitted to EPA;
4. Documentation of equipment calibration (only if Operator is also the applicator);
5. Description of each treatment area, including location and size (acres or linear feet) of treatment area and identification of any Waters of the State, either by name or by watershed, to which pesticide(s) are discharged;
6. Pesticide use pattern(s);
7. Target pest(s) and explanation of need for pest control;
8. Action Thresholds;
9. Method and/or data used to determine that action threshold(s) has been met;
10. Description of pest management measure(s) implemented prior to the first pesticide application;
11. Company name and contact information for pesticide applicator, if any;
12. Name of each pesticide product used including the EPA registration number;
13. Quantity of each pesticide product applied to each treatment area;
14. Pesticide application date(s); and
15. Whether or not visual monitoring was conducted during pesticide application and/or post application and if not, why not and whether monitoring identified any possible or observable adverse incidents caused by application of pesticides.

11 Description of Procedures for Reaching a Final Decision on the Draft Action

Refer to the procedures described in the public notice that is part of the draft permit. The public notice for this permit action is published in the *DEP Bulletin* and the newspapers specified in the table below:

Newspaper	County
<i>Courier Post</i>	Burlington, Camden, and Gloucester
<i>The Daily Record</i>	Morris
<i>The Press of Atlantic City</i>	Atlantic, Cumberland, and Ocean
<i>The Star Ledger</i>	Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, and Warren
<i>The Times</i>	Mercer
<i>The South Jersey Times</i>	Salem

12 Description of Procedures for Reaching a Final Decision on the Draft Action

All permit applications, reports, and records shall be submitted electronically to the Department at: pesticidegp@dep.nj.gov.

If there are any questions regarding this permit action, please contact Kirstin Victorella or Teresa Guloy, Bureau of Surface Water and Pretreatment Permitting at (609) 292-4860 or via email at pesticidegp@dep.nj.gov.

13 Description of Procedures for Reaching a Final Decision on the Draft Action

The following items are used to establish the basis of the Draft Permit:

Rules and Regulations:

- 33 U.S.C. 1251 *et seq.*, Federal Water Pollution Control Act. [B]
- 40 CFR Part 131, Federal Water Quality Standards. [B]
- 40 CFR Part 122, National Pollutant Discharge Elimination System. [B]
- N.J.S.A. 58:10A-1 *et seq.*, New Jersey Water Pollution Control Act. [A]
- N.J.A.C. 7:14A-1 *et seq.*, NJPDES Regulations. [A]
- N.J.A.C. 7:9B-1 *et seq.*, New Jersey SWQS. [A]
- N.J.A.C. 7:15, Statewide Water Quality Management Planning Rules. [A]

Guidance Documents / Reports:

- "Field Sampling Procedures Manual", published by the Department. [A]
- "NJPDES Monitoring Report Form Reference Manual", updated December 2007, and available on the web at https://dep.nj.gov/wp-content/uploads/dwq/mrf_manual.pdf. [A]
- New Jersey's 2018/2020 Integrated Water Quality Monitoring and Assessment Report (includes 305 (b) Report 303(d) List). [A]

Permits / Applications:

- Existing NJPDES/DSW General Permit for Pesticides Application Discharges, Permit No. NJ0178217, issued February 13, 2020 and effective February 28, 2020.

Footnotes:

[A] Denotes items that may be found on the Department's website located at "<http://www.state.nj.us/dep/>".

[B] Denotes items that may be found on the USEPA website at "<http://www.epa.gov/>".



NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM

The New Jersey Department of Environmental Protection hereby grants you a NJPDES permit for the facility/activity named in this document. This permit is the regulatory mechanism used by the Department to help ensure your discharge will not harm the environment. By complying with the terms and conditions specified, you are assuming an important role in protecting New Jersey's valuable water resources. Your acceptance of this permit is an agreement to conform with all of its provisions when constructing, installing, modifying, or operating any facility for the collection, treatment, or discharge of pollutants to waters of the state. If you have any questions about this document, please feel free to contact the Department representative listed in the permit cover letter. Your cooperation in helping us protect and safeguard our state's environment is appreciated.

Permit Number: NJ0178217

Draft: Surface Water Master General Permit Renewal

Permittee:

NJPDES Master General Permit Program Interest
Category PGP
Per Individual Notice of Authorization Division of
Water Quality
Mail Code 401-02B
P.O. Box 420, 401 East State Street
Trenton, NJ 08625-0420

Co-Permittee:

Property Owner:

NJPDES Master General Permit Program Interest
Category PGP
Per Individual Notice of Authorization Division of
Water Quality
Mail Code 401-02B
P.O. Box 420, 401 East State Street
Trenton, NJ 08625-0420

Location Of Activity:

NJPDES Master General Permit Program Interest
Category PGP
Per Individual Notice of Authorization Division of
Water Quality
Mail Code 401-02B
P.O. Box 420, 401 East State Street
Trenton, NJ 08625-0420

Authorization Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
PGP - Pesticide Application Discharges (GP)	<i>Pending</i>	<i>Pending</i>	<i>Pending</i>

By Authority of:
Commissioner's Office

DEP AUTHORIZATION

Brett Callanan, Chief

Bureau of Surface Water and Pretreatment Permitting

(Terms, conditions and provisions attached hereto)

PART I

NARRATIVE REQUIREMENTS

Pesticide Application Discharges (GP)

A. GENERAL REQUIREMENTS FOR AUTHORIZATION UNDER THE NJPDES DISCHARGE TO SURFACE WATER GENERAL PERMIT FOR PESTICIDE APPLICATION DISCHARGE

1. Purpose of the Master General Pesticide NJPDES Permit

- a. This general permit is issued to authorize the application(s) of biological and chemical pesticides in water when such applications are made in, over, or near surface waters of the State. This NJPDES general permit is also issued to ensure compliance with the Clean Water Act and does not supersede and/or replace any other required permits.

2. Requirements Incorporated by Reference

- a. The permittee must comply with all other applicable federal, state, local laws and regulations that pertain to the application of pesticides, including but not limited to the following: Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), Pinelands Commission Certificate of Filing, N.J.A.C. 7:30-9.3 (Aquatic Pesticide Permits), N.J.A.C. 7:30-9.2 (Mosquito/Fly Control Permit), and Reporting to the National Response Center. This permit does not negate the requirements under FIFRA and its implementing regulations to use registered pesticides consistent with the product's labeling, including contacting the local fish and wildlife service if required.
- b. Application of herbicides to waterbodies in the Pinelands, with the exception of lakes and ponds, requires the operator to apply and receive a Pinelands Commission Consistent Certificate of Filing prior to submitting an application to the NJDEP for a NJPDES Pesticide Application Discharge permit. This is consistent with the terms of the June 1991 Memorandum of Agreement between the Commission and the Pesticide Control Program.

B. COVERAGE UNDER THE MASTER GENERAL PERMIT

1. Eligible Activities

- a. This master general permit authorizes the application of biological and chemical pesticides made directly to surface waters of the State in order to control pests.
- b. Pesticide use patterns were developed to include discharges that are similar in type and nature and therefore represent the type of discharges and expected nature of the discharges covered under this general permit. This general permit is required when pesticide application is for one of the following six pesticide use patterns:
 - i. Mosquito and Other Flying Insect Pest Control – to control public health/nuisance and other flying insect pests that develop or are present during a portion of their life cycle in or above standing or flowing water. Public health/nuisance and other flying insect pests in this use category include but are not limited to mosquitoes and black flies.

Pesticide Application Discharges (GP)

- ii. Aquatic Weed and Algae Control – to control weeds, algae, and pathogens that are pests in water and at water's edge, including ditches and/or canals.
 - iii. Aquatic Nuisance Animal Pest Control – to control animal pests in water and at water's edge. Animal pests in this use category include, but are not limited to fish, lampreys, insects, mollusks, and pathogens.
 - iv. Forest Canopy Pest Control - to control the population of a pest species (e.g., insect or pathogen) where a portion of the pesticide unavoidably will be applied over and deposited to water in order to target the pests effectively.
 - v. Agricultural Activities - application of pesticides into, over, or near surface waters (as defined in Appendix A) of the State used in the operation of agricultural activities.
 - vi. Utility Transmission and Distribution Line Vegetation Control - application of pesticides into, over, or near waters of the State to selectively eliminate vegetation which may potentially short circuit overhead conductors, significantly restrict physical access on the right-of-way, is necessary for other related uses, or is required by the New Jersey Board of Public Utilities Vegetation Management Standards for Transmission Line Maintenance.
- c. Pesticide applications must be approved by the Department through individual general permit authorizations to be covered under this master general permit. The applicant becomes authorized for application of a product and resultant discharge under this general permit once a final individual general permit authorization has been issued by the Department.
- d. The Department reserves the right to deny or revoke authorization to discharge pesticides in any area where significant adverse impacts due to documented pesticide applications are occurring.

2. Eligible Permit Applicants

- a. In accordance with N.J.A.C. 7:14A-1.2, and as defined in Appendix A, the Department defines an Operator as any person who alone or along with the other persons has primary management and operational decision-making authority over any part of the activity.
- b. Coverage under this master general permit is for the Operator who filed the application, including its employees, contractors, subcontractors, and other agents, for all activities identified on the application for the duration of this general permit unless coverage is terminated.
- c. The following Operators are required to submit an application (NJPDES Form-1 and PGP Supplemental Form) to obtain coverage under this general permit for discharges to surface waters of the State resulting from the application of pesticides:
 - i. If the Operator is in control over the financing for, or over the decision to perform pest control activities that will result in a discharge and know or reasonably should have known that those activities will exceed one or more of the annual (i.e., calendar year) treatment area thresholds listed in Table 1 in Appendix C for the “treatment area,” (defined in Appendix A) or
 - ii. If the Operator is an entity for which pest management for land resource stewardship is an integral part of the organization's operation and the Operator will be performing pest control activities that will result in a discharge, or

- iii. If the Operator applies pesticides that result in a discharge and know or reasonably should have known that those activities will exceed one or more of the pesticide application annual (i.e., calendar year) treatment area thresholds listed in Table 1 in Appendix C for the “treatment area” (defined in Appendix A). To determine whether an entity’s activities will exceed one or more of the annual treatment area thresholds, the entity should exclude from its calculation any pesticide application activities conducted under another entity’s application required under i. above.
- iv. If the Operator applies pesticides to waters classified as Pinelands (PL) or FW1, in accordance with N.J.A.C. 7:9B-1.15, exemption from submission of an application based on annual treatment area thresholds does not apply to these waters. Surface water classifications are listed in the New Jersey Surface Water Quality Standards at N.J.A.C. 7:9B and can be found on the Department’s website at http://www.nj.gov/dep/rules/rules/njac7_9b.pdf. The Department will specify the surface water classifications and corresponding designated uses for the waterbodies that are being authorized in the general permit authorization (GPA).

3. Permit by Rule

- a. Operators whose application of pesticides will not exceed one or more of the annual (i.e. calendar year) treatment area thresholds listed in Table 1 in Appendix C for the “treatment area” (defined in Appendix A), are automatically authorized to discharge after the effective date of the Master General Permit, in compliance with the requirements of this permit without submission of an application.
- b. Permit by rule does not apply to operators who discharge to Pinelands and FW1 Waters.

4. Activities Exempted

- a. Irrigation return flows and agricultural stormwater runoff do not require NJPDES permits, even when they contain pesticides or pesticide residues, as the CWA specifically exempts these categories of discharges from requiring NJPDES permit coverage. Other stormwater runoff is either: (a) already required to obtain NJPDES permit coverage as established in Section 402(p) of the CWA or (b) classified as a non-point source discharge for which NJPDES permit coverage is not required. Stormwater runoff that may contain pesticides would not be eligible for coverage under this permit, and is not required to obtain NJPDES permit coverage unless it was already required to do so prior to the Sixth Circuit decision, or NJDEP designates a source for future stormwater permitting.

5. Activities Not Covered

- a. The Operator is not eligible for coverage under this permit for any discharges from a pesticide application to surface waters of the State if the water is identified as impaired by a substance which either is an active ingredient in that pesticide or is a degradate of such an active ingredient. For purposes of this permit, impaired waters are those that have been identified by the Department of Environmental Protection (DEP) pursuant to Section 303(d) of the CWA as not meeting applicable State water quality standards. Please see <https://www.nj.gov/dep/wms/bears/generalinfo.htm>.
- i. As an exception to the above, the Department has decided to allow the use of Temephos for mosquito control in waters impaired for phosphorus due to the fact that an alternative product is considered more toxic to the environment and is not recommended. In addition, both biological and chemical pesticides are used on a rotating basis in order to prevent pest resistance. Therefore, the chemical pesticide, Temephos, will not be the only pesticide used for mosquito control, and will only be used occasionally when necessary.

C. ADMINISTRATIVE PROCESS

1. To obtain authorization under this permit, an Operator must:

- a. Seek a permit for a pesticide use pattern identified in Section B and
- b. Submit a complete and accurate application (NJPDES Form-1 and PGP Supplemental Form). In accordance with this Section, Operators who qualify for a permit by rule are automatically authorized to discharge after the effective date of the Master General Permit, in compliance with the requirements of this permit without submission of an application.

2. Application Requirements

- a. Applications are required to be submitted at least thirty (30) days prior to the pesticide application via email to pesticidegp@dep.nj.gov. Operators are authorized to discharge under this permit consistent with Table 2 in Appendix D.
- b. The PGP checklist and application forms are available on the Department's website at: www.nj.gov/dep/dwq/forms_surfacewater.htm.
- c. The following information shall be included in a permit application for authorization under this general permit:
 - i. Contact information and license number of the Operator;
 - ii. Contact information and license number of the for-hire Applicator (when applicable);
 - iii. Description of the waterbody;
 - iv. Size of treatment area (acres and/or linear miles);
 - v. Pesticide Use Pattern(s); and
 - vi. Aquatic Pesticide Submittal Summaries for each discharge location (when applicable).
 - vii. Any Operator that is required to submit an application and is a large entity is required to also develop a written Pesticide Discharge Management Plan (PDMP) in accordance with Section F
- d. The Operator authorizing the activity to be authorized by this general permit must sign the NJPDES Form-1 and PGP Supplemental Form, in accordance with N.J.A.C. 7:14A-4.9, certifying that the application will comply with all the conditions of this general permit.
- e. Authorization under this master general permit allows the application of pesticides to the specified waterbody listed in the initial permit application. If a permit applicant requests an application to additional waterbodies not listed in the initial permit application, a PGP Supplemental Application Form must be submitted to the Department at least thirty (30) days prior to each additional waterbody application. The permit applicant becomes authorized for the additional waterbody application when a modification to the individual general permit authorization has been issued by the Department.
- f. An individual authorization issued under the Master Pesticides Application Discharge General Permit will be given two NJPDES numbers. The NJPDES number on the individual general permit authorization beginning in "NJG" is specific to the applicant, whereas the NJPDES number NJ0178217 is for the master general permit.

- g. All authorizations will have the same expiration date and will follow the same permit cycle. In accordance with N.J.A.C. 7:14A-2.7, all NJPDES permits shall be issued for fixed terms not to exceed five (5) years.
- h. Based on review of the application or other information, the Department may delay authorization for further review or may determine whether additional technology-based and/or water quality-based effluent limitations are necessary or may deny coverage under this general permit and require submission of an application for an individual NJPDES permit.
- i. A general permit authorization renewal application shall be submitted 180 days before the expiration date.
- j. A general permit revocation request form shall be submitted to the Department if the applicant no longer requires authorization under this general permit.
- k. Questions regarding this general permit, should be directed to the Bureau of Surface Water and Pretreatment Permitting at (609) 292-4860 or via email at pesticidegp@dep.nj.gov.

D. CONDITIONS FOR AUTHORIZATION UNDER THE NJPDES MASTER FOR PESTICIDE APPLICATION DISCHARGE GENERAL PERMIT

1. Minimize Pesticide Discharges to Surface Waters of the State.

- a. All Operators, regardless of whether they are required to submit a NJPDES application, shall minimize the discharge of pollutants resulting from the application of pesticides as a means to meet the technology-based requirements in this Section. The Operator shall implement site-specific control measures that minimize discharges of pesticides to surface waters of the State as follows:
 - i. Use only the amount of pesticide and frequency of pesticide application necessary to control the target pest, using equipment and application procedures appropriate for this task;
 - ii. Maintain application equipment in proper operating condition, including requirement to calibrate, clean, and repair such equipment and prevent leaks, spills, or other unintended discharges;
 - iii. Assess weather conditions (e.g. temperature, precipitation, and wind speed) in the treatment area to ensure application is consistent with all applicable federal requirements.
- b. The discharge shall be controlled as necessary to meet applicable numeric and narrative SWQS as a means to meet water quality based effluent limitation requirements.
 - i. If at any time the Operator becomes aware, or the Department determines, that the discharge causes or contributes to an excursion of applicable State Water Quality Standards, the Operator shall take corrective action as required in Section G below, up to and including ceasing the discharge, if necessary.

2. Visual Monitoring for All Operators or for-hire Applicators

- a. The Operator or for-hire Applicator is prohibited from performing any pesticide application if dead or visibly distressed non-target organisms and/or stunted, wilted, or desiccated non-target submerged or emergent aquatic plants are observed during any pre-application monitoring.

- b. During any pesticide application with discharges authorized under this permit, all Operators or for-hire Applicators must, when considerations for safety and feasibility allow, visually assess the area to and around where pesticides are applied for possible and observable adverse incidents, as defined in Appendix A, including the unanticipated death or distress of non-target organisms and disruption of wildlife habitat, recreational or municipal water use.
- c. During any post application surveillance of any pesticide application with discharges authorized under this permit, all Operators or for-hire Applicators must visually assess the area to and around where pesticides were applied for possible and observable adverse incidents, as defined in Appendix A, including the unanticipated death or distress of non-target organisms and disruption of wildlife habitat, recreational or municipal water use.

3. Post Application Visual Monitoring for Operators or for-hire Applicators Discharging to Waterbodies Classified as Pinelands or FW1

- a. Applicators or Operators discharging to Pinelands or FW1 waters on any given calendar day shall choose one of the Pinelands or FW1 waterbodies treated on that day to conduct post application monitoring for possible and observable adverse incidents, as defined in Appendix A, including the unanticipated death or distress of non-target organisms and disruption of wildlife habitat, recreational or municipal water use. The waterbody that received the highest quantity of pesticides shall be the one chosen for post application monitoring.

4. Avoidance of Adverse Impacts

- a. It is a condition of this permit that the permittee take all necessary and practicable steps to avoid adverse incidents to the federally listed or candidate New Jersey plant species listed below. The permittee may use the FIFRA label as a guide in determining whether the pesticide application has the potential to cause adverse impacts to endangered and threatened plants. Application of pesticides in a manner that results in such adverse incidents is a violation of this permit and a violation of state and/or federal endangered species statutes and subject to applicable penalties.
 - i. *Aeschynomene virginica* (sensitive joint-vetch) – Federally threatened
 - ii. *Amaranthus pumilus* (seabeach amaranth) – Federally threatened
 - iii. *Helonias bullata* (swamp pink) – Federally threatened
 - iv. *Isotria medeoloides* (small whorled pogonia) – Federally threatened
 - v. *Narthecium americanum* (bog asphodel) – Federal candidate
 - vi. *Panicum hirstii* (Hirst brothers' panic grass) – Federal candidate
 - vii. *Rhynchospora knieskernii* (Knieskern's beaked-rush) – Federally threatened
 - viii. *Schwalbea americana* (American chaffseed) – Federally endangered

- b. It is a condition of this permit that the permittee take all necessary and practicable steps to avoid adverse incidents to state and federally listed endangered and threatened wildlife. The permittee may use the FIFRA label as a guide in determining whether the pesticide application has the potential to cause adverse impacts to endangered and threatened wildlife. Application of pesticides in a manner that results in such adverse incidents is a violation of this permit and a violation of state and/or federal endangered species statutes and subject to applicable penalties. The list of federally endangered or threatened wildlife species occurring in New Jersey is provided below:

- i. Indiana Bat, *Myotis sodalis*
- ii. Black Right, Whale *Balaena glacialis*
- iii. Blue Whale, *Balaenoptera musculus*
- iv. Fin Whale, *Balaenoptera physalus*
- v. Humpback Whale, *Megaptera novaeangliae*
- vi. Sei Whale, *Balaenoptera borealis*
- vii. Sperm Whale, *Physeter macrocephalus*
- viii. Piping Plover, *Charadrius melodus*
- ix. Roseate Tern, *Sterna dougallii*
- x. Bog Turtle, *Glyptemys muhlenbergii*
- xi. Atlantic Green Turtle, *Chelonia mydas*
- xii. Atlantic Hawksbill, *Eretmochelys imbricata*
- xiii. Atlantic Leatherback, *Dermochelys coriacea*
- xiv. Atlantic Loggerhead, *Caretta caretta*
- xv. Atlantic Ridley, *Lepidochelys kempi*
- xvi. Shortnose Sturgeon, *Acipenser brevirostrum*
- xvii. American Burying Beetle, *Nicrophorus mericanus*
- xviii. Northeastern Beach Tiger Beetle, *Cincindela d. dorsalis*
- xix. Mitchell's Satyr, *Neonympha m. mitchellii*
- xx. Dwarf Wedgemussel, *Alasmodonta heterodon*

E. PEST MANAGEMENT MEASURES

1. General

- a. Pest Management Measures (PMM) apply to any Operator that is required to submit an application, including any pesticide applicator hired by such entity or any other employee, contractor, subcontractor, or other agent.
- b. Section F of this permit requires any Operator that is required to submit an application and is a large entity to also develop a written Pesticide Discharge Management Plan (PDMP) to document measures taken to meet the effluent limits.
- c. The Pest Management Measures, as described below, shall be attached to the PDMP, kept at the address specified on the application form, and made available to the Department upon request.
- d. Prior to the first pesticide application covered under this permit that will result in a discharge into, over, or near surface waters of the State, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the Operator shall select and implement, for each pest management area, efficient and effective means of pest management that minimize discharges resulting from application of pesticides to control mosquitoes or other flying insect pests, thereby reducing risks to the environment, including water quality. In developing these pest management measures for each pest management area, the Operator shall evaluate the following management options, including a combination of these management options, considering impact to non-target organisms, feasibility, and cost effectiveness:
 - i. No Action
 - ii. Prevention
 - iii. Mechanical or Physical Methods
 - iv. Cultural Methods
 - v. Biological Control Agents
 - vi. Pesticides
- e. If the discharge of pollutants results from the application of a pesticide that is being used solely for the purpose of “pesticide research and development,” as defined in Appendix A, the Operator is not required to fully implement the following measures for such a discharge, but shall implement these measures to the extent that its requirements do not compromise the research design.

2. Contents of the Pesticide Management Measures (PMM)

3. Mosquito and Other Flying Insect PMM (Applicable to Operators Required to Submit an Application):

- a. This part applies to discharges from the application of pesticides for mosquito and other flying insect pest control as defined in Section B. Prior to the first pesticide application covered under this permit that will result in a discharge into, over, or near surface waters of the State, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the following shall be done for each pest management area, as defined in Appendix A:
 - i. Establish densities for larval and adult mosquito or flying insect pest populations or identify environmental condition(s), either current or based on historical data, to serve as action threshold(s) for implementing pest management measures;

- ii. Identify target pest(s) to develop pest management measures based on developmental and behavioral considerations for each pest;
 - iii. Identify known breeding sites for source reduction, larval control program, and habitat management;
 - iv. Analyze existing surveillance data to identify new or unidentified sources of mosquito or flying insect pest problems as well as sites that have recurring pest problems; and
 - v. In the event there are no data for the pest management area in the past calendar year, use other available data as appropriate to meet the permit conditions.
- b. If a pesticide is selected to manage mosquitoes or flying insect pests and application of the pesticide will result in a discharge into, over, or near surface waters of the State, the Operator shall:
- i. Conduct larval and/or adult surveillance in an area that is representative of the pest problem or evaluate existing larval surveillance data, environmental conditions, or data from adjacent areas prior to each pesticide application to assess the pest management area and to determine when the action threshold(s) is met;
 - ii. Reduce the impact on the environment and on non-target organisms by applying the pesticide only when the action threshold has been met;
 - iii. In situations or locations where practicable and feasible for efficacious control, use larvicides as a preferred pesticide for mosquito or flying insect pest control when larval action threshold(s) has been met; and
 - iv. In situations or locations where larvicide use is not practicable or feasible for efficacious control, use adulticides for mosquito or flying insect pest control when adult action threshold(s) has been met.

4. Aquatic Weed and Algae PMM (Applicable to Operators Required to Submit an Application)

- a. This part applies to discharges from the application of pesticides to control weeds, algae, and pathogens as defined in Section B. Prior to the first pesticide application covered under this permit that will result in a discharge into, over, or near surface waters of the State, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year the Operator shall do the following for each pest management area, as defined in Appendix A:
- i. Identify areas with pest problems and characterize the extent of the problems, including, for example, water use goals not attained (e.g. wildlife habitat, fisheries, vegetation, and recreation);
 - ii. Identify target pest(s);
 - iii. Identify possible factors causing or contributing to the pest problem (e.g., nutrients, invasive species, etc);
 - iv. Establish any pest - and site-specific action threshold for implementing b below; and
 - v. In the event there are no data for the pest management area in the past calendar year, use other available data as appropriate to meet the permit conditions in this Section.
- b. If a pesticide is selected to manage aquatic weeds or algae and application of the pesticide will result in a discharge to surface waters of the State, the Operator shall:

- i. Conduct surveillance in an area that is representative of the pest problem prior to each pesticide application to assess the pest management area and to determine when the action threshold(s) is met; and
- ii. Reduce the impact on the environment and non-target organisms by applying the pesticide only when the action threshold has been met.

5. Aquatic Nuisance Animal PMM (Applicable to Operators Required to Submit an Application)

- a. This part applies to discharges from the application of pesticides for aquatic animal pest control as defined in Section B. Prior to the first pesticide application covered under this permit that will result in a discharge into, over, or near surface waters of the State, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the Operator shall do the following for each pest management area, as defined in Appendix A:
 - i. Identify areas with pest problems and characterize the extent of the problems, including, for example, water use goals not attained (e.g. wildlife habitat, fisheries, vegetation, and recreation);
 - ii. Identify target pest(s);
 - iii. Identify possible factors causing or contributing to the problem (e.g., nutrients, invasive species);
 - iv. Establish any pest - and site-specific action threshold(s) for implementing b below; and
 - v. In the event there are no data for the pest management area in the past calendar year, use other available data as appropriate to meet the permit conditions in this Section.
- b. If a pesticide is selected to manage pests and application of the pesticide will result in a discharge to surface waters of the State, the Operator shall:
 - i. Conduct surveillance in an area that is representative of the pest problem prior to each application to assess the pest management area and to determine when the action threshold(s) is met; and
 - ii. Reduce the impact on the environment and non-target organisms by evaluating site restrictions, application timing, and application method in addition to applying the pesticide only when the action threshold(s) has been met.

6. Forest Canopy PMM (Applicable to Operators Required to Submit an Application)

- a. This part applies to discharges from the application of pesticides for forest canopy pest control as defined in Section B. Prior to the first pesticide application covered under this permit that will result in a discharge into, over, or near surface waters of the State, and at least once each calendar year thereafter prior to the first pesticide application in that calendar year, the Operator shall do the following for each pest management area, as defined in Appendix A:
 - i. Establish any pest - and site-specific action threshold for implementing b below; and
 - ii. Identify target pest(s) to develop pest management measures based on developmental and behavioral considerations for each pest;
 - iii. Identify current distribution of the target pest and assess potential distribution in the absence of pest management measures; and
 - iv. In the event there are no data for the pest management area in the past calendar year, use other available data as appropriate to meet the permit conditions in this Section.

- b. If a pesticide is selected to manage forestry pests and application of the pesticide will result in a discharge into, over, or near surface waters of the State, the Operator shall:
 - i. Conduct surveillance in an area that is representative of the pest problem prior to each application to assess the pest management area and to determine when the pest action threshold is met;
 - ii. Reduce the impact on the environment and non-target organisms by evaluating the restrictions, application timing, and application methods in addition to applying pesticide only when the action threshold(s) has been met; and
 - iii. Evaluate using pesticides against the most susceptible developmental stage.

7. Agricultural PMM (Applicable to Operators Required to Submit an Application)

- a. This part applies to discharges from the application of pesticides into, over, or near Surface waters of the State (as defined in Appendix A), which are used in the operation of agricultural activities as defined in Section B. The use of pest management measures involves knowledge of the crop, the pest, the ecosystem, and the relationships between these factors. The ultimate goal of pest management measures is to ensure the production of an abundant, high quality crop in an environmentally sound manner, by relying on field scouting, proper pest identification, prevention, cultural and biological practices, and if necessary the use of pesticides that are the least toxic to the environment and beneficial organisms. The pest management measures avoid the use of calendar based pesticide spraying. The Operator shall:
 - i. Scout the pest management area for insects, disease, and weeds at each crop stage for detection of a problem in the early stages of development and ensure accurate identification of pest(s);
 - ii. Evaluate pest management strategies that minimize the use of pesticides, such as use of resistant or tolerant cultivars, plant spacing, proper pruning, weed removal at the base of plants, use of beneficial insects, surface mulch, etc.;
 - iii. Determine the conditions that would require the use of pesticides.
- b. If a pesticide is selected to manage pests and application of the pesticide will result in a discharge into, over, or near surface waters of the State, the Operator shall:
 - i. Ensure that the conditions that require the use of pesticides are present and the pest(s) has been accurately identified;
 - ii. Choose a pesticide that is pest specific to protect beneficial organisms that may be present;
 - iii. Use pesticides at the optimum time for control (i.e. the stage that the pest is most vulnerable).

8. Utility Transmission and Distribution Line PMM

- a. This part applies to discharges from the application of pesticides into, over, or near Surface waters of the State for Utility Transmission and Distribution Line Vegetation Control as defined in Section B. Pest Management Measures reduce the risk to the environment, including water quality, by minimizing the need for pesticides, while effectively managing vegetation along distribution and transmission lines and other electric utility facilities and rights of way. The Operator shall:
 - i. Assess each pest management area's vegetation characteristics, such as height, density, type, size, condition, hazard status, and clearance from conductors. Identify target pests.

- ii. Establish any pest - and site-specific action threshold(s) for implementing pest management measures.
- b. If a pesticide is selected and application of the pesticide will result in a discharge into, over, or near surface waters of the State, the Operator shall:
 - i. Reduce the impact on the environment and non-target organisms by applying the pesticide only when the action threshold has been met.

F. PESTICIDE DISCHARGE MANAGEMENT PLAN (Applicable to Operators Required to Submit an Application and is a Large Entity)

1. General

- a. A PDMP must be prepared for any Operator who is required to submit an application and is a large entity and shall consist of the contents in Section 2 below. Some sections of the PDMP will require input from the pesticide applicator. Operators who are not a large entity and/or are not required to submit an application are not required to prepare a PDMP.
- b. If the Operator is a large entity and are required to submit an application, they shall prepare a PDMP for their pest management area. The Operator shall keep the plan up-to-date thereafter for the duration of coverage under this general permit, even if the discharges subsequently fall below the applicable acreage threshold. The Operator shall develop a PDMP by the time the application is submitted.
- c. The PDMP records how the Operator will comply with the permit conditions, including the evaluation and selection of pest management measures to meet those effluent limitations and minimize discharges. In the PDMP, the Operator may incorporate by reference any procedures or plans in other documents that meet the requirements of this permit. If the Operator relies upon other documents to describe how they will comply with the effluent limitations in this permit, such as a pre-existing pest management plan, they shall attach a copy of any portions of any documents that they are using to document compliance of the effluent limitations to the PDMP. All Operators subject to the effluent limitations described above shall implement pest management measures to satisfy the effluent limitations. This includes the Operator who submitted the application as well as any employees, contractors, subcontractors, or other agents. The pest management measures implemented shall be documented and the documentation shall be kept up-to-date.
- d. The PDMP shall be modified whenever necessary to address any of the triggering conditions for corrective action in Section G. below or when a change in pest control activities significantly changes the type or quantity of pollutants discharged. Changes to the PDMP shall be made before the next pesticide application that results in a discharge, if practicable, or if not, no later than 90 days after any change in pesticide application activities. The revised PDMP shall be signed and dated in accordance with Section F.
- e. A copy of the current PDMP is required to be retained along with all supporting maps and documents, at the address provided on the application. The PDMP and all supporting documents shall be readily available, upon request, and copies of any of these documents provided, upon request, to the Department or a local agency governing pesticide applications within their respective jurisdictions.

2. Contents of the Pesticide Discharge Management Plan (PDMP)

- a. The PDMP shall identify Pesticide Discharge Management Team members which must include any written agreement(s) between the applicant and any other Operator(s), such as a for-hire pesticide Applicator, that specify the division of responsibilities between Operators as necessary to comply with the provisions of this permit. The applicant must identify all the persons (by name and contact information) that compose the team as well as each person's individual responsibilities, including:
 - i. Person(s) responsible for managing pests in relation to the pest management area;
 - ii. Person(s) responsible for developing and revising the PDMP;
 - iii. Person(s) responsible for developing, revising, and implementing corrective actions and other effluent limitation requirements; and
 - iv. Person(s) responsible for pesticide applications (NJDEP certified applicators not operators as defined by NJDEP Pesticide Regulations). If the pesticide applicator is unknown at the time of plan development, indicate whether or not a for-hire Applicator will be used and when the Operator anticipates that they will identify the applicator.
- b. The PDMP shall identify each problem by documenting the following:
 - i. Document a description of the pest problem at the pest management area, including identification of the target pest(s), source of the pest problem, and source of data used to identify the problem;
 - ii. Describe the action threshold(s) for the pest management area, including data used in developing the action threshold(s) and method(s) to determine when the action threshold(s) has been met;
 - iii. In the plan, include a general location map (e.g., USGS quadrangle map, a portion of a city or county map, or other map) that identifies the geographic boundaries of the area to which the plan applies and location of the surface waters of the State; and
 - iv. Document any FW1 and Pinelands waterbodies and any State waterbodies identified as impaired by a substance which either is an active ingredient or a degradate of such an active ingredient. A list of the State's impaired waterbodies as well as a list of the State's surface waterbodies that are classified as FW1 and Pinelands can be found at <https://www.nj.gov/dep/wms/bears/generalinfo.htm>.
- c. Operators must document the evaluation of the pest management options, including a combination of pest management options, to control the target pest(s) in the PDMP. Pest management options include the following: No action, prevention, mechanical/ physical methods, cultural methods, biological control agents, and pesticides. In the evaluation, operators must consider the impact to water quality, impact to non-target organisms, feasibility, cost effectiveness, and any relevant previous Pest Management Measures.
- d. Operators must document the following procedures in the PDMP:
 - i. At a minimum, procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases to waters of the State. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of the PDMP team;
 - ii. At a minimum, procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies;

- iii. At a minimum, procedures for responding to any adverse incident resulting from pesticide applications;
- iv. At a minimum, procedures for notification of the adverse incident, both internal to the operator's agency/organization and external. Contact information for state/ federal permitting agency, nearest emergency medical facility, and nearest hazardous chemical responder must be in locations that are readily accessible and available.
- e. The Operator must sign, date and certify their PDMP in accordance with N.J.A.C. 7:14A-4.9.

G. CORRECTIVE ACTION

1. Situations Requiring Revision of Control Measures

- a. All Operators must comply with the provisions of this section for any discharges authorized under this permit, with compliance required upon beginning such discharge. Operators must review and, as necessary, revise the evaluation and selection of Pest Management Measures consistent with Section F above for the following situations:
 - i. An unauthorized release or discharge associated with the application of pesticides (e.g., spill, leak, or discharge not authorized by this or another NJPDES permit) occurs;
 - ii. Operators become aware, or the Department concludes, that the control measures are not adequate/sufficient for the discharge to meet applicable water quality standards;
 - iii. Operators become aware or the Department concludes, that the control measures are not adequate/sufficient to avoid adverse incidents to state and/or federally listed endangered and threatened plant and wildlife species;
 - iv. Any monitoring activities indicate failure to meet applicable technology based effluent limitations;
 - v. An inspection or evaluation of activities by a NJDEP official, or local, state, or federal entity reveals that modifications to the Pest Management Measures are necessary to meet the effluent limitations in this permit;
 - vi. Any operator observes or is otherwise made aware of an adverse incident as defined in Appendix A that has been determined to be caused by their application of pesticides.
- b. If an operator determines that changes to Pest Management Measures are necessary to eliminate any situation identified in Section G.1, such changes shall be made before or, if not practicable, as soon as possible after the next pesticide application that results in a discharge.
- c. The occurrence of a situation identified in Section G.1 may constitute a violation of the permit. Correcting the situation according to Section G.1 does not absolve the Operator of liability for any original violation. However, failure to comply with Section G.1 constitutes an additional permit violation. The Department will consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations.

2. Corrective Action Documentation

- a. For situations other than for adverse incidents, spills, leaks, or other unpermitted discharges, Operators must document the situation triggering corrective action and planned corrective action within thirty (30) days of becoming aware of the situation, and retain a copy of this documentation. This documentation must include the following information:

- i. Identification of the condition triggering the need for corrective action review, including any ambient water quality monitoring that assisted in determining that discharges did not meet water quality standards;
 - ii. Brief description of the situation;
 - iii. Date the problem was identified;
 - iv. Brief description of how the problem was identified, how the Operator learned of the situation, and date the Operator learned of the situation;
 - v. Summary of corrective action taken or to be taken, including date initiated and date completed or expected to be completed; and
 - vi. Any measures to prevent reoccurrence of such an incident, including notice of whether PDMP modification is required as a result of the incident.
- b. The Department or a court may impose additional requirements and schedules of compliance, including requirements to submit additional information concerning the condition(s) triggering corrective action or schedules and requirements more stringent than specified in this permit. Those requirements and schedules will supersede those of Section G if such requirements conflict.

H. REPORTING

1. Adverse Incident, Reportable Spill and Leaks, and Other Unpermitted Discharge Notification

- a. If an Operator or for-hire Applicator observe or are otherwise made aware of an adverse incident, reportable spill or leak, as defined in Appendix A, or any other unpermitted discharge, they shall immediately notify the NJDEP Hotline at 1-877-WARN-DEP. This notification shall be made by telephone immediately but no later than two (2) hours of the Operator or for-hire Applicator becoming aware of the incident and shall include at least the following information:
 - i. The caller's name and telephone number;
 - ii. Operator and, if applicable, then for-hire Applicator's name and mailing address;
 - iii. If the Operator received a General Permit Authorization, the NJPDES permit number;
 - iv. The name and telephone number of a contact person, if different than the person providing the 24-hour notice;
 - v. How and when the Operator and/or for-hire Applicator became aware of the adverse incident, spill, leak, or other unpermitted discharge;
 - vi. Location of the adverse incident, spill, leak, or other unpermitted discharge;
 - vii. Description of the adverse incident, spill, leak, or other unpermitted discharge identified, and the pesticide product name, EPA pesticide registration number, and amount of each product that was applied, spilled, leaked, or discharged in the affected area; and
 - viii. Description of any steps have taken or will take to correct, repair, remedy, cleanup, or otherwise address any adverse effects;
 - ix. If known, the identity of any other operators authorized for coverage under this permit.

- b. If the Operator and/or for-hire Applicator are unable to notify the Department within two (2) hours, they shall do so as soon as possible and also provide rationale for why they were unable to provide such notification.
- c. The adverse incident notification and reporting requirements are in addition to what the registrant is required to submit under FIFRA Section 6(a)(2) and its implementing regulations at 40 CFR Part 159. Reporting of adverse incidents is not required in the following situations:
 - i. The Operator has been notified in writing by the Department that the reporting requirement has been waived for this incident or category of incidents; and
 - ii. An adverse incident occurs to pests that are similar in kind to potential target pests identified on the FIFRA label.

2. Written Report

- a. If it has been determined by the Department that the incident is a result of the Operator's and/or for-hire Applicator's activity, the Operator is required to provide a written report to the Department within ten (10) business days of a reportable spill or leak, or other unpermitted discharge to the Bureau of Pesticide Compliance at pesticidegp@dep.nj.gov. The Operator shall report adverse incidents even for those instances when the pesticide labeling states that adverse effects may occur. The incident report shall include at least the following information:
 - i. Information required to be provided to the NJDEP Hotline, as specified above;
 - ii. Date and time the NJDEP hotline was contacted notifying the Department of the incident, the employee who received the notification, and any instructions received from the Department;
 - iii. Location of incident, including the names of any waters affected and appearance of those waters (sheen, color, clarity, etc);
 - iv. A description of the circumstances of the incident including species affected, estimated number of individual and approximate size of dead or distressed organisms;
 - v. Magnitude and scope of the effected area (e.g. aquatic square area or total stream distance affected);
 - vi. Pesticide application rate, intended use site (e.g., banks, above, or direct to water), method of application, and name of pesticide product, amount applied, and EPA registration number;
 - vii. Description of the habitat and the circumstances under which the incident occurred (including any available ambient water data for pesticides applied);
 - viii. If laboratory tests were performed, indicate what test(s) were performed, and when, and provide a summary of the test results within five (5) days after they become available if not available at the time of submission of this report;
 - ix. Actions to be taken to prevent recurrence of adverse incident, spill or leak, or other unpermitted discharge; and
 - x. Signed and dated in accordance with N.J.A.C. 7:14A-4.9.

3. Annual Reporting for Operators Who are Required to Submit an Application

- a. If the Operator is required to submit an application and reported an adverse incident(s) in the previous calendar year as described in Section I.1, the Operator shall submit an annual report to the Department via email at pesticidegp@dep.nj.gov, no later than December 31 of the following year (and retain a copy for their records), which includes the following:
 - i. Operator's name and contact information;
 - ii. NJPDES permit number(s);
 - iii. Contact person name, title, e-mail address (if any), and phone number;
 - iv. A summary report of all adverse incidents that occurred during the previous calendar year; and
 - v. A summary of any corrective actions, including spill responses, in response to adverse incidents, and the rationale for such actions.

4. Annual Reporting Requirements for Discharges to Waters Designated as Pinelands or FW1:

- a. The Department is requiring all operators discharging to Pinelands or FW1 waters to submit an annual report that details the findings of the post application monitoring. This information will be used by the Department to assess permit compliance and to determine whether additional controls on pesticide discharges are necessary to protect water quality.
- b. The annual report must include information for the calendar year, with the first report required to include activities for the portion of the calendar year after the effective date of the permit authorization. If the effective date of the permit authorization is after December 1, the Operator is not required to submit an annual report for that first partial year, but must submit annual reports thereafter, with the first report submitted also including information from the first partial year. When an operator terminates permit coverage, the Operator must submit an annual report for the portion of the year up through the date of termination. The annual report is due no later than forty-five (45) days after the termination date.
- c. Operators discharging to Pinelands or FW1 waters shall submit an annual report to pesticidegp@dep.nj.gov no later than December 31 of the following year that includes all of the following:
 - i. Operator's name;
 - ii. NJPDES permit number(s);
 - iii. Contact person name, title, e-mail address (if any), and phone number;
 - iv. Brief description of what was observed at the post application monitoring, including identification of any waters of the State, either by name or watershed, date, and time;
 - v. A summary report of any adverse incidents, spills, leaks, or any other unpermitted discharge that occurred during the previous calendar year; and
 - vi. A summary of any corrective actions taken, and the rationale for such actions.

I. RECORDKEEPING

1. General Recordkeeping

- a. Operators shall keep written records as required in this permit. These records shall be accurate, complete, and sufficient to demonstrate compliance with the conditions of this permit. Operators can rely on records and documents developed for other obligations, such as requirements under FIFRA, and state or local pesticide programs, provided all requirements of this permit are satisfied. All operators shall keep the following records:
 - i. A copy of this permit (an electronic copy is also acceptable);
 - ii. A copy of any adverse incident, spill, leak, or other unpermitted discharge reports;
 - iii. Rationale for any determination that reporting of an identified adverse incident is not required consistent with allowances identified in Section I.2;
 - iv. A copy of any corrective action documentation.
- b. The Department recommends that operators required to submit an application keep records of acres or linear miles treated for all applicable use patterns covered under this general permit. The records should be kept up-to-date to help determine if they will meet the annual treatment area threshold during any calendar year.
- c. All required records shall be prepared as soon as possible, but no later than fourteen (14) days following completion of the associated activity. Operators shall retain copies of these documents for a period of at least five (5) years from the date their coverage under this master general permit expires or is terminated, in accordance with N.J.A.C. 7:14A-6.6.
- d. In accordance with N.J.A.C. 7:14A-2.11, the Operator shall allow an authorized representative of the Department access to any records that are required to be kept under the conditions of this master general permit.

2. Specific Recordkeeping for All Applicators Including For Hire Applicators

- a. Any Operator who is an applicator or is a for-hire Applicator as defined in Appendix A, must retain the following records:
 - i. Documentation of equipment calibration; and
 - ii. Information on each treatment area, including location and size (acres or linear feet) of treatment area and identification of any waters, either by name or by watershed, to which pesticide(s) are discharged;
 - iii. Pesticide use pattern(s);
 - iv. Target pest(s);
 - v. Name of each pesticide product used including the EPA registration number;
 - vi. Quantity of each pesticide product applied to each treatment area;
 - vii. Pesticide application date(s); and
 - viii. Whether or not visual monitoring was conducted during pesticide application and/or post application and if not, why not and whether monitoring identified any possible or observable adverse incidents caused by application of pesticides.

3. Recordkeeping for Any Operator Required to Submit an Application and is a Small Entity

- a. Any Operator who is a small entity and is required to submit an application must maintain the following records at the address provided on the application:
 - i. A copy of the application submitted to the Department, any correspondence exchanged between the Operator and the Department specific to coverage under this permit, and a copy of the Pesticide General Permit Authorization;
 - ii. Documentation of equipment calibration (only if the Operator is also the Applicator);
 - iii. Description of treatment area, including location and size (acres or linear feet) of treatment area and identification of any Waters of the State, either by name or by watershed, to which pesticide(s) are discharged;
 - iv. Pesticide use pattern(s);
 - v. Target pest(s) and explanation of need for pest control;
 - vi. Description of pest management measure(s) implemented prior to the first pesticide application;
 - vii. Company name and contact information for pesticide applicator, if any;
 - viii. Name of each pesticide product used including the EPA registration number;
 - ix. Quantity of each pesticide product applied to each treatment area;
 - x. Pesticide Application Start Date;
 - xi. Pesticide Application End Date; and
 - xii. Whether or not visual monitoring was conducted during pesticide application and/or post application and if not, why not and whether monitoring identified any possible or observable adverse incidents caused by application of pesticides.

4. Recordkeeping for Any Operator Required to Submit an Application and is a Large Entity

- a. Any Operator required to submit an application that is defined as a large entity must retain the following records at the address provided on the application:
 - i. Copy of the application submitted to the Department, any correspondence exchanged between the Operator and the Department specific to coverage under this permit, and a copy of the Pesticide General Permit Authorization;
 - ii. A copy of the PDMP, including any modifications made to the PDMP during the term of this permit;
 - iii. Copy of annual reports submitted to EPA;
 - iv. Documentation of equipment calibration (only if the Operator is also the Applicator);
 - v. Description of each treatment area, including location and size (acres or linear feet) of treatment area and identification of any Waters of the State, either by name or by watershed, to which pesticide(s) are discharged;
 - vi. Pesticide use pattern(s);
 - vii. Target pest(s) and explanation of need for pest control;

- viii. Action Thresholds;
- ix. Method and/or data used to determine that action threshold(s) has been met;
- x. Description of pest management measure(s) implemented prior to the first pesticide application;
- xi. Company name and contact information for pesticide applicator, if any;
- xii. Name of each pesticide product used including the EPA registration number;
- xiii. Quantity of each pesticide product applied to each treatment area;
- xiv. Pesticide application date(s); and
- xv. Whether or not visual monitoring was conducted during pesticide application and/or post application and if not, why not and whether monitoring identified any possible or observable adverse incidents caused by application of pesticides.

J. GENERAL REQUIREMENTS FOR ALL NJPDES PERMITS

1. Requirements Incorporated by Reference

- a. The permittee shall comply with all conditions set forth in this permit and with all the applicable requirements incorporated into this permit by reference. The permittee is required to comply with the regulations, including those cited in paragraphs b. through e. following, which are in effect as of the effective date of the final permit.
- b. General Conditions
 - i. Penalties for Violations - N.J.A.C. 7:14-8.1 et seq
 - ii. Incorporation by Reference - N.J.A.C. 7:14A-2.3
 - iii. Toxic Pollutants - N.J.A.C. 7:14A-6.2(a)4i
 - iv. Duty to Comply - N.J.A.C. 7:14A-6.2(a)1 & 4
 - v. Duty to Mitigate - N.J.A.C. 7:14A-6.2(a)5, 6.2(a)11
 - vi. Inspection and Entry - N.J.A.C. 7:14A-2.11(e)
 - vii. Enforcement Action - N.J.A.C. 7:14A-2.9
 - viii. Signatory Requirements for Applications and Reports - N.J.A.C. 7:14A-4.9
 - ix. Effect of Permit/Other Laws - N.J.A.C. 7:14A-2.9(c), 6.2(a)6&7
 - x. Severability - N.J.A.C. 7:14A-2.2(b)
 - xi. Administrative Continuation of Permits - N.J.A.C. 7:14A-2.8
 - xii. Permit Actions - N.J.A.C. 7:14A-2.7(c)
 - xiii. Permit Duration and Renewal - N.J.A.C. 7:14A-2.7(a)&(b)
 - xiv. Confidentiality - N.J.A.C. 7:14A-18.2 & 2.11(g)

- xv. Treatment Works Approval - N.J.A.C. 7:14A-22 & 23
- xvi. General Permits - N.J.A.C. 7:14A-6.13
- c. Operation and Maintenance
 - i. Need to Halt or Reduce not a Defense - N.J.A.C. 7:14A-2.9(b)
 - ii. Proper Operation and Maintenance - N.J.A.C. 7:14A-6.12(a)
- d. Monitoring And Records
 - i. Monitoring - N.J.A.C. 7:14A-6.5
 - ii. Record Keeping - N.J.A.C. 7:14A-6.6
 - iii. Signatory Requirements for Monitoring Reports - N.J.A.C. 7:14A-6.9
- e. Reporting Requirements
 - i. Planned Changes - N.J.A.C. 7:14A-6.7
 - ii. Noncompliance Reporting - N.J.A.C. 7:14A-6.10
 - iii. Hotline/Two Hour & Twenty-four Hour Reporting - N.J.A.C. 7:14A-6.10(c) & (d)
 - iv. Written Reporting - N.J.A.C. 7:14A-6.10(e) & (f) & 6.8(h)
 - v. Duty to Provide Information - N.J.A.C. 7:14A-2.11, 6.2(a)14 & 18.1
 - vi. Transfer - N.J.A.C. 7:14A-6.2(a)8, 6.13(n), 16.1, 16.2

NJPDES MASTER GENERAL PERMIT PROGRAM INTEREST, Trenton

Permit No.NJ0178217
DSW240002 Surface Water Master General Permit Renewal

APPENDIX A

Definitions, Abbreviations, and Acronyms

This appendix serves to supplement the Definitions, Abbreviations, and Acronyms specified at N.J.A.C. 7:14A-1.1 and 1.2.

A.1. DEFINITIONS

For the purposes of this permit, the following definitions apply.

Action Threshold – the point at which pest populations or environmental conditions necessitate that pest control action be taken based on economic, human health, aesthetic, or other effects. An action threshold may be based on current and/or past environmental factors that are or have been demonstrated to be conducive to pest emergence and/or growth, as well as past and/or current pest presence. Action thresholds are those conditions that indicate both the need for control actions and the proper timing of such actions.

Active ingredient – any substance (or group of structurally similar substances if specified by the Agency) that will prevent, destroy, repel or mitigate any pest, or that functions as a plant regulator, desiccant, or defoliant within the meaning of FIFRA sec. 2(a). [40 CFR 152.3] Active ingredient also means a pesticidal substance that is intended to be produced and used in a living plant, or in the produce thereof, and the genetic material necessary for the production of such a pesticidal substance. [40 CFR 174.3]

Adverse incident – means an unusual or unexpected incident that an operator has observed upon inspection or of which the operator otherwise becomes aware within 72 hours, in which:

- (1) There is evidence that a person or non-target organism has likely been exposed to a pesticide residue, and
- (2) The person or non-target organism suffered a toxic or adverse effect.

The phrase “toxic or adverse effects” includes effects that occur within a water of the State on non-target plants, fish or wildlife that are unusual or unexpected (e.g., effects are to organisms not otherwise described on the pesticide product label or otherwise not expected to be present) as a result of exposure to a pesticide residue, and may include:

- Distressed or dead juvenile and small fishes
- Washed up or floating fish
- Fish swimming abnormally or erratically
- Fish lying lethargically at water surface or in shallow water
- Fish that are listless or nonresponsive to disturbance
- Stunting, wilting, or desiccation of non-target submerged or emergent aquatic plants
- Other dead or visibly distressed non-target aquatic organisms (amphibians, turtles, invertebrates, etc.)

The phrase, “toxic or adverse effects,” also includes any adverse effects to humans (e.g., skin rashes) or domesticated animals that occur either from direct contact with or as a secondary effect from a discharge (e.g., sickness from consumption of plants or animals containing pesticides) to waters of the State that are temporally and spatially related to exposure to a pesticide residue (e.g., vomiting, lethargy).

Annual Treatment Area Threshold - an area (in acres) or linear distance (in miles) in a calendar year to which an Operator is authorizing and/or performing pesticide applications in that area for activities covered under this permit.

For calculating annual treatment areas for Mosquitoes and Other Flying Insect Pest Control and Forest Canopy Pest for comparing with any threshold value, count each pesticide application activity to a treatment area (i.e. that area where a pesticide application is intended to provide pesticidal benefits within the pest management area) as a separate area treated. For example, applying pesticides three times per year to the same 3,000 acre site should be counted as 9,000 acres of treatment area for purposes of determining if such an application exceeds an annual treatment area threshold. The treatment area for these two pesticide use patterns is additive over the calendar year.

For calculating annual treatment areas for Aquatic Weed and Algae Control, Animal Pest Control, and Aquatic Agricultural Activities for comparing with any threshold value, calculations should include either the linear extent of or the surface area of waters for applications made to waters of the State or at water's edge adjacent to waters of the State. For calculating the annual treatment area, count each treatment area only once, regardless of the number of pesticide application activities performed on that area in a given year. Also, for linear features (e.g., a canal or ditch) use the length of the linear feature whether treating in or adjacent to the feature, regardless of the number of applications made to that feature during the calendar year. For example, whether treating the bank on one side of a ten mile long ditch, banks on both sides of the ditch, and/or water in that ditch, the total treatment area is ten miles for purposes of determining if an RFA is required to be submitted. Additionally, if the same 10 miles area is treated more than once in a calendar year, the total area treated is still 10 miles for purposes of comparing with any threshold value. The treatment area for these three use patterns is not additive over the calendar year.

Biological Control Agents – These agents are organisms which can be introduced to Operator sites, such as herbivores, predators, parasites, and hyperparasites. [Source: US FWS IPM Guidance, 2004]

Biological pesticides (also called biopesticides) - include microbial pesticides, biochemical pesticides and plant-incorporated protectants (PIP). Microbial pesticide means a microbial agent intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or dessicant, that (1) is a eucaryotic microorganism including, but not limited to, protozoa, algae, and fungi; (2) is a procaryotic microorganism, including, but not limited to, Eubacteria and Archaeobacteria; or (3) is a parasitically replicating microscopic element, including but not limited to, viruses. [40 CFR 158.2100(a)] Biochemical pesticide means a pesticide that (1) is a naturally-occurring substance or structurally-similar and functionally identical to a naturally-occurring substance; (2) has a history of exposure to humans and the environment demonstrating minimal toxicity, or in the case of a synthetically-derived biochemical pesticides, is equivalent to a naturally-occurring substance that has such a history; and (3) Has a non-toxic mode of action to the target pest(s). [40 CFR 158.2000(a)] Plant-incorporated protectant means a pesticidal substance that is intended to be produced and used in a living plant, or in the produce thereof, and the genetic material necessary for production of such a pesticidal substance. It also includes any inert ingredient contained in the plant, or produce thereof. [40 CFR 174.3]

Chemical pesticides – all pesticides not otherwise classified as biological pesticides.

Cultural Methods - manipulation of the habitat to increase pest mortality by making the habitat less suitable to the pest.

For-Hire Applicator - Includes persons who make contractual pesticide applications for which they or their employer receives compensation (e.g., lawn care firms, pest control companies).

Herbicides – kill weeds and other plants that grow where they are not wanted.

Impaired Water (or “Water Quality Impaired Water” or “Water Quality Limited Segment”) – A water is impaired for purposes of this permit if it has been identified by NJDEP pursuant to Section 303(d) of the Clean Water Act as not meeting applicable State water quality standards (these waters are called “water quality limited segments” under 40 CFR 30.2(j)). Impaired waters include both waters with approved or established TMDLs, and those for which a TMDL has not yet been approved or established.

Insecticide - kill insects and other arthropods.

Large Entity – any entity that is not a “small entity.”

Leak – a reportable leak means a leak of one gallon liquid or more of any combination of any pesticide and/or diluent or one pound or more of any dry pesticide formulation.

Mechanical/Physical Methods - mechanical tools, or physical alterations of the environment, for pest prevention or removal.

Minimize - to reduce and/or eliminate pesticide discharges to waters of the State through the use of Pest Management Measures to the extent technologically available and economically practicable and achievable.

Near* – for the purposes of this permit, on an embankment leading to or within three feet from surface waters of the State.

*Exception: Pesticide applications are not considered near surface waters if the treatment sites are separated from the surface waters by dikes that have widths in excess of three feet.

Non-target Organisms – includes the plant and animal hosts of the target species, the natural enemies of the target species living in the community, and other plants and animals, including vertebrates, living in or near the community that are not the target of the pesticide.

Operator – any entity involved in the application of a pesticide, which results in a discharge to surface waters of the State that meets either of the following two criteria:

- (i) The entity has control over the financing for, or the decision to perform pesticide applications that result in discharges, including the ability to modify those decisions; or
- (ii) The entity has day-to-day control of or performs activities that are necessary to ensure compliance with the permit (e.g., they are authorized to direct workers to carry out activities required by the permit or perform such activities themselves).

Outstanding National Resource Waters – means high quality waters that constitute an outstanding national resource (for example, waters of National/State Parks and Wildlife Refuges and waters of exceptional recreational or ecological significance). Waters classified as FW1 waters and Pinelands waters (PL) are Outstanding National Resource Waters.

Permittee – for the purposes of this permit, the permittee is the same as operator.

Person – an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof.

Pest – Consistent with 40 CFR 152.5, any organism under circumstances that make it deleterious to man or the environment, if it is:

- (a) Any vertebrate animal other than man;
- (b) Any invertebrate animal, including but not limited to, any insect, other arthropod, nematode, or mollusk such as a slug and snail, but excluding any internal parasite of living man or other living animals;
- (c) Any plant growing where not wanted, including any moss, alga, liverwort, or other plant of any higher order, and any plant part such as a root; or
- (d) Any fungus, bacterium, virus, or other microorganism, except for those on or in living man or other living animals and those on or in processed food or processed animal feed, beverages, drugs (as defined in Federal Food, Drug, and Cosmetic Act (FFDCA) sec. 201(g)(1)) and cosmetics (as defined in FFDCA sec. 201(i)).

Pest Management Area – The area of land, including any water, for which an Operator has responsibility and is authorized to conduct pest management activities as covered by this permit (e.g. for an Operator who is a mosquito control district, the pest management area is the total area of the district).

Pest Management Measure – any practice used to meet the effluent limitations that comply with manufacturer specifications, industry standards, and recommended industry practices related to the application of pesticides, relevant legal

requirements and other provisions that a prudent operator would implement to reduce and/or eliminate pesticide discharges to waters of the State.

Pesticide – means (1) any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, (2) any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant, and (3) any nitrogen stabilizer, except that the term “pesticide” shall not include any article that is a “new animal drug” within the meaning of section 201(w) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 321(w)), that has been determined by the Secretary of Health and Human Services not to be a new animal drug by a regulation establishing conditions of use for the article, or that is an animal feed within the meaning of Section 201(x) of such Act (21 U.S.C. 321(x)) bearing or containing a new animal drug. The term “pesticide” does not include liquid chemical sterilant products (including any sterilant or subordinate disinfectant claims on such products) for use on a critical or semi-critical device, as defined in section 201 of the FFDCA (21 U.S.C. 321). For purposes of the preceding sentence, the term “critical device” includes any device which is introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body and the term “semi-critical device” includes any device that contacts intact mucous membranes but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. [FIFRA Section 2(u)]

The term pesticide applies to insecticides, herbicides, fungicides, rodenticides, and various other substances used to control pests. The definition encompasses all uses of pesticides authorized under FIFRA including uses authorized under sections 3 (registration), 5 (experimental use permits), 18 (emergency exemptions), 24(c) (special local needs registrations), and 25(b) (exemptions from FIFRA).

Note: drugs used to control diseases of humans or animals (such as livestock and pets) are not considered pesticides; such drugs are regulated by the Food and Drug Administration. Fertilizers, nutrients, and other substances used to promote plant survival and health are not considered plant growth regulators and thus are not pesticides. Biological control agents, except for certain microorganisms, are exempted from regulation under FIFRA. (Biological control agents include beneficial predators such as birds or ladybugs that eat insect pests, parasitic wasps, fish, etc).

This permit uses the term “pesticide” when referring to the “pesticide, as applied.” When referring to the chemical in the pesticide product with pesticidal qualities, the permit uses the term “active ingredient.”

Pesticide Product – a pesticide in the particular form (including composition, packaging, and labeling) in which the pesticide is, or is intended to be, distributed or sold. The term includes any physical apparatus used to deliver or apply the pesticide if distributed or sold with the pesticide.

Pesticide Research and Development – Activities undertaken on a systematic basis to gain new knowledge (research) and/or the application of research findings or other scientific knowledge for the creation of new or significantly improved products or processes (experimental development).

Pesticide Residue – includes that portion of a pesticide application that is discharged from a point source to waters of the State and no longer provides pesticidal benefits. It also includes any degradates of the pesticide.

Pollutant – In addition to the definition provided in N.J.A.C. 7:14A-1.2, for purposes of this permit, a “biological pesticide” is considered a “biological material,” and any “pesticide residue” resulting from use of a “chemical pesticide” is considered a “chemical waste.”

Small Entity – Any (1) private enterprise that does not exceed the Small Business Administration size standard as identified in 13 CFR 121.201, or (2) local government that serves a population of 10,000 or less.

Spill – A reportable spill means a spill of one gallon liquid or more of any combination of any pesticide and/or diluent or one pound or more of any dry pesticide formulation.

Surface Water* - means water at or above the land's surface which is neither ground water or contained within the unsaturated zone, including, but not limited to, the ocean and its tributaries, all springs, streams, rivers, lakes, ponds, artificial waterbodies, and wetlands (with or without standing water). However, surface waters shall not include agricultural modified wetlands and features of farm fields designed for irrigation return flows or storm water runoff. However, surface waters shall not include agricultural modified wetlands and features of farm fields designed for irrigation return flows or storm water runoff.

*Exception: This definition is for the purposes of this permit only.

Target Pest – the organism toward which pest management measures are being directed.

Treatment Area –the entire area, whether over land or water, where the pesticide application is intended to provide pesticidal benefits within the pest management area. In some instances, the treatment area will be larger than the area where pesticides are actually applied. For example, the treatment area for a stationary drip treatment into a canal includes the entire width and length of the canal over which the pesticide is intended to control weeds. Similarly, the treatment area for a lake or marine area is the water surface area where the application is intended to provide pesticidal benefits.

Water Quality Impaired – See 'Impaired Water'.

Wetlands – means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions commonly known as hydrophytic vegetation.

“You” and “Your” – as used in this permit are intended to refer to the operator, or the discharger as the context indicates and that party's activities or responsibilities.

A.2. ABBREVIATIONS AND ACRONYMS

For the purposes of this permit, the following abbreviations and acronyms have been utilized.

EPA – Environmental Protection Agency

FIFRA – Federal Insecticide, Fungicide, and Rodenticide Act, 7 USC 136 et seq.

FW1 – Fresh Water One

PDMP – Pesticide Discharge Management Plan

PL - Pinelands

PMM – Pesticide Management Measures

APPENDIX B
NJPDES Pesticide General Permit
Surface Water Quality Criteria Chart

Parameter	Fresh Water (µg/L)	Saline Water (µg/L)
Phosphorus, Total (for Lakes)	0.05 mg/L	--
Phosphorus, Total (for Streams)	0.1 mg/L	--
Aldrin	3.0	1.3
Gamma-BHC (Lindane)	0.95	0.16
Chlordane	2.4	0.09
Chlorpyrifos	0.083	0.011
4,4'-DDT	1.1	0.13
Dieldrin	0.24	0.71
Endosulfans (alpha and beta)	0.22	0.034
Endrin	0.086	0.037
Heptachlor	0.52	0.053
Heptachlor Epoxide	0.52	0.053
Parathion	0.065	--
Toxaphene	0.73	0.21
Copper, Dissolved (with hardness of 50 mg/L)	6.6	4.8
Copper, Dissolved (with hardness of 100 mg/L)	12.7	4.8
Copper, Dissolved (with hardness of 150 mg/L)	18.67	4.8
Copper, Dissolved (with hardness of 200 mg/L)	24.4	4.8
Copper, Dissolved (Newark Bay, Raritan Bay, Arthur Kill, Kill Van Kull, sa- line portions of the Passaic, Hackensack and Hudson Rivers and saline portions of tributaries to all of these waters)	--	7.9

APPENDIX C

Table 1. Annual Treatment Area Thresholds (Does not apply to Pinelands or FW1 waters)			
Pesticide General Permit Section	Pesticide Use	Entity	Annual Threshold
E.2	Mosquitoes and Other Flying Insect Pests	Any Entity for which pest management for land resource stewardship is an integral part of the organization's operation.	None, all must submit an application (NJPDES Form-1 and PGP Supplemental Form)
		Local governments or other entities	Less than 6,400 acres of treatment area ¹ are exempt from submitting an application
E.3	Aquatic Weed and Algae Control	Any Entity for which pest management for land resource stewardship is an integral part of the organization's operation.	None, all must submit an application
		Local governments or other entities	Less than 80 acres of water (i.e. surface area) or less than 20 linear miles ² are exempt from submitting an application
E.4	Aquatic Nuisance Animal Control:	Any Entity for which pest management for land resource stewardship is an integral part of the organization's operation.	None, all must submit an application
		Local governments or other entities	Less than 80 acres of water (i.e. surface area) or less than 20 linear miles ² are exempt from submitting an application
E.5	Forest Canopy Pest Control	Any Entity for which pest management for land resource stewardship is an integral part of the organization's operation.	None, all must submit an application
		Local governments or other entities	Less than 6,400 acres of treatment area ¹ are exempt from submitting an application

E.6	Agricultural Activities	All entities	Less than 100 acres of treatment area ³ are exempt from submitting an application
E.7	Utility Transmission and Distribution Line Vegetation Control	All entities	None, all must submit an application

¹ For calculating annual treatment areas for Mosquitoes and Other Flying Insect Pest Control and Forest Canopy Pest count each pesticide application activity to a treatment area (i.e. that area where a pesticide application is intended to provide pesticidal benefits within the pest management area) as a separate area treated. For calculating annual treatment area totals, count each pesticide application activity as a separate activity. For example, applying pesticides twice a year to a ten-acre site shall be counted as twenty acres of treatment area. The treatment areas for these two pesticides use patterns are additive over the calendar year.

² For calculating annual treatment areas for all activities, except Mosquitoes and Flying Insect Pest control and Forest Canopy Pest, calculations should include either the linear extent of or the surface area of waters for applications made into, over, or near waters of the State. For calculating annual treatment totals, count each treatment area only once, regardless of the number of pesticide application activities performed on that area in a given year. Also, for linear features (e.g. a canal or ditch), use the length of the linear feature whether treating in or adjacent to the feature, regardless of the number of applications made to that feature during the calendar year. For example, whether treating the bank on one side of a ten-mile-long ditch, banks on both sides of the ditch, and /or water in that ditch, the total treatment area is ten miles for purposes of determining if an application is required to be submitted. Additionally, if the same 10-mile area is treated more than once in a calendar year, the total area treated is still 10 miles for purposes of comparing with any threshold value. The treatment areas for these three pesticides use patterns are **not** additive over the calendar year.

APPENDIX D**Table 2 – Discharge Authorization Date**

Category	Application Submittal Deadline	Discharge Authorization Date
Operators not required to submit an application.	Not applicable.	Effective Date of Master General Permit
Operators that discharge to Pinelands or FW1 waters.	At least thirty (30) days prior to commencement of discharge.	Effective Date of Permit Authorization (EDPA)
Operators who are public or quasi-public entities and have a major responsibility to manage pests for public health and environmental protection.	At least thirty (30) days prior to commencement of discharge.	Effective Date of Permit Authorization (EDPA)
Operators who know or should have reasonably known, prior to commencement of discharge, that they will exceed an annual treatment area threshold for that year.	At least thirty (30) days prior to commencement of discharge.	Effective Date of Permit Authorization (EDPA)
Operators who do not know or would reasonably not know until after commencement of discharge that they will exceed an annual treatment area threshold for that year.	At least thirty (30) days prior to exceeding the annual treatment area threshold.	Original authorization is terminated when the annual treatment area threshold is exceeded. The Operator must be reauthorized and covered under a new EDPA.
Operators requiring permit coverage for an area not already identified on a previously submitted application.	At least thirty (30) days prior to beginning discharge in that newly identified area.	Effective Date of modified Permit Authorization
Operators requiring the use of a pesticide not already identified on a previously submitted application.	At least thirty (30) days prior to beginning the use of the new pesticide.	Effective Date of modified Permit Authorization
Any other change on a previously submitted application (e.g. change in name, address, or contact information)	As soon as the information is known	Effective Date of Existing Permit Authorization or Effective Date of modified Permit Authorization (if applicable)