State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

Mail Code 401 - 02B
Division of Water Quality
Bureau of Surface Water Permitting
PO Box 420, Trenton, NJ 08625-0420
Phone: (609) 292-4860
Fax: (609) 984-7938

BOB MARTIN
Commissioner

March 22, 2013

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

To: Distribution List

Re: Pre-draft Revoke and Reissue Surface Water Master General Permit
Category: PGP- Pesticide Application Discharge
NJPDES Permit No. NJ0178217
NJPDES MASTER GENERAL PERMIT PROGRAM INTEREST

Dear Permittee:

In accordance with N.J.A.C. 7:14A, the Bureau Surface Water Permitting (BSWP) is proposing to revoke and reissue the New Jersey Pollutant Discharge Elimination System (NJPDES) discharge to surface water master general permit action for the Statewide General Pesticide Application Discharge Permit that was issued on October 31, 2011. As a courtesy, the Department has enclosed a preliminary draft permit action, providing you an opportunity to informally review the permit, before it is issued draft. The preliminary draft comment period may be utilized by the permittee to informally raise comments or questions. Please submit any informal comments regarding the preliminary draft on or before April 12, 2013. A copy of this document is available in the Division of Water Quality website at http://www.nj.gov/dep/dwq/gp_surfacewater.htm under Surface Water General Permits.

The receipt of this preliminary draft permit action **does not** mark the start of the formal comment period. It is not necessary, nor does the Department expect, detailed comments at this time. You will receive a copy of the draft permit action when it is officially issued, prior to commencement of the formal comment period.

If you have questions or comments regarding the draft action, please contact me at (609) 292-4860 or by e-mail at teresa.guloy@dep.state.nj.us.

Sincerely,

Teresa Guloy
Environmental Engineer
Bureau of Surface Water Permitting

Enclosures

C: Distribution List

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This permit package contains the items checked below:

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- [X] 1. **Cover Letter**
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New Jersey Department of Environmental Protection
Division of Water Quality
Bureau of Surface Water Permitting

PUBLIC NOTICE

Notice is hereby given that the New Jersey Department of Environmental Protection (Department) proposes to revoke and reissue the New Jersey Pollutant Discharge Elimination System (NJPDES) Discharge to Surface Water (DSW) Master General Permit, 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., 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 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 agricultural activities, and utility transmission and distribution line vegetation control.

For the past 30 years, the United States Environmental Protection Agency ("US EPA") has regulated the application of pesticides through the Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA"). FIFRA allows delegation of this regulation to the individual states and tribes. In New Jersey, this delegation is authorized to the NJDEP Pesticide Control Program. However, effective April 9, 2011, based on a ruling by the 6th Circuit Court of Appeals made on January 7, 2009 in National Cotton Council, et al v. EPA, all applications of biological and chemical pesticide applications that leave a residue in water when such applications are made, in, over, and near surface waters of the State will require a NJPDES permit. This requirement is in addition to the Pesticide Control Program (PCP) permits and requirements. The NJPDES permit does not supersede and/or replace the PCP permits.

The Department issued a draft NJPDES Pesticide General Permit on December 28, 2010 that was modeled after the US EPA's 2010 draft National Pollutant Discharge Elimination System (NPDES) Pesticide General Permit (PGP). On October 28, 2011, the US EPA issued a final NPDES PGP, which includes significantly different permit conditions than what was proposed in their 2010 draft permit. New Jersey regulations at N.J.A.C. 7:14A-15.10 and 15.11 prohibit the Department from making significant changes to permit conditions between draft and final permits in order to provide the public with the opportunity to comment on any new permit requirements. Therefore, on October 31, 2011, the Department finalized the draft NJPDES PGP "as is" with the intention of revoking and reissuing the permit to incorporate the changes made to EPA's final NPDES PGP.

A draft revoke and reissue NJPDES PGP 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 Open Public Records Act office. Details are available online at www.nj.gov/dep/opra, or by calling (609) 341-3121. Appointments for inspection of the NJPDES file only or requests for a copy of the draft document (for a nominal charge) may be made by calling Central File at (609) 292-0400.

Written comments or a request that the Department hold a non-adversarial public hearing on the draft document must be submitted in writing to Pilar Patterson, Chief, or Attention: Comments on Public Notice NJ0178217, at Mail Code 401-02B, Division of Water Quality, Bureau of Surface Water 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. 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 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

Permittee:
NJPDES Master General Permit Program Interest
Category PGP
Division of Water Quality
P.O. Box 420, 401 East State Street
Trenton, NJ 08625

Co-Permittee:

Property Owner:
NJPDES Master General Permit Program Interest
Category PGP
Division of Water Quality
P.O. Box 420, 401 East State Street
Trenton, NJ 08625

Location Of Activity:
NJPDES Master General Permit Program Interest
Category PGP
Division of Water Quality
P.O. Box 420, 401 East State Street
Trenton, NJ 08625

Authorization(s) Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
PGP - Pesticide Application Discharges			

By Authority of:
Commissioner's Office

DEP AUTHORIZATION
Pilar Patterson, Chief
Bureau of Surface Water Permitting
Division of Water Quality

NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM

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Permit Number: Per Individual Notice of Authorization (NJGxxxxxxx)NJ0178217

Surface Water Master General Permit Authorization

Permittee:
NJPDES Master General Permit Program Interest
Category PGP
Per Individual Notice of Authorization

Co-Permittee:

Property Owner:
NJPDES Master General Permit Program Interest
Category PGP
Per Individual Notice of Authorization

Location Of Activity:
NJPDES Master General Permit Program Interest
Category PGP
Per Individual Notice of Authorization

Authorization(s) Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
PGP – Pesticide Application Discharge			

By Authority of:
Commissioner's Office

DEP AUTHORIZATION
Pilar Patterson, Chief
Bureau of Surface Water Permitting
Division of Water Quality

(Terms, conditions and provisions attached hereto)

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

FACT SHEET

Masterfile #: **PI #:**

This fact sheet sets forth the principle facts and the significant factual, legal, and policy considerations examined during preparation of the draft master general 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 (NJPDES).

This permit shall not be considered as a waiver of any applicable federal, state, local laws and regulations that pertain to your 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. For example, 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.

PERMIT ACTION: Pesticide Application Discharge for Category PGP

I. BACKGROUND INFORMATION:

For the past 30 years that the United States Environmental Protection Agency (USEPA) has administered the Clean Water Act (CWA), the Agency has never issued a National Pollutant Discharge Elimination System (NPDES) permit for the application of a pesticide to target a pest that is present in or over, including near, the water where such application results in a discharge to waters of the United States. Instead, the US EPA has been regulating these types of applications through the Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA").

In accordance with this practice, on November 27, 2006, USEPA issued a final rule (hereinafter called the "2006 NPDES Pesticides Rule") clarifying two specific circumstances in which a National Pollutant Discharge Elimination System (NPDES) permit was not required to apply pesticides to or around water. They were: 1) the application of pesticides directly to water to control pests; and 2) the application of pesticides to control pests that are present over, including near, water where a portion of the pesticides will unavoidably be deposited to the water to target the pests, in both instances provided that the application is consistent with relevant Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requirements. The rule became effective on January 26, 2007.

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. USEPA*, 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 of America v. US EPA, 553 F.3d 927 (6th Cir., 2009). The Court held that the 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 an 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. A point source is defined as a discernible, confined, and discrete conveyance. Trucks and helicopters that spray pesticides are point sources under the CWA. Therefore, as of this January 9th 2009 ruling, NPDES permits are required for such discharges and it is no longer sufficient to regulate these applications solely under FIFRA.

On April 9, 2009, in response to this decision, , USEPA requested a two-year stay of the mandate to provide the Agency time to develop general permits, to assist NPDES-authorized states to develop their NPDES permits, and to provide outreach and education to the regulated community. On June 8, 2009, the Sixth Circuit granted USEPA the two-year stay of the mandate, extending the deadline to April 9, 2011. On March 3, 2011, the EPA requested the court for an extension of the April 9, 2011 deadline to October 31, 2011 to allow more time for pesticide operators to obtain permits. The EPA has also stated that the extension is needed in order to provide EPA with additional time to engage in Endangered Species Act consultation, complete the development of an electronic database to streamline requests for coverage under the NPDES PGP, and give States more time to complete their permits. The court granted EPA the requested extension on March 28, 2011.

As a result of the Court's decision to vacate the 2006 NPDES Pesticides 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 Department issued a draft NJPDES Pesticide General Permit (PGP) on December 28, 2010. The Department modeled the December 2010 Draft NJPDES PGP after the U.S. Environmental Protection Agency's (EPA) 2010 draft National Pollutant Discharge Elimination System (NPDES) PGP. On October 28, 2011, the USEPA issued a final Pesticide General Permit, which includes significantly different permit requirements than the 2010 NPDES draft permit. In New Jersey, the regulations at N.J.A.C. 7:14A-15.10 and 15.11, prohibit the Department from making significant changes to permit conditions between draft and final permit in order to provide the public with the opportunity to comment on any new permit requirements. Therefore, the Department would need to redraft the PGP in order to incorporate the changes.

In order to provide the Department with additional time beyond the October 31, 2011 deadline to address the changes to the federal PGP, the draft NJPDES permit was finalized "as is" and specific permit requirements were stayed on October 31, 2011. This fact sheet provides the basis for the revised draft NJPDES PGP.

II. NJPDES PERMITS- General Information

The NJPDES program relies on two types of permits: individual and general. An individual permit is a permit issued to an individual discharger. Upon receiving the appropriate permit application(s), the NJDEP develops a draft permit for public comment for that particular discharger based on the information contained in the permit application (e.g., type of activity, nature of discharge, receiving water quality). Following consideration of public comments, a final permit is then issued to the discharger for a specific time period (not to exceed 5 years) with a provision for reapplying for

further permit coverage prior to the expiration date. The processing time for an individual permit is approximately six (6) months.

In contrast, a general permit covers multiple facilities/sites/activities within a specific category for a specific period of time (not to exceed 5 years). For general permits, NJDEP develops and issues the permit in advance (called a "master general permit"), with dischargers then generally obtaining coverage under the permit through submission of a Request for Authorization (RFA). Upon submission of an administratively and technically complete RFA, the permittee will be issued an individual authorization under the master general permit. The individual permit authorization expires no later than the expiration date of the master general permit. The RFA is an application form, which will be made available subsequent to the issuance of the final master general permit. A master general permit is also subject to public comment prior to issuance. Any individual authorization issued under the PGP is given two NJPDES numbers. The NJPDES number on the individual authorization page will be specific to the individual facility whereas the NJPDES number NJ0178217 is designated for this master general permit.

In accordance with N.J.A.C. 7:14A-6.13, the NJDEP may issue a general permit for categories of discharges that have common elements, such as facilities that involve the same or substantially similar types of operations, that discharge the same types of wastes, or that require the same or similar effluent limitations, operating conditions, or monitoring. Given the vast number of pesticide applicators requiring NJPDES permit coverage, the NJDEP, in accordance with the US EPA guidance, decided that the most efficient way to regulate these types of discharges is to issue a general permit. The general permit approach maximizes NJDEP's resources by regulating all the applicators through a single permit action rather than multiple permit action. In addition, the issuance of a general permit will enable the NJDEP to address the public's comments and concerns in a single forum.

III. COVERAGE UNDER THIS PERMIT

This general permit authorizes applications of pesticides made directly to surface waters of the State in order to control pests, as well as applications into, over, or near waters of the State.

A. Use Patterns Covered Under This Permit

The general permit is structured by six pesticide use patterns. These 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 permit. Also, the NJDEP has determined that the following six use patterns encompass the majority of pesticide applications that result in point source discharges to surface waters of the State. However, any pesticide application activities that do not fall within the six use patterns covered by this permit will require coverage under some other NJPDES permit if those activities result in point source discharges into, over, or near waters of the State. The general permit covers the following six use patterns:

1. **Mosquito and Other Flying Insect Pest Control:** This use pattern includes the application, by any means, of chemical and biological insecticides and larvicides into, over, or near water to control insects that breed or live in, over, or near water. Applications of this nature usually

involve the use of low volume or ultra low volume sprays or granular larvicides discharged over large swaths of mosquito breeding habitat and often performed several times per year.

2. **Aquatic Weed and Algae Control:** This use pattern includes the application, by any means, of contact or systemic herbicides to control vegetation or algae (and plant pathogens such as fungi) in water and at water's edge, including ditches and/or canals. Applications of this nature typically are single spot pesticide applications to control infestations or staged large scale pesticide applications intended to control pests in several acres of waterway. Pesticide applications in a treatment area may be performed one or more times per year to control the pest problem.

3. **Animal Pest Control:** This use pattern includes the application, by any means, of pesticides into, over, or near waters of the State to control a range of animal pests for purposes such as fisheries management, invasive species eradication or equipment operation and maintenance. Applications of this nature are often made over an entire or large portion of a waterbody as typically the target pests are mobile. Multiple pesticide applications to a waterbody for animal pest control are often made several years apart.

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

5. **Agricultural Activities In Waters of the State (Aquatic Agricultural Activities):** Although the USEPA did not include this use pattern in the 2011 Final NPDES PGP, the NJDEP has determined that it is appropriate to include this use pattern in this general permit. This use pattern includes the application of pesticides, usually chemicals, into, over, or near waters of the State used in agricultural operations. Applications of this nature usually occur during specific times of the year.

6. **Utility Transmission and Distribution Line Vegetation Control**
Although the USEPA did not include this use pattern in the 2011 Final NPDES PGP, the NJDEP has determined that it is appropriate to include this use pattern in this general permit. This use pattern includes the 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.

B. Operators Responsible for Coverage Under This Permit

The NJDEP acknowledges that there may be more than one party implementing the conditions of the permit. However, in accordance with N.J.A.C. 7:14A-1.2, the NJDEP defines operator as any

person who alone or along with other persons has primary management and operational decision making authority over any part of the activity. Only the operator(s) is required to obtain permit coverage. Therefore, the operator assumes full responsibility for permit compliance. For example, a mosquito control commission or agency that controls the pest management program in a district would be considered the permittee, even if a hired contractor is the one applying the pesticide. It is the mosquito control commission's or agency's responsibility to ensure that the hired contractor complies with the conditions of the permit when pesticides are being applied.

C. Activities Covered Under This Permit

Coverage under this permit is available to operators discharging to all surface waters of the State, including waterbodies classified as Outstanding National Resource Waters.

Basis for Authorization of Discharges to Outstanding National Resource Waters Including Anti-degradation Analysis

Outstanding National Resource Waters (ONRW) means high quality waters that constitute an outstanding national resource, which are classified in accordance with N.J.A.C. 7:9B-1.4 as FW1 and Pinelands waters. The list of FW1 and Pinelands waters can be found at http://www.nj.gov/dep/rules/rules/njac7_9b.pdf pages 42-113.

Pesticides have historically been used to control harmful, destructive, or nuisance forms of insects, plants, and animal life into, over, or near waterbodies that are designated as ONRW. When properly applied, they are an effective tool for the protection of existing water quality and the control of invasive, harmful species that can cause significant adverse ecological impacts and/or create public health concerns. The NJDEP believes that the authorization of existing pesticide applications is consistent with the State anti-degradation policy. Pesticide applications have been occurring into, over, and near ONRW for decades. The continuation of past practices is not expected to change water quality. In fact, the consequence of prohibiting the application of pesticides would be the proliferation of invasive, destructive, or harmful species that could result in the lowering of existing water quality, increase in the quantity or potency of pesticides used in surrounding areas, and/or adverse health impacts resulting in diseases such as West Nile virus, encephalitis, etc.

NJDEP believes that coverage under the general permit for discharges to ONRW is necessary in order to avoid delays in the control of invasive and destructive plants, insects, and animals in State forests and parklands, areas that contain the majority of ONRW. Additionally, not authorizing discharges to ONRW in this general permit may cause unintended delays in treatment that could potentially result in long term impacts to sensitive natural environments requiring more extensive control measures. Issuance of individual permits would create unnecessary delays, and add to the administrative costs without any added environmental benefit.

D. Activities Not Covered Under This Permit

Coverage under the permit is only available for discharges to waters that are not impaired for specific pesticides or degradates of that pesticide. For example, application of the pesticide copper sulfate to a waterbody impaired for either copper or sulfates would not be eligible for coverage under this permit, because copper sulfate can degrade into these two substances. In this instance, the operator would have to choose between obtaining coverage under an individual permit for such a discharge or selecting some other means of pest management, e.g., using mechanical means or an alternate pesticide product, which would not contribute to the exceedance of the pollutant level for which the stream is impaired. Please be advised that the

processing time for an individual permit is approximately two (2) years. Additionally, the individual permit may include more stringent requirements, such as more extensive monitoring, reporting, and recordkeeping, as well as application requirements that may include stream monitoring.

For this general permit, NJDEP has determined that it does not have information warranting a limitation for all impaired waters regardless of the impairment. In fact, in some instances, the application of a pesticide to water can have a beneficial effect, such as when it is used to control algae growth that can deplete oxygen levels in water. It is important to note that this permit allows NJDEP, based on additional information, to require an operator to apply for coverage under an individual permit rather than approve coverage under this general permit.

Impaired waters are those that have been identified by the NJDEP pursuant to Section 303(d) of the CWA as not meeting applicable State water quality standards. Impaired waters for the purposes of this permit include both waters with approved or established Total Maximum Daily Loads (TMDLs) and waters for which the NJDEP has not yet approved or established a TMDL.

The NJ Impaired Surface Water list can be found in the Division of Water Quality website at http://www.nj.gov/dep/dwq/gp_surfacewater.htm under Surface Water General Permits. Only the named waterbody identified on the NJ Impaired Surface Water list is prohibited from receiving discharges of any parameter for which the waterbody is impaired.

Exception: The Department has decided to allow the use of Temephos for mosquito control in waters impaired for phosphorus due to the fact that the alternative 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.

E. Activities Exempted From Coverage Under This Permit

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. Additionally, 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.

IV. TYPE OF WASTES 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 of 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. For example, discharges to control pests in or near areas that are Waters of the US, even when these areas are dry for much of the year, may be covered by this permit, if one is required. This would include discharges on forest or range lands that include dry washes and ephemeral streams, to control pests that may be found in these occasionally wet areas, including pests that may also be found in upland areas. For the weed and algae pest control and animal pest control categories, the permit specifies that covered activities include applications to control pests "in water and at water's edge." EPA intends for "waters edge" to allow coverage of activities targeting pests that are not necessarily "in" the water but are near the water such that control of the pests may unavoidably involve a point source discharge of pesticides into waters. The category forest canopy pest control is for applications to a forest canopy. EPA intends that this can include both mature and immature forest canopies, including canopies that may not be continuously connected, where control of pests associated with the canopy (i.e., branches and leaves of the trees) may unavoidably involve point source discharges of pesticides to waters of the US. If the application of a chemical pesticide is made near (see Appendix A for NJDEP's definition of near) a surface water to control pests, it is expected that a portion of the pesticide will unavoidably be deposited into the water in order to target pests effectively, and thus assumes applications will trigger the requirement for a permit.

The NJDEP concurs with the USEPA's findings; therefore, the application of pesticides over, into, or near waters of the State will require a NJPDES permit.

Biological Pesticides:

For purposes of this permit, NJDEP 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 purposes of this permit, NJDEP identifies biological pesticides (also called "biopesticides" under FIFRA regulations) to include microbial pesticides and biochemical pesticides and plant-incorporated protectants.

The Sixth Circuit Court determined that the residue and excess quantities of biological pesticides, as well as the biological pesticide itself is considered a pollutant. Therefore, all applications of biological pesticides over, into, or near surface waters of the State require a NJPDES permit.

V. AUTHORIZATION TO DISCHARGE UNDER THIS PERMIT

Authorization to discharge under this permit is granted in two ways. One way to obtain coverage under this permit is through the submission of an RFA. The Department will review the RFA and grant a written approval called the General Permit Authorization (GPA), when appropriate.

The second way to obtain coverage under this permit is through 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 an RFA and no specific written approval will be provided by the NJDEP. The Department considered the following factors when making a determination regarding who does not need to submit an RFA (i.e. covered through permit by rule):

- the type of discharge; the expected nature of the discharge
- the potential for toxic and conventional pollutants in the discharge
- the expected volume of discharges
- other means of identifying discharges authorized by the permit and
- the estimated number of discharges authorized by the permit.

Generally, the volume of discharge will vary proportionally with the number of acres and linear miles treated. Therefore, for all use patterns, NJDEP expects that the volume of discharge for a given pesticide application will be lower when fewer acres or linear feet are treated over a calendar year. Moreover, while there may be more operators applying pesticides to small treatment areas when compared to operators applying to large treatment areas, the volume of discharges from operators applying to small treatment areas is believed to be substantially less on a per applicator basis and cumulatively less than the volume of discharges from applications made by operators applying to large treatment areas.

The US EPA has stated in its fact sheet of the April 1, 2011 Draft Final NPDES Pesticide General Permit (PGP) that after considering the universe of entities to be covered under the permit, USEPA found a logical break between entities applying pesticides to larger areas versus smaller areas, and a difference between the types of entities generally responsible for performing such pest control activities. As a result, application submission requirements are based on the size of areas treated and the entity making the decision to perform pesticide applications. The NJDEP 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 NJDEP gave weight to the volume of discharges and the estimated number of discharges to be covered by the permit and has relied on and is proposing to adopt the same threshold categories and values (see Table I below), as proposed by the USEPA in their October 28, 2011 Final NPDES PGP.

Should USEPA revise the threshold categories and/or values, the NJDEP 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 Water, Office of Chemical Safety and Pollution Prevention (formerly Office of Pesticides, Pollution, and Toxic Substances), and the ten 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. Also, EPA solicited and received some comments on the draft PGP on appropriate threshold values to use for permit

application submission. Based on these discussions, comments received, and best professional judgment, the US EPA 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 recognizes there are many unknowns concerning the size, organization, and activities of the permitted universe. Considerable variation in the availability of data and in the consistency of requirements across regions and states resulted in EPA relying heavily on its best professional judgment in setting the annual treatment area thresholds for each of the use patterns.

Threshold values do not apply to operators that have a significant role in pest control for public health and environmental protection since the NJDEP believes that they should be expected to provide notice of such activities.

Table 1. Annual Treatment Area Thresholds (Does not apply to discharges to Pinelands and FW1 waters)

Factsheet Part III	Pesticide Use		Annual Threshold
A.1.	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 RFA
		Local governments or other entities	Less than 6,400 acres of treatment area[1] are exempt from submitting an RFA
A.2.	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 RFA
		Local governments or other entities	Less than 80 acres of water (i.e. surface area) or less than 20 linear miles[2] of treatment area are exempt from submitting an RFA
A.3.	Animal 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 RFA
		Local governments or other entities	Less than 80 acres of water (i.e. surface area) or less than 20 linear miles[2] of treatment area are exempt from submitting an RFA
A.4.	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 RFA
		Local governments or other entities	Less than 6,400 acres of treatment area[1] are exempt from submitting an RFA

A.6.	Agricultural Activities	All entities	Less than 100 acres of treatment area[2] are exempt from submitting an RFA
A.7.	Utility Transmission and Distribution Line Vegetation Control	All entities	None, all must submit an RFA

[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 area for these two pesticide use patterns is additive over the calendar year.

[2] For calculating annual treatment areas for Aquatic Weed and Algae Control, Animal Pest Control, Agricultural Activities, and Utility Transmission and Distribution Line Vegetation Control, 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 annual treatment totals. 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.

Any operator that does not have a significant role in pest control for public health and environmental protection and that has reason to believe it will exceed one or more of the annual treatment area thresholds in any calendar year of the permit cycle shall submit an RFA to the NJDEP and obtain coverage.

The exemption from submission of an RFA does not apply to operators that discharge to waters designated as Pinelands or FW1. Therefore, all discharges into, near, or over Pinelands or FW1 waters of the State shall submit an RFA.

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

Mosquitoes and Other Flying Insect Pests: For mosquitoes and other flying insect pests, the annual treatment area threshold has been set at 6,400 acres. US EPA determined that the vast majority of mosquito control and abatement districts in the U.S. 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 US EPA's draft *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 for Florida. Furthermore, the effective control of other aquatic breeding, flying insects, such as the blackfly, necessitates an

application approaching or exceeding this threshold. Therefore, US EPA believes the threshold appropriately captures most operators 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 and should provide notice to the NJDEP of their activities. As such, the permit requires all mosquito control districts or similar pest control districts, as well as any other operator treating over the annual treatment area threshold, to submit a permit application. The USEPA believes 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.

Aquatic Weeds and Algae: For aquatic 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 regulated waterbodies. 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. For example, Florida's South Florida Water Management District usually performs treatments of generally 60 acres at a time hundreds of times per year for various invasive plants on Florida's Lake Okeechobee. After reviewing the operations of major irrigation and flood control systems, USEPA expects that generally, relatively large entities such as South Florida Water Management District or California Department of Water Resources or organizations with comparable resources are the types of entities that manage 20 or more miles of engineered irrigation system conveyances and that this is a reasonable limit to trigger the application submission requirement. The same rationale is applied to managers of ditch and canal banks. Therefore, USEPA believes the threshold appropriately captures the relatively large applications but excludes a significant number of small applications. Similar to mosquito control, USEPA believes that 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 permit applications. The USEPA believes 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.

Aquatic Nuisance Animals: Invasive and nuisance aquatic animals are most commonly treated by public agencies such as departments of fish and game or utilities such as water management districts that manage areas of surface water in excess of 80 acres or 20 linear miles. The high mobility and prolific breeding ability that necessitate control of aquatic animals usually means that their treatment most often occurs in the entirety or large portions of the water bodies they inhabit. For example, fishery management treatments using *Rotenone* often occur in the entire lake and, thus any similar application to a lake of more than 80 acres in an area will trigger the annual treatment area threshold. USEPA expects that for this reason, only spot treatments to eradicate small emergent populations of sessile animals or treatments to very small water bodies might be excluded from the application submission requirement. Therefore, USEPA believes the threshold appropriately captures the relatively large operators engaging in this use pattern.

Forest Canopy: Forest canopy pest suppression programs are designed to blanket large tracts of terrain, throughout which operators may not be able to see waterbodies beneath the canopy. USEPA has set the annual treatment area threshold at 6,400 acres for this use pattern with the understanding that this will exclude only the smallest applications from the application submission requirement. These smaller applications generally occur on private lands. Therefore, USEPA believes the threshold

appropriately captures most operators engaging in this use pattern, particularly public agencies managing large tracts of land.

NJDEP's rational for the annual treatment area threshold for the following use pattern:

Aquatic Agricultural Activities: The NJDEP 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.

Utility Transmission and Distribution Line Vegetation Control: Based on the information provided to the NJDEP, 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, and all are considered large entities, the NJDEP has determined that it is appropriate to require these operators to submit an RFA.

RFAs Required of Certain Entities Regardless if They Exceed an Annual Treatment Area Threshold
In addition to RFAs from operators treating the largest areas, NJDEP is also requiring RFAs from certain other types of entities with a responsibility to control pests, regardless of the size of the area treated. In general, NJDEP expects that in many instances these entities will exceed one or more of the annual treatment area thresholds anyway but the NJDEP believes that regardless of the size, public or quasi-public entities that have an inherent responsibility to control pests as a primary activity of their organization should also be required to submit RFAs. The specific entities required to submit RFAs regardless of whether an annual treatment area threshold is exceeded are as follows:

Federal and state agencies with a responsibility to control pests- NJDEP believes that most pest control activities performed by Federal and state agencies will meet the requirement to submit an RFA; however, NJDEP recognizes that there are instances when an agency may perform ad-hoc pest control on a small scale basis that is outside its normal operations. For example, a Federal social security administration facility that wants to control weeds in a ditch on their building property would not be considered to have a responsibility to control such pests. However, a federal or state transportation department controlling weeds in waters of the State alongside roads, for the purposes of flood control for the roadway, would be considered to be serving such a public function and as such would be required to submit an RFA. To be clear, in both instances described above, discharges would require permit coverage, however, only in the second instance is an RFA required to be submitted.

Mosquito control districts (or similar pest control districts, such as vector control districts) – Special districts have been established for the purpose of mosquito control. Generally, these districts treat large areas that exceed EPA's annual treatment area thresholds; however NJDEP is requiring any such district, regardless of area treated, to submit an RFA.

Irrigation control districts (or other similar public or private entities supplying irrigation waters) - Special districts have been established for the purpose of maintaining irrigation canals and ditches. Generally, these districts treat large areas that exceed the annual treatment area thresholds; however NJDEP is requiring any such district, regardless of area treated, to submit an RFA.

Weed control districts (or other similar special purpose districts created with a responsibility for pest control)- The NJDEP believes that these types of entities, who perform pest management and control,

as the primary function of their organization, should provide notice to the NJDEP of such activities regardless of the size of the area treated.

VI. WHO MUST APPLY

1. Operators Required to Submit an RFA

- All operators discharging pesticides to Pinelands or FW1 waters;
- Operators managing public or quasi public organizations for which pest management for land resource stewardship is an integral part of their operation;
- Operators discharging pesticides to waterbodies not classified as Pinelands or FW1, if they have reasons to believe they will exceed one or more of the annual (i.e. calendar year) treatment area thresholds;
- Operators hiring another party to apply pesticides if:
    - The application exceeds any applicable annual treatment area threshold, or
    - The application, in addition to any other treatments made under the hiring operator's authority in the same calendar year, will exceed any applicable annual treatment area threshold;

- For hire applicators applying pesticides under contract from another party will include the acreage treated on behalf of the client in their annual total, unless that client has submitted or has responsibility for submitting an RFA reflecting that treatment. If the client has already submitted an RFA for the area to be treated, the applicator does not need to include it in his/her RFA threshold calculation.

Based on a review of the RFA or other information, NJDEP may in certain circumstances delay or deny coverage under the general permit and require submission of an application for an individual permit. Please be advised that the processing time for an individual permit is approximately six (6) months.

2. Operators Not Required to Submit an RFA

- Operators who discharge to waterbodies not classified as Pinelands or FW1 waters, and
- Operators who do not manage organizations for which pest management for land resource stewardship is an integral part of their operation, and
- Operators who do not exceed any of the applicable annual treatment area threshold values during any individual calendar year of the permit cycle (5 years).

Operators whose discharges are authorized by this permit, but are not required to submit an RFA are automatically covered under the permit for their application and are authorized to discharge in accordance with the permit requirements as soon as the permit becomes effective. Nonetheless, NJDEP emphasizes that these operators are still subject to all applicable requirements contained within the permit.

If an operator, otherwise not required to submit an RFA, anticipates that he or she will exceed an applicable annual treatment area threshold during any time in a given calendar year of the permit cycle, he or she shall submit an RFA at least 30 days prior to exceeding the threshold to continue to be authorized to discharge. NJDEP is requiring RFAs be submitted at least 30 days in advance of permit authorization to provide NJDEP with time necessary to ensure that permit coverage is appropriate for those activities identified in the RFA and to issue the authorization.

VII. RFA SUBMITTAL AND AUTHORIZATION EFFECTIVE DATES

Operators shall submit a complete and accurate RFA no later than the deadlines set forth below.

Discharge Authorization Date		
I. Category	**RFA Submittal Deadline**	**Discharge Authorization Date**
Operators not required to submit an RFA.	Not applicable.	Effective Date of Master General Permit
Operators that discharge to Pinelands or FW1 waters.	At least 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 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 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 30 days prior to exceeding an annual treatment area threshold.	Original authorization terminates when annual treatment area threshold is exceeded. Operator is reauthorized on the EDPA.
Operators requiring permit coverage for an area not already identified on a previously submitted RFA.	At least 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 RFA.	At least 30 days prior to beginning the use of the new pesticide.	Effective Date of modified Permit Authorization
Any other change on a previously submitted RFA (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)

VIII. INDIVIDUAL PERMITS

In accordance with N.J.A.C. 7:14A-6.13(e), NJDEP may require an individual permit or coverage under an alternative NJPDES general permit instead of the PGP. The regulations also provide that any interested party may petition NJDEP to take such an action. The issuance of the individual permit or

alternative NJPDES general permit is in accordance with N.J.A.C. 7:14A and provides for public comment and appeal of any final permit decision. The circumstances in which such an action would be taken are set forth at N.J.A.C. 7:14A-6.13(e).

Permittee Requesting Coverage under an Individual Permit: In place of being covered by this permit, the permittee may request to be excluded from such coverage by applying for an individual permit. In this case, the permittee shall submit an individual permit application in accordance with N.J.A.C. 7:14A-4.1, along with a statement of reasons supporting the request, to NJDEP. The request may be granted by issuance of an individual permit or authorization of coverage under an alternative general permit if the reasons are adequate to support the request. Cases where an individual permit may be required are described in N.J.A.C. 7:14A-6.13(e). Under this scenario, if an individual permit is issued, or authorization to discharge under an alternative general permit is granted, coverage under this permit is automatically terminated under N.J.A.C. 7:14A-6.13(h) on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit. Please be advised that the processing time for an individual permit is approximately two (2) years.

IX. EFFLUENT LIMITATIONS IN THE PERMIT

A. Technology Based Effluent Limitations (Applicable to all Operators)

1. What are the Technology Based Effluent Limitations?

The technology-based effluent limitations require the operator to minimize discharges of pesticides to surface waters of the State. The term "minimize" means to reduce and/or eliminate pesticide discharges to surface waters of the State through the use of pest management measures to the extent technologically available and economically achievable and practicable for the category or class of point sources covered under this permit taking into account any unique factors relating to the operators to be covered under the permit. The technology-based effluent limitations section is divided into two parts.

a. The first part applies to all operators and addresses the general requirement to minimize discharges. In this part, all operators shall minimize discharges of pesticides by using only the amount of pesticide product per application and frequency of pesticide applications necessary to control the target pest, performing regular maintenance activities, calibrating and cleaning/repairing application equipment, and assessing weather conditions in the treatment area.

b. The second part requires operators, who are required to submit an RFA, to implement pest management measures that involve the following:

- identifying and assessing the pest problem;
- assessing effective pest management; and
- following specified procedures for pesticide application.

2. Basis for the Technology Based Effluent Limitations

The technology-based effluent limitations contained in the PGP 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 the receiving waters inside the treatment area following completion of pest management activities.

The NJDEP's decision to include non-numeric technology based effluent limitations in this general permit is consistent with US EPA's approach as described in the 2011 NPDES Pesticides General Permit Fact Sheet.

It cannot be easily determined at what point a numeric effluent limit would apply. Since discharges from the application of pesticides are highly intermittent, it would be difficult to separate the discharge from the pesticide application itself. For example, the discharge from the application of a chemical pesticide to a surface water of the State is represented by the 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 also will have combined with any other discharges 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.

For discharges from the application of pesticides, there are often many short duration, highly variable, pesticide 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 numeric effluent limitations for pesticide applications extremely difficult. In this situation, requiring the use of standard control practices (i.e., narrative non-numeric effluent limitations), provides a reasonable approach to control pesticides discharges.

Determining the precise location for which a numeric effluent limitation would apply is not clear. Discharges from the application of pesticide are different from discharges 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.

Information needed to develop numeric effluent limitations is not available at this time. To develop numeric technology-based effluent limitations, US EPA shall fully 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, US EPA estimates that more than 400 pesticide active ingredients contained in over 3,500 pesticide products may be covered under this permit.

Technology-based effluent limitations 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 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. NJDEP 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. Pollution prevention continues to be the cornerstone of the NJPDES program.

3. Pest Management Measures Used to Meet the Technology-Based Effluent Limitations

Because there is variability in the pest management measures that can be used to meet the effluent limitations, the NJDEP 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 NJDEP 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 your 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) (l) 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." 40 CFR 122.44(k) (4).

4. Implementation of Pest Management Measures

This permit requires operators to implement pest management measures to meet the technology-based effluent limitations. 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 taken into account in the implementation of their pest management measures. NJDEP recognizes that not all of 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 pesticide adequately, the pest management measures shall be modified as expeditiously as practicable.

The following is excerpted from US EPA's 2011 Final NPDES Pesticides General Permit Fact Sheet (Section 2.1.1- 2.1.3):

To the extent not determined by the Operator, 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.

• As noted earlier, it is illegal to use a pesticide in any way prohibited by the FIFRA labeling. Also, use of pesticides shall be consistent with any other applicable state or federal laws. To minimize the total amount of pesticide discharged, operators shall use only the amount of pesticide and frequency of pesticide application necessary to control the target pest. Using only the amount of pesticide and frequency of pesticide application needed ensures maximum efficiency in pest control with the minimum quantity of pesticide. Using only the amount and frequency of applications necessary can result in cost and time savings to the user. To minimize discharges of pesticide, operators should base the rate and frequency of application on what is known to be effective against the target pest.

Maintain pesticide application equipment in proper operating condition, including requirement to calibrate, clean, and repair such equipment and prevent leaks, spills, or other unintended discharges.

Common-sense and good housekeeping practices enable pesticide users to save time and money and reduce potential for unintended discharges of pesticides to surface waters. Regular maintenance activities should be practiced and improper pesticide mixing and equipment loading should be avoided. When preparing the pesticides for application be certain that you are mixing them correctly and preparing only the amount of material that you need. Carefully choose the pesticide mixing and loading area and avoid places where a spill will discharge into waters. Some basic factors operators should consider are:

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

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

- Choosing the right spray equipment for the application;
- Ensuring proper regulation of pressure and choice of nozzle to ensure desired application rate;

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

Assess weather conditions (e.g. temperature, precipitation, and wind speed) in the treatment area to ensure application is consistent with all applicable federal requirements.

Weather conditions may affect the results of pesticide applications. Applicators must assess the treatment area to determine whether weather conditions support pest populations and are suitable for pesticide application.

B. Additional Technology Based Effluent Limitations - Pest Management Measures (Applicable to Operators who are required to submit an RFA)

In addition to the technology-based effluent limitations described above that apply to all permittees, NJDEP is requiring permittees, who are required to submit an RFA, to also identify the pest problem, implement effective and efficient pest management options, and adhere to certain pesticide use provisions. Operators are required to perform each of these permit conditions prior to the first pesticide application covered under this permit and at least once each calendar year thereafter. These additional technology based effluent limitations are based on integrated pest management principles. These requirements are aimed at reducing discharge of pesticides to waters and lessening the adverse effects of pesticides that are applied. Each pesticide use pattern has specific limitations, and these requirements are divided into three different sections: (1) identify the problem, (2) pest management options, and (3) pesticide use. For each pest management area, operators shall identify the problem prior to pesticide application, consider using a combination of chemicals and non-chemical pest management measures, and perform surveillance before pesticide application to reduce environmental impacts.

NJDEP expects that many of these permittees are already implementing pest management measures that are likely to meet these technology-based effluent limitations. Additionally, operators whose discharges of pesticides to surface waters of the State are solely from pesticide research and development activities do not have to comply with these additional technology-based effluent limitations to the extent the limits may compromise the research design.

These technology-based effluent limitations are based on Integrated Pest Management (IPM) principles. IPM, as defined in FIFRA, is a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks. (FIFRA, 7 U.S.C. 136r-1) IPM is not a single pest control method but, rather, a series of pest management evaluations, decisions and controls. In evaluating available and relevant information, US EPA has found that some commercial (for-hired applicators) and non-commercial (e.g., state governments, federal governments, local governments, utilities) entities are currently implementing IPM practices or components of IPM to minimize pesticide use. For example, federal agencies are required to implement IPM under 7 USC 136r-1, "Federal agencies shall use

Integrated Pest Management techniques in carrying out pest management through procurement and regulatory policies, and other activities." US EPA has found that mosquito control operations are performed by local government entities and that they are generally performing IPM.

Below is a general discussion describing the limitations for all use patterns. For more detailed descriptions of pest management measures for each use pattern see USEPA 2011 NPDES Pesticide General Permit Fact Sheet, pages 45- 78.

Operators required to submit RFAs shall do the following regardless of use pattern:

Identify the Problem

Operators are required to identify the pest problem, identify the target pest, and establish an action threshold. Understanding the pest biology and ecology will provide insight into selecting the most effective and efficient pest management measures (pesticidal or non-pesticidal methods), and in developing an action threshold. An action threshold is a point at which pest populations or environmental conditions cannot be tolerated necessitating that pest control action be taken based on economic, human health, aesthetic, or other effects. Action thresholds help determine both the need for control actions and the proper timing of such actions. It is a predetermined pest level that is deemed to be unacceptable. In some situations, the action threshold for a pest may be zero (i.e., no presence of the pest is tolerated). This is especially true when the pest is capable of transmitting a human pathogen (e.g., mosquitoes and the West Nile virus) and/or is an invasive species. In areas where aquatic weeds are problematic, it may be preferable to use an aquatic herbicide as a preventive measure rather than after weeds become established. In some situations, even a slight amount of pest damage may be unacceptable for ecological or aesthetic reasons. Sometimes pre-emergent pesticide application is needed, as preventive measure to keep aquatic weeds at bay. Action thresholds, often expressed as number of pests per unit area, can vary by pest, by site, and by season. In a new pest management program, action thresholds may be difficult to establish and as a practical approach should first focus on major pests. As operators gain insight and experience into specific pest management settings, the action levels can be revised up or down.

To identify the problem at a treatment area, operators may use existing data to meet the conditions of the permit. For example, a mosquito district may use monitoring data from an adjacent district to identify pests at their pest management area. Operators may also use relevant historic site data.

Pest Management Options

Operators are required to implement efficient and effective means of pest management measures that most successfully minimizes discharges to surface waters of the State resulting from the application of pesticides. Operators shall evaluate both pesticide and non-pesticide methods. Operators shall consider and evaluate the following options: no action, prevention, mechanical/physical methods, cultural methods, biological control agents, and pesticides. In the evaluation of these options, operators shall consider impacts to water quality, impacts to non-target organisms, pest resistance, feasibility, and cost effectiveness. Combinations of various management options are frequently the most effective pest management measures over the long term. The goal should be to emphasize long-term control rather than a temporary fix. For additional information, see USEPA 2011 NPDES Pesticides General Permit Fact Sheet, pages 45 – 78.

Pesticide Use

Operators are required to conduct pest surveillance in an area that is representative of the pest problem and reduce the impact on the environment. Pest surveillance is important to properly time the need for pest control. To reduce the impact on the environment and non-target organisms, operators are required to only apply pesticide when the action threshold has been met. As noted earlier, action thresholds help determine both the need for control actions and the proper timing of such actions. For additional information, see USEPA 2011 NPDES Pesticides General Permit Fact Sheet, pages 45 – 78.

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

A. What are the Water Quality Based Effluent Limits?

In addition to the technology-based effluent limitations, the PGP also contains water-quality-based effluent limitations. In this permit, NJDEP 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)). 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 NJDEP 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 NJDEP 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.

B. Compliance with the Water Quality Based Effluent Limits

Each Operator is required to control its discharge as necessary to meet applicable water quality standards. As explained in US EPA's 2011 NPDES Pesticide General Permit Fact Sheet (Section 3), generally, compliance with the other conditions in this permit (e.g., the technology-based limitations, 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:

1. Under FIFRA, US EPA evaluates risk associated with pesticides and mitigates unreasonable ecological risk. Compliance with FIFRA is assumed.

2. US EPA 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 show that, in most samples, most pesticides were below ambient water quality criteria or benchmarks developed by US EPA's Office of Pesticide Programs (OPP) as indicators of narrative water quality criteria. For the small number of pesticides found in monitoring data to be present above such benchmarks, the evaluation, as summarized in Appendices B and C of the US EPA PGP fact sheet, also documents risk mitigation actions taken by US EPA (such as cancellation of pesticide uses) that US EPA expects have reduced the levels of those pesticides in water.
3. Technology-based effluent limitations in the PGP provide further protections beyond compliance with existing FIFRA requirements.
4. Biological pesticides discharged to waters, by regulatory definition, do not work through a toxic mode of action. For chemical pesticides, the discharges covered under this permit 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.
5. The PGP excludes pesticide applications that result in discharges of any pesticide to waters impaired for that pesticide.

This permit requires Operators to control discharges as necessary to meet applicable water quality standards. When the Operator or NJDEP determines a discharge will cause or contribute to an excursion above any WQS, 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, NJDEP 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.

X. MONITORING REQUIREMENTS

Basis of 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 of 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 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 the 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.

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

1) Uncertainty: 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.

2) State water quality standards do not exist at this time for the vast majority of constituents in the products authorized for use under this PGP.

3) Difficulty of residue sampling for chemical pesticides: For chemical pesticides, the "pollutant" regulated by the PGP 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 discernable at this time for all pesticides.

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

NJDEP 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 has been tailored to accommodate the unique situations related to pesticide applications. Visual monitoring is required to determine if any pesticide use practices may need to be revised to ensure that avoidable adverse impacts to the environment do not occur. Monitoring records required by those operators who submit RFAs will establish a history that may indicate if or when practices need to be reconsidered.

The operator is prohibited from performing any pesticide application if an adverse incident is observed during any pre-application monitoring.

A. Visual Monitoring Requirements for all Operators

Visual monitoring assessments are required as a means of identifying, for example, instances of detrimental impact to non-target organisms, disruption or degradation of wildlife habitat, or the prevention of designated recreational or municipal uses of a waterbody that may possibly be related to the operator's use of pesticides in a given area. This requirement consists of visually monitoring the area to and around where pesticides are applied for possible and observable adverse incidents, such as unanticipated death or distress of non-target organisms and disruption of wildlife habitat, recreational or municipal water use.

Visual monitoring assessments are required during the pesticide application when feasibility and safety allow. Visual monitoring is not required during the course of treatment when that treatment is performed in darkness as it would be infeasible for the inspector to note adverse effects under these circumstances. 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 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.

B. Post Visual Monitoring Requirements for all Operators

For all waterbodies, except those classified as PL or FW1, visual monitoring must also be conducted during any post application surveillance, such as to determine the efficacy of the pesticide application. Visual monitoring of this type is required of all Operators but only if the Operator performs post application surveillance in the course of business. NJDEP expects that post application visual assessments are reasonably conducted on foot or from a stationary vehicle, although they might also be conducted from a moving vehicle, including a boat or plane, in certain circumstances.

C. Visual Monitoring Requirements for Operators Discharging to Waterbodies classified as Pinelands or FW1

A visual monitoring assessment shall be conducted during any post application monitoring of a waterbody classified as Pinelands or FW1 as described below.

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. The waterbody that received the highest quantity of pesticides shall be the one chosen for post application monitoring in order to check for any adverse effects.

XI. PESTICIDE DISCHARGE MANAGEMENT PLAN (PDMP)

A. What is a PDMP?

Distinct from the technology-based or water quality-based effluent limitation provisions in the permit, operators who are required to submit an RFA and are large entities (see Appendix A for definition) are required to prepare a PDMP by the time the RFAs are filed. Operators who are required to submit an RFA and is a small entity (see Appendix A for definition) shall document activities as described in Part XIV. A.2. of this fact sheet.

The PDMP itself does not contain effluent limitations; rather it constitutes a tool both to assist the operator in documenting what pest management measures it is implementing to meet the effluent limitations, and to assist the permitting/compliance authority in determining whether the effluent limitations are being met. Developing a PDMP helps operators ensure they have (1) taken steps to identify the pest problem, (2) evaluated pest management options, and (3) appropriate pest management measures to control pesticide discharges.

A PDMP is a "living" document that requires periodic reviews and shall be kept up-to-date. Where pest management measures are modified or replaced to meet effluent limitations, such changes shall be documented in the PDMP. All changes to the PDMP must 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. If operators fail to develop and maintain an up-to-date PDMP, they will have violated the permit. This recordkeeping violation is separate and distinct from a violation of any of the other substantive requirements in the permit (e.g., effluent limitations, corrective action, monitoring, and reporting).

A PDMP must include identification of the pesticide discharge management team, a description of the pest problem, and a description of the pest management options evaluation. Operators must also provide response procedures for spill response and adverse incident response. The size of the pest management area is determined by the Operator responsible for and with the authority to conduct pest management activities. For example, the pest management area for a mosquito control district is the total area of the district. Once the plan is developed, the operator must maintain the plan thereafter for the duration of coverage under this general permit. For any operator for which the annual treatment area threshold triggers the RFA requirement and is a large entity, the operator must keep the plan up to date for the duration of permit coverage even if the annual treatment area subsequently falls below the annual treatment area threshold.

Operators may choose to reference other documents, such as a pre-existing pest management plan or spill prevention and response plan, in the PDMP rather than recreating the same text in the PDMP. It is not required that an operator shall have authored the pre-existing plan in order to use it. When referencing other documents, the operator is responsible for ensuring his/her PDMP and the other documents together contain all the necessary elements for a complete PDMP. In addition, the operator shall ensure that a copy of relevant portions of those referenced documents is attached to the PDMP and is located at the address specified on the RFA and it is available for review. Failure to have a PDMP, where required, is a violation of the permit.

B. When do you need to prepare a PDMP?

- Operators, who are required to submit an RFA and are large entities, shall develop a PDMP by the time the RFA is filed.

- Operators, who are large entities and know or should have reasonably known prior to commencement of discharge, that they will exceed an annual treatment area threshold for that year, shall develop a PDMP by the time the RFA is filed.

- 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 , shall develop a PDMP by the time the RFA is filed.

- Once the operator meets the requirement to prepare a PDMP, he/she shall maintain the plan thereafter for the duration of coverage under this general permit. This means even if the operator's annual treatment area subsequently falls below the annual treatment area threshold, the operator is required to keep the plan up-to-date.

C. Contents of Your PDMP

In general, the permit requires that the following be documented in the PDMP: (1) pesticide discharge management team information; (2) description of the pest management area and the pest problem; (3) a description of pest management options evaluation; (4) response procedures for spill response and adverse incident response.

1. Pesticide Discharge Management Team

The permit requires that a qualified individual or team of individuals be identified to manage pesticide discharges covered under the permit. Identification of a pesticide discharge management team ensures that appropriate persons (or positions) are identified as necessary for developing and implementing the plan. Inclusion of the team in the plan provides notice to staff and management (i.e., those responsible for signing and certifying the plan) of the responsibilities of certain key staff for following through on compliance with the permit's conditions and limits.

The pesticide discharge management team is responsible for developing and revising the PDMP, implementing and maintaining the pest management measures to meet effluent limitations, and taking corrective action where necessary. Team members should be chosen for their expertise in the relevant areas to ensure that all aspects of pest management are considered in developing the plan. The PDMP shall clearly describe the responsibilities of each team member to ensure that each aspect of the PDMP is addressed. NJDEP expects most operators will have more than one individual on the team, except for those with relatively simple plans and/or staff limitations. The permit requires that team members have ready access to any applicable portions of the PDMP and the permit.

2. Problem Identification

This section includes the pest problem description, action threshold(s), a general location map, and water quality standards.

a. Pest Problem Description

The permit requires that the PDMP include a description of the pest problem at the pest management area. A detailed pest management area description assists operators in subsequent efforts to identify and set priorities for the evaluation and selection of pest management measures taken to meet effluent limitations and in identifying necessary changes in pest management. The description shall include identification of the target pest(s), source of the pest problem, and source of data used to identify the problem. The permit allows use of historic data or other available data (eg, from another similar site) to identify the problem at your site. If you use other site data, you shall document in this section why data from your site is not available or not taken within the past year and explain why the data is relevant to your site. Additionally, the pest management area descriptions should include any sensitive resources in the area, such as unique habitat areas, rare or listed species, or other species of concern that may limit pest management options. As required in Part II, Section B.4.b. and c., the permittee must take all necessary and practicable steps to avoid adverse incidents to the state and federally listed endangered and threatened plant and wildlife species.

b. Action Threshold(s)

The permit requires that the PDMP include a description of the action threshold(s) established for the target pest, including a description of how they were determined and method(s) to determine when the action threshold(s) has been met. An action threshold is a level of pest prevalence (or other indicator) at which an operator takes action to reduce the pest population. It is the point at which pest populations or environmental conditions cannot be tolerated necessitating that pest control action be taken based on economic, human health, aesthetic, or other effects. Action thresholds help determine both the need for control actions and the proper timing of such actions. It is a predetermined pest level that is deemed to be unacceptable. In some situations, the action threshold for a pest may be zero (i.e., no presence of the pest is tolerated). This is especially true when the pest is capable of transmitting a human pathogen (e.g., mosquitoes and the West Nile virus) and/or is an invasive species. In areas where aquatic weeds are problematic, it may be preferable to use an aquatic herbicide as a preventive measure rather than after weeds become established. In some situations, even a slight amount of pest damage may be unacceptable for ecological or aesthetic reasons. Sometimes pre-emergent pesticide application is needed, as preventive measure to keep aquatic weeds at bay. Action thresholds, often expressed as number of pests per unit area, can vary by pest, by site, and by season. In a new pest management program, action thresholds may be difficult to establish and as a practical approach should first focus on major pests. As operators gain insight and experience into specific pest management settings, the action levels can be revised up or down.

c. General Location Map

The PDMP shall also contain a general location map of the site that identifies the geographic boundaries of the area to which the plan applies and location of the waters of the State. To improve readability of the map, some detailed information may be kept as an attachment to the site map and pictures may be included as deemed appropriate.

d. Water Quality Standards

Operators shall identify any FW1 or Pinelands waters and any water(s) impaired for a specific pesticide or its degradates to which there may be a discharge. The State Water

Quality Standards are listed in Appendix B and the list of impaired waters can be found in the Division of Water Quality website at http://www.nj.gov/dep/dwq/gp_surfacewater.htm under Surface Water General Permits.

3. Description of Pest Management Measures Option Evaluation

The permit requires that the PDMP include a description of the pest management measures implemented to meet the applicable technology-based or water quality-based effluent limitations. The description shall include a brief explanation of the pest management measures used at the site to reduce pesticide discharge, including evaluation and implementation of the six pest management tools (no action, prevention, mechanical/physical methods, cultural methods, biological control agents, and pesticide management). Operators shall consider impact to non-target organisms, impact to water quality, feasibility, and cost effectiveness when evaluating and selecting the most efficient and effective means of pest management measures to minimize pesticide discharge to surface waters of the State.

All six management options may not be available for a specific use category and/or treatment area. However, the PDMP shall include documentation of how the six management options, including combination of these options, were evaluated prior to selecting a site specific pest management measure. For the no action option, operators should document the impact of this option without any current pest management measures at the site. For the prevention management option, the operator should document the methods implemented to prevent new introductions or the spread of the pests to new sites such as identifying routes of invasion and how these can be intercepted to reduce the chance of invasion. Prevention may include source reduction, using pathogen-free or weed-free seeds or fill; exclusion methods (e.g., barriers) and/or sanitation methods, like wash stations, to prevent reintroduction by vehicles, personnel, etc. Some prevention management methods may fall under mechanical/physical or cultural methods as well.

For the pesticide management option, operators shall include a list of active ingredient(s) evaluated and an explanation of the reasons for choosing a specific pesticide. Discussion should also identify specific equipment or methods that will prevent or reduce the risks to non-target organisms and pesticide discharges to surface waters of the State.

While the permit requires the operator to select pest management measures to meet the effluent limitations in this permit, the pest management measures themselves described in the PDMP are not effluent limitations because the permit does not impose on the operator the obligation to comply with the PDMP, when variable site conditions indicate otherwise in order to comply with FIFRA and other health and safety concerns; rather, the permit imposes on the operator the obligation to meet the effluent limitations prescribed. Therefore, the operator is free to change, as appropriate, the pest management measures used to meet the effluent limitations contained in the permit. This flexibility helps ensure that the operator is able to adjust its practices as necessary to ensure continued compliance with the permit's effluent limitations. However, the permit also contains a recordkeeping condition that requires that the PDMP be updated with any such changes in the operator's practices. Thus, if an operator's on-the-ground practices differ from what is in the PDMP, this would constitute a violation of the permit's recordkeeping requirement to keep the PDMP up-to-date, and not per se a violation of the permit's effluent

limitations, which are distinct from the PDMP. NJDEP recognizes, however, that because the PDMP documents how the operator is meeting the effluent limitations contained in the permit, not following through with actions identified in the PDMP as the method of complying with the effluent limitations in the permit is relevant to evaluating whether the operator is complying with the permit's effluent limitations.

4. Schedules and Procedures

The following procedures necessary to minimize discharges must be documented in the PDMP:

1. Spill Response Procedures
   The PDMP must document appropriate procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other release. In addition, the PDMP must include documentation of the procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies.

2. Adverse Incident Response Procedures

   In the PDMP, operators shall document appropriate procedures for responding to an adverse incident resulting from pesticide applications. Operator shall identify and document the following:
   - Procedures for responding to any adverse incident resulting from pesticide applications;
   - Procedures for notification of the adverse incident, both internal to your agency/organization and external;
   - State/Federal contacts with phone numbers;
   - Name, location, and telephone of nearest emergency medical facility;
   - Name, location, and telephone of nearest hazardous chemical responder, including police and fire department.

5. Signature Requirements

The PDMP shall be signed and certified in accordance with the signatory requirements in Part II. E.7 of the permit. This requirement is consistent with standard NJPDES permit conditions described in N.J.A.C. 7:14A-4.9 and is intended to ensure that the operator understands his/her responsibility to create and maintain a complete and accurate PDMP. The signature requirement includes an acknowledgment that there are significant penalties for submitting false information.

D. Pesticide Discharge Management Plan Modifications

This permit requires that the PDMP be updated whenever any of the triggering conditions for corrective action occur, or when a review following the triggering conditions in Part XII. B. of this fact sheet requires the operator to revise his/her pest management measures as necessary to meet the effluent limitations in this permit. Keeping the PDMP up-to-date will help the operator ensure that the condition that triggered the corrective action does not reoccur. All 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 or after an annual review.

It is important to note that failure to update the PDMP is a recordkeeping violation, not a violation of an effluent limit. For example, if the operator changes its spill response procedures, but fails to update its PDMP to reflect these changes, a recordkeeping violation will result. The operator shall revise its PDMP to reflect the new procedures and include documentation of the corrective action (in accordance with Part XII below) to return to full compliance.

E. Pesticide Discharge Management Plan Availability

In accordance with N.J.A.C. 7:14A-2.11, a copy of the current PDMP, along with all supporting maps and documents, shall be kept at the address provided on the RFA. The PDMP and all supporting documents shall be immediately available to representatives of NJDEP or a local agency governing pesticide applications, as well as representatives of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) at the time of an on-site inspection or upon request. In accordance with N.J.A.C. 7:14A-18.1, the NJDEP shall provide the PDMP for inspection and duplication to a member of the public upon request. Confidential Business Information (CBI) may be withheld from the public in accordance with N.J.A.C. 7:14A-18.2, but shall not be withheld from NJDEP or the Services.

XII. CORRECTIVE ACTION

A. Purpose of 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 RFA. 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. The 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. NJDEP believes this approach will help operators in complying with the requirements of the permit on a consistent basis. Compliance issues with some of the permit's requirements (for instance, those related to reporting and recordkeeping and some of those related to operation and maintenance) 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.

B. Situations Requiring Revision of Pest Management Measures

Operators are required to review and, as necessary, revise the selection and implementation of their pest management measures to eliminate any of the following situations:

- 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;

- operators become aware, or NJDEP determines, that pest management measures are not adequate/sufficient for the discharge to meet applicable water quality standards;
- operators become aware, or NJDEP concludes, that your control measures are not adequate/ sufficient to avoid adverse incidents to state and/or federally listed endangered and threatened plant and wildlife species;
- any monitoring activities indicate failure to meet applicable technology based effluent limitations;
- an inspection or evaluation of your facility by a NJDEP official determines that modifications are necessary to meet the non-numeric effluent limits; or
- the permittee observes or is otherwise made aware (e.g., a third party notification) of an adverse incident.

NJDEP considers the above situations to be of significant concern. Thus, if it has been determined by the NJDEP that the situation was caused by the operator's discharge from the application of pesticides, then the operator shall take the necessary steps to eliminate the situation and ensure that it will not be repeated in the future.

The purpose of this section is to ensure compliance with corrective action requirements through increased accountability and oversight. NJDEP views ongoing assessment of the effectiveness of pest management measures and corrective actions as integral to an effective pesticide management program. This corrective action assessment shall be kept with the other recordkeeping documentation required by this permit.

C. Corrective Action Deadlines.

The permit requires that corrective action be completed "before the next pesticide application that results in a discharge, if practicable, or if not, as soon as practicable thereafter." NJDEP emphasizes that this timeframe is not a grace period within which an operator is relieved of any liability for a permit violation. NJDEP is adopting this flexible deadline to account for the variation in types of responses (e.g., evaluate situation and select, design, install, and implement new or modified pest management measures) that may be necessary to address any identified situations of concern. NJDEP recognizes that in rare cases a corrective action review may identify the need for substantial improvements to the operator's pest management measures, and does not want to limit the selection and implementation of such controls with an inflexible deadline. Another possibility is that NJDEP or the operator may determine that further monitoring is needed to pinpoint the source of the problem, and this monitoring may need to be conducted during future pesticide application activities. However, the NJDEP believes that in the vast majority of cases, corrective action review will identify responses that can be taken quickly, either before the next pesticide application that results in a discharge or shortly thereafter.

D. Effect of Corrective Action

The occurrence of a situation requiring revision of pest management measures may, but does not necessarily, constitute a violation of the permit. The occurrence of the situation does require the permittee to immediately review and as necessary, revise the selection and implementation of their pest management measures to eliminate the situation. This section explains that taking corrective action does not absolve the permittee of any liability for a permit violation requiring that action,

however, failure to take required corrective action will constitute an original or an additional permit violation. NJDEP will consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations. NJDEP may impose additional requirements and schedules of compliance, including requirements to submit additional information concerning the condition(s) triggering corrective action, additional site-specific water-quality based limitations, additional monitoring requirements, or other schedules and requirements more stringent than specified in this permit. Those requirements and schedules will supersede those specified under "Situations Requiring Revision of Control Measures" and "Corrective Action Deadlines" if such requirements conflict.

XIII. WHEN TO CONTACT THE NJDEP HOTLINE

A. Adverse Incidents

1. Adverse Incidents that are Required to be Reported

Operators are required to take specific actions in response to identified adverse incidents that they observe during visual monitoring. Namely, operators are required to contact the NJDEP Hotline (1-877-WARN-DEP) immediately, but no later than 2 hours. If it has been determined by the NJDEP that the adverse incident was due to an operator's activity, the operator shall follow-up with a written report within 10 days of becoming aware of the adverse incident. NJDEP defines an "adverse incident" in Appendix A, but generally it is defined as any effect that is unexpected or unintended in which there is evidence that a person or non-target organism may have suffered a toxic or adverse effect. The operator is required to report the adverse incident whether or not he/she believes the incident was due to his/her activity. The NJDEP is responsible for determining the cause of the adverse incident.

The following information shall be reported to the NJDEP Hotline:

- The caller's name and telephone number;
- Operator name and mailing address;
- If you received a General Permit Authorization , the NJPDES permit number;
- The name and telephone number of a contact person, if different than the person providing the 24-hour notice;
- How and when you became aware of the adverse incident, spill, leak, or other unpermitted discharge;
- Description of the location of the adverse incident, spill, leak, or other unpermitted discharge;
- Description of the adverse incident, spill, leak, or other unpermitted discharge identified and the US EPA pesticide registration number for each product that was applied, spilled, leaked, or discharged in the affected area; and
- If the incident is due to your activity, a description of any steps you have taken or will take to correct, repair, remedy, cleanup, or otherwise address any adverse effects.

If it has been determined by the NJDEP that the adverse incident was due to an operator's activity, the operator is required to provide a written report of the adverse incident to the NJDEP within 10 days of discovering the adverse incident. The adverse incident report shall include the following information:

- Information required to be provided in Part XIII. A.1 above;

- Date and time you contacted NJDEP notifying the Agency of the adverse incident;
- Location of incident, including the names of any waters affected and appearance of those waters (sheen, color, clarity, etc.)
- A description of the circumstances of the incident including species affected, number of individual and approximate size of dead or distressed organisms
- Magnitude of the effect (e.g., aquatic square area or total stream distance affected)
- Quantity of pesticide applied and EPA registration number of pesticide product, intended use site (e.g. banks, above or direct to water) and method application;
- Description of the habitat and the circumstances under which the incident occurred (including any available ambient water data for pesticides applied);
- Actions to be taken to prevent recurrence of the incident.

2. Adverse Incidents That Do Not Need to be Reported

Reporting of adverse incidents is not required under this permit in the following situations when:

a) an operator has been notified in writing by NJDEP, and retains such notification, that the reporting requirement has been waived for this incident or category of incidents;

b) an adverse incident occurs to pests that are similar in kind to pests identified as potential target pests indentified on the FIFRA label.

However, records of all visual inspections, even for these situations, shall be kept on site with the permittee.

B. Reportable Spills, Leaks, and Unpermitted Discharge

The permittee is required to call the NJDEP Hotline at 1-877-927-6337 for any reportable spill, leak, or unpermitted discharge of a hazardous substance into surface waters of the State immediately but no later than 2 hours of becoming aware of the unpermitted discharge, spill, or leak.[1] Permittees shall document this notification within 10 days of becoming aware of such spill, leak, or unpermitted discharge. This documentation provides a written record of what you reported to NJDEP orally. Permittees shall provide the information detailed in A.1. above to the Department. It should also include a description of the reporting system that will be used to alert responsible managers and legal authorities in the event of a future spill, leak, or unpermitted discharge and a description of preventive measures to prevent, contain, or treat spills and leaks of these materials. This information will be used by NJDEP to ascertain compliance with permit conditions.

XIV. RECORDKEEPING AND ANNUAL REPORTING

A. Recordkeeping

This permit requires operators to maintain certain records to help them assess performance of pest management measures and to document compliance with permit conditions. Recordkeeping and

[1] Reportable Spills and Leaks are defined as those that trigger the requirement to notify the National Response Center (40 CFR Parts 110, 117, 302) based on the type of pollutant and quantity released.

reporting requirements apply from the time any authorized operator begins discharging under this permit. Operators can rely on records and documents developed for other programs, such as requirements under FIFRA, provided all requirements of the permit are satisfied.

NJDEP has found that it is appropriate and reasonable to require different records for different types of operators, reasoning that the recordkeeping responsibilities assigned in the permit reflect the nature of involvement in pesticide application activities for the operators described. The following sections describe the sets of records that the permit requires different types of operators keep, and enumerates the specific information items to be recorded.

1. **Recordkeeping Requirements (Applicable to all Operators)**
   These records shall be kept by all operators, including those that are not submitting an RFA, specifically the entity who has operational control over the decision to perform pesticide applications, include the following:
   - **a.** A copy of the permit;
   - **b.** Adverse incident reports; and rationale for any determination that reporting of an identified adverse incident is not required;
   - **c.** A copy of any corrective action documentation;
   - **d.** A copy of any spill, leak, or other unpermitted discharge documentation.

2. **Recordkeeping for All Applicators Including For Hire Applicators**
   Any operator, who is an applicator or is a For Hire Applicator as defined in Appendix A, must retain the following records:

   - **a.** Documentation of equipment calibration;
   - **b.** 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 location, to which pesticide(s) are discharged;
   - **c.** Pesticide use pattern(s);
   - **d.** Target pest(s);
   - **e.** Name of each pesticide product used including the EPA registration number;
   - **f.** Quantity of each pesticide product applied to each treatment area;
   - **g.** Pesticide application date(s); and
   - **h.** 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. **Additional Recordkeeping Requirements Applicable to Operators Required to Submit an RFA and is a Small Entity**
   As noted above, operators who are small entities and are required to submit an RFA, as well as any pesticide applicator hired by such entity to perform activities covered under the permit shall keep additional records. These records are listed below and identified in Part IV of the permit are to be kept at the address provided on the RFA. Records of equipment maintenance and calibration are to be maintained only by the entity performing the pest management activity on behalf of self or client.
   - **a.** A copy of the RFA submitted to NJDEP, any correspondence exchanged between you and NJDEP specific to coverage under this permit, and a copy of your permit authorization,
   - **b.** Documentation of equipment calibration;

c. Description of pest management measure(s) implemented prior to the first pesticide application;
d. Target pest(s) and an explanation of need for pest control;
e. Company name and contact information for pesticide applicator;
f. Pesticide application start and end date(s);
g. Description of treatment area, including location and size (acres or linear feet) of treatment area and identification of any waters, either by name or by location, to which you discharged any pesticide(s);
h. Name of each pesticide product used including the US EPA registration number;
i. Quantity of pesticide product applied to each treatment area;
j. Whether or not visual monitoring was conducted during pesticide application and/or post application and if not, why not and whether any unusual or unexpected effects to non-target organisms were identified.

4. Additional Recordkeeping Requirements Applicable to Operators Required to Submit an RFA and is a Large Entity

As noted above, operators who are large entities and are required to submit an RFA, as well as any pesticide applicator hired by such entity to perform activities covered under the permit shall keep additional records. NJDEP expects that large entities will have greater capability than small entities to record specific details of the pest treatment area, and is therefore requiring slightly more comprehensive recordkeeping. In addition, much of the records set for large entities are reflected in the annual report that these entities must submit. These records are listed below and identified in Part IV of the permit are to be kept at the address provided on the RFA. Records of equipment maintenance and calibration are to be maintained only by the entity performing the pest management activity on behalf of self or client.

a. A copy of the RFA submitted to NJDEP, any correspondence exchanged between you and NJDEP specific to coverage under this permit, and a copy of your permit authorization;
b. A copy of the PDMP, including any modifications made to the PDMP during the term of this permit;
c. A copy of annual reports submitted to NJDEP;
d. Description of treatment area, including location and size (acres or linear feet) of treatment area and identification of any waters, either by name or by location, to which you discharged any pesticide(s);
e. Target pest(s) and an explanation of need for pest control;
f. Action Thresholds;
g. Method and/or data used to determine that action threshold(s) has been met;
h. Documentation of equipment calibration;
i. Description of pest management measure(s) implemented prior to the first pesticide application;
j. Company name and contact information for pesticide applicator;
k. Name of each pesticide product used including the US EPA registration number;
l. Quantity of pesticide product applied to each treatment area;
m. Pesticide application date(s); and
n. Whether or not visual monitoring was conducted during pesticide application and/or post application and if not, why not and whether any unusual or unexpected effects to non-target organisms were identified.

5. Records Schedule

All required records shall be prepared as soon as possible but no later than 14 days following completion of the associated activity. Operators shall retain copies of these documents for a period of at least 5 years from the date their coverage under this permit expires or is terminated, in accordance with N.J.A.C. 7:14A-6.6.

NJDEP recommends that all operators keep records of acres or linear miles treated each calendar year for all applicable use patterns covered under this general permit. This record will help operators estimate when they will exceed the annual treatment area threshold. As explained, the total acres or linear miles should not include those acres/miles accounted for in another operator's RFA.

6. Access to Records

In accordance with N.J.A.C. 7:14A-2.11, the permittee shall allow an authorized representative of the NJDEP, access to any records that are required to be kept under the conditions of this permit.

B. Annual Reports (Applicable to Operators Required to Submit an RFA and is a Large Entity)

In addition to recordkeeping, NJDEP is requiring operators who are required to submit an RFA and are large entities to submit annual reports that contain basic information on their pesticide discharges to waters of the State. 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 RFA. If the effective date of the RFA 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 45 days after the termination date, or February 15 of the following year, whichever is earlier.

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

The annual report is a summary of the pest control activities for each applicable use pattern and must contain:

a. Operator's name and contact information;
b. NJPDES permit number(s);
c. Contact person name, title, e-mail address (if any), and phone number;
d. For each treatment area, report the following information:
   1) 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 location, to which pesticides are discharged;
   2) Pesticide use pattern(s);
   3) Company name and contact information for pesticide applicator (if applicable)

4) Total amount of each pesticide product applied for the reporting year by the EPA registration number(s) and by application method (e.g., aerially by fixed wing or rotary aircraft, ground based spray, etc.)
5) Whether this pest control activity was addressed in the PDMP prior to pesticide application;
6) If applicable, any adverse incidents as a result of these treatment(s);
7) If applicable, description of any corrective action(s), including spill responses, resulting from pesticide application activities and the rationale for such action(s).

C. Annual Reports (Applicable to Operators Discharging to Pinelands or FW1 Waters)

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.

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 RFA. If the effective date of the RFA 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 45 days after the termination date. Operators discharging to Pinelands or FW1 waters shall submit an annual report to the Bureau of Surface Water Permitting at the address specified in Part IV. I. of the permit, no later than February 15 of the following year that includes all of the following:

a. Operator's name;
b. NJPDES permit number(s);
c. Contact person name, title, e-mail address (if any), and phone number;
d. Brief description of what was observed at the post application monitoring, including the location, date, and time;
e. A summary report of any adverse incidents that occurred during the previous calendar year; and
f. A summary of any corrective actions, including spill responses, in response to adverse incidents, and the rationale for such actions.

PART I
GENERAL REQUIREMENTS: NJPDES

A. General Requirements of 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

Penalties for Violations	N.J.A.C. 7:14-8.1 et seq.
Incorporation by Reference	N.J.A.C. 7:14A-2.3
Toxic Pollutants	N.J.A.C. 7:14A-6.2(a)4i
Duty to Comply	N.J.A.C. 7:14A-6.2(a)1 & 4
Duty to Mitigate	N.J.A.C. 7:14A-6.2(a)5 & 11
Inspection and Entry	N.J.A.C. 7:14A-2.11(e)
Enforcement Action	N.J.A.C. 7:14A-2.9
Duty to Reapply	N.J.A.C. 7:14A-4.2(e)3
Signatory Requirements for Applications and Reports	N.J.A.C. 7:14A-4.9
Effect of Permit/Other Laws	N.J.A.C. 7:14A-6.2(a)6 & 7 & 2.9(c)
Severability	N.J.A.C. 7:14A-2.2
Administrative Continuation of Permits	N.J.A.C. 7:14A-2.8
Permit Actions	N.J.A.C. 7:14A-2.7(c)
Reopener Clause	N.J.A.C. 7:14A-6.2(a)10
Permit Duration and Renewal	N.J.A.C. 7:14A-2.7(a) & (b)
Consolidation of Permit Process	N.J.A.C. 7:14A-15.5
Confidentiality	N.J.A.C. 7:14A-18.2 & 2.11(g)
Fee Schedule	N.J.A.C. 7:14A-3.1

c. Operation And Maintenance

Need to Halt or Reduce not a Defense	N.J.A.C. 7:14A-2.9(b)
Proper Operation and Maintenance	N.J.A.C. 7:14A-6.12

d. Monitoring And Records

Monitoring	N.J.A.C. 7:14A-6.5
Recordkeeping	N.J.A.C. 7:14A-6.6
Signatory Requirements for Monitoring Reports	N.J.A.C. 7:14A-6.9

e. Reporting Requirements

Planned Changes	N.J.A.C. 7:14A-6.7
Reporting of Monitoring Results	N.J.A.C. 7:14A-6.8
Noncompliance Reporting	N.J.A.C. 7:14A-6.10 & 6.8(h)
Hotline/Two Hour & Twenty-four Hour Reporting	N.J.A.C. 7:14A-6.10(c) & (d)
Written Reporting	N.J.A.C. 7:14A-6.10(e) &(f) & 6.8(h)
Duty to Provide Information	N.J.A.C. 7:14A-2.11, 6.2(a)14 & 18.1
Schedules of Compliance	N.J.A.C. 7:14A-6.4
Transfer	N.J.A.C. 7:14A-6.2(a)8 & 16.2

PART II

GENERAL REQUIREMENTS
DISCHARGE CATEGORIES

A. **The permittee must comply with all other applicable federal, state, local laws and regulations that pertain to your 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. For example, 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.**

1. 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 This Permit.** This permit covers any operator, defined in Appendix A that meets the eligibility requirements identified below and submits a Request for Authorization in accordance with Section C, if required.

1. **Activities For Which a Permit is Required**

Activities Covered. This permit is available to operators who discharge to surface waters of the State from the application of (1) biological pesticides or (2) chemical pesticides that leave a residue (hereinafter collectively "pesticides"), when the pesticide application is for one of the following 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. **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. **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.
d. **Forest Canopy Pest Control** - application of a pesticide to a forest canopy to control the population of a pest species (e.g., insect or pathogen) where, to target the pests effectively, a portion of the pesticide unavoidably will be applied over and deposited to water.

e. **Agricultural Activities**- application of pesticides into, over, or near waters 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. 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.

3. Permit by Rule (Does not apply to operators who discharge to Pinelands and FW1 waters)

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 below for the "treatment area" as 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 a Request for Authorization (RFA).

Table 1. Annual Treatment Area Thresholds

PGP Part	Pesticide Use		Annual Threshold
B.1.a.	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 RFA
		Local governments or other entities	Less than 6,400 acres of treatment area[1] are exempt from submitting an RFA
B.1.b.	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 RFA
		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 RFA

Table 1. Annual Treatment Area Thresholds (continued)

PGP Part	Pesticide Use		Annual Threshold
B.1.c.	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 RFA
		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 RFA
B.1.d.	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 RFA
		Local governments or other entities	Less than 6,400 acres of treatment area[1] are exempt from submitting an RFA
B.1.e.	Agricultural Activities	All entities	Less than 100 acres of treatment area[2] are exempt from submitting an RFA
B.1.f.	Utility Transmission and Distribution Line Vegetation Control	All entities	None, all must submit an RFA

[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 area for these two pesticide use patterns is additive over the calendar year.

[2] For calculating annual treatment areas for all other activities, except Mosquitoes and Other Flying Insect Pest Control and Forest Canopy Pest Control, 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 annual treatment totals. 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 area for these two pesticide use patterns is not additive over the calendar year.

4. Activities Not Covered

a. **Discharges to Water Quality Impaired Waters.** You are 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. Impaired waters for the purposes of this permit include both waters with approved or established Total Maximum Daily Loads (TMDLs) and waters for which the DEP has not yet approved or established a TMDL.

The NJ Impaired Surface Water list is available in the Division of Water Quality website at http://www.nj.gov/dep/dwq/gp_surfacewater.htm under Surface Water General Permits. Only the named waterbody identified on the NJ Impaired Surface Water list is prohibited from receiving discharges of any parameter for which the waterbody is impaired.

Exception: The Department has decided to allow the use of Temephos for mosquito control in waters impaired for phosphorus due to the fact that the alternative 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.

b. Endangered and Threatened Plant Species

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

c. Endangered and Threatened Wildlife

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, *Alasmidonta heterodon*

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.

C. Authorization to Discharge under This Permit

1. **How to Obtain Authorization.** To obtain authorization under this permit, an operator must:

   a. Seek a permit for a pesticide use pattern identified in Section B.1, and
   b. Submit a complete and accurate RFA. In accordance with Section C, operators who qualify for a permit by rule in accordance with Section B.3 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 RFA.
   c. If you are a large entity (defined in Appendix A) and are required to submit an RFA, you shall prepare a Pesticide Discharge Management Plan in accordance with Part IV. F. and Section D below.

2. An RFA provides notice of an operator's intent to be covered under this permit for discharges from its pesticide application. Coverage is for the operator who filed the RFA, including its employees, contractors, subcontractors, and other agents, for all activities identified on the RFA for the duration of this permit unless coverage is terminated. If a submitted RFA is not timely, accurate, or complete, then any

employee, contractor, subcontractor or other entity that discharges without the required RFA is not covered by this permit.

3. **Operators Required to Submit a Request for Authorization (RFA).**
The following operators are required to submit an RFA to obtain coverage under this general permit for discharges to surface waters of the State resulting from the application of pesticides:

   a. If you are 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 2 below for the "treatment area," as defined in Appendix A, or

   b. If you apply 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 2 below for the "treatment area," as 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 RFA required under (a) above.

Table 2. Annual Treatment Area Thresholds (Does not apply to Pinelands or FW1 waters)

PGP Part	Pesticide Use		Annual Threshold
B.1.a.	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 RFA
		Local governments or other entities	Less than 6,400 acres of treatment area[1] are exempt from submitting an RFA
B.1.b.	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 RFA
		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 RFA
B.1.c.	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 RFA
		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 RFA
B.1.d.	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 RFA
		Local governments or other entities	Less than 6,400 acres of treatment area[1] are exempt from submitting an RFA
B.1.e.	Agricultural Activities	All entities	Less than 100 acres of treatment area[3] are exempt from submitting an RFA
B.1.f.	Utility Transmission and Distribution Line Vegetation Control	All entities	None, all must submit an RFA

[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 pesticide 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 RFA 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 pesticide use patterns are not additive over the calendar year.

If you apply pesticides to waters designated as Pinelands (PL) or FW1, exemption from submission of an RFA based on annual treatment area thresholds do not apply to these waters. You can find the stream designations at http://www.nj.gov/dep/rules/rules/njac7_9b.pdf, on pages 42-113. For your convenience, the NJDEP will include in the individual authorizations the stream designations for those waterbodies that are being regulated by this permit.

4. **Discharge Authorization Date.** Operators are authorized to discharge under this permit consistent with Table 3 below.

Table 3. Discharge Authorization Date

Category	RFA Submittal Deadline	Discharge Authorization Date
Operators not required to submit an RFA.	Not applicable.	Effective Date of Master General Permit
Operators that discharge to Pinelands or FW1 waters.	At least 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 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 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 30 days prior to exceeding an annual treatment area threshold.	Original authorization terminates when annual treatment area threshold is exceeded. Operator is reauthorized on the EDPA.
Operators requiring permit coverage for an area not already identified on a previously submitted RFA.	At least 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 RFA.	At least 30 days prior to beginning the use of the new pesticide.	Effective Date of modified Permit Authorization
Any other change on a previously submitted RFA (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)

Late RFAs will be accepted, but authorization to discharge will not be retroactive. RFA submissions must be in accordance with the deadlines specified above.

Based on a review of your RFA or other information, DEP may delay your authorization for further review, or 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 two (2) years.

D. Contents of Your Pesticide Discharge Monitoring Plan. In accordance with Part IV.F, your PDMP must include the following elements:

1. **Pesticide Discharge Management Team**
   Identification of team members must include any written agreement(s) between you 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. You must identify all the persons (by name and contact information) that compose the team as well as each person's individual responsibilities, including:
   a. Person(s) responsible for managing pests in relation to the pest management area
   b. Person(s) responsible for developing and revising the PDMP;
   c. Person(s) responsible for developing, revising, and implementing corrective actions and other effluent limitation requirements ; and
   d. Person(s) responsible for pesticide applications. 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 you anticipate that you will identify the applicator.

2. **Problem Identification**
   You must document the following:
   a. Pest problem description. Document a description of the pest problem at your pest management area, including identification of the target pest(s), source of the pest problem, and source of data used to identify the problem.
   b. Action Threshold(s). Describe the action threshold(s) for your 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.
   c. 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
   d. Water quality standards. 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 can be found in the Division of Water Quality website at http://www.nj.gov/dep/dwq/gp_surfacewater.htm under Pesticide Application Discharge (PGP). A list of the State's surface waterbodies that are classified as FW1 and Pinelands waters can be found at http://www.nj.gov/dep/rules/rules/njac7_9b.pdf on pages 42-113.

3. **Pest Management Options Evaluation**

   Operators must document the evaluation of the pest management options, including a combination of pest management options, to control the target pest(s). 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.

4. Response Procedures

Operators must document the following procedures in your PDMP:

a. Spill Response Procedures- at a minimum, operators must have:

i. 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. Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies.

b. Adverse Incident Response Procedures- At a minimum, operators must have:

i. Procedures for responding to any adverse incident resulting from pesticide applications:

ii. 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.

5. Signature Requirements

You must sign, date and certify your PDMP in accordance with Section E.7. below.

E. General Conditions

1. Scope

a. The issuance of this permit shall not be considered as a waiver of any applicable federal, state, and local rules, regulations, permits, and ordinances.

2. Permit Renewal Requirement

a. Permit conditions remain in effect and enforceable until and unless the permit is modified, renewed or revoked by the Department.

b. Submit a complete Request for Authorization: 180 days before the Expiration Date.

3. Notification of Non-Compliance

a. The permittee shall notify the Department of all non-compliance when required in accordance with N.J.A.C. 7:14A-6.10 by contacting the DEP HOTLINE at 1-877-927-6337 immediately but no later than 2 hours after the permittee becomes aware of the non-compliance.

b. The permittee shall submit a written report as required by N.J.A.C. 7:14A-6.10 within five days.

4. Operation Restrictions

a. The pesticide activity resulting in a point source discharge to surface waters of the State shall at no time be conducted in a manner and location, except as specifically authorized by a valid NJPDES permit.

b. The use of a pesticide not listed in the permit is not authorized under this permit. The permittee shall submit a revised RFA and obtain a permit modification prior to using a pesticide not listed in this permit.

5. Permit Modification/Transfer/Termination

a. The permittee may request a permit modification in order to obtain authorization to use a pesticide not listed in this authorization in accordance with N.J.A.C. 7:14A-16.3.

b. This permit may be transferred to another operator in accordance with N.J.A.C. 7:14A-16.2.

c. To terminate permit coverage, an operator who is required to submit a RFA must submit a Request for Revocation (RFR) in accordance with N.J.A.C. 7:14A-16.3. Your authorization to discharge under this permit terminates on the effective date of the Permit Revocation. If you were required to submit annual reports pursuant to Part IV, you must file an annual report for the portion of the year up through the effective date of the permit revocation. The annual report is due no later than 45 days after the effective date of the permit revocation.

d. Operators covered under this permit that are not required to submit a RFA are terminated from permit coverage when they no longer have a discharge from the application of pesticides or their discharge is covered under a NJPDES individual permit or alternative general permit.

6. Access to Information

a. The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to enter upon a person's premises, for purposes of inspection, and to access/copy any records that must be kept under the conditions of this permit.

7. Signatory Requirements.

a. In accordance with N.J.A.C. 7:14A-4.9, all applications, RFAs, reports required by permits shall be signed as follows:

1) For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated activity including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations and ensuring that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

2) For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

3) For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit or the agency or

4) By a duly authorized representative. A person is a duly authorized representative only if (i) the authorization is made in writing by a person described in 1 through 3 above, (ii) the authorization specifies either an individual or a position whose occupant has the responsibility for the overall operation of the regulated facility or activity or an individual or position whose occupant has overall responsibility for environmental matters for the company and (iii) the written authorization is submitted to the Department.

5) If an authorization under 4 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility or overall responsibility for environmental matters for the company, a new authorization satisfying the requirements above must be submitted to the Department prior to or together with any reports, information, or applications signed by an authorized representative.

6) Any person signing a document under 1 through 4 above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my

knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for purposely, knowingly, recklessly, or negligently submitting false information."

7) Any person not listed above, please contact the Bureau of Surface Water Permitting at (609) 292- 4860 for information on the applicable signatory requirements.

PART III
LIMITS AND MONITORING REQUIREMENTS

Reserved.

PART IV

SPECIFIC REQUIREMENTS: NARRATIVE

Pesticide Application Discharges

A. TECHNOLOGY BASED EFFLUENT LIMITATIONS

1. To meet the effluent limitations in this Section, you shall implement site-specific control measures that minimize discharges of pesticides to surface waters of the State.

   a. **Minimize Pesticide Discharges to Surface Waters of the State.** All operators, regardless of whether you are required to submit an RFA, shall minimize the discharge of pollutants resulting from the application of pesticides 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. PEST MANAGEMENT MEASURES

1. Pest Management Measures (PMM) apply to any operator that is required to submit an RFA, including any pesticide applicator hired by such entity or any other employee, contractor, subcontractor, or other agent. Note: Part IV.E. of this permit requires any operator that is required to submit an RFA and is a large entity 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 in Section C below, shall be attached to the PDMP, kept at the address specified on the RFA, and made available to the NJDEP upon request.

2. If your 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, you are not required to fully implement the following measures for such a discharge, but you shall implement these measures to the extent that its requirements do not compromise the research design.

C. SPECIFIC PEST MANAGEMENT MEASURES FOR EACH ACTIVITY (Applicable to operators required to submit an RFA)

1. **Mosquito and Other Flying Insect Pest Control**
   This part applies to discharges from the application of pesticides for mosquito and other flying insect pest control as defined in Part II of this permit.

a. **Identify the Problem**. 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, you shall do the following 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 your pest management area in the past calendar year, use other available data as appropriate to meet the permit conditions in Section C.1.a.

b. **Pest Management Options**. 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, you 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, you 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

c. **Pesticide Use**. 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, you 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.

2. **Aquatic Weed and Algae Control**
This part applies to discharges from the application of pesticides to control weeds, algae, and pathogens as defined in Part II of this permit.

   a. **Identify the Problem.** 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 you 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 Section C. 2.b; and
      v. In the event there are no data for your pest management area in the past calendar year, use other available data as appropriate to meet the permit conditions in Section C. 2.a.

   b. **Pest Management Options.** 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, you shall select and implement, for each pest management area, efficient and effective means of pest management measures that minimize discharges resulting from application of pesticides to control pests, thereby reducing risks to the environment, including water quality. In developing these pest management measures for each pest management area, you shall evaluate the following 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

   c. **Pesticide Use.** 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, you 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.

3. **Aquatic Animal Pest Control**
This part applies to discharges from the application of pesticides for aquatic animal pest control as defined in Part II of this permit.

a. **Identify the Problem.** 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, you 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 Section C.3.b; and
   v. In the event there are no data for your pest management area in the past calendar year, use other available data as appropriate to meet the permit conditions in Section C. 3.a.

b. **Pest Management Options.** Prior to the first pesticide application covered under this permit that will result in a discharge to surface waters of the State, and at least once each year thereafter prior to the first pesticide application during that calendar year, you shall select and implement, for each pest management area, efficient and effective means of pest management measures that minimize discharges resulting from application of pesticides to control pests, thereby reducing risks to the environment, including water quality. In developing these pest management measures for each pest management area, you shall evaluate the following management options, considering impact to non-target organisms, feasibility, and cost effectiveness:
   i. No action.
   ii. Prevention
   iii. Mechanical or physical methods
   iv. Biological control agents
   v. Pesticides

c. **Pesticide Use.** If a pesticide is selected to manage pests and application of the pesticide will result in a discharge to surface waters of the State, you 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.

4. **Forest Canopy Pest Control**
This part applies to discharges from the application of pesticides for forest canopy pest control as defined in Part II of this permit.

a. **Identify the Problem**. 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, you shall do the following for each pest management area, as defined in Appendix A:

ii. Establish any pest- and site-specific action threshold(s) for implementing Section C.4.b;
iii. Identify target pest(s) to develop pest management measures based on developmental and behavioral considerations for each pest;
iv. Identify current distribution of the target pest and assess potential distribution in the absence of pest management measures; and
v. In the event there are no data for your pest management area in the past calendar year, use other available data as appropriate to meet the permit conditions in Section C.4.a.

b. **Pest Management Options.** 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, you shall select and implement for each pest management area efficient and effective means of pest management measures that minimize discharges resulting from application of pesticides to control pests, thereby reducing risks to the environment, including water quality. In developing these pest management measures for each pest management area, you shall evaluate the following management options, considering impact to non-target organisms, feasibility, and cost effectiveness:

i. No action
ii. Prevention
iii. Mechanical/physical methods
iv. Cultural methods
v. Biological control agents
vi. Pesticides

c. **Pesticide Use.** 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, you 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.

5. **Agricultural Activities**
This part applies to discharges from the application of pesticides into, over, or near Surface waters of the State, which are used in the operation of agricultural activities as defined in Part II of this permit.

a. **Identify the Problem and Pest Management Options**. 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. You 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. **Pesticide Use.** 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, you 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).

6. **Utility Transmission and Distribution Line Vegetation Control**
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 Part II of this permit.

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. You shall:

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

b. **Pest Management Options.** In developing pest management measures for each pest management area, you shall evaluate the following management options, considering impact to non-target organisms, feasibility, and cost effectiveness:

   i. No action
   ii. Prevention
   iii. Manual/Mechanical methods
   iv. Cultural methods
   v. Biological control agents
   vi. Pesticides

c. **Define Action Thresholds**. Establish any pest- and site-specific action threshold(s) for implementing pest management measures.

d. **Pesticide Use.** If a pesticide is selected and application of the pesticide will result in a discharge into, over, or near surface waters of the State, you shall:

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

D. WATER QUALITY BASED EFFLUENT LIMITATIONS

1. Your discharge shall be controlled as necessary to meet applicable numeric and narrative State Water Quality Standards.

2. If at any time you become aware, or DEP determines, that your discharge causes or contributes to an excursion of applicable State Water Quality Standards, you shall take corrective action as required in Section G below, up to and including ceasing the discharge, if necessary.

E. VISUAL MONITORING FOR ALL OPERATORS

The operator is prohibited from performing any pesticide application if an adverse incident is observed during any pre-application monitoring.

1. During any pesticide application with discharges authorized under this permit, all operators 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.

2. During any operator post application surveillance of any pesticide application with discharges authorized under this permit, all operators 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. **Additional Visual Monitoring Requirements for Discharges to Waters Designated Pinelands or FW1 waters.** 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.

F. PESTICIDE DISCHARGE MANAGEMENT PLAN (Applicable to operators required to submit an RFA and is a Large Entity)

1. This Part applies to any operator required to submit an RFA and is a large entity. Some sections of the Pesticide Discharge Management Plan (PDMP) will require input from the pesticide applicator. Operators who are not a large entity and/or are not required to submit an RFA are not required to prepare a PDMP.

2. If you are a large entity and are required to submit an RFA, you shall prepare a PDMP for your pest management area. You shall keep the plan up-to-date thereafter for the duration of coverage under this general permit, even if your discharges subsequently fall below the applicable RFA threshold. You shall develop a PDMP by the time the RFA is submitted.

3. The PDMP records how you will comply with the effluent limitations in Section A and D, including your evaluation and selection of pest management measures to meet those effluent limitations and minimize discharges. In your PDMP, you may incorporate by reference any procedures or plans in other documents that meet the requirements of this permit. If you rely upon other documents to describe how you will comply with the effluent limitations in this permit, such as a pre-existing pest management plan, you shall attach to your PDMP a copy of any portions of any documents that you are using to document your compliance of the effluent limitations. 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 RFA 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.

4. Your PDMP shall include the elements specified in Part II. D.

5. **Pesticide Discharge Management Plan Modifications.** You shall modify your PDMP 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 your 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 Part II. E.7.

6. **Pesticide Discharge Management Plan Availability.**
You shall retain a copy of the current PDMP, along with all supporting maps and documents, at the address provided on your RFA. The PDMP and all supporting documents shall be readily available, upon request, and copies of any of these documents provided, upon request, to NJDEP or a local agency governing pesticide applications within their respective jurisdictions.

G. CORRECTIVE ACTION

All operators must comply with the provisions of this section for any discharges authorized under this permit, with compliance required upon beginning such discharge.

1. **Situations Requiring Revision of Control Measures.** Operators must review and, as necessary, revise the evaluation and selection of Pest Management Measures consistent with Section B and C above for the following situations:

   a. 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;
   b. Operators become aware, or NJDEP concludes, that your control measures are not adequate/sufficient for the discharge to meet applicable water quality standards;
   c. Operators become aware or NJDEP concludes, that your control measures are not adequate/sufficient to avoid adverse incidents to state and/or federally listed endangered and threatened plant and wildlife species;
   d. Any monitoring activities indicate failure to meet applicable technology based effluent limitations;
   e. 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;

f. 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 your application of pesticides.

2. **Corrective Action Deadlines.** 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.

3. **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 30 days of becoming aware of the situation, and retain a copy of this documentation. This documentation must include the following information:

   - 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;
   - Brief description of the situation;
   - Date the problem was identified;
   - Brief description of how the problem was identified, how the Operator learned of the situation, and date the Operator learned of the situation;
   - Summary of corrective action taken or to be taken, including date initiated and date completed or expected to be completed; and
   - Any measures to prevent reoccurrence of such an incident, including notice of whether PDMP modification is required as a result of the incident.

4. **Effect of Corrective Action.** 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 you of liability for any original violation. However, failure to comply with Section G.1 constitutes an additional permit violation. DEP will consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations.

   DEP 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.1 if such requirements conflict.

5. **Adverse Incident, Reportable Spills and Leaks, and Other Unpermitted Discharge Documentation and Reporting**

   a. **Adverse Incident, Reportable Spill and Leaks, and Other Unpermitted Discharge Notification**
   If you observe or are otherwise made aware of an adverse incident, reportable spill or leak, as defined in Appendix A, or any other unpermitted discharge, you shall immediately notify the DEP Hotline at 1-877-WARN-DEP. This notification shall be made by telephone immediately but no later than 2 hours of you becoming aware of the incident and shall include at least the following information:

      i. The caller's name and telephone number;
      ii. Operator name and mailing address;

iii. If you 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 you 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 you 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 you are unable to notify DEP within 2 hours, you shall do so as soon as possible and also provide your rationale for why you were unable to provide such notification within 2 hours. 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. You have been notified in writing by the DEP that the reporting requirement has been waived for this incident or category of incidents.

ii. An adverse incident occurs to pests that are similar in kind to potential target pests identified on the FIFRA label.

6. **Ten (10) Day Adverse Incident, Reportable Spill or Leak, or Other Unpermitted Discharge Written Report.** If it has been determined by the NJDEP that the incident was due to your activity, within ten (10) business days of the incident, you shall provide a written report of the incident to the Bureau of Pesticide Compliance at the address listed in Section I below. Within ten (10) business days of a reportable spill or leak, or other unpermitted discharge you shall provide a written report of the incident to the Bureau of Pesticide Compliance at the address listed in Section I below. You shall report adverse incidents even for those instances when the pesticide labeling states that adverse effects may occur. Your incident report shall include at least the following information:

a. Information required to be provided in Section G.5.a;
b. Date and time you contacted DEP notifying the Department of the incident and who you spoke with at DEP and any instructions you received from DEP;
c. Location of incident, including the names of any waters affected and appearance of those waters (sheen, color, clarity, etc);
d. A description of the circumstances of the incident including species affected, estimated number of individual and approximate size of dead or distressed organisms;
e. Magnitude and scope of the effected area (e.g. aquatic square area or total stream distance affected);
f. 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;
g. Description of the habitat and the circumstances under which the incident occurred (including any available ambient water data for pesticides applied);

h. If laboratory tests were performed, indicate what test(s) were performed, and when, and provide a summary of the test results within 5 days after they become available if not available at the time of submission of this report;

i. Actions to be taken to prevent recurrence of adverse incident, spill or leak, or other unpermitted discharge; and

j. Signed and dated in accordance with Part II.E.7.

H. RECORDKEEPING AND ANNUAL REPORTING

1. Recordkeeping

Operators shall keep written records as required in this permit. These records shall be accurate and 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.

NJDEP recommends that operators required to submit an RFA 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 you determine if you will meet the annual treatment area threshold during any calendar year.

a. 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. Your rationale for any determination that reporting of an identified adverse incident is not required consistent with allowances identified in Section G.5.b;

iv. A copy of any corrective action documentation.

b. Recordkeeping for All Applicators Including For Hire Applicators – 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 location, 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.

c. Recordkeeping for Any Operator Required to Submit an RFA and is a Small Entity

i. A copy of the RFA submitted to NJDEP, any correspondence exchanged between you and DEP specific to coverage under this permit, and a copy of the Pesticide General Permit Authorization;

ii. Documentation of equipment calibration (only if 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 location, 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.

d. **Recordkeeping for Any Operator Required to Submit an RFA and is a Large Entity-** Any operator required to submit an RFA that is defined as a large entity must retain the following records at the address provided on the RFA:

i. Copy of the RFA submitted to the NJDEP, any correspondence exchanged between the operator and NJDEP 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 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 location, 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.

e. **Retention of Records for All Operators -** All required records shall be documented as soon as possible but no later than 14 days following completion of each pesticide application. Operators shall retain any records required under this permit for at least 5 years from the date that your coverage under this permit expires or is terminated. Operators shall make available to NJDEP,

including an authorized representative of NJDEP, all records kept under this permit upon request and provide copies of such records, upon request.

2. **Annual Reporting for Operators Who are Large Entities and are Required to Submit an RFA:** If you are a large entity and are required to submit an RFA, you must submit an annual report to the NJDEP. Once an operator meets the obligation to submit an annual report, the operator must submit an annual report each calendar year thereafter for the duration of coverage under this general permit, whether or not the operator has discharges from the application of pesticides in any subsequent calendar year.

   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 General Permit Authorization. If the effective date of the General 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 45 days after the termination date.

   You shall submit the annual report to the Bureau of Surface Water Permitting at the address specified in Section I. below. You shall submit the annual report no later than February 15 of the following year (and retain a copy for your records).

   The annual report is a summary of the pest control activities for each applicable use pattern and must contain:

   a. Operator's name and contact information;
   b. NJPDES permit number(s);
   c. Contact person name, title, e-mail address (if any), and phone number;
   d. For each treatment area, report the following information:
      1) 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 location, to which pesticides are discharged;
      2) Pesticide use pattern(s);
      3) Company name and contact information for pesticide applicator (if applicable)
      4) Total amount of each pesticide product applied for the reporting year by the EPA registration number(s) and by application method (e.g., aerially by fixed wing or rotary aircraft, ground based spray, etc.)
      5) Whether this pest control activity was addressed in the PDMP prior to pesticide application;
      6) If applicable, any adverse incidents as a result of these treatment(s);
      7) If applicable, description of any corrective action(s), including spill responses, resulting from pesticide application activities and the rationale for such action(s).

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

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 General Permit Authorization. If the effective date of the General 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 45 days after the termination date.

Operators discharging to Pinelands or FW1 waters shall submit an annual report to the Bureau of Surface Water Permitting at the address specified in Section I. below, no later than February 15 of the following year that includes all of the following:

a. Operator's name;
b. NJPDES permit number(s);
c. Contact person name, title, e-mail address (if any), and phone number;
d. Brief description of what was observed at the post application monitoring, including the location, date, and time;
e. A summary report of any adverse incidents, spills, leaks, or any other unpermitted discharge that occurred during the previous calendar year; and
f. A summary of any corrective actions taken, and the rationale for such actions.

I. DEP CONTACT INFORMATION AND MAILING ADDRESSES

a. Bureau of Surface Water Permitting
Mail Code 401-02B
P.O. Box 420
Trenton, NJ 08625-0420
(609) 292-4860

b. Bureau of Pesticide Compliance
Mail Code 401-04A
P.O. Box 420
401 East State Street
Trenton, NJ 08625-0420
(609) 984-6982

APPENDIX A
Definitions, Abbreviations, and Acronyms

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

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

A.1. DEFINITIONS

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 become aware, 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 Archaebacteria; 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.

EPA Approved or Established Total Maximum Daily Loads (TMDLs) – "Approved TMDLs" are those that are developed by a State and approved by EPA. "Established TMDLs" are those that are finalized by the State and submitted to EPA for approval.

Establishment – generally a single physical location where business is conducted or where services or industrial operations are performed (e.g., factory, mill, store, hotel, movie theater, mine, farm, airline terminal, sales office, warehouse, or central administrative office).

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.

Hydrologic Unit Code (or HUC) - The United States is divided and sub-divided into successively smaller hydrologic units which are classified into four levels: regions, sub-regions, accounting units, and cataloging units. The hydrologic units are arranged within each other, from the smallest (cataloging units) to the largest (regions). Each hydrologic unit is identified by a unique hydrologic unit code (HUC) consisting of two to eight digits based on the four levels of classification in the hydrologic unit system. (http://water.usgs.gov/GIS/huc.html)

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.

Inert Ingredient - any substance (or group of structurally similar substances if designated by the Agency), other than an active ingredient, which is intentionally included in a pesticide product. [40 CFR 152.3] Inert ingredient also means any substance, such as a selectable marker, other than the active ingredient, where the substance is used to confirm or ensure the presence of the active ingredient, and includes the genetic material necessary for the production of the substance, provided that genetic material is intentionally introduced into a living plant in addition to the active ingredient. [40 CFR 174.3]

Insecticides- 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.

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, wetlands, and artificial waterbodies.

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'.

"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

ESA – Endangered Species Act
FFDCA- Federal Food, Drug, and Cosmetic Act
FIFRA – Federal Insecticide, Fungicide, and Rodenticide Act, 7 USC 136 et seq.
HUC – Hydrologic Unit Code
IPM – Integrated Pest Management
NPDES – National Pollutant Discharge Elimination System
NRC – National Response Center
PDMP – Pesticide Discharge Management Plan

PGP Surface Water 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, saline portions of the Passaic, Hackensack and Hudson Rivers and saline portions of tributaries to all of these waters)	--	7.9