

Applying Pesticides in Compliance with the National Pollutant Discharge Elimination System (NPDES)¹

F. M. Fishel²

Note: A complete list of acronyms used in this publication is available at the end of the document.

Background

The Environmental Protection Agency (EPA) is largely responsible for regulating the sale and use of pesticides, and the allowable levels of such pesticides in or on food. EPA's authority is contained in two core statutes, the Federal Insecticide, Rodenticide, and Fungicide Act (FIFRA) and the Federal Food, Drug, and Cosmetic Act (FFDCA). FIFRA provides the overall framework for the federal pesticide program. Under FIFRA, EPA is responsible for registering or licensing pesticide products for use in the United States. Pesticide registration decisions are based on a detailed assessment of the potential effects a product will have on human health and the environment when it is used according to label directions. These approved labels have the force of law, and any use not in accordance with the label directions and precautions may be subject to civil and/or criminal penalties. FIFRA also requires that EPA reevaluate older pesticides to ensure that they meet more recent safety standards. FIFRA requires EPA and states to establish programs to protect workers and to provide training and certification for applicators as well. In addition, many other environmental and procedural statutes provide shape and direction to the EPA's pesticide program.

On October 31, 2011, EPA issued a final National Pollutant Discharge Elimination System (NPDES) Pesticide Generic

Permit for point source discharges from the application of pesticides to waters of the United States. This action was in response to a 2009 decision by the US Sixth Circuit Court of Appeals (National Cotton Council, et al. vs. EPA) in which the court vacated EPA's 2006 Final Rule on Aquatic Pesticides and found that point source discharges of biological pesticides and chemical pesticides that leave a residue into waters of the U.S. were pollutants under the Clean Water Act (CWA). As a result of the court's decision, NPDES permits are generally required for these types of discharges as of October 31, 2011.

Pesticide Applications in Florida

The Florida Department of Environmental Protection (FDEP) has adopted a rule establishing a pesticide generic permit, which allows the application of pesticides to surface waters of the state, provided that the conditions of the permit are met. This generic permit, DEP Document Number 62-621.300(8)(e), F.A.C., *Generic Permit for Pollutant Discharges to Surface Waters of the State from the Application of Pesticides* is commonly referred to as the PGP.

The PGP requires certain operators, such as mosquito control districts, various water management districts, and various government agencies that apply pesticides to or over surface waters of the state, to submit a Notice of Intent (NOI) and meet certain other permit conditions. Only those operators specifically identified in the rule are required to file an NOI, develop a Pesticide Discharge

- 1. This document is PI239, one of a series of the Agronomy Department, UF/IFAS Extension. Original publication date December 2011. Reviewed September 2017. Reviewed February 2021. Visit the EDIS website at https://edis.ifas.ufl.edu for the currently supported version of this publication.
- 2. F. M. Fishel, professor, Agronomy Department, and director, Pesticide Information Office; UF/IFAS Extension, Gainesville, FL 32611.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. For more information on obtaining other UF/IFAS Extension publications, contact your county's UF/IFAS Extension office. U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A & M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Nick T. Place, dean for UF/IFAS Extension.

Management Plan (PDMP), and maintain certain records. If you or your organization is not specifically identified in the rule, you do not need to file an NOI, develop a PDMP, or maintain certain records required in the rule. See Table 1 (provided below) to determine if you are an operator required to file an NOI. If you are not listed in Table 1, you do not need to file an NOI. If you are required to file an NOI, it may be obtained at http://www.dep.state.fl.us/ water/wastewater/forms/pdf/621_300_8f.pdf. The PGP does establish some requirements that apply to all pesticide applicators making applications to surface waters of the state. These include minimizing discharge of pollutants, monitoring pesticide use, reporting adverse incidents, and keeping certain records. Florida's PGP may be viewed in its entirety at http://www.dep.state.fl.us/water/wastewater/ iw/docs/62-621.300_8e.pdf. The purpose of this EDIS publication is to provide practical guidelines for two groups of pesticide applicators:

- Those who are not required to file an NOI (non-NOI Filers)
- Those who are required to file an NOI (NOI Filers)

I. Requirements for ALL Pesticide Applicators (NOI Filers and non-NOI Filers)

Other laws and rules governing pesticide application must still be followed, such as the Florida Pesticide Law (Chapter 487, Florida Statutes) and rules (Chapters 5E-2, and 5E-9, Florida Administrative Code), and the Structural Pest Control Act (Chapter 482, Florida Statutes) and rules (Chapter 5E-14, Florida Administrative Code).

There are five general requirements for **ALL** pesticide applicators under the Florida PGP:

- Limit discharge of effluent to surface waters of the state.
- Monitor application of pesticides to surface waters of the state.
- Take corrective action if there is a discharge to surface waters of the state as a result of a spill, leak, etc.
- Report adverse incidents to the State Watch Office at 1-800-320-0519.
- Maintain records of adverse incidents reports.

Limiting Discharge of Effluent

The basic requirement of the permit is that the applicator "minimizes discharges of pollutants resulting from applications of pesticides." This is done by "using the

amount and frequency of pesticide applications necessary to control the target pest." In practice this means following label directions for use. The entity conducting day-to-day pesticide application activities is required to perform regular maintenance activities to reduce leaks, spills, or other unintended discharges of pesticides associated with the application of pesticides covered under this permit. Calibration is required to ensure the intended amount of pesticide is applied to the site. The permit does not specify the frequency of maintenance and calibration, other than referring to manufacturer's recommendations and industry practices. Corrective action is required if at any time the permitted applicator becomes aware or the FDEP determines that the discharge causes or contributes to exceeding applicable water quality standards.

Monitoring Pesticide Applications

Applicators must monitor the amount of pesticide applied to ensure that the pesticide used and the frequency of pesticide application are limited to that which is necessary to control the target pest using equipment and application procedures appropriate for the task. This can be done by verifying that the amount applied is the amount intended. Calibration and maintenance are necessary to accomplish this.

In addition, the permit requires visual assessment (or spot checks), in and around the area where pesticides are applied, for "adverse incidents" that occur as a result of the application. See the definition of adverse incidents under the heading "Reporting Adverse Incidents" in this publication. These visual assessments are to be performed during any post-application surveillance or efficacy check that occurs as a normal part of the pest control effort, or during any pesticide application if they can be done safely and feasibly.

The permit does not require records be kept of this activity or specify the frequency of this type of monitoring.

Taking Corrective Action

Corrective action is required when a spill, leak, or adverse incident occurs, or when calibration, maintenance, etc., failed to prevent unintended or accidental release of pesticides to surface water. Corrective action must be taken to ensure that the situation is eliminated and will not be repeated. Also, corrective action needs to occur before the next pesticide application covered under the permit.

Reporting Adverse Incidents

Note: An event can only be considered an "adverse incident" subject to the requirements of the PGP if it is the result of exposure to a pesticide residue in the surface water to which a pesticide has been applied under the PGP. Adverse effects that result from direct contact with a pesticide should be reported to the Florida Department of Agriculture and Consumer Services (FDACS) at 1-800-HELP-FLA.

An adverse incident is defined as an incident that the operator either has observed upon inspection of the application area or is otherwise made aware of, in which:

- A person or non-target organism is likely to have been exposed to a pesticide residue, and
- The person or non-target organism suffered toxic or adverse effects.

The phrase "toxic or adverse effects" includes effects that occur within surface waters of the state on non-target plants, fish, or wildlife that are unusual or unexpected (e.g., the effects to the organisms are those not otherwise described on the pesticide product label or those not otherwise expected to be present) as a result of exposure to a pesticide residue, including:

- 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 directly or indirectly from a discharge of pollutants to surface waters of the state that are temporally and spatially related to exposure to a pesticide residue (e.g., vomiting, lethargy).

If the operator observes or otherwise becomes aware of an adverse incident resulting from a pesticide application covered under this permit, the operator has to report it verbally to the State Watch Office at 1-800-320-0519 within 24 hours. A written report may need to be filed with the FDEP within 30 days of the adverse incident.

The verbal adverse incident report needs to include the following information:

- Caller's name, address, and phone number.
- Pesticide application operator's name, mailing address, phone number (if different from the caller's).
- Contact person (if different from the caller).
- If covered under an NOI, provide the generic permit number.
- Date and time of incident and current status (ongoing or ceased).
- How and when the caller became aware of incident.
- Description of location of incident (address, water body, etc.).
- Description of the adverse incident and EPA pesticide registration number of the pesticides applied.
- Description of the steps taken to correct, repair, or otherwise mitigate the incident.
- Other persons, entities, or agencies contacted.

If the verbal report is provided within 24 hours, and the incident has been corrected and did not adversely impact human health or the environment, no further report is needed. If the incident effects are continuing or not corrected, a **written** report to FDEP is needed within 30 days of the 24-hour report. This written report has to be more detailed, including results of any testing conducted. If this is necessary, refer to the text of the PGP for what the report needs to contain (available at http://www.dep.state.fl.us/water/wastewater/iw/docs/62-621.300_8e.pdf). The report needs to be sent via email to PGPadverseincidentreport@dep.state.fl.us or by regular mail to:

Florida Department of Environmental Protection Bob Martinez Center Industrial Wastewater Section 2600 Blair Stone Road, Mail Station 3545 Tallahassee, FL 32399-2400

II. Additional Requirement for non-NOI Filers

Recordkeeping of Adverse Incidents for non-NOI Filers

The only records required to be kept for the PGP for operators who are **not** required to file an NOI are the following:

- A copy of any written 30-day adverse incident report.
- The rationale for any determination after an adverse incident that a 30-day written report was not required.
- A copy of any corrective action determination.

These records do not need to be sent to FDEP or reported annually, but they do need to be available to FDEP.

III. Additional Requirements for NOI Filers

Guidelines for Completing an NOI PART I OF THE FORM—INSTRUCTIONS

- 1. A fee of \$500 for the NOI needs to be paid to FDEP. The single fee covers all categories of pesticide application identified in the PGP that the operator conducts.
- 2. PGP coverage is renewed every five (5) years by submitting an NOI and \$500 to the FDEP, at least 30 days prior to the expiration of coverage.

PART II OF THE FORM—COVERAGE STATUS

- 1. Check all the applicable boxes for Coverage Status:
 - a. Check the "new" box if this is the initial filing for the district or program.
 - b. Check the "renewal" box if renewing coverage under the PGP.
 - c. Upon renewal, if any changes have occurred, such as a change in director, program name, or boundaries of the district or program, also check the "change of information" box.
- 2. There is no "permit number" if this is the initial filing of the NOI. Upon approval, the FDEP will issue a coverage letter, which contains the FLG permit number.

PART III OF THE FORM—PESTICIDE USE PATTERN

Those filing NOIs **only** need to check the box(es) for any of the other pesticide use patterns identified in Table 1 of the PGP that your entity is identified with.

PART IV OF THE FORM—OPERATOR INFORMATION

- 1. **Permittee name:** Enter the corporate name or agency name (i.e., Leon County Mosquito Control). Do not use an individual's name; use the entity's name.
- 2. **Title:** Enter the name and title of the main contact person.
- 3. **Phone number:** Enter the phone number for the contact person or program.
- 4. **Fax number:** Enter the fax number for the contact person or program.
- 5. **Email address:** Enter the email address of the program official responsible for maintaining this permit.
- 6. **Street address or P.O. Box, City, ZIP code:** Enter the street address of the headquarters or main office.

PART V OF THE FORM—SITE INFORMATION

- 1. **Site name:** This can be broad, such as a district name, a geographic area, or just a county name.
- 2. General location description: Referring to an attached map is acceptable, and it should depict an outline of the geographic area in which the pesticide applications will occur. GPS coordinates may be given, if known.

3.

- a. **Use pattern:** Include the name of the use pattern(s) already identified in Part III of the form.
- b. **Location:** Attach map of district or program boundaries.
- c. **Receiving waters:** Check the appropriate coverage requested.

PART VI OF THE FORM—RECORDKEEPING LOCATION

Check box "same as permittee address" if the address where records are kept is the same as the headquarters. Put the

address where operational records are kept if it is different from the headquarters.

PART VII OF THE FORM—CERTIFICATIONS

Make sure they are signed and include contact information.

The Pesticide Discharge Management Plan (PDMP)

Those required to file an NOI for the pesticide generic permit must also develop a PDMP and update it as necessary. The requirements for the PDMP are identified in Part III of Document Number 62-621.300(8)(e), F.A.C., Generic Permit for Pollutant Discharges to Surface Waters of the State from the Application of Pesticides.

This PDMP shall be kept on file by the operator and made available as necessary to the FDEP and the FDACS. The PDMP does not need to be sent to FDEP or FDACS and does not need to be approved by either department. It may be reviewed by FDEP (or FDACS as part of a memorandum of understanding, or MOU, with FDEP) to determine if it is in compliance with the requirements of the rule. The PDMP is to be developed within 90 days of the issuance of the coverage under the permit. The issuance of coverage occurs when FDEP has processed the NOI and sent a "coverage letter."

The purpose of the PDMP is to document how the effluent limitations required in Part II of the permit are to be achieved. The PDMP needs to include a description of the process by which pesticide discharges are minimized, and the measures taken to prevent spills, leaks, and misapplications. Pesticide discharges are minimized when they are only made when necessary to control pests as part of an overall pest management plan and are used in a way that maximizes their effectiveness. The PDMP should contain the basic information that describes the Integrated Pest Management (IPM) program that the mosquito control program uses.

The PDMP can reference procedures or plans in other documents such as Standard Operating Procedures (SOPs), or standard reference documents such as species identification manuals. Copies of the referenced documents need to be available for review when requested by FDEP or FDACS.

The PDMP must contain five major elements:

- Identification of the PDMP Team.
- Description of the area served by the program, including descriptions of the mosquito habitats encountered.

- Description of the measures used to minimize pesticide discharges.
- Documentation of the procedures used for determining when and how to apply pesticides, maintaining equipment, and responding to spills, leaks, and adverse incidents.
- Signature of the plan and plan updates.

The following is a general example on how to develop the PDMP and what to include in the plan.

1. Identification of the PDMP Team

This part of the PDMP consists of a list of the person(s) responsible for determining, managing, and implementing the surveillance and treatment measures used in the program.

- a. Person(s) responsible for managing pests in 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 overseeing pesticide applications. If the pesticide applicator is unknown when the plan is developed, indicate whether or not a for-hire applicator will be used and when it is anticipated an applicator will be identified.

Identification of team members shall include any written agreement(s) between the permittee 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.

2. Pest Management Area Description

a. Pest problem description. Describe the pest problem at the pest management area, including identification of the target pest(s), source of the pest problem, and source of data used to identify the problem in accordance with Part II.A.2.(a).

Example of pest problem description.

Aedes taeniorhynchus is a salt marsh mosquito produced in large numbers in the salt marshes surrounding the district or program. The aquatic habitat for this species is vast and covers a significant portion of the district or program. This species is known to fly up to 20 or 30 miles in search of a blood meal. It is an aggressive biter and a major pest along the coastal areas of the district or program, as well as a vector of dog heartworm.

Part of the description needs to identify the source of data used for determining that these species are a pest problem. This can be a brief description of the history of surveillance activity that shows the existence of the problem.

Example of pest description data source.

These species have been designated as primary targets for control operations based on routine light trap collections, landing rate counts, and citizen complaints, which indicate high populations of these species within the district or program. This type of monitoring has been performed for nearly two decades and is the basis for determining where and when control measures will be applied. The presence of disease is also monitored routinely, providing more information used in making treatment decisions.

b. General location map. In the plan, include a general location map (e.g., USGS quadrangle map, aportion of a city or county map, or other map) with the PDMP. A description of the program area of responsibility may be appropriate.

Example of general location map.

The Collier Mosquito Control District is located in Collier County, Florida, and is responsible for mosquito control operations in the majority of the populated portions of the county. The attached map delimits the extent of the district or program. Surface waters of the state occur within the boundaries of the district or program.

c. List of pesticides or any degradates for which the water bodies are impaired. According to FDEP, as of the effective date of the rule, no Florida water bodies are classified as impaired for any pesticides. Based on this, the following statement may be included in the PDMP:

No water bodies in the program area are impaired for pesticides or their degradates used in our pest control program.

In the event a water body in your program area is declared impaired for one of the pesticides used or one of its degradates, this statement can be readdressed.

3. Control Measure Description

This part of the PDMP is a brief description of the control measures used by the district or program. This needs to include methods of application, pesticide active ingredients, types of formulations used, and methods used to determine when and what rate to apply. A general statement should also address how the control measures were determined to be needed (if used). One easy way to present this information is to use a table format, along with a few general statements.

Example of control measures general description.

The district or program follows the common aquatic weed control practices as described in the University of Florida publication, Efficacy of Herbicide Active Ingredients Against Aquatic Weeds (2009 UF/IFAS EDIS SS-AGR-44, https://edis.ifas.ufl.edu/ag262). Postemergence herbicides are used when other control measures have not succeeded in reducing target species numbers below thresholds. The dosage rate for each product has been determined by comparing a variety of postemergence herbicide doses. The current dosages are the lowest at which a consistent, acceptable level of control can be achieved.

4. Schedules and Procedures

a. (1)-(5)

This section of the PDMP contains a list of the procedures used to implement the control measures described in Section 3 above, and the schedules by which these procedures are performed. As with Section 3, much of the information can be presented in a table (see the example below) along with a limited number of general explanatory statements. Documents such as SOPs for spill response, or adverse incident reporting, can be cited as part of the PDMP. These documents have to be available for review upon request.

b.(1)

This section of the PDMP contains measures for providing spill response and notification procedures.

Example of spill response and notification procedures.

When a spill of pesticide material in surface water is observed, the inspector/applicator will implement procedures in SOP#..... This SOP includes instructions for immediate response and containment actions. In addition, the inspector/applicator or supervisor will contact the National Spill Response Center at 1-800-454-8802 and the State Watch Office at 1-800-320-0519.

b. (2)

This section of the PDMP addresses adverse incident response procedures.

Example of 24-hour adverse incident response procedures.

Inspectors/applicators will notify supervisors immediately by radio or phone when adverse incidents (as defined in the rule) are observed per SOP#.... The supervisor will then contact the National Pesticide Telecommunications Network at 1-800-858-7358; and the National Spill Response Center at 1-800-454-8802; and the State Watch Office at 1-800-320-0519 within 24 hours of becoming aware of the incident. See the "Reporting Adverse Incidents" section of this document for information to provide to the State Watch Office.

Examples of pesticide monitoring schedules and procedures.

- Visual monitoring of water within any treatment area will be monitored by district or program staff who are routinely in the field on a daily basis.
- For larvicide applications directly to water, the treatment site will be inspected the day after treatment by the inspector making the application.
- Aerial adulticide applications are made between 2 a.m. and up to two hours after sunrise. Monitoring will be performed by the inspectors performing routine mosquito surveillance in the treated area.

5. Signature Requirements

The PDMP should be signed and dated by the director or the designated individual responsible for maintaining and updating the plan. Each revision to the plan after the original signature should also be signed and dated. The PDMP needs to be reviewed at least once per calendar year and whenever necessary to update the pest problem identified and pest management strategies evaluated for the pest management area. It would be advisable to document the annual review of the plan with a signature and date.

The PDMP does not need to be submitted to the FDEP or FDACS. However, a copy of the current PDMP, along with all supporting maps and documents, shall be kept at the address provided in the NOI. The PDMP and all supporting documents shall be readily available, upon request, and copies of any of these documents provided, upon request, to FDEP and FDACS.

Recordkeeping

Operators are required to keep written records as required by the PGP. The permittee can rely on records and documents developed for other obligations, such as requirements under FIFRA, FDACS, and FWC, provided all requirements of the permit are satisfied.

Entities required to submit NOIs shall keep the following records:

- A copy of any written 30-day adverse incident report
- The rationale for any determination that a written report of an identified adverse incident is not required
- A copy of any corrective action documentation

Entities required to submit an NOI for coverage under the PGP must also keep the following records at the address provided on the NOI for at least three years from the date the NOI was filed. Records of equipment calibration are to be maintained only by the entity performing the pest application activity (on behalf of self or client).

- A copy of the NOI submitted to the department, any correspondence specific to coverage under this permit, and a copy of the department coverage letter assigning a permit tracking number
- A copy of the permit (either a hardcopy or an electronic copy)
- Surveillance method(s) used, date(s) of surveillance activities, and findings of surveillance
- Target pest(s)
- Pest density prior to pesticide application
- Company name and contact information for pesticide applicator (if applicable)
- Pesticide application date(s)
- Description of the treatment area, including location and size (acres), or other appropriate unit of measure, and identification of any waters, either by name or by location, to which the operator applied any pesticide(s)
- Name of each pesticide product used, including the EPA pesticide registration number
- Quantity of pesticide applied (and specify if quantities are for the pesticide product as packaged or as formulated and applied)
- Concentration (%) of active ingredient in formulation
- For pesticide applications directly to waters, the effective concentration of active ingredient required for control
- Any unusual or unexpected effects identified in nontarget organisms
- Documentation of any equipment calibration (to be kept by pesticide application equipment operator)
- A copy of the PDMP, including any modifications made to the PDMP during the term of this permit

All records are required to be documented as soon as possible but no later than 14 days following completion of the activity. The permittee must make all records kept under the permit available to an authorized representative of the FDEP and provide copies of such records, upon request.

Annual Reporting

The generic permit requires permittees that submit NOIs to provide annual reports of their activities under the permit. Annual reports must be provided for the duration of the permit whether or not the permittee has applied pesticides during the calendar year.

Annual reports submitted to FDACS for discharges covered under the permit by mosquito control programs organized

under Chapter 388 F.S. meet the reporting requirements and no additional reports need to be submitted to the FDEP. Reports and invoices submitted to FWC for discharges covered under the permit by entities required to submit NOIs meet the reporting requirements of the permit and no additional reports need to be submitted to the FDEP.

Other entities required to submit an NOI must submit an annual report directly to the FDEP. The annual report is to be submitted each calendar year for the duration of coverage under the generic permit, whether or not there have been discharges from the application of pesticides in any subsequent calendar year. All annual reports must be submitted to the FDEP either by emailing them to PGPannualreport@dep.state.fl.us; or by sending through regular mail to:

Florida Department of Environmental Protection Bob Martinez Center Industrial Wastewater Section 2600 Blair Stone Road, Mail Station 3545 Tallahassee, Florida 32399-2400

The annual report must be submitted no later than February 15 of the following year for all pesticide activities covered under the permit occurring during the previous calendar year. All permittees must retain a copy for their records.

The annual report is to include information for the calendar year, with the first annual report required to include activities for the portion of the calendar year after the effective date of the NOI. If the effective date is after December 1, an annual report for that first partial year is not required but annual reports are required thereafter; the first annual report submitted should also include information from the first partial year. When permit coverage is terminated, an annual report is required for the portion of the year up through the date of the 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.

The annual report must contain the following information:

- Permittee's name
- NPDES generic permit coverage number (i.e., FLGxxxx)
- Contact person name, if different from the permittee, title, e-mail address (if any), and phone number
- A summary containing the following information:

- Identification of any waters or adjacent treatment area, including size, either by name or by location, to which pesticide(s) were discharged;
- Pesticide use pattern(s) (i.e., mosquito and other flying insects, aquatic weeds and algae, aquatic nuisance animals, or forest canopy/area wide pest control) and target pest(s)
- Company name(s) and contact information for pesticide applicator(s), if different from the NOI submitter
- Total amount of each pesticide product expressed as pounds of active ingredient
- Whether this pest control activity was addressed in the PDMP prior to pesticide application
- If applicable, an annual report of any adverse incidents as a result of these treatment(s) for incidents, as described in the Adverse Incident Notification and Reporting section of the PDMP
- A description of any corrective action(s), including spill responses, resulting from pesticide application activities and the rationale for such action(s)

For more information or if you have a question about the provisions of the PGP, contact the FDEP Industrial Waste Water Section at 850-245-8589.

Acronyms

CWA: Clean Water Act

EPA: Environmental Protection Agency

FDACS: Florida Department of Agriculture and Consumer Services

FDEP: Florida Department of Environmental Protection

FFDCA: Federal Food, Drug, and Cosmetic Act

FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act

FLG: An identification number for a generic permit for the Florida Department of Environmental Protection (FDEP) National Pollutant Discharge Elimination System (NPDES)

FWC: Florida Fish and Wildlife Conservation Commission

GPS: Global Positioning System

IPM: Integrated Pest Management

MOU: Memorandum of Understanding

NMFS: National Marine Fisheries Service

NOI: Notice of Intent

NPDES: National Pollutant Discharge Elimination System

PDMP: Pesticide Discharge Management Plan

PGP: Pesticide Generic Permit

SOPs: Standard Operating Procedures

WMD: Water Management District

Additional Information

Florida Department of Agriculture and Consumer Services: http://www.freshfromflorida.com/

Florida Department of Environmental Protection: http://www.dep.state.fl.us/

Florida Fish and Wildlife Conservation Commission: http://myfwc.com/

State Watch Office, Florida Division of Emergency Management: http://floridadisaster.org/Response/Operations/swp. htm

https://plants-archive.ifas.ufl.edu/man-age/developing-management-plans/npdes-and-aquatic-plant-management-in-florida/

Table 1. Operators required to file an NOI under the PGP.

Use patterns	Operators required to submit an NOI				
Mosquito and other flying insect pest control	Mosquito control programs or districts organized under the authority of Chapter 388 F.S. and Florida Department of Agriculture and Consumer Services				
Aquatic weed and algae control	Florida Fish and Wildlife Conservation Commission, South Florida Water Management District, Southwest Florida Water Management District, and St. Johns River Water Management District as defined in Section 373.019(21) F.S., U.S. Army Corp of Engineers, U.S. Forest Service, National Park Service, and U.S. Fish and Wildlife Service				
Aquatic nuisance animal control	Florida Fish and Wildlife Conservation Commission, South Florida Water Management District, Southwest Florida Water Management District, and St. Johns River Water Management District as defined in Section 373.019(21) F.S., U.S. Army Corp of Engineers, U.S. Forest Service, National Park Service, and U.S. Fish and Wildlife Service				
Forest canopy or other area-wide pest control	Florida Department of Agriculture and Consumer Services, U.S. Army Corp of Engineers, U.S. Department of Agriculture, U.S. Forest Service, National Park Service, and U.S. Fish and Wildlife Service				

NOTE: Entities **not** identified in Table 1 do **not** need to file an NOI but will have automatic coverage. Such entities (non-NOI filers) are responsible for meeting only certain requirements of this permit.

Table 2. Example of table describing control measures.

Control measure	Description	Applicability	Active ingredient/ formulation	Surveillance method	Threshold	Application method	Rate determination
Source reduction— hydrilla	Use of approved herbicide	Orange Lake	Penoxsulam/SC	Property checks, inspector observation	Presence of target species	In-water by boat with weighted hoses	Rate used in district program

Table 3. Example of sections 4(a) (1)-(5) of the PGP's instructions for developing the PDMP.

Control measure	Determination of application rate	Surveillance method	Determination of frequency of application	Spill prevention procedures and schedule	Application equipment calibration procedures	Application equipment maintenance procedures	Environmental condition assessment
Postemergence herbicide applications for control of aquatic vegetation.	Efficacy determined by comparison trials of label rates. Dosage applied is the lowest at which consistent control is obtained.	Inspections conducted after receipt of complaint prior to application.	Applications made when thresholds exceeded based on surveillance; surveillance conducted upon receipt of complaints.	Pre-trip inspection of vehicles prior to each application, spill kits on each vehicle, mandatory annual training for applicators, reference SOP#	Application equipment calibrated weekly following SOP#	Pre-trip inspection for leaks and cracks, proper operation of pump equipment, annual rebuild of application equipment.	Onsite evaluation of weather conditions by trained applicator. No applications if wind in excess of 10 mph.