



# NPDES Permitting and Hurricane Florence

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# Overview

- NC NPDES-What is it?
- Monitoring requirements for pesticide applicators
- What you need to do for permit
- PDMP
  - Importance
  - What to do during an emergency situation, Like Hurricane Florence
- Adverse Incident Reports



# North Carolina NPDES

- This permit is available to Operators who discharge to Waters of the United States from the application of (1) biological pesticides or (2) chemical pesticides that leave a residue (collectively called *pesticides*), when the pesticide application is for one of the following pesticide use patterns:
- **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 mosquitoes and black flies.



# Monitoring Requirements for Pesticide Applicators

- You must monitor the amount of pesticide applied to ensure that you are using the lowest amount to effectively control the pest, consistent with reducing the potential for development of pest resistance.
- You must also monitor your pesticide application activities to ensure you are performing regular maintenance activities and to ensure that your application equipment is in proper operating condition to reduce the potential for leaks, spills, or other unintended discharge of pesticides to waters of the U.S. Additionally, you must monitor your pesticide application activities to ensure that the application equipment is in proper operating condition by adhering to any relevant manufacturer's conditions and industry practices, and by calibrating, cleaning, and repairing equipment on a regular basis. You must conduct spot checks in the area to and around where pesticides are applied for possible and observable adverse incidents caused by application of pesticides, including but not limited to the unanticipated death or distress of non-target organisms and disruption of wildlife habitat, recreational or municipal water use. Visual assessments of the application site must be performed:
  - a. During any post-application surveillance or efficacy check that you conduct, if surveillance or an efficacy check is conducted.
  - b. During any pesticide application, when considerations for safety and feasibility allow.



# What You Need To Do

- Notice of Intent submittal to DWQ
- Discharge Authorization date is no earlier than 10 days after DWQ posts on the internet receipt of your complete and accurate Notice Of Intent
- Pesticide Discharge Management Plan – after April 1, 2012
- Additional recordkeeping
- \$100 annual fee



Table 1. Annual Treatment Area Thresholds

Treatment Category	Annual Threshold
Mosquitoes and Other Flying Insect Pests	15,000 acres of treatment area (adulticide applications only) <sup>1</sup>
Aquatic Weed and Algae Control:	
- In Water	1000 acres of treatment area
- At Water's Edge:	200 linear miles of treatment area at water's edge <sup>2</sup>
Aquatic Nuisance Animal Control:	
- In Water	200 acres of treatment area
- At Water's Edge	200 linear miles of treatment area at water's edge
Forest Canopy Pest Control	10,000 acres
Intrusive Vegetation Control	500 linear miles <sup>3</sup>

- <sup>1</sup> Multiple applications to the same area are added together only for mosquito and other flying insect pest control
- <sup>2</sup> Applications that occur at water's edge in a ditch or canal are counted only once when one or both sides are treated
- <sup>3</sup> Applications to both sides of a road are added together for the total miles

**Discharge Authorization Date.** Beginning January 31, 2012, you must be covered under an NPDES permit for discharges to waters of the state as a result of the application of a pesticide. Permittees are authorized to discharge under this permit consistent with Table 2 below.



# Now What?

- If you treat 15,000 acres annually, you need an NC NPDES permit.
- When Should You Apply for NC NPDES?



Table 2. Discharge Authorization Date

Category	Notice Of Intent (NOI) Submittal Deadline	Discharge Authorization Date
Applicators who know or should have reasonably known, prior to commencement of discharge, that they will exceed an annual treatment area threshold.	At least 10 days prior to commencement of discharge. (Requirement waived until January 31, 2012)	No earlier than 10 days after the Division posts on the Internet receipt of your complete and accurate NOI.
Applicators who do not know or would reasonably not know until after commencement of discharge, that they will exceed an annual treatment area threshold.	At least 10 days prior to exceeding an annual treatment area threshold. (Requirement waived until January 31, 2012)	Original authorization terminates when annual treatment area threshold is exceeded. Applicator is reauthorized no earlier than 10 days after the Division posts on the Internet receipt of your complete and accurate NOI.
Applicators commencing discharge in response to a <u>declared pest emergency situation</u> .	After January 31, 2012 no later than 30 days after commencement of discharge.	Immediately, for activities conducted in response to declared pest emergency situation.

**Pesticide Discharge Management Plan.** This Part applies to any applicator required to submit an NOI. Some sections of the Pesticide Discharge Management Plan (PDMP) will require input from the pesticide applicator.

If you are required to submit an NOI, you must prepare a PDMP for your pest management area. You must 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 NOI threshold. You must develop a PDMP consistent with the deadline outlined in Table 3 below.





# PDMP

- If you are required to submit an NOI, you must prepare a PDMP for your pest management area.
- You must 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 NOI threshold
- A PDMP must be completed prior to submitting a Notice of Intent (NOI) for coverage under the general NPDES permit.



# PDMP Template from DWQ



## PESTICIDE-DISCHARGE-MANAGEMENT-PLAN-(PDMP)-TEMPLATE

The information indicated herein represents the minimum requirements for a complete PDMP. Please note: The use of this template, or another version that provides the same elements of information, is acceptable in meeting the PDMP submission requirements of the NPDES Pesticide General Permit.

A PDMP must be completed prior to submitting a Notice of Intent (NOI) for coverage under the general NPDES permit.

Please refer to Part 5 of NCGS66000 for the specific requirements related to a PDMP for reviewing, updating and modifying a PDMP, or incorporating by reference other documents in the PDMP. PDMP updates shall include revisions to information on actual pesticide applications after the application (dates of application, total amounts and rates of pesticide application) if they differ from the information included in the original PDMP.

### 5.1 - PDMP TEAM

A. Name of Operator/Responsible Parties (see permit section 5.1.1 for details of responsible parties)

B. Name and Title of Authorized Person signing the PDMP

C. Responsible Parties Street address

D. Responsible Parties mailing address

E. Telephone number

F. E-mail address

G. Name of entity/organization performing application

H. Address: City: State: Zip

I. Name of certified Applicator performing the application

K. Certified Applicator Identification number

L. Certified Applicator telephone and E-mail

M. List the name, address, and role of any other individuals involved with the pesticide application, as indicated in Part 5 of the general NPDES permit.

### 5.1.2 - PEST MANAGEMENT AREA DESCRIPTION

In cases where the PDMP addresses multiple pest management areas or treatment areas under a single NOI, each pest management area or treatment area must be documented in the PDMP. Use additional sheets with all required information, as necessary.

A. Target Pest(s)

B. Waterbodies present in pest management area

1) Waterbody Type (Lake, Pond, Stream, wetland)

2) Waterbody name (where known)

C. County

D. Town

E. USGS Quad

F. Total waterbody size (acres or linear miles)

G. Location and total size of treatment area(s)

H. Delineate the following information on a map. The map can be hand drawn, or can be copied from a published source. It should be of adequate scale for all required information to be readily identifiable. If the pesticide discharge will occur in a large waterbody, i.e., one that cannot be shown easily on a single map drawing with sufficient scale, then an area should be depicted to enable an adequate indication of the location of the discharge relative to the surrounding area.

The water body wherein the discharge will occur

The location of the target pest species

The treatment area(s), including location within waterbody

### 5.1.3 - SCHEDULES AND PROCEDURES

5.1.3.1 Control Measures

A. Describe procedures and maintenance activities, done to prevent spills

B. Application Equipment: List and describe equipment to be used to apply the pesticide. Include the date of the last routine maintenance or servicing and the date last calibrated. Describe schedule and procedures for equipment maintenance.

C. Pest Surveillance/Monitoring: Describe schedules and procedures of visual assessments for adverse incidents of the pest management area and treatment areas, including those conducted during any pesticide application, when considerations for safety allow, and during any post-application surveillance or efficacy check that is conducted by the operator, or under the operator's supervision or direction.

D. Identification of the problem or impacts that the pest is causing

E. Describe any additional control measures that are currently being used, or have been used in the past to minimize the discharge of pesticides

5.1.3.2 - Actions necessary to minimize Discharges

A. Spill response procedures, including

1. Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak must be trained in

these procedures and have necessary response equipment available. One of these individuals should be a member of your PDMP team.

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

B. Adverse incident response procedures - at a minimum you must have

1. Procedures for responding to any incident resulting from pesticide applications.

2. Procedures for notification of the incident, both internal to your 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.

C. Pesticide Monitoring Procedures - You must document procedures for monitoring consistent with the requirements in Part 4 including

1. The person (or position) responsible for conducting monitoring

2. Procedures for documenting any observed impacts to non-target organisms resulting from your pesticide discharge.

### 5.1.4 SIGNATORY

In accordance with Penal Law §210.45, I certify under penalty of perjury that information on this plan is true to the best of my knowledge and belief.

Signature of Operator

Title

Date

Date plan last updated/revised

Signatory has read and understand the permit and application

5.2 - PESTICIDE-DISCHARGE-MANAGEMENT-PLAN-MODIFICATIONS - You must modify your PDMP whenever necessary to address any of the triggering conditions for corrective action or when a change in pest control activities significantly changes the type or quantity of pollutants discharged. Changes to your PDMP must be made before the next pesticide application that results in a discharge, if practicable, or if not, as soon as possible thereafter. The revised PDMP must be signed and dated in accordance with Appendix B, Subsection B.11. You must review your PDMP at a minimum once per calendar year and whenever necessary to update the pest problem identified and pest management strategies evaluated for your pest management area.



Table 3. Pesticide Discharge Management Plan Deadline

Category	PDMP Deadline
Permittees who know or should have reasonably known, prior to commencement of discharge, that they will exceed an annual treatment area threshold.	Prior to first pesticide application covered under this permit after April 1, 2012
Permittees who do not know or would reasonably not know until after commencement of discharge, that they will exceed an annual treatment area threshold.	Prior to exceeding an annual treatment area threshold after April 1, 2012
Permittees commencing discharge in response to a <u>declared pest emergency situation</u> that will cause the applicator to exceed an annual treatment area threshold.	No later than 90 days after responding to declared pest emergency situation after April 1, 2012



Highlights on required contents of the PDMP:

- Team - Persons responsible for
  - Managing pests
  - Developing & revising PDMP
  - Developing, revising, & implementing corrective actions
  - Applying pesticides
- Pest Management Area Description
  - Pest problem
  - General location map
- Schedules & procedures
  - Spill prevention & response
  - Pesticide application equipment maintenance
  - Pest surveillance – pre-application, if needed
  - Adverse incident response
  - Pesticide monitoring
- Signature Requirements

***Carries over to Aerial Application areas***



# Adverse Incident Procedure

- **Adverse Incident (Definition)**

- An Adverse Incident means an incident that you have observed upon inspection or of which you otherwise become aware, in which:
  - There is evidence that a person or non-target organism has been exposed to a pesticide residue, and
  - The person or non-target organism suffered a toxic or adverse effect



# Adverse Incident Procedure

- The phrase “toxic or adverse effects” includes effects that occur within the waters of the state on non-target plants, fish or wildlife that are unusual or unexpected as a result of exposure to a pesticide residue.
- The phrase “toxic or adverse effects” also includes any adverse effects to humans or domesticated animals that occur either directly or indirectly from a discharge to the waters of the U.S. that are temporally and spatially related to a pesticide residue.



# Adverse Incident Forms

## Twenty-Four Hour Adverse Incident Notification Reporting Form

Wilmington Regional Office Contact Information:

Address: 127 Cardinal Drive Extension, Wilmington, NC 28405

Phone: 910-796-7215

Fax: 910-350-2004

Emergency Response During the normal workday - Monday - Friday, 8 a.m. through 5 p.m. - call the regional office closest to the environmental emergency. Do not leave a message. Make sure that you speak to an actual person so that you can share information that may be necessary to a fast response.

Outside of normal business hours, call the emergency hot line at 1-800-858-0368 and an appropriate regional staff member will be alerted

Required Reporting Information when reporting an Adverse Incident to NCDWQ Regional Office located at Wilmington Regional Office

NPDES Permit Holder Information to Be Provided to NCDWQ during the initial 24 hr report

Name of Permitted Person Reporting the Adverse Incident \_\_\_\_\_

Phone Number of Permitted Person Reporting the Adverse Incident \_\_\_\_\_

Address of Person Reporting the Adverse Incident \_\_\_\_\_

Your Organizations NOI, NPDES tracking number \_\_\_\_\_

Contact Persons Name and Phone Number if different from the person providing the 24 notice.

Contact Persons Name \_\_\_\_\_

Contact Persons Phone \_\_\_\_\_

How you became aware of the Adverse Incident \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Name of Citizen Reporting Adverse Incident \_\_\_\_\_

Address of Reported Adverse Incident \_\_\_\_\_

Phone Number of Citizen Reporting Adverse Incident \_\_\_\_\_

Description of Adverse Incident \_\_\_\_\_

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## Thirty (30) Day Written Adverse Incident Notification Reporting Form

NCDWQ Wilmington Regional Office Contact Information:

Address: 127 Cardinal Drive Extension, Wilmington, NC 28405

Phone: 910-796-7215

Fax: 910-350-2004

Emergency Response During the normal workday - Monday - Friday, 8 a.m. through 5 p.m. - call the regional office closest to the environmental emergency. Do not leave a message. Make sure that you speak to an actual person so that you can share information that may be necessary to a fast response.

Outside of normal business hours, call the emergency hot line at 1-800-858-0368 and an appropriate regional staff member will be alerted

a. A copy of the Twenty Four (24) hour Adverse Incident Notification.

b. Date NCDWQ was initially contacted \_\_\_\_\_. The name of the NCDWQ Division representative you talked with: \_\_\_\_\_ and any instructions you received from NCDWQ \_\_\_\_\_

c. Location of the Incident, including names of any waters affected and appearance of those waters (sheen, color, clarity etc.) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

d. Description of the circumstances of the adverse incident including species affected, estimated number of individual and approximate size of dead and distressed organisms; \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

e. Magnitude and scope of affected area (e.g. aquatic square area or total stream distance affected).

\_\_\_\_\_

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\_\_\_\_\_

f. Pesticide application rate, intended use site (e.g. above water or directly to water), method of application, brand name of pesticide product, EPA registration number; \_\_\_\_\_

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# The Process of an Adverse Incident

- In the event an employee observes a potential adverse event to the waters of North Carolina resulting from an adulticide operation during post adulticiding landing count inspections; the employee will put the Word “Yes” in the column called “Adverse Incident Yes/No” column in the **Brunswick County Adulticide Worksheet**. When a potential adverse incident is recorded, the Mosquito control supervisor will investigate and initiate any required documentation and/or notifications.



# Annual Adverse Incident Training

- All personnel licensed in category B will be trained in identifying and reporting adverse incidents annually. Training will be documented on the Adverse Incident Training Form.





# Adverse Incident Training Documentation Form

- Review of Adverse Incident Definition in General Permit NCG560000
- Review 24 hour Adverse incident Reporting Criteria
- Review 30 Day Adverse Incident Reporting Criteria
- Adverse Incident to Threatened or Endangered Species or Critical Habitat Reporting Criteria
- Review of Notification of an incident, both internal and to your agency/organization and external. Review of the appropriate contact information for state /federal permitting agency, the nearest emergency medical facility and nearest hazardous chemical responder
- The Adverse Incident training was held on (Date) \_\_\_\_\_. The following employees attended the training:
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_



# Adverse Incident





# Review

- NC NPDES-What is it?
- Monitoring Requirements for pesticide applicators
- What you need to do for permit
- PDMP
  - Importance
  - What to do during an emergency situation, Like Hurricane Florence
- Adverse Incident Reports



Questions?