

Pesticide Applications Covered by the New North Carolina National Pollutant Discharge Elimination System (NPDES) Pesticide General Permit and Your Requirements

On November 1, 2011, the North Carolina Department of Environment and Natural Resources Division of Water Quality authorized a new permit for the application of pesticides to, over or near Waters of North Carolina. These waters include any stream, river, swamp, lake, pond, reservoir, tidal estuary, bay, ocean, or other body of water, public or private. This permit is available to Permittees who discharge to Waters of the State from the application of (1) biological pesticide products or (2) chemical pesticide products 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 in or above standing or flowing water. Public health/nuisance and other flying insect pests in this use category include but are not limited to mosquitoes and black flies.
- b. Aquatic Weed and Algae Control** – to control invasive or other nuisance weeds and algae in water and at water's edge, including irrigation ditches and/or irrigation canals.
- c. Aquatic Animal Pest Control** –to control invasive or other pest animals in water and at water's edge. Animals in this use category include but are not limited to fish, lampreys, and mollusks.
- d. Forest Canopy Pest Control** - aerial application of a pesticide over a forest canopy to control the population of a pest species where to target the pests effectively a portion of the pesticide unavoidably will be applied over and deposited to water.
- e. Intrusive Vegetation Control**- to control vegetation along roads, utility rights-of-way, canals or ditches where to target the intrusive species effectively a portion of the pesticide will unavoidably be applied over or deposited into Water of the State.

There are four exemptions from the requirements of this permit that you need to be aware of.

- Agricultural irrigation return flow
- Agricultural and silvicultural storm water runoff
- Agricultural (non-aquatic crops) and silvicultural applications
- Applications by a NC pesticide applicator licensed in Demonstration & Research and works for a manufacturer, university or similar organization

If your pesticide applications are covered by this permit, there are certain minimum requirements that you must fulfill in order to be in compliance when your annual applications do not exceed annual treatment area thresholds. The minimum requirements for everyone are the following:

1. Minimize Pesticide Discharges to Waters of the State.

- All applicators must minimize the discharge of pollutants resulting from the application of pesticides.
- Apply pesticides at or below the highest rate allowed by the pesticide label.
- Perform regular maintenance activities to reduce leaks, spills, or other unintended discharges of pesticides associated with the application of pesticides covered under this permit.

- Maintain pesticide application equipment in proper operating condition by adhering to relevant manufacturer's conditions and industry practices, and by calibrating, cleaning, and repairing such equipment on a regular basis to ensure effective pesticide application and pest control. You must ensure that the equipment's rate of pesticide application is calibrated to deliver the appropriate quantity of pesticide needed to achieve greatest efficacy against the target pest.

2. Water Quality-Based Effluent Limitations

If at any time you become aware, or the Division of Water Quality determines, that your discharge causes or contributes to a violation of applicable water quality standards, you must take corrective action.

3. 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.

If an Annual Threshold (Table 1 below) will be exceeded, the entity is responsible for a

- Notice of Intent submittal to DWQ
 - Beginning January 31, 2012
 - 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	
Pesticide Use	Annual Threshold
Mosquitoes and Other Flying Insect Pests	15,000 acres of treatment area (adulticide applications only) ¹
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 ²
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 ³

¹ Multiple applications to the same area are added together only for mosquito and other flying insect pest control

² Applications that occur at water's edge in a ditch or canal are counted only once when one or both sides are treated

³ 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.

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.

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

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. You must retain a copy of the current PDMP, along with all supporting maps and documents, at the address provided in the NOI. The PDMP and all supporting documents must be

readily available, upon request, and copies of any of these documents provided, upon request, to the Division of Water Quality.

Corrective action is required for a spill, leak, maintenance activities not performed, and an adverse incident to non-target organisms. If an adverse incident occurs, the following documentation and reporting must occur:

- Immediate phone notification to US Fish and Wildlife Service or US National Marine Fisheries Service for federally listed threatened or endangered species or critical habitats
- Within 24 hours phone notification to DENR Regional Office
- Within 30 days written report to DENR Regional Office

The following recordkeeping is required for anyone.

- A copy of the NC Pesticide General Permit
- A copy of any Adverse Incident Reports
- Your rationale for any determination that reporting of an Adverse Incident is not required
- A copy of any Corrective Action documentation

The following recordkeeping is required for entities that exceed an annual treatment area threshold and submit a Notice of Intent to DWQ:

- A copy of the NOI & any correspondence submitted to DWQ
- Date you knew or should have known that you would exceed the threshold
- Target pest, pesticide applicator contact info, pesticide application date, treatment area description & identification of any waters.
- Pesticide product, EPA Registration Number, amount of product applied
- Any unusual or unexpected effects identified to non-target organisms
- Equipment cleaning, calibration, and repair documentation by the pesticide applicator
- A copy of your PDMP, including any modifications of it

The above summary is not the official permit. In order to be in compliance, please review the entire North Carolina NPDES Pesticide General Permit that is located at the following NC DENR website:

<http://portal.ncdenr.org/web/wq/swp/ps/npdes>

Then click on **PESTICIDE General Permit** listed under HOT TOPICS.

If you have specific questions, please contact Jeff Poupart at 919-807-6309 or Jeff.Poupart@ncdenr.gov