

# **United States Environmental Protection Agency**

## **National Pollutant Discharge Elimination System (NPDES) Permit Quality Review (PQR) Pesticide Checklist Companion**

This guidance was developed by staff in the U.S. Environmental Protection Agency's (EPA's) Office of Wastewater Management and addresses development of pesticide discharge permits under the National Pollutant Discharge Elimination System (NPDES). NPDES permit development is governed by existing requirements of the Clean Water Act (CWA) and the EPA NPDES implementing regulations. CWA provisions and regulations contain legally binding requirements. This document does not substitute for those provisions or regulations. Recommendations in this guidance are not binding; the permitting authority may consider other approaches consistent with the CWA and EPA regulations. When EPA makes a permitting decision, it will make each decision on a case-by-case basis and will be guided by the applicable requirements of the CWA and implementing regulations, taking into account comments and information presented at that time by interested persons regarding the appropriateness of applying these recommendations to the situation. This guidance incorporates, and does not modify, existing EPA policy and guidance on developing NPDES permits.  
EPA may change this guidance in the future.

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## Introduction

This document serves as a companion to the National Pollutant Discharge Elimination System (NPDES) Permit Quality Review (PQR) Pesticide Checklist and provides details for each of the sections and questions in the checklist. The PQR Pesticide Checklist assesses the state's NPDES permit for pesticide discharges. The PQR Pesticide Checklist was developed using EPA's Pesticide General Permit (PGP) and discussions between U.S. Environmental Protection Agency (EPA) headquarters and regions.

The information requested for the checklist will be based on the review of the state's authority to issue NPDES permits for pesticide discharges, permits issued for pesticide discharges, and program implementation.

### I. State Authority

This section of the checklist includes general information about the state's authority to issue permits for pesticide discharges. In a 2009 decision by the U.S. Sixth Circuit of Appeals (*National Cotton Council, et al. v. EPA*), 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 United States are pollutants under the Clean Water Act. Thus, as of October 31, 2011, discharges from applications of pesticides must comply with NPDES requirements.

#### 1. Does existing state law provide the authority to issue NPDES permits for discharges from the application of pesticides?

Check Y or N to indicate whether state law provides the authority to issue NPDES permits for discharges from the application of pesticides. Such authority may exist in the state's general NPDES authority, and may be referenced in the state's permit or fact sheet.

#### 2. Are there any obstacles in state law preventing the state NPDES permitting authority from fully implementing the NPDES requirements?

Check Y or N to indicate whether any obstacles are in state law preventing the state from issuing NPDES permits for discharges from the application of pesticides. It is possible that pesticide application is subject to some form of an exclusion under state law (e.g., conditional exclusion of state water quality standards), or that definitions of key terms limit authority for permitting pesticide application.

### 3. Do state regulations provide for permitting of all discharges from the application of pesticides? Including:

#### a) All pesticide use patterns

NPDES permits are required for any point source discharge to waters of the United States from the application of (1) biological pesticides and (2) chemical pesticides that leave a residue. EPA identified four pesticide use patterns that generally include the full range of pesticide application activities that meet this condition, including pesticide applications to control mosquitoes and other flying insect pests (i.e., 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), weeds and algae (i.e., control weeds, algae, and pathogens that are pests in water and at water's edge, including ditches and/or canals), animal pests (i.e., control animal pests including fish, lampreys, insects, mollusks, and pathogens), and forest canopy pests in water and at water's edge (i.e., 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).

Check Y or N to indicate whether the state regulations provide for permitting from all of the pesticide use patterns specified in the PGP (i.e., mosquito and other flying insect pest control, weed and algae control, animal pest control, and forest canopy pest control). Note that the regulations may provide general authority and the use patterns (or other specific information) may be specified in the relevant permit.

#### b) All operators of discharges, including decision-makers and applicators

The NPDES program requires *Operators* of discharges to obtain NPDES permit coverage. EPA's PGP assigns different responsibilities to the different types of Operators to reflect who is best suited to perform the various tasks required in the permit. For EPA's PGP, Operators are defined to include both *Decision-makers* and *Applicators*. Note that some states use different terminology in determining who must obtain NPDES permit coverage for pesticide applications.

Check Y or N to indicate whether the state regulations provide for permitting of all Operators of pesticide discharges. If a state uses different terminology that the PGP this can be noted in the comments section.

#### c) All locations/waters within the state

EPA's PGP imposes some restrictions and requires further investigation to determine whether coverage is available for discharges to waters of the United States with the following characteristics:

- Discharges to waters listed as impaired for pesticides by the state under section 303(d) of the Clean Water Act (see the next question below for conditions where coverage can be obtained);
- Discharges to waters designated by a state or tribe as Tier 3 or Outstanding National Resource Water (ONRW) (coverage is available for applications made to restore or maintain water quality or protect public health or the environment, that either do not degrade water quality or degrade water quality on only a short-term or temporary basis); and
- Discharges to waters containing National Marine Fisheries Service (NMFS) Listed Resources of Concern (see additional questions and answers below concerning NMFS considerations).

Check Y or N to indicate whether the state regulations provide for permitting of all locations or waters in the state in a manner to the PGP. Note in comments significant differences.

**4. Does the state have other laws/regulations, in addition to these NPDES requirements, that control discharges from these types of pesticide applications?**

In 2009 the U.S. 6<sup>th</sup> Circuit Court of Appeals found in *National Cotton Council, et al. v. EPA* that any point source discharge of biological pesticides, or chemical pesticides that leave a residue, into waters of the United States are pollutants under the Clean Water Act. As a result of that court decision, certain discharges from the application of pesticides must now comply with NPDES requirements. Some states might have other laws or regulations (i.e., Department of Agriculture), in addition to the NPDES requirements, that control discharges from pesticide applications.

Check Y or N to indicate whether other state laws or regulations control discharges from pesticide applications. If yes, describe briefly the other laws or regulations. It is useful to indicate whether other permits are issued for such applications.

**5. Describe how the state identifies “waters” for which permit coverage is required for these discharges (e.g., includes both waters of the U.S. and waters of the state, includes applications made to dry areas that are delineated as waters of the U.S. but do not contain water at the time of application, observable high water mark, bank full, etc.):**

The determination of whether a discharge from the application of pesticides requires an NPDES permit requires a site-specific evaluation of whether that discharge will be made to (i.e., within the boundary of) *waters of the United States* or to an area with a direct hydrologic surface connection to waters of the United States at the time of application. This determination is to be made on the basis of the definition of *waters of the United States* in the EPA’s and the U.S. Army Corps of Engineers’ respective regulations at title 40 of the *Code of Federal Regulations* (CFR) section 122.2 and 33 CFR 328.3(a), in accordance with principles enunciated in the U.S. Supreme Court’s opinions in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001) and *Rapanos v. United States*, 547 U.S. 715 (2006).

Describe how the state identifies those *waters* for which NPDES permit coverage is required for discharges resulting from pesticide applications. Many states require NPDES permits for discharges to “waters of the state.” Note if this differs in some significant respect from federal jurisdiction over discharges to surface waters.

**6. Describe whether any special waters (e.g., ONRWs, impaired waters) are addressed differently than under the PGP under the state NPDES pesticide permit(s):**

EPA’s PGP provides coverage for discharges from pesticide applications made to Outstanding National Resource Waters (Tier 3) but only for applications made to those waters to restore or maintain water quality or to protect public health or the environment that either do not degrade water quality or degrade water quality on only a short-term or temporary basis. Also, in certain instances, coverage under EPA’s PGP is not available for discharges to impaired waters. If a discharge is not eligible for coverage under EPA’s PGP, Operators 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 a different pesticide active ingredient.

Describe whether the state addresses special waters differently than the PGP under the state NPDES pesticide permits.

## II. Permits

This section of the checklist includes general information on the NPDES individual permits and general permits issued by the state for pesticide discharges. The NPDES program provides for two types of permits:

individual and general. Permitting authorities may develop general permits in part to reduce administrative burdens associated with individual permits. Without coverage under a general permit, any pesticide discharge to waters of the United States that requires coverage under an NPDES permit must be controlled under an individual permit.

**1. Has the state issued any individual permit(s) for discharges from the application of pesticides?**

Check Y or N to indicate whether the state has issued any individual permits. If yes, describe the reason(s) these pesticide discharges are not being covered under a general permit.

**2. How many individual permits for these types of discharges have been issued since October 31, 2011?**

Indicate the total number of NPDES individual permits for pesticide discharges the state has issued since October 31, 2011.

**3. Does the state expect to issue any additional individual permits for these types of discharges?**

Check Y or N to indicate whether the state expects to issue any additional individual permits for pesticide discharges. If yes, describe the reason(s) for issuing individual permits.

**4. Approximately how many individual permits does the state expect to issue over the course of five years?**

Indicate the approximate number of individual permits that the state expects to issue over the course of five years.

**5. Has the state issued any general permit(s) to control discharges from the application of pesticides?**

Check Y or N to indicate whether the state has issued any general permit(s) to control pesticide discharges. If yes, indicate how many general permits have been issued or are expected to be issued. Some states issue a single general permit to address pesticide discharges. Others issues two or more general permits that address specific activities or areas.

**6. Are all discharges requiring permits from these types of pesticide applications covered by the general permit(s)?**

**a) All pesticide use patterns**

NPDES permits are required for any point source discharge to waters of the United States from the application of (1) biological pesticides and (2) chemical pesticides that leave a residue. EPA identified four pesticide use patterns that generally include the full range of pesticide application activities that meet this condition, including mosquitoes and other flying insect pests, weeds and algae, animal pests, and forest canopy pests. EPA's PGP covers discharges of biological pesticides, and chemical pesticides that leave a residue, from these pesticide use patterns.

Check Y or N to indicate whether the state general permit(s) cover the PGP pesticide use patterns (mosquito and other flying insect pest control, weed and algae control, animal pest control, and forest canopy pest control). Note any significant differences.

**b) All operators of discharges, including decision-makers and applicators**

The NPDES program requires *Operators* of discharges to obtain NPDES permit coverage. EPA's PGP assigns different responsibilities to the different types of Operators to reflect who is best suited to perform the various tasks required in the permit. For EPA's PGP, Operators are defined to include both *Decision makers* and *Applicators*.

Check Y or N to indicate whether the state general permit(s) cover all Operators of pesticide discharges. Note any significant differences.

**c) All locations/waters within the state**

EPA's PGP imposes certain restrictions and requires further investigation to determine whether coverage is available for discharges to waters of the United States with the following characteristics:

- Discharges to waters listed as impaired for pesticides by the state under section 303(d) of the Clean Water Act (see the next question below for conditions where coverage can be obtained);
- Discharges to waters designated by a state or tribe as Tier 3 or *Outstanding National Resource Water* (ONRW) (coverage is available for applications made to restore or maintain water quality or protect public health or the environment, that either do not degrade water quality or degrade water quality on only a short-term or temporary basis); and
- Discharges to waters containing NMFS-Listed Resources of Concern.

Check Y or N to indicate whether the state general permit(s) provide for permitting of all locations or waters in the state in a manner to the PGP. Note in comments significant differences.

### III. Notices of Intent (NOIs)

This section of the checklist includes information on the NPDES permit application for a state pesticide general permit. EPA's PGP requires certain Operators to submit a Notice of Intent (NOI). An NOI for a general permit is similar to a permit application, in that it notifies the regulatory authority of a planned discharge for which coverage under a specific NPDES general permit is needed and contains information about the discharge and the Operator responsible for the discharge. The NOI serves as the Operator's notice to the permitting authority that the Operator intends for the discharge to be authorized under the terms and conditions of that general permit.

**1. Are Notices of Intent (NOIs), or similar, required to be submitted by permittees?**

Check Y or N to indicate whether the state general permit(s) require permittees to submit NOIs or similar notices. If yes, describe the criteria for who must submit NOIs and under what conditions, including where more than one Operator is involved with the discharge. States vary in their approach. Some follow the PGP. Some require NOIs are all Operators or dischargers. Some states do not require NOIs.

**2. How many NOIs have been received to date for the state pesticide general permit(s)?**

Indicate the total number of NOIs or similar notices received to date for the state pesticide general permit(s).

**3. What is the state's estimate of the number of NOIs expected for these general permits?**

Indicate the number of NOIs or similar notices expected for the state pesticide general permit(s).

**4. Does the state have an electronic NOI system for submission of NOIs?**

Check Y or N to indicate whether the state has an electronic system for submitting NOIs or similar notices. If no, describe how the state manages the NOIs or similar notices.

**5. Are NOI data available online?**

Check Y or N to indicate whether the NOIs or similar notices are available online.

**a) If no, does the state plan on making these data available online? If so, when?**

Check Y or N to indicate whether the state will make NOIs or similar notices available online. If yes, indicate when it will be available.

**IV. Program Implementation**

This section of the checklist includes information on the implementation of the NPDES program for pesticide discharges.

**1. If applicable, describe how the state reviews/plans to review any pesticide management plans required under the permits:**

EPA's GGP requires certain Operators to develop and implement a Pesticide Discharge Management Plan (PDMP), which helps document how an Operator complies with the permit requirement. If the state permit requires a PDMP or a similar pesticide management plan, describe how the state reviews or plans to review the plans.

**2. If applicable, describe how the state manages or intends to manage any reports required under the permits:**

EPA's GGP requires Operators, if applicable, to submit Adverse Incident Reports, Reportable Spills or Leaks Reports, and other corrective action documentation. Certain Operators are also required to submit Annual Reports.

Describe any reports required under the state permit and how the state manages or intends to manage the reports.

**3. If applicable, describe how the state manages or intends to manage any ambient water quality monitoring required under the permit:**

The monitoring program that EPA has developed for EPA's GGP has been tailored to accommodate the unique situations related to pesticide applications. EPA's GGP requires routine visual monitoring, which can be used to determine if any pesticide use practices might need to be revised to ensure that avoidable adverse effects on the environment do not occur. Nothing in the federal regulations precludes a state from adopting or enforcing requirements that are appropriate to address discharges in the state or are more stringent or more extensive than those required under the NPDES regulations. In fact, the Clean Water Act is meant to serve as a baseline for state environmental protection. The Clean Water Act and corresponding NPDES regulations require that permits, at a minimum, include the requirements detailed in section 122.44 (but not necessarily in the same way as in this permit). States are free to incorporate additional or different requirements that they feel are necessary to adequately protect water quality. Similarly, how EPA and states interpret information and use the information to develop permit requirements may differ. For example, the regulations, as written at 122.44(i) specify that monitoring requirements be included to ensure compliance with permit limitations. One permit writer may make a best professional judgment (BPJ) determination that monitoring of discharges reasonably should occur *during* pesticide application, whereas a second permit

writer may make a BPJ determination that monitoring of discharges should reasonably be performed *after* pesticide application. It is reasonable that the two permit writers may come to different conclusions about how best to incorporate this requirement into the permit. If the state permit requires ambient water quality monitoring, describe how the state manages or intends to manage the monitoring data.

**4. Describe any existing ambient water quality data for pesticides in state waters as well as any plans the state has or may be aware of to collect such information:**

Monitoring studies are valuable because they characterize water quality and may specifically target areas where pesticides are applied or are likely to be used. Such data also can be used to evaluate impacts from mitigation measures, or the increase in use of other pesticides that might replace pesticides to which mitigation measures are applied. If the state has existing ambient water quality data for pesticides, describe the data. If the state has any plans to collect ambient water quality data for pesticides, describe the plans.

**5. Describe how the state addresses permitting requirements for discharges associated with pest emergency situations.**

For Operators who are required to submit NOIs, EPA's PGP allows the Operators to discharge immediately if the discharge is in response to a declared pest emergency situation. Describe how the state permit addresses pest emergency situations.

**6. Describe any problems that have arisen associated with NPDES permits hindering a pesticide applicator's ability to respond to a pest emergency.**

If the pesticide discharge permit has hindered a pesticide applicator's ability to respond to a pest emergency, describe any problems that have arisen (e.g., prohibited application, restricted application, delayed application, communication issues, etc.).

**7. Summarize the outreach that the state has provided regarding NPDES permitting of discharges associated with pesticide applications:**

Summarize any outreach that the state has provided or conducted with regard to NPDES permitting and pesticide discharges to waters of the United States. This can include a summary of webcasts, fact sheets, or meetings held.

**8. Describe state agency resources available to administer NPDES permits for discharges from pesticide applications:**

Describe any resources the state agency has to administer the NPDES permits for discharges from pesticide applications (e.g., financial and human resources available to develop, implement, and monitor compliance with the permit).