

Ohio Environmental Protection Agency

Fact Sheet For

National Pollutant Discharge Elimination System (NPDES)

General Permit for Discharges from Pesticide Applications

I. Background

The Federal Water Pollution Control Act [also referred to as the Clean Water Act (CWA)], the Ohio Water Pollution Control Act and the Ohio Revised Code (ORC Chapter 6111) provide that discharge of pollutants to waters of the state from any point source is unlawful, unless the discharge is in compliance with an effective NPDES permit.

The purpose of issuing NPDES permits to pesticide applications is to ensure that any discharges of pesticide residues are in compliance with all applicable state and federal water pollution control laws. The requirement of an NPDES permit for these discharges is a result of the U.S. Sixth Circuit Court decision on January 9, 2009 (hereby referred to as the “Court’s decision”).

The Court’s decision held that the CWA unambiguously includes “biological pesticides” and “chemical pesticides with residue” within its definition of “pollutant”. For the purposes of this permit, the Ohio Environmental Protection Agency (Ohio EPA) assumes that all chemical pesticides will leave a residue once the product has performed its intended purpose. Anyone who wishes to contest the assumption that all chemical pesticides leave a residue should submit scientific data to prove that no quantity of a chemical pesticide falls into a water of the state.

As a result of the Court’s decision, NPDES permits are required for biological and chemical pesticide discharges in, over, or near surface waters. The Sixth Circuit Court required Ohio EPA and other NPDES-authorized states to develop NPDES permits which address discharges of this nature. On October 31, 2011, Ohio EPA completed this requirement through the issuance of the “General Permit Authorization to Discharge Pesticides In, Over, or Near Waters of the State” (OHG870001). The renewal of this permit is required under the Court’s decision.

Ohio EPA expects that pesticide application and discharges will have minimal effects on the environment. There are several reasons for this expectation. *The Ohio 2014 Integrated Water Quality Monitoring and Assessment Report* identifies only a few impairments due to pesticides^a. In addition, only thirteen areas were identified with elevated levels of atrazine, an herbicide used in row crop agriculture applications (not covered in this permit). These areas mostly coincide with predominantly agricultural lands of western and northwestern Ohio.^b Also, Ohio EPA’s current review of pesticides directly applied to state waters ensures that impacts to water quality from the most direct and intensive applications are minimal. The draft permit would extend some of these management practices to other

^a *Ohio 2014 Integrated Water Quality Monitoring and Assessment Report*, Appendix H, page H-8. 2014. Ohio Environmental Protection Agency. <http://www.epa.ohio.gov/dsw/tmdl/OhioIntegratedReport.aspx>

^b *Ohio 2014 Integrated Water Quality Monitoring and Assessment Report*, Appendix A, page A-5. 2014. Ohio Environmental Protection Agency. <http://www.epa.ohio.gov/dsw/tmdl/OhioIntegratedReport.aspx>

pesticide uses, thereby reducing any adverse effects.

In addition to upholding the Court's decision, the United States Environmental Protection Agency (U.S. EPA) has been regulating these types of applications through the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). Under FIFRA, U.S. EPA regulates the sale, distribution and use of pesticides in the U.S. to ensure that when used in conformance with FIFRA labeling directions, pesticides will not pose unreasonable risks to human health and the environment. All new pesticides must undergo a registration procedure under FIFRA during which U.S. EPA assesses a variety of potential human health and environmental effects associated with the use of the product. In performing this analysis, U.S. EPA examines the ingredients of a pesticide, the intended type of application site and directions for use, and supporting scientific studies for human health and environmental effects and exposures.

When U.S. EPA approves a pesticide for a particular use, the U.S. EPA imposes restrictions through labeling requirements governing each use. The restrictions are intended to ensure that the pesticide serves an intended purpose and avoids unreasonable adverse effects. It is illegal under Section 12(a)(2)(G) of FIFRA to use a registered pesticide in a manner inconsistent with its labeling. States have primary authority under FIFRA to enforce "use" violations, but the state enforcement authority and U.S. EPA have ample authority to prosecute pesticide misuse when it occurs. In Ohio, the FIFRA enforcement authority is the Ohio Department of Agriculture (ODA).

The ODA oversees FIFRA compliance through its Pesticide & Fertilizer Regulation section which licenses pesticide dealers and applicators, and offers training and testing sessions throughout the year. The section licenses 30,000 pesticide applicators and more than 13,000 pesticide products. In addition, this section administers the Clean Sweep Program which assists pesticide users with proper disposal of unusable and out-of-date pesticides.

In addition to this oversight, the Ohio Water Quality Standards (WQS) contain a limited exception for pesticides in Ohio Administrative Code (OAC) 3745-1-01(E)(1). The exception is a recognition that applying chemicals designed to kill will not meet state narrative toxicity standards [OAC 3745-1-04(D)] for all species at all times. Under this rule, impacts are not allowed outside of the treatment area.

For pesticide applications to reservoirs used for drinking water, Ohio EPA's Division of Drinking and Ground Waters also reviews the application to ensure that drinking water standards are met.

II. Antidegradation

Because this permit authorizes new discharges to waters classified as General High Quality Waters, Outstanding State Waters, Superior High Quality Waters and Category 3 wetlands, certain provisions of Ohio's Antidegradation Rule apply [OAC Rule 3745-1-05]. This general permit is going to public notice as a degradation under the public notice provisions of the Antidegradation Rule [OAC Rule 3745-1-05(C)(3)].

The Antidegradation Rule excludes general permits from the alternatives analysis and social/economic justification portions of the rule. The discharge alternative being considered for this permit is allowing discharges to surface waters, with technology-based controls and pollution prevention requirements (Integrated Pest Management) as BADCT and mitigating requirements. Ohio EPA considers the public health benefits and the benefits of invasive species control as positive contributions of pesticide use. Use of these chemicals according to FIFRA label instructions and Ohio EPA Notice of Intent (NOI)

approval conditions is not expected to have impacts to human health or significant impacts to aquatic life.

Ohio EPA considered and rejected the alternative of central treatment of this water at a publicly-owned treatment works (POTW). The applications of pesticides to water or air are diffuse and not amenable to collection; the applications to stream banks are deliberately done during drier periods to minimize the amount of pollutant in water. Washing the banks and collected the pesticide in water for treatment would be counterproductive, both from the point of minimizing water contact and also would hinder the effect of the pesticide by rinsing vegetation before the pesticide could act. Therefore, central treatment at a POTW is not an appropriate disposal option for pesticide application wastewater.

III. Description of General Permit Coverage and Type of Discharge

The permit covers pesticide application in, over, and near to waters of the state. The permit does not cover any discharges that the Director of the Ohio EPA has determined to be contributing to a violation of a WQS as determined in OAC 3745-1. The permit does not cover any discharge which is not defined as a point source (e.g. agricultural stormwater discharges and return flows from irrigated agriculture).

The submittal of an NOI is required for some entities to obtain coverage under the permit. See Part IV of this fact sheet for a list of situations where a Notice of Intent (NOI) must be submitted.

Per 40 CFR 122.28(b)(2)(v), the activities and entities in Items A and B below are automatically covered under this permit, provided that the pesticide application does not meet the criteria in Part IV of this fact sheet. Automatic coverage means that the entity does not have to submit a NOI to Ohio EPA to be applicable to the permit conditions.

- A. **Activities Covered.** This permit is available to operators of discharges to surface waters of the state, or above or near surface waters of the state, from the application of (1) biological pesticides and (2) chemical pesticides which leave a residue for the following six pesticide use patterns:
1. **Mosquito and Other Aquatic Nuisance Insect Control** - management of all public health/nuisance pests which develop during a portion of their life cycle in standing or flowing water. Public health/nuisance pests in this use category include but not limited to mosquitoes and black flies.
 2. **Aquatic Weed and Algae Control** - management of weeds and algae in water, including but not limited to lakes, ponds, rivers, streams, irrigation canals, and drainage systems (ditches, canals, etc).
 3. **Area-Wide Pest Control** - management of a diverse pest spectrum (insects, weeds, and/or pathogens) in wide range of diverse habitats where a portion of the pesticides will unavoidably be deposited to water to target the pests effectively. Habitats in this use category include but are not limited to rangeland, forests, urban, and ditch banks. Area wide application means management of a pest (e.g., gypsy

moths, grasshoppers, etc.) to contain an infestation and in area greater than 15 contiguous acres.

4. Aquatic Nuisance Animal Control - management of invasive or other nuisance species in water, including but not limited to lakes, ponds, rivers, and streams. Aquatic nuisance animals in this use category include, but are not limited to fish, lampreys, and mollusks.
 5. Intrusive Vegetation Control – control of vegetation along roads, utility rights of way, and utility facilities (including pump stations, plants, and electric substations where the property is owned by the utility) where intrusive pests are targets. A portion of the pesticide will unavoidably be applied over and deposited into surface waters of the state;
 6. Invasive Plant Management in Resource Conservation Areas and Mitigation Areas – control of invasive plants in public parks, wildlife preserves, and other conservation management areas, and in wetland mitigation areas established by CWA Section 401 certifications, Ohio wetland permits, or by state or federal enforcement orders.
- B. Who is covered. “Operators” of pesticide applications are covered as defined in Part VI of the permit. The criteria below cover both the person authorizing the application (decision maker) and the person performing the application (applicator or for-hire applicator):
1. The entity has operational control over the decision to perform pesticide applications that result in discharges, including the ability to modify those decisions; and/or

The entity has day-to-day operational control of activities which are necessary to ensure compliance with the permit (e.g., they are authorized to direct workers to carry out activities required by the permit).

IV. Procedures for Participation in the Formulation of Final Determinations

The draft action shall be issued as a final action unless the Director revises the draft after consideration of the record of a public meeting or written comments, or upon disapproval by the Administrator of the U.S. Environmental Protection Agency.

Within thirty days of the date of the Public Notice, any person may request or petition for a public meeting for presentation of evidence, statements or opinions. The purpose of the public meeting is to obtain additional evidence. Statements concerning the issues raised by the party requesting the meeting are invited. Evidence may be presented by the applicant, the state, or other parties, and following presentation of such evidence, other interested persons may present testimony of facts or statements of opinion.

Requests for public meetings shall be in writing and shall state the action of the Director objected to, the questions to be considered, and the reasons the action is contested. Such requests should be addressed to:

**DSW Permits Processing Unit
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, Ohio 43216-1049**

Interested persons are invited to submit written comments upon the discharge permit. Comments should be submitted in person or by mail no later than 30 days after the date of this Public Notice. Deliver or mail all comments to:

**Ohio Environmental Protection Agency
Attention: Division of Surface Water
Permits and Compliance Section
P.O. Box 1049
Columbus, Ohio 43216-1049**

The OEPA permit number and Public Notice numbers should appear on each page of any submitted comments. All comments received no later than 30 days after the date of the Public Notice will be considered.

Citizens may conduct file reviews regarding specific companies or sites. Appointments are necessary to conduct file reviews, because requests to review files have increased dramatically in recent years. The first 250 pages copied are free. For requests to copy more than 250 pages, there is a five-cent charge for each page copied. Payment is required by check or money order, made payable to Treasurer State of Ohio.

For additional information about this fact sheet or the draft permit, contact [Phoebe Low, \(614\) 644-2134, Phoebe.Low@epa.ohio.gov](mailto:Phoebe.Low@epa.ohio.gov).

V. Description of the Application Process

NOI – The pesticide discharges listed below must submit a NOI application to apply for coverage under the general permit. State and federal regulations exclude facilities covered by general permits from requirements to submit an application for an individual permit [OAC 3745-38-02 and 40 CFR 122.21(a), respectively].

Operators which meet any of the criteria listed below must submit a NOI application to apply for coverage under the general permit. All other operators are not required to submit an NOI, but are bound by the conditions of the permit.

Individuals who require an NOI submittal and intend to renew coverage of the existing general permit shall submit an NOI form within 45 days of the effective date of this permit. For individuals that require an NOI submittal and begin discharging pesticides after the effective date of this permit, an NOI shall be submitted within 45 days prior to commencing discharge. Dischargers meeting any of the requirements

below who fail to obtain coverage under the general permit are not otherwise covered by an NPDES permit are in violation of Ohio Revised Code (ORC) 6111.

NOIs are required for:

1. Any decision maker applying pesticides to reservoirs used as a drinking water supply for aquatic algae, weed or nuisance animal control;
2. Any decision maker conducting a piscicide (fish killing) application;
3. Any decision maker applying pesticides to Outstanding State Waters or Superior High Quality Waters other than Lake Erie for aquatic algae, weed or nuisance animal control (The definitions and lists of Outstanding State Waters and Superior High Quality Waters are in Ohio's Antidegradation Rule – OAC 3745-1-05; the definition of Category 3 wetlands is in OAC 3745-1-54);
4. Any decision maker directly applying pesticide to wetlands that exceed an annual treatment area threshold in Part V. This requirement does not apply to the Invasive Plant Management in Resource Conservation Areas and Mitigation Areas Use Pattern;
5. Any decision maker applying pesticide for forest pest control or for aquatic weed control in Lake Erie that exceeds an annual treatment area threshold in Part V.

NOI requirements are intended to establish a mechanism that can be used to establish a clear accounting of the number of facilities covered by the general permit, their identities, locations, mailing addresses, location of discharge, and nature of discharge. Ohio EPA chose these categories for review because of potential impacts to drinking water quality, non-target organisms, and sensitive waters.

NOIs are being required for drinking water reservoirs because of the potential for pesticides to pass through water treatment processes and affect drinking water quality. Ohio EPA also believes that treatment to kill algae, particularly when blooms occur, is sometimes counterproductive because killing the algae may release more cyanotoxins.

The Ohio EPA is requiring NOIs for piscicide applications because these applications need to be carefully managed to avoid minimize to non-target organisms. Ohio EPA has noticed problems with non-target organism mortality during sea lamprey treatments, and as a result has required additional controls on these applications in the past. Requiring NOIs in these situations provides a site-specific review of controls.

The Ohio EPA has also included forest applications and Lake Erie aerial spraying applications (i.e. from aircraft), because of the large scale of these applications.

To apply for general permit coverage, all decision makers meeting any of the above five criteria will be required to complete and submit an NOI application form that is available from Ohio EPA. The NOI application form shall be submitted through the Ohio EPA eBusiness Center Division of Surface Water NPDES Permit Application STREAMS service in the link below.

<https://ebiz.epa.ohio.gov/login.html>

A copy of the NOI should also be sent to the appropriate district office of the Ohio EPA.

Application Fee – all permittees submitting an NOI must also submit the \$200 fee for NOI processing. Payment can be electronically submitted through the Ohio EPA eBusiness Center ePay service. Instructions on submitting fee payments via the ePay service can be found in the link below.

<http://epa.ohio.gov/portals/35/edmr/doc/ePAYwalkthrough.pdf>

Ohio EPA is not requiring NOIs for other pesticide applications other than those five listed above. The Ohio EPA believes that the existing licensing oversight provided by the ODA provides adequate review of pesticide applications. The ODA records include information on the activities licensed and the number of licensed applicators in a given company or government body. Also, the annual reporting requirements for applications over the federal thresholds will provide Ohio EPA with data on pesticide amounts being applied in larger applications.

VI. Eligibility Determining Factors

The following discharges are not authorized by this permit:

1. Discharges to Water Quality Impaired Waters. An operator is not eligible for coverage under this permit for discharges to waters of the U.S. identified as impaired for the pesticide or its degradates. Impaired waters are those which have been identified in the Ohio Integrated Water Quality Report as not meeting applicable State water quality standards. This report can be found in the link below.
<http://www.epa.ohio.gov/dsw/tmdl/OhioIntegratedReport.aspx>
2. Discharges Currently Covered by another Permit. You are not eligible for coverage under this permit if you have coverage under an existing NPDES permit and you have approval for the discharge of a pesticide used as a cooling or boiler water additive.
3. Discharges for which the Director requests an individual permit application;

The permit does not cover any discharges that the Director of the Ohio EPA has determined to be contributing to a violation of a Water Quality Standard (WQS) as determined in Ohio Administrative Code, Chapter 3745-1.

Discharges not eligible for coverage under this permit may still obtain an individual NPDES permit by submitting individual permit applications (Form 1, Form 2D, and an Antidegradation Addendum).

VII. Effluent Limitations and Monitoring Requirements

Part III of the permit lists treatment-technology and water quality-based limitations. The treatment technology limits are management plans, which are considered technology-based limits. The permit contains general management practices in Part III that apply to all covered pesticide applications.

This section contains general water quality-based limits, visual monitoring, requirements for applying pesticides to ponds, quarries, and burrows, and temporary signage requirements.

General Water Quality Standards. The operator must control its discharge as necessary to meet

applicable water quality standards. This includes any specific conditions set in the water quality standards review of direct applications to surface waters.

Visual Monitoring. The operator must complete a visual monitoring of the surface water during treatment activity and post-application surveillance.

Applying pesticides to ponds, quarries and borrow pits. These waters often intersect with ground waters that may be used as a source of drinking water for public or private well owners. To protect these water supplies, Ohio EPA has proposed a requirement that the pond meet Maximum Contaminant Levels (MCL) for pesticide chemicals if the MCL concentration is more restrictive than the FIFRA label requirements. The MCL would need to be met as an “as mixed” concentration for the pond volume. Ohio EPA expects that operators can use estimates of the pond or quarry volume to calculate dosing volumes to meet the MCL requirement.

Temporary Signage Requirements. This applies to pesticide discharges to ponds that have public access. This would include both public areas and those accessible by members of homeowner associations and private individuals. Pond owners that do not have outside access, for example companies that have ponds accessible only by employees, are exempt from this requirement.

Part IV contains requirements for corrective actions and reporting, if circumstances require them. This section also includes record keeping requirements, notification requirements for applications less than 500 yards from a public water supply intake, and conditions for applications to public water supply reservoirs.

Part V lists requirements for applications larger than certain annual thresholds. These conditions apply to applications affecting more than 6,400 land acres, 80 lake acres or 20 linear stream miles. The conditions include Integrated Pest Management (IPM) as an additional technology-based control, Pesticide Discharge Management Plans (PDMP) to document how all technology-based limits are met, and annual reporting requirements. Ohio EPA may use best management practices such as IPM under federal rule 40 CFR 122.44(k). IPM requirements do not apply to the Invasive Vegetation and Invasive Plant Management in Resource Conservation Areas and Mitigation Areas Use Patterns; they also do not apply to small entities (public decision makers representing less than 10,000 people, or a private enterprise that employs fewer than 100 employees and is independently owned).

PDMPs apply to pesticide applications greater than the thresholds. The PDMP is not a limitation and does not by itself impose requirements on discharges; these are already imposed in Part III of the permit. The PDMP is a tool for operators to document how control measures will be implemented to comply with the permit’s effluent limitations. PDMPs do not apply to the Invasive Plant Management in Resource Conservation Areas and Mitigation Use Pattern or to any small entities.

The application thresholds above are the same as those used in U.S. EPA’s draft general permit. Ohio EPA believes that these thresholds will be exceeded by all but very small numbers of pesticide uses.

Part VI contains conditions from federal rules that must be included in all NPDES permits. These rules can be found primarily in 40 CFR 122.41 and 122.42.

VIII. Changes from Previous Permit

Ohio EPA will no longer accept hard copies of the NOI forms or Notice of Termination (NOT) forms. Instead, permittees are to submit these forms electronically through the Ohio EPA eBusiness Center at the website below.

<https://ebiz.epa.ohio.gov>

Except for spills or discharge which may endanger human health or the environment, Ohio EPA will no longer accept noncompliance reports by telephone (refer to Part IV, Item C.3 of the general permit). Instead permittees are to submit noncompliance report forms electronically through the Ohio EPA eBusiness Center. The 24-Hour Emergency Hotline should still be contacted to report any spill or discharge which may endanger human health or the environment.

If permittees are unable to access these forms through the Ohio EPA eBusiness Center due to a demonstrated hardship, these forms may be submitted on paper forms provided by Ohio EPA. The required information shall be typed on the forms. Permittees should contact Ohio EPA, Division of Surface Water at (614) 644-2001 if they wish to receive hard copies of forms.

Permittees now have the option of paying the NOI processing fee through Ohio EPA's eBusiness Center ePay service.

These changes are in compliance with the U.S. EPA's NPDES Electronic Reporting Rule which became effective on December 21, 2015.

XI. Notice of Termination

Permittees are to request permit coverage termination once the wastewater discharges are eliminated. Failure to submit a NOT form constitutes a violation of the permit and is a violation of ORC 6111.

To terminate coverage under this permit, each individual facility covered by the general permit must submit a NOT form. The NOT form must be submitted through the Ohio EPA eBusiness Center Division of Surface Water NPDES Application STREAMS service located in the link below.

<https://ebiz.epa.ohio.gov/login.html>

X. Pollution Prevention

Ohio EPA strongly encourages pollution prevention as the preferred approach for waste management. The first priority of pollution prevention is to eliminate the generation of wastes and pollutants at the source (source reduction). For those wastes or pollutants that are generated, the second priority is to recycle or reuse them in an environmentally sound manner.

*Businesses can benefit economically, help preserve the environment, and improve your public image by implementing pollution prevention programs. For more information about pollution prevention, including fact sheets and the **Ohio Pollution Prevention and Waste Minimization Planning Guidance Manual**, please contact the Ohio EPA, Office of Pollution Prevention at (614) 644-3949.*