

**FACT SHEET
AND SUPPLEMENTARY INFORMATION
FOR GENERAL PERMIT ARG870000
PESTICIDE DISCHARGES LOCATED WITHIN THE STATE OF ARKANSAS**

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1. **Background**

a. *General Permit Coverage*

Under 40 C.F.R. § 122.28, general permits may be written to cover categories of point sources having common elements, such as facilities that involve the same or substantially similar types of operations, that discharge the same types of wastes, or that are more appropriately regulated by a general permit. Given the vast number of pesticide applicators requiring National Pollutant Discharge Elimination System (NPDES) permit coverage and the discharges common to these applicators, the Arkansas Department of Environmental Quality (ADEQ) believes that it makes administrative sense to issue the general permit, rather than issuing individual permits to each applicator.

This general permit authorizes the discharge of biological pesticides or chemical pesticides (including insecticides, nematocides, rodenticides, fungicides and herbicides) that leave a residue in water when such applications are made into or over, including near Waters of the State except as stated in Part 1.3 in accordance with effluent limitations, monitoring requirements, and other conditions set forth in the permit.

b. *NPDES Pesticide Application Regulation History*

The Environmental Protection Agency (EPA) regulates the sale, distribution and use of pesticides in the U.S. under the statutory framework of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. § 136 *et seq.*, to ensure that when used in conformance with FIFRA labeling directions, pesticides will not pose unreasonable risks to human health and the environment.

The following summary is taken from EPA's website at http://cfpub.epa.gov/npdes/home.cfm?program_id=414#decision:

On November 27, 2006 EPA issued a final rule clarifying two specific circumstances in which a Clean Water Act (CWA) permit is not required to apply pesticides to or around water. They are: 1) the application of pesticides directly to water to control pests; and 2) the application of pesticides to control pests that are present over or near water, where a portion of the pesticides will unavoidably be deposited to the water to target the pests.

The action put into effect a rule that confirms EPA's past operating approach that pesticides legally registered under FIFRA for application to or near aquatic environments, and legally applied to control pests at those sites, are not subject to NPDES permit requirements. The rule became effective on January 26, 2007.

On January 19, 2007, EPA received petitions for review of the Aquatic Pesticides rule from both environmental and industry groups. The case, National Cotton Council, et al, v. EPA, was assigned to the Sixth Circuit Court of Appeals.

On January 7, 2009 the U.S. Sixth Circuit Court of Appeals held in National Cotton Council, et al, v. EPA, that the final rule was not a reasonable interpretation of the CWA and vacated the rule. Reversing EPA's November 2006 Aquatics Pesticides rule, the Sixth Circuit held that CWA permits are required for all biological pesticide applications and chemical pesticide applications that leave a residue in water when such applications are made in or over, including near, Waters of the State.

The court's decision, which applies nationally, was effective seven days after the deadline for rehearing expires or seven days after a denial of any petition for rehearing. Parties had until April 9, 2009 to seek rehearing.

EPA estimates that the ruling affects approximately 365,000 pesticide applicators that perform 5.6 million pesticide applications annually.

On April 9, 2009, the Department of Justice (DOJ) chose not to seek rehearing in National Cotton Council v. EPA. DOJ instead filed a motion to stay issuance of the Court's mandate for two years to provide EPA time to develop, propose and issue a final NPDES general permit for pesticide applications, for States to develop permits, and to provide outreach and education to the regulated community.

On June 8, 2009, the U.S. Sixth Circuit Court of Appeals granted EPA a two-year stay of the mandate in National Cotton Council et al v. EPA in response to their request on April 9, 2009.

On June 2, 2010, EPA announced the public availability of a draft National Pollutant Discharge Elimination System (NPDES) permit for point source discharges from the application of pesticides to Waters of the State.

On March 28, 2011, the U.S. Court of Appeals for the Sixth Circuit granted EPA's request for an extension to allow more time for pesticide operators to obtain permits for pesticide discharges into U.S. waters. The court's decision extends the deadline for when permits will be required from April 9, 2011 to October 31, 2011.

On April 1, 2011, EPA posted a pre-publication version of its draft final pesticide general permit for discharges of pesticide applications to U.S. waters.

NPDES permits are required for pesticides applied directly to water to control pests and/or applied to control pests that are present in or over, including near waters. Irrigation return flows and agricultural runoff will not require NPDES permits as they are specifically exempted from the CWA.

On August 10, 2012, the process of amending APC&EC Regulation 6 began. One of the proposed amendments was to add Reg 6.206 to provide automatic permit coverage for entities discharging pesticides into waters of the State. The ARG870000 general permit was modified in 2013 to delete language that required the submission of a Notice of Intent (NOI). Regulation 6.206 was finalized on January 25, 2013. With the finalized changes to Reg 6.206 and the modification of ARG870000, all dischargers of pesticides in the state of Arkansas that qualify for this permit are automatically covered.

40 CFR 122.28(b)(2)(v) states that permit coverage can be given without requiring the submittal of an NOI. The Director is required to consider the following items:

(1, 2 & 4) the type of discharge, the expected nature of the discharge, and the expected volume of the discharges: The type and expected nature of the discharge are discussed in Part 3.a (Covered Uses) of the Fact Sheet. When considering the need for an NOI, these discharges were considered to be of a type and nature that could be permitted without notification of ADEQ. The expected volume of the discharges will be very low, due to the nature of the pesticide applications. Applicators will use as little product as necessary to meet their goals, due to expense of over-application and FIFRA labeling and ASPB requirements. Most applications covered by this permit will be at water's edge with a portion of the pesticide application unavoidably being discharged to waters of the State. The volume of pesticide discharged to waters of the State by this method will be very small. The expected volume of discharges directly to waters of the State to treat aquatic organisms will be dependent on the target organism and area needing treatment. ASPB regulations and FIFRA requirements dictate the maximum allowable dose.

(3) the potential for toxic and conventional pollutants in the discharges: A review of the 303(d) list of impaired waters in the state of Arkansas showed that no waterbodies in the state were impaired due to pesticide use. The Arkansas State Plant Board (ASPB)'s regulations and FIFRA requirements control pesticide applications to such a degree that the potential for toxic and conventional pollutants in the discharges is very low. In such a case that a pollutant causes an adverse incident, the permit will still require corrective actions to be implemented.

(5) other means of identifying discharges covered by the permit: The ASPB currently regulates pesticides licensing and use requirements. If a problem arises with a pesticide discharge that needs ADEQ's attention, the ASPB would be a partner in determining the responsible party and any violations of law. Requiring additional paperwork and fees through ADEQ will put an undue burden on the permittees without any appreciable benefit.

and (6) the estimated number of discharges to be covered by the permit: According to the ASPB's website, each year ASPB's Pesticide Division issues approximately 6,000 Private Applicator Licenses, 1000 Commercial Applicator Licenses, 600 Non-Commercial Applicator Licenses, 400 Commercial Firm Licenses (ground and air), and 200 Custom Applicator Licenses and maintains approximately 19,400 active Private Applicator Licenses. While not all of these applicators will apply pesticides in a manner that will require coverage by this general permit, a large number of these licensees may need coverage during some of their applications. Most pesticide applications are needed to occur within a short timeframe to be most effective. The

review process can take several days to weeks to get an approval. Allowing discharges to begin immediately without the submittal of an NOI will ensure that pesticide applications occur in a timely manner.

It is important to note that while no NOI is required to be submitted to the Department, a Notice of Coverage must still be posted at the application site. A blank Notice of Coverage is available on ADEQ's website. Facilities with coverage under this permit must comply with all provisions of the general permit, as required by APC&EC Regulation 6.206.

Information regarding pesticides licensing and proper use in Arkansas can be found on the Arkansas State Plant Board's website at the following address:

<http://plantboard.arkansas.gov/Pesticides/Pages/default.aspx>

2. Changes from the Previous Permit

Parts 1.3.1.1.2 and 1.3.1.2.2 were changed to remove the statement that the Department will review the information. While the Department will review any information submitted regarding discharges to impaired receiving waters, this permit allows for permit coverage without submittal to the Department.

3. Permit Coverage

a. Covered Uses

This permit is available to operators who discharge to Waters of the State from the application of (1) biological pesticides or (2) chemical pesticides that leave a residue (hereinafter collectively "pesticides") when the pesticide application is for one of the following pesticide use patterns:

- 1. 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 but are not limited to mosquitoes and black flies.
- 2. 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.
- 3. Aquatic Nuisance Animal Control** – to control invasive or other nuisance animals in water and at water's edge. Aquatic nuisance animals in this use category include, but are not limited to fish, lampreys, and mollusks.
- 4. Forest Canopy Pest Control** - aerial application of a pesticide over 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.

The four use patterns included in the general permit encompass the majority of pesticide applications that would result in point source discharges to Waters of the State that the EPA covered under the NPDES permit. These use patterns are consistent with those currently regulated by the Arkansas State Plant Board. It is the Department's intent to not require any additional conditions not already required by the State Plant Board.

b. *Individual Permits*

- i. At the discretion of the Director, the Department may require any operator covered under this general permit to apply for and obtain an individual NPDES permit for reasons that include, but are not limited, to the following:
 - a) The discharger is not in compliance with the conditions of the general permit;
 - b) Conditions or standards have changed so that the discharger no longer qualifies for a general permit;
 - c) The Department does not renew this general permit; or
 - d) Effluent limitation guidelines are promulgated for point sources covered by the general NPDES permit;
- ii. The operator will be notified in writing that an application for an individual permit is required. When an individual NPDES permit is issued to an operator otherwise covered under this general permit, the applicability of the general permit to that operator automatically terminates upon the effective date of the individual NPDES permit.
- iii. Any operator covered by this General Permit may request to be excluded from coverage of this general permit by applying for an individual NPDES permit.

3. Effluent Limitation Guidelines

The effluent limitations in the permit are not numeric and constitute the levels of control that reduce the area and duration of impacts caused by the discharge of pesticides to Waters of the State in a treatment area. The effluent limitations provide for protection of water quality standards, including protection of beneficial uses of the receiving waters inside the treatment area following completion of pest management activities.

The effluent limitations in this permit are expressed as specific pollution prevention requirements for minimizing the pollutant levels in the discharge. ADEQ has determined that the combination of pollution prevention approaches and structural management practices required by these limits is the most environmentally sound way to control the discharge of pesticide pollutants to meet the effluent limitations.

The effluent limitations require all levels of operators to “minimize” discharges of pesticide. Consistent with the control level requirements of the CWA, the term “minimize” means to reduce or eliminate pesticide discharges to Waters of the State through the use of control measures to the extent technologically available and economically achievable and practicable.

These effluent limitations are generally preventative in nature, and are designed to minimize pesticide discharges into Waters of the State. Operators are required to minimize the discharge of pesticides to Waters of the State by:

- a. Using the lowest effective amount of pesticide product per application and optimum frequency of pesticide applications as necessary to control the target pest, consistent with reducing the potential for development of pest resistance.

Operators must consider lower application rates, frequencies, or both to accomplish effective control. The lowest effective application rate also reduces the amount of pesticide available that is not performing a specific pest-control function. Using the lowest possible effective rate and frequency of applications can result in cost and time savings to the user. To minimize discharges of pesticide, operators should base the rate and frequency of application on what is known to be effective against the target pest or necessary for resistance management.

Operators must also consider pest resistance to pesticides when reducing discharges from application of pesticide. Resistance management is an important part of pest control. Some pests can develop resistance to pesticides unless resistance management techniques are adopted by pesticide users. Resistance can result in the loss of effectiveness of pesticides with relatively favorable environmental and human health risks and increase reliance on riskier pesticides. When resistance occurs, users may increase rates and frequency of application in an attempt to maintain pesticide effectiveness. This can lead to the loss of efficacy and increased exposure to the pesticide. Pesticide applicators should be aware of the potential for pest resistance to develop by considering the pest, the pesticide and its mode of action, the number of applications and intervals, and application rates.

Pest resistance develops because intensive pesticide use kills the susceptible individuals in a population, leaving only the resistant ones to reproduce. Several pest management tactics help prevent or delay the occurrence of pesticide resistance. One tactic is to reduce dosages in order to avoid establishing a population of resistant organisms and instead allowing some survivors to pass on genes for susceptibility. Another is to apply pesticides over limited areas to reduce the proportion of the total pest population exposed to the pesticide, thereby maintaining a large pool of individuals still susceptible to the pesticide. A third tactic to prevent development of resistant pest populations is to rotate pesticides with different modes of actions against the pests rather than depend on a single mode of action.

- b. All dischargers covered under this permit must conduct spot checks in the area and around where pesticides are applied for possible and observable adverse incidents, as defined in Part 10, 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 must be performed:
 1. During any post-application surveillance or efficacy check that you conduct, if surveillance or an efficacy check is conducted; and
 2. During any pesticide application, when considerations for safety and feasibility allow.

Operators must carry out a visual evaluation of the pest management area in compliance with the permit conditions. Operators are required to do spot checks of areas in and around the treatment area within a reasonable period of time after each pesticide application, not to exceed the time required for maximum effect indicated on the product label to observe the effects of the pesticides on the treatment area and document if there was an observable adverse or toxic impact that may possibly be related to the operator's use of pesticides in the treatment area. Permittees must take corrective actions for any observed problem(s) and document the effect of the corrective measure(s) when completed.

Permittees shall conduct a visual evaluation to determine if the target pest action threshold(s) are met and weather conditions are conducive to proper application, identify conditions (e.g. temperature, precipitation, and wind speed in the treatment area) that support development of

pest populations and are suitable for control activities, and during the application when considerations for safety and feasibility allow.

Performing spot checks during application and post-application helps the permittee determine the effectiveness of the pesticide application as well as check for observable adverse incidents. Requiring spot checks ensures that water quality is protected while allowing for the removal of pest organisms.

- c. If any of the following situations occur, you must review and, as necessary, revise the evaluation and selection of your control measures to ensure that the situation is eliminated and will not be repeated in the future:
1. An unauthorized release or discharge associated with the application of pesticides e.g., spill, leak, or discharge not authorized by this or another NPDES permit occurs;
 2. You become aware, or the State permitting authority concludes, that your control measures are not adequate/sufficient for the discharge to meet applicable water quality standards;
 3. An inspection or evaluation of your activities by a state official reveals that modification to the control measures are necessary to meet the non-numeric effluent limits in the permits; or
 4. You observe, for example during visual inspection or monitoring, that a modification is required or are otherwise made aware of an adverse incident, as defined in Part 10.

The control measures implemented by the permittee should not be seen as unchangeable. Under the permit, revisions should be made to control measures based on the information gathered from visual inspections, State permitting authority reviews and other sources. This revision process ensures that the best feasible methods for controlling pesticide residuals are always in effect.

- d. Other narrative limitations included in the permit are listed below:
1. This permit does not authorize other discharges (such as treated sanitary wastewater, equipment wash water, or wash water from cleaning storage or mixing tanks) from facilities which handle pesticides.
 2. This permit authorizes all persons to handle, use, or apply pesticides in accordance with state laws and regulations and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) which include all instruction on the pesticide label;
 3. Discharge must be controlled as necessary to meet applicable state water quality standards (APC&EC Reg. 2). If it is determined that the discharge causes or contributes to an excursion of applicable water quality standards, corrective action must be taken;
 4. No pesticide may be applied unless that pesticide is registered by the Arkansas State Plant Board (ASPB);
 5. No person shall apply a pesticide unless in accordance with state laws and ASPB or that person is under the direct supervision of someone who is certified by ASPB;

4. Public Notice

a. Public Notice for the General Permit ARG870000

The public notice describes the procedures for the formulation of final determinations and shall provide for a public comment period of 30 days. During this period, any interested persons may submit written comments on the permit and may request a public hearing to clarify issues involved in the permitting decision. A copy of the permit and public notice will be sent via email to the Corps of Engineers, the Regional Director of the U.S. Fish and Wildlife Service, the Department of Arkansas Heritage, the EPA, and the Arkansas Department of Health prior to the publication of that notice.

The public comment period began on the date of publication, July 15, 2016 and ended on August 15, 2016 at 4:30 p.m (Central Time).

b. NOI Review and Public Notification Process

All NOIs submitted for permit coverage under this general permit will be reviewed by ADEQ prior to undergoing a public notification process as follows:

1. Upon receipt of the NOI, ADEQ will review the submitted documents to ensure that all permit requirements are fulfilled. ADEQ may request additional information from the applicant if additional information is necessary to complete the NOI. If ADEQ makes a preliminary determination that the NOI is complete, the NOI will be made available for a five (5) business days public review and comment period on the ADEQ website. ADEQ will review comments received during this period and, if necessary, require the applicant to revise the NOI. If determined appropriate by ADEQ, the operator will be granted coverage under this general permit upon written notification by ADEQ.
2. Comments will only be considered if they regard a specific facility's NOI. Comments on the contents of the General Permit ARG870000 will not be considered during the public comment period for a specific facility's coverage under this permit.

5. Sources

1. EPA 2010 NPDES Draft Pesticides General Permit
2. FIFRA, 7 U.S.C. § 136 *et seq.*
3. 40 C.F.R. §§ 122, 126, 152.3, 174.3, 2000(a)(1), & 2100(b)
4. APC&EC Regs. 2, 6, & 9
5. ARG870000 General Permit
6. EPA No Objection to Preliminary Draft General Permit letter dated July 29, 2016.

6. Economic Impact

The Pesticide Discharges Located within the State of Arkansas General Permit ARG870000 incorporates narrative effluent limitations based on EPA's draft Pesticide General Permit. There are no laboratory testing requirements for compliance with this permit. The permit is also in

compliance with applicable state laws, specifically the Arkansas Water and Air Pollution Control Act, Ark. Code Ann. § 8-4-101 *et seq.* and the regulations promulgated thereunder.

The Arkansas Department of Environmental Quality has not added any requirements not specifically outlined in State and Federal Regulations. Issuance of this permit is required by federal law, based on a decision of the Federal Court of Appeals for the Sixth Circuit in *National Cotton Council of America v. EPA*, 553 F.3d 927 (6th Cir. 2009). It was the Department's intent to not require any additional conditions that are not required by the Arkansas State Plant Board. Therefore, this permit does not place any additional undue burden on any private business entity, large or small. It does not restrict any opportunities that are available to any small businesses. The requirements are set at a level to protect water quality while minimizing the resources required for compliance.

The permit fee of \$200 is allowed by Arkansas Pollution Control and Ecology Commission Regulation No. 9, Fee Regulation.