

**FACT SHEET**  
**GENERAL PERMIT NO. G-KPGP-1016-1**  
**KANSAS PESTICIDE GENERAL PERMIT (PGP)**

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**BACKGROUND**

Prior to November 1, 2011, no National Pollutant Discharge Elimination System (NPDES) permits have been required for the application of pesticides to, over, or near Waters of the US for the purpose of pest control. Over the years there have been incidents throughout the US where localized problems occurred and resulted in litigation challenging whether it was appropriate to use the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) as the means to regulate such activities or whether a National Pollutant Discharge Elimination System (NPDES) permit should be issued under the provisions of the Clean Water Act (CWA). To provide clarification, on November 17, 2006, EPA promulgated the 2006 NPDES Pesticide Rule (2006 Rule) which provided that NPDES permits were not required to apply pesticides to, over, or near a Water of the US where a pesticide is applied to the water or a portion of the pesticide will unavoidably be deposited to the water in targeting pests if the application is consistent with relevant FIFRA requirements. On January 19, 2006, petitions for review of the 2006 Rule were filed in eleven circuit courts with the petitions being consolidated and the case (National Cotton Council, et al, v. EPA) being assigned to the Sixth Circuit Court of Appeals. On January 9, 2009, the Sixth Circuit Court of Appeals vacated EPA's 2006 Rule claiming that biological pesticides and chemical pesticides that leave a residue are considered pollutants and the discharge of pollutants to Waters of the US is prohibited unless authorized by an NPDES permit. EPA did not appeal the ruling and on April 9, 2009, requested the Court to grant a 2-year stay to allow EPA to develop and issue an NPDES Pesticide Permit. The Court granted the stay and established April 9, 2011 as the deadline for issuance of an NPDES Pesticide Permit. On June 4, 2010, EPA public noticed in the Federal Register their draft Pesticide General Permit and Fact Sheet. The initial EPA Pesticide General Permit and Fact Sheet were issued on October 31, 2011. The Kansas Department of Health and Environment's (KDHE's) initial master pesticide general permit became effective November 1, 2011 and is scheduled to expire October 31, 2016.

**PROPOSED ACTION**

The Kansas Department of Health and Environment has prepared a Kansas Water Pollution Control and National Pollutant Discharge Elimination System master general permit for discharges from the application of pesticides to, over, or near Waters of the US. The proposed action consists of the reissuance of a Kansas NPDES Pesticide General Permit.

**RECEIVING STREAM**

All surface waters where discharges from the application of pesticides are located within the borders of Kansas, with the exception of discharges from pesticide application occurring on Indian Lands i.e., Indian Country.

## AUTHORIZED ACTIVITY DESCRIPTION

This general permit covers discharges from the application of pesticides to, over, or near Waters of the US within Kansas where the pesticide is applied directly to the water or where a portion of the pesticide will unavoidably be deposited to the water in targeting pests. For the purpose of this permit, pesticides include both biological pesticides and chemical pesticides that leave a residue. This general permit authorizes coverage for four specific pesticide use patterns as well as providing automatic coverage for pesticide research and development activities. Discharges from the application of pesticides to Waters of the US for pesticide use patterns not listed in this permit, or approved by KDHE, will be in violation of the Clean Water Act (CWA) and are prohibited unless the operator obtained coverage under another NPDES permit. It is KDHE's intent in drafting this general permit to mirror the scope and extent of the discharges from pesticide application activities addressed in EPA's 2011 pesticide general permit and fact sheet and the proposed general permit and fact sheet published in the January 26, 2016, Federal Register.

Operators performing pesticide application to, over, or near a Water of the US, for the pesticide use patterns listed below, must comply with the provisions of the general permit. An operator may be either an entity that has control over the financing for, or the decision to perform pesticide applications (decision maker) or an entity that has day-to-day control of or performs actual pesticide application activities that are necessary to ensure compliance with this permit (applicator). For-Hire or Contract Applicators can be an operator if their contract with a decision maker specifically designates them as being responsible for all duties required by this permit.

All discharges authorized by this general permit involve applications made directly to Waters of the US in order to control pests in or over the water or applications to control pests near water in which pesticides will make unavoidable contact with the water. The general permit is structured by pesticide use patterns. The pesticide use patterns were developed to include discharges that are similar in type and nature and therefore represent the type of discharges and expected nature of the discharge covered under this permit. This general permit covers the following pesticide use patterns: **Mosquito and Other Flying or Aquatic 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. This use pattern includes the application, by any means, of chemical and biological insecticides and larvicides into or over water to control insects that breed or live in, over, or near water. Applications of this nature usually involve the use of ultra-low volume sprays or granular larvicides discharged over large swaths of mosquito breeding habitat and may occur several times per year.

**Weed, Algae, Pathogen, or Fish Parasite Control** - To control weeds, algae, pathogens, or fish parasites in water and at the water's edge including but not limited to lakes, rivers, streams, irrigation canals, and drainage systems. This use pattern includes the application, by any means, of contact or systemic herbicides to control vegetation and algae in water and at water's edge, including irrigation ditches and/or irrigation canals. Applications of this nature may be single spot treatments of infestations or staged large scale treatments intended to clear several acres of waterway. Treatments may be singular or occur several times per year. Pathogen and Fish Parasite control includes application by any means, either for spot control or widespread control, of a pesticide to target a specific pathogen or fish parasite, as required.

**Nuisance Animal Control** - To control invasive or other nuisance animals in water and at the water's edge. Nuisance animals in this use category include, but are not limited to fish, lampreys, and mollusks. This use pattern includes the application, by any means, of chemicals into waters to control a range of animals for purposes such as fisheries management, invasive species eradication or equipment maintenance. Applications of this nature are usually made over an entire waterbody as the target pests are mobile. Treatments are generally made several years apart.

**Forest Canopy Pest Control** - Aerial or ground application of a pesticide to a forest canopy to control the population of a pest species (e.g., insect or pathogen) where to target pests effectively a portion of the pesticide unavoidably will be applied to the forest canopy and deposited to water. This use pattern includes aerial pest control projects, in and over forest canopies where there are waters of the US below the canopy. Applications of this nature usually occur over large tracts of land, and are typically made in response to specific outbreaks. It is understood that for this use pattern pesticides will be unavoidably discharged into waters in the course of controlling for pests that are present near or over waters as a result of the aerial spraying (i.e., a point source discharge from a nozzle) over a forest canopy. These pests are not necessarily aquatic (e.g., airborne non-aquatic insects) but are detrimental to industry, the environment, and public health. It is recognized that mosquito adulticides may be applied to forest canopies, in which case the application would be covered under the "Mosquito and Other Flying or Aquatic Insect Pest Control" use pattern.

**Pesticide Research and Development** - Activities undertaken on a systematic basis to gain new knowledge (research) and/or the application of research findings or other scientific knowledge for the creation of new or significantly improved products or processes (experimental development). These types of activities are generally categorized under the four-digit code of 5417 under the 2007 NAICS. These activities are to target pests located in, over, or near water. The pesticide application is expected to be limited in scope can be applied by any method.

### UNAUTHORIZED ACTIVITIES

This general permit is not intended to address or regulate pesticide application activities associated with conventional terrestrial agricultural practices. For these conventional terrestrial agricultural pesticide application activities, an NPDES permit is not required and any pesticide misuse, over application, over-spray, and drift issues continue to be regulated through the requirements and provisions of FIFRA and/or the Kansas Pesticide Law.

Discharges from the application of pesticides to Waters of the US for pesticide use patterns not listed in this permit, or approved by KDHE are prohibited unless authorized by another NPDES permit.

You are not eligible for coverage under this permit for any discharges from a pesticide application to Waters of the US if the water is identified as impaired by the pesticide being employed or its degradate(s). Impaired waters are those that have been identified by KDHE pursuant to Section 303d of the CWA as not meeting applicable Kansas Surface Water Quality Standards. Impaired waters for the purpose of this permit include both waters which have a KDHE established and EPA approved Total Maximum Daily Load (TMDL) and waters for which KDHE has yet to establish or EPA has yet to approve a TMDL for the pesticide proposed for use or its degradate(s). A list of impaired waters in Kansas, identified pursuant to Section 303d of the CWA is available on KDHE's website at:

<http://kdheks.gov/tmdl/methodology.htm>

Unless you request and receive specific written approval from the Kansas Department of Health and Environment - Bureau of Water for a proposed discharge to an Outstanding National Resource Water (ONRW), you are not eligible for coverage under this permit for discharges from pesticide application to any water designated by KDHE as an ONRW and listed in the Kansas Surface Water Register. Discharges from the application of pesticides to ONRWs will only be considered to restore or maintain water quality, to protect public health, protect the environment, halt the spread or prevent the introduction of invasive species, or that will only degrade water quality on a short-term or temporary basis. Submission of an NOI and written approval from KDHE is required by any operator, whether the annual threshold for the respective pesticide activity is met or exceeded prior to any discharge, including emergency discharges, to a Tier 3 (ONRW) water. Information regarding Kansas waters designated as ONRWs is available at KDHE's website at:

[http://www.kdheks.gov/befs/resources\\_publications.html](http://www.kdheks.gov/befs/resources_publications.html)

You are not eligible for coverage under this permit for discharges from a pesticide application if the point of application is to a water located  $\frac{1}{4}$  - mile or less from a public water supply intake on the water receiving the discharge from a pesticide application unless you have submitted a written request to and received written approval from the KDHE - Bureau of Water prior to commencing the proposed discharge.

#### ANNUAL TREATMENT AREA THRESHOLD AND RATIONALE

The general permit contains requirements including whether a formal application [Notice of Intent (NOI)] is required of an operator which are based on whether the extent of the discharge from pesticide applications exceeds an annual (calendar year) treatment area threshold. Since EPA is responsible for administering both the CWA and FIFRA on a national level, KDHE is deferring to the extensive research and review conducted by EPA Headquarters in establishing both the pesticide use patterns and the annual treatment area thresholds. It is our understanding the justification provided in both EPA's 2011 Fact Sheet and Fact Sheet for the proposed general permit published in the Federal Register January 26, 2016 remain unchanged and pertinent sections from the 2011 Fact Sheet are quoted below:

"EPA also considered the expected volume of discharges from each use pattern. It is difficult to estimate the expected volume of discharges for each use pattern because control measures used by permittees to meet the permit's technology based effluent limitations may vary based on site-specific conditions. For example, the volume of the discharge may vary depending on the specific pesticide being used, the intensity of the pest pressure based on the specific pest problem, and the pest management strategy deemed to be most effective for the pest problem. Moreover, the lowest effective amount of pesticide product necessary to manage pests successfully will vary among operators depending on which control measures the operator uses. Nonetheless, EPA expects that, in general, the volume of the discharge will vary proportionally with the number of acres and linear miles treated. Therefore, for all use patterns, EPA expects that the volume of the discharge for a given pesticide application will be lower when fewer acres or linear feet are treated over a calendar year. Moreover, while there may be more operators applying pesticides to small treatment areas when compared to operators applying to large treatment areas, the volume of discharges from

operators applying to small treatment areas is believed to be substantially less on a per applicator basis and cumulatively less than the volume of discharges from applications made by operators applying to large treatment areas.

Similarly, EPA does not expect the potential for toxic and conventional pollutants in the discharges from pesticides to vary among use patterns. EPA would expect, however, that the potential for high concentrations of toxic or conventional pollutants in the discharge would be smaller when fewer acres or linear feet are treated.

EPA also considered other means of identifying types of discharges covered by this permit. EPA may be able to identify pesticide discharges from operator submitted data, ambient water sampling data reported to EPA and the States, as well as reported information submitted by pesticide dischargers pursuant to state law. EPA recognizes that the availability, quality, and uniformity of these data may be limited.

Lastly, EPA considered the estimated number of discharges to be covered by the permit. While the exact number of entities and thus the number of categorical discharges which may be covered by the permit is unknown, EPA estimates that the PGP covers more than 30,000 applicators per year in the states for which EPA is the permitting authority. Of this total, a large majority represent applicators performing small pesticide treatments that EPA considers to have very low potential for impact (such as herbicide treatments to short sections of ditch or canal banks). Thus, requiring an NOI from all dischargers would be a large burden of little value for permitting authorities and permittees alike.

Based on the analysis outlined above, EPA has determined that it would be inappropriate to require operators that apply pesticides to relatively small areas to submit NOIs. Therefore, EPA is exercising its discretion and not requiring these operators to submit NOIs. EPA developed annual treatment area thresholds for each use pattern that it believes will only exclude those operators making small-area applications from the NOI requirement because their discharges will be comparatively small.

To determine the appropriate annual treatment area thresholds that would trigger the NOI requirement, EPA's Office of Water, Office of Pesticides, Pollution, and Toxic Substances, and Regional Offices, engaged in discussions with USDA, states as co-regulators, and representatives from industry including pesticide registrants, applicators, and land managers. Based on these discussions and EPA's best professional judgment, EPA developed annual treatment area thresholds that differentiate between applications to small areas and those treatments to larger areas which are believed to have a greater potential for impact on waters of the U.S. EPA recognizes there are many unknowns concerning the size, organization, and activities of the permitted universe. Considerable variation in the availability of data and in the consistency of requirements across regions and states resulted in EPA depending on its best professional judgment in setting the NOI annual treatment area thresholds for each of the use patterns."

For the Kansas Pesticide General Permit, any operator that exceeds one or more of the annual treatment area thresholds in any calendar year, during the term of this general permit, must submit an application (NOI). An operator is required to submit an NOI, if an annual treatment area threshold

listed below is exceeded:

| <b>ANNUAL (CALENDAR YEAR) TREATMENT AREA THRESHOLD CRITERIA</b> |                              |
|---|------------------------------|
| <b>PESTICIDE USE PATTERN</b>                                    | <b>THRESHOLD CRITERIA</b>    |
| Mosquito and Other Flying or Aquatic Insect Control:            | 6400 acres <sup>1</sup>      |
| Weed, Algae, Pathogen, or Fish Parasite Control:                |                              |
| In Water  | 80 acres <sup>3</sup>        |
| At Water's Edge   | 20 linear miles <sup>2</sup> |
| Nuisance Animal Control:  |                              |
| In Water  | 80 acres <sup>3</sup>        |
| At Water's Edge   | 20 linear miles <sup>2</sup> |
| Forest Canopy Pest Control:                                     | 6400 acres <sup>1</sup>      |

- <sup>1</sup> For calculating annual treatment area totals, count each pesticide application activity as a separate activity. For example, applying pesticides twice a year to a ten acre site should be counted as twenty acres of annual treatment area.
- <sup>2</sup> Calculations should include the linear extent of the application made at the water's edge adjacent to: (1) Waters of the U.S. and (2) conveyances with a hydrologic surface connection to Waters of the U.S. at the time of pesticide application. For calculating annual treatment totals, count the linear distance at the water's edge of each treatment area just once regardless of the number of applications in a given year.
- <sup>3</sup> Calculations should include the area of the applications made to: (1) Waters of the U.S. and (2) conveyances with a hydrologic surface connection to Waters of the U.S. at the time of the pesticide application. For calculating annual treatment area totals, count each pesticide application area just once regardless of the number of applications in a given year.

The "treatment area" includes the entire area, whether over land or water, where the pesticide application is intended to provide pesticidal benefits. In some instances the treatment area will be larger than the area where pesticides are actually applied. For example, the treatment area for a stationary drip treatment into a canal should be calculated by multiplying the width of the canal by the length over which the pesticide is intended to control weeds. The treatment area for a lake or marine area is the water surface area where the application is intended to provide pesticidal benefits. Treatment area calculations for pesticide applications that occur "at water's edge", where the discharge of pesticides directly to waters is unavoidable, are determined by the linear distance over which the pesticides are applied.

EPA's rationale, based on information available to KDHE at the time this fact sheet was being drafted, for the annual treatment area threshold is provided below:

### Mosquito and Other Flying or Aquatic Insect Pest Control

For Mosquitoes and Other Flying Insect Pest, the annual treatment area threshold has been set at 6400 acres. EPA believes that the vast majority of mosquito control and abatement districts in the U.S. manage areas significantly larger than this threshold and may reasonably expect to exceed it during any given year. For instance, information from the state of Florida on 49 independent mosquito control districts shows that 48 of the 49 districts annually apply to more than 6400 acres, which indicates that applications exceeding this area are quite typical. Similarly, data provided in EPA's draft *Economic Achievability Analysis of the Pesticide General Permit (PGP) for Point Source Discharges from the Application of Pesticides* and included in the administrative record for this permit show similar findings as for Florida. Furthermore, the effective control of other aquatic breeding, flying insects, such as the blackfly, necessitates an application approaching or exceeding this threshold. Therefore, EPA believes the threshold appropriately captures most operators engaging in this use pattern.

### Weed and Algae Control

For Aquatic Weeds and Algae, the annual treatment area threshold has been set at 80 acres or 20 linear miles of treatment on canals and irrigation system conveyances. This threshold has been set to capture operators treating relatively large portions of surface waters and watersheds, such as water management districts, wildlife and game departments, and some homeowner and lake associations. For example, Florida's South Florida Water Management District usually performs treatments of generally 60 acres at a time hundreds of times per year for various invasive plants on Florida's Lake Okeechobee. After reviewing the operations of major irrigation and flood control systems, EPA expects that generally, relatively large entities such as South Florida Water Management District or California Department of Water Resources or organizations with comparable resources are the types of entities that manage 20 or more miles of engineered irrigation system conveyances and that this is a reasonable limit to trigger the NOI requirement. The same rationale is applied to managers of ditch and canal banks. Therefore, EPA believes the threshold appropriately captures the relatively large applications but excludes a significant number of small applications.

### Nuisance Animal Control

Invasive and Nuisance Aquatic Animals are most commonly treated by public agencies such as departments of fish and game or utilities such as water management districts that manage areas of surface water in excess of 80 acres. The high mobility and prolific breeding ability that necessitate control of aquatic animals usually means that their treatment most often occurs in the entirety or large portions of the water bodies they inhabit. For example, fishery management treatments using rotenone must occur in the entire lake and, thus any treatment to a lake of more than 80 acres in area will trigger the annual treatment area threshold. EPA expects that for this reason, only spot treatments to eradicate small emergent populations of sessile animals or treatments to very small water bodies might be excluded from an NOI requirement. Therefore, EPA believes the threshold appropriately captures the relatively large operators engaging in this use pattern.

### Forest Canopy Pest Control

Forest canopy pest suppression programs are designed to aerially blanket large tracts of terrain, throughout which operators may not be able to see waters of the U.S. beneath the canopy. EPA has

set the annual treatment area threshold at 6400 acres for this use pattern with the understanding that this will exclude only the smallest applications from the NOI requirement. These smaller applications generally occur on private lands. Therefore, EPA believes the threshold appropriately captures most operators engaging in this use pattern, particularly public agencies managing large tracts of land.

#### AUTHORIZATION OF COVERAGE UNDER THE KANSAS PGP

Operators proposing to apply pesticides to a Water of the US for one of the designated pesticide use patterns, that do not trigger an annual treatment area threshold criteria, that are not proposing to discharge to an ONRW, or are proposing to discharge within ¼-mile of a public water supply surface water intake continue to receive automatic coverage under the permit and are not required to submit an NOI or any permit fee. Operators proposing a discharge within ¼-mile of a public water supply surface water intake must submit a written request for the proposed activity and receive written approval from KDHE prior to initiation of the pesticide application.

Operators proposing to apply pesticides to a Water of the US for one of the designated pesticide use patterns, that propose a pesticide use pattern not addressed but desire coverage under the PGP, that trigger an annual treatment area threshold criteria, or that are proposing to discharge to an ONRW are required to submit an NOI and \$60 permit fee. In addition, if the operator is proposing to discharge within ¼-mile of a public water supply surface water intake, the NOI submission needs to address this activity as well.

KDHE has made a determination that the submission of an NOI by all operators is not required. The automatic authorization is being provided for a number of reasons. EPA's analysis as to the estimated number of discharges to be covered by an NPDES pesticide general permit is 365,000. While EPA acknowledges the exact number of permittees that will be required to submit an NOI is unknown they estimated in the 2011 Fact Sheet the number in the range of 30,000 i.e., 8%-10%. The Kansas Department of Agriculture (KDA) administers a pesticide applicator licensing program in Kansas. They currently license approximately 14,020 private applicators and 6,574 certified applicators. These numbers would not include city, county, state, or federal agencies applying a general use pesticide (examples: mosquito control in cities and weed control along levees) as they are not required to be certified. KDA's review of their database, considering various certification categories, identified the following numbers of potential permittees: Category 5 - Aquatic (110), Category 7D - Health Related (141), Category 8 - Public Health (26), and Category 2 - Forestry (7). It is clear that from both a national and state perspective, the scope and extent as to the number of persons requiring coverage under an NPDES permit is unknown. Recognizing that Kansas has 20,594 licensed and certified pesticide applicators and assuming the same 8%-10% range estimated by EPA this would require 2,060 persons to file an NOI based on the pesticide treatment threshold criteria. Administratively, KDHE will need to establish a system to review, process, and compile information for permittees required to submit an NOI. The number, nature, and volume of the expected discharges, the human health and environmental effect analysis conducted as a part of the EPA FIFRA pesticide registration process, the potential for the release of toxic pollutants in toxic amounts from the discharges, and the fact the technology-based effluent limitations required in the permit during the interim period include provisions that KDHE expects will provide further protections beyond compliance with the FIFRA requirements are the reasons that during the interim

period KDHE is not requiring the submission of NOIs [40 CFR 122.28(b)(2)(v)].

All operators covered by this general permit must comply with technology-based and water quality-based effluent limitations, standard conditions, monitoring requirements, and reporting requirements.

Since there are no EPA promulgated effluent guideline standards for this activity, KDHE chose non-numeric permit requirements [40 CFR 122.44(k)] that are established based on best professional judgement (BPJ) [40 CFR 125.3(c)], best management practices (BMPs) [40 CFR 122.44(k)], and/or Kansas Surface Water Quality Standards. Operators are expected to use only the amount of pesticide and frequency of application necessary to control the target pest using equipment and application procedures appropriate for the task. They are not to exceed the maximum application rate, established under FIFRA, referenced on the pesticide product label. They are to perform regular maintenance on the application equipment (calibration, cleaning, repair, etc.) to minimize the potential for spills, leaks, and unintended releases. Operators are required to conduct pesticide application activities so as to ensure they do not cause or contribute to an excursion of any applicable numeric or narrative Kansas Surface Water Quality Standard. Operators are required to document application locations, weather conditions, the pesticide(s) used, and the amount of pesticide used. Operators are required to report to KDHE any adverse incidents as well as any spills, leaks, or unintended releases.

Discharges from the application of pesticides to Waters of the US for pesticide use patterns not listed in this permit, or approved by KDHE are prohibited unless the operator does so under another NPDES permit.

The permit addresses continuation of coverage, following the expiration date until such time as a new general permit is issued, payment of an annual fee for operators submitting an NOI, permit renewal requirements, termination of coverage under this permit, and the transfer of permit coverage.

#### COMPLIANCE WITH OTHER FEDERAL AND STATE LAWS AND REGULATIONS

Permittees must comply with all other Federal and Kansas laws, statutes, and regulations that pertain to the storage, handling, use, and application of pesticides. Coverage under this general permit does not negate the requirements of any Federal or Kansas law, statute, or regulation and specifically references FIFRA, the Kansas Agricultural Chemical Act, and the Kansas Pesticide Law.

#### TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND RATIONALE

Based on the extensive review conducted by EPA Headquarters, KDHE also chose to employ non-numeric permit requirements [40 CFR 122.44(k)] that are established based on best professional judgement (BPJ) [40 CFR 125.3(c)] and best management practices (BMPs) [40 CFR 122.44(k)] as the basis for the technology-based requirements of this general permit.

The technology-based effluent limitations in this permit are non-numeric based on the following facts, as summarized by EPA:

“The point in time for which a numeric effluent limitation would apply is not easily determinable. For discharges from the application of pesticides, the discharges can be highly intermittent with those discharges not practically separable from the pesticide application itself. For example, the discharge

from the application of a chemical pesticide to a water of the U.S. is represented by the residual remaining in the ambient water after the pesticide is no longer serving its intended purpose (i.e., acting as a pesticide against targeted pests in the applied medium). Chemical pesticides applied directly to water are not considered pollutants until some time after actual discharge at which point the pesticides will have performed their intended function for pest control, dissipated in the waterbody, and broken down into other compounds to some extent, etc. This discharge also will have combined with any other discharges to that waterbody (be it from other point sources, non-point source runoff, air deposition, etc). Given this situation, it is not clear what would be measured for a numeric limit or when.

For discharges from the application of pesticides, there are often many short duration, highly variable, pesticide discharges to surface waters from many different locations for which it would be difficult to establish a numeric limitation at each location. This variability makes setting numeric effluent limitations for pesticide applications extremely difficult. In this situation, requiring the use of standard control practices (i.e., narrative non-numeric effluent limitations), provides a reasonable approach to control pesticides discharges.

The precise location for which a numeric effluent limitation would apply is not clear. Discharges from the application of pesticide are different from discharges of process wastewater from a particular industrial or commercial facility where the effluent is more predictable and easily identified as an effluent from a conveyance (e.g., pipe or ditch), can be precisely measured for compliance prior to discharge, and can be more effectively analyzed to develop numeric effluent limitations.

Information needed to develop numeric effluent limitations is not available at this time. To develop numeric technology-based effluent limitations, EPA must fully evaluate factors outlined in 40 CFR 125.3, such as the age of equipment and facilities involved, the process employed, the potential process changes, and non-water quality environmental impacts. In addition, EPA estimates that more than 400 pesticide active ingredients contained in over 3,500 pesticide products may be covered under this permit.

Technology-based effluent limitations in this permit are presented specific to each pesticide use pattern to reflect the variations in procedures and expectations for the use and application of pesticides. These non-numeric effluent limitations are expected to minimize environmental impacts by reducing the discharge of pesticides to waters of the U.S., thereby protecting the receiving waters, including meeting of all applicable water quality standards.

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

Just as there is variability in the pesticide applications as described above, there is variability in the control measures that can be used to meet the effluent limitations. Therefore, KDHE is not

mandating the specific control measures operators must implement to meet the limitations. Control measures can be actions (including processes, procedures, schedules of activities, prohibitions on practices and other management practices), or structural or installed devices to prevent or reduce water pollution. The key is determining what measure is appropriate for your situation in order to meet the effluent limitation. In this permit, operators are required to implement site-specific control measures to meet these limitations.

The technology-based effluent limitations required by this general permit include:

All Operators are required to:

Use site-specific control measures to minimize the discharge of pollutants from pesticide application.

Use only the amount of pesticide and frequency of application necessary to control the target pest using equipment and application procedures appropriate for the task. In no case exceed the maximum application rate, established under FIFRA, referenced on the pesticide product label.

Perform regular maintenance activities on application equipment (calibration, cleaning, repair) to minimize the potential for spills, leaks, and unintended releases.

Operators required to submit NOIs must also:

Prior to the first application and annually thereafter conduct certain pest management practices dependent upon the specific use pattern employed (identify affected areas, pest densities, pest control strategy, breeding sites or sources, action thresholds, etc.).

Prior to the first application and annually thereafter select and implement control measures for each pesticide use pattern and pest management area.

If a pesticide will be employed as the control measure, conduct certain pesticide use pattern specific activities such as conducting pre-application surveillance, initiate application only when the action threshold is reached, etc.

#### WATER QUALITY-BASED EFFLUENT LIMITATIONS AND RATIONALE

This general permit requires that each operator conduct pesticide application activities so as to ensure they do not cause or contribute to an excursion of any applicable numeric or narrative Kansas Surface Water Quality Standard.

Currently, the only pesticide on the Kansas 303d list of impaired waters is the pesticide Atrazine. Based on EPA's review of potential pesticide water quality issues, as summarized in the 2011 Fact Sheet, and their experience in administering the FIFRA program for the past 44 years, KDHE concurs with EPA's expectation that compliance with the other conditions of their draft general permit, which the Kansas PGP generally mirrors, will result in discharges that are controlled as necessary to meet applicable water quality standards based on the cumulative effect of the following factors, which are described below:

“Under FIFRA, EPA evaluates risk associated with pesticides and mitigates unreasonable ecological risk. Compliance with FIFRA is assumed.

EPA evaluated national-scale ambient monitoring data, as well as the frequency of the identification of specific pesticides as the cause of water impairments, to assess whether pesticide residues are currently present in waters at levels that would exceed water quality standards. The monitoring data show that, in most samples, most pesticides were below ambient water quality criteria or benchmarks developed by EPA's Office of Pesticide Programs (OPP) as indicators of narrative water quality criteria. For the small number of pesticides found in monitoring data to be present above such benchmarks, the evaluation, as summarized in Appendices B and C of this fact sheet, also documents risk mitigation actions taken by EPA (such as cancellation of pesticide uses) that EPA expects have reduced the levels of those pesticides in water.

Technology-based effluent limitations in the PGP provide further protections beyond compliance with existing FIFRA requirements.

Biological pesticides discharged to waters, by regulatory definition, do not work through a toxic mode of action. For chemical pesticides, the discharges covered under this permit are the residues after the pesticide has performed its intended purpose. Thus, the residue will be no higher than, and in many instances, lower than, the concentration of the pesticide as applied.

The PGP excludes pesticide applications that result in discharges of any pesticide to (1) waters impaired for that pesticide or (2) any Tier 3 waters (i.e., outstanding national resource waters).” Note: The Kansas PGP and we understand the EPA final PGP will not contain outright prohibitions on discharging to Tier 3 waters i.e., ONRWs but require a more detailed review and specific approval of the proposal prior to initiating application activities.

#### MONITORING REQUIREMENTS - APPLICABLE TO ALL OPERATORS

All operators shall perform or ensure their employee, contractor, subcontractor, contract applicator, or other agent performing the pesticide application performs and documents the monitoring requirements addressed below.

The date(s) pesticide application conducted.

The name of the applicator or the company performing the pesticide application.

The treatment area(s) where pesticide application is conducted.

The acres or linear miles treated for all applicable use patterns covered under this permit.

Environmental conditions at the treatment area prior to pesticide application (e.g., temperature, precipitation, and wind direction and speed).

The pesticide being applied and the EPA registration number.

The amount of pesticide applied to the treatment area(s).

The maximum application rate noted on the pesticide product label.

The date the application equipment was last calibrated.

All operators authorized coverage under this permit, or their designees, shall conduct spot check visual assessments of the treatment and surrounding area(s) where pesticides are applied when:

When an operator or their designee observes or becomes aware of a possible adverse incident, as defined in Appendix A, (i.e., that a person, domesticated animal, or non-target organism may have been exposed to a pesticide and the person, domesticated animal, or non-target organism suffered a toxic or adverse effect).

When the operator or their designee observes or becomes aware of any recreational water use.

When the operator or their designee observes or becomes aware of any municipal water use.  
During any post-application surveillance or efficacy check, if a surveillance or efficacy check is conducted.

Visual assessments will consist of spot checks in and around the area(s) where pesticides were applied for possible and observable adverse effects that are unusual or unexpected (e.g., effects are to organisms not otherwise described on the pesticide product label or otherwise not expected to be present as a result of exposure to the pesticide) including, but not limited to:

Distressed or dead juvenile and small fish.

Washed up or floating fish.

Fish swimming abnormally or erratically.

Fish laying lethargically at water the water surface or in shallow water.

Fish that are listless or non-responsive to disturbances.

Stunting, wilting, or desiccation of non-target submerged or emergent aquatic plants.

Other dead or visibly distressed non-target aquatic organisms (amphibians, turtles, invertebrates, etc.).

#### CORRECTIVE ACTION AND REPORTING - APPLICABLE TO ALL OPERATORS

Situations Requiring Revision of Control Measures:

If any of the following situations occur, the permittee 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:

An unauthorized release or discharge (e.g., spill, leak, or discharge not authorized by this or another NPDES permit) occurs.

You become aware, or KDHE concludes, that your control measures are not adequate or sufficient for the discharge to meet applicable surface water quality standards.

Any monitoring activities indicate or you become aware that you failed to:

Use only the amount of pesticide or the frequency of pesticide application necessary to control the target pest using equipment and application procedures appropriate for the task.

Apply pesticide at a rate that did not exceed the maximum application rate, established under FIFRA, referenced on the pesticide product label.

Perform regular maintenance activities to reduce the potential for 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 calibrating, cleaning, and repairing such equipment to ensure effective pesticide application and to deliver the precise quantity of pesticide needed to achieve the greatest efficacy against the target pest.

An inspection by KDHE of your activities reveals that modifications to the control measures are necessary to meet the non-numeric effluent limits in this permit.

You observe or become aware of an adverse incident.

Changes must be made before the next pesticide application that results in a discharge if practicable, or if not, as soon as possible thereafter.

**Adverse Incident Notification:**

Immediate verbal reporting followed by a written report within 30 days.

Provides detailed information as to what information is required when reporting.

**Spill, Leak, or Other Unpermitted Discharge:**

Immediate verbal reporting followed by a written report within 30 days.

Provides what information is required when reporting.

**RECORDKEEPING & DOCUMENT RETENTION - APPLICABLE TO ALL OPERATORS**

You must keep written records as required in this permit. These records must be accurate and complete and sufficient to demonstrate your compliance with the conditions of this permit. You can rely on records and documents developed for other obligations, such as requirements under FIFRA or the Kansas Pesticide Law.

**Required Records For All Operators:**

Have a copy of this permit or be able to access an electric copy of this permit.

A copy of any Adverse Incident Reports.

Your rationale for any determination that reporting of an identified Adverse Incident is not required consistent with allowances identified in Part 5.3.1.

A copy of any Incident Reports addressing surface water quality standards violations or violations of the maximum pesticide application rate, established under FIFRA, and referenced on the pesticide product label.

A copy of any corrective action documentation.

Pre-application and post application surveillance: surveillance date(s), treatment areas where surveillance conducted, and findings of surveillance.

Target pest(s).

Pest density, presence of pathogen, or presence of fish parasites prior to pesticide application.

Company or agency name and contact information conducting pesticide application.

Pesticide application date(s).

Map of the pest management area. Describe and delineate on the pest management area map the treatment area(s), size (acres or linear miles) of treatment area, and the location and identification of any waters to which you discharge any pesticide(s) to or where the application of the pesticide will unavoidably be deposited to the water.

Name of each pesticide product used including the EPA registration number.

Quantity of the pesticide applied (and specify if quantities are for the pesticide product as packaged or as formulated and applied).

Concentration (%) of active ingredient in the formulation.

For pesticide applications directly to waters, the effective concentration of active ingredient required for control.

Any unusual or unexpected effects identified to non-target organisms.

Documentation as to when the application equipment was calibrated.

#### Required Records For Operators Submitting NOIs:

A copy of the NOI and any attachments submitted to KDHE.

Any correspondence exchanged between you and KDHE specific to coverage under this permit.

A copy of the authorized NOI granting coverage under this permit.

Documentation of the pest management measures for each pest management area and specific pesticide use pattern as required in Part 2.2.

A copy of any Permit Transfer Request and any correspondence between you and KDHE regarding the request.

#### Maintenance and Availability of Records:

All records must be documented as soon as possible but no later than 14 days following completion of such activity.

You must retain any records required under this permit for at least 3 years from the date that your coverage under this permit expires or is terminated.

You must make available to any authorized representative of KDHE or the U.S. Environmental Protection Agency, all records kept under this permit upon request and provide copies of such records, upon request.

#### STANDARD PERMIT CONDITIONS - APPLICABLE TO ALL OPERATORS

Where not addressed elsewhere in the general permit, the Standard Permit Conditions in Appendix B of the general permit are essentially consistent with the permit provisions in 40 CFR 122.41 but have been modified to reflect the nature of discharges covered by this general permit. The permittee is required to comply with the provisions of the following standard conditions:

Duty to Comply

Administrative, Civil, and Criminal Liability

Need To Halt Or Reduce Activity Not A Defense

Permit Modifications and Terminations

Change In Discharge

Property Rights

Right of Entry

Duty To Provide Information

Availability of Records

Severability

Oil and Hazardous Substance Liability

Signatory Requirements and Changes to Signature Authorization

Additional Information

#### PUBLIC NOTICE & PARTICIPATION AND CONTACT INFORMATION

In accordance with Kansas Administrative Regulations (K.A.R.) 28-16-57 through 63 and 28-16-150 through 154, and the authority vested with the state by the administrator of the U.S. Environmental Protection Agency, a Pesticide General Permit (PGP) for Point Source Discharge from the Application of Pesticides to Waters of the U.S. has been prepared and is being placed on public notice in the Kansas Register on September 8, 2016, to receive public comments. The final action

will result in the issuance of a Kansas Water Pollution Control Permit and a National Pollutant Discharge Elimination System general permit being issued. Persons wishing to comment on the draft general permit must submit their comments in writing to the Kansas Department of Health and Environment if they wish to have the comments considered in the decision-making process. Comments should be submitted to:

Donald Carlson  
Kansas Department of Health and Environment  
Bureau of Water - Industrial Program Section  
1000 SW Jackson Street, Suite 420  
Topeka, Kansas 66612-1367

All comments regarding the draft general permit received on or before October ??, 2016 will be considered in the formulation of the final determination regarding this public notice and the draft general permit.

After review of any comments received during the public notice period, the Secretary of Health and Environment will issue a determination regarding final agency action on the draft general permit. If response to the draft general permit indicates significant public interest, a public hearing may be held in conformance with K.A.R. 28-16-61.

The draft general permit, fact sheet, and any supporting information including any comments received are on file and may be inspected at the offices of the Kansas Department of Health and Environment, Bureau of Water. These documents are available upon request at the copying cost assessed by KDHE. Division of Environment Offices are open from 8:00 a.m. to 5:00 p.m. Monday through Friday, excluding holidays.

Information regarding the draft pesticide general permit can be obtained by contacting:

Donald Carlson  
Kansas Department of Health and Environment  
Bureau of Water - Industrial Program Section  
1000 SW Jackson Street, Suite 420  
Topeka, Kansas 66612-1367  
(785) 296-5547  
[dcarlson@kdheks.gov](mailto:dcarlson@kdheks.gov)

or

Steve Caspers  
Kansas Department of Health and Environment  
Bureau of Water - Industrial Program Section  
1000 SW Jackson Street, Suite 420  
Topeka, Kansas 66612-1367  
(785) 296-5551

[scaspers@kdheks.gov](mailto:scaspers@kdheks.gov)