

FACT SHEET AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

For proposed Texas Pollutant Discharge Elimination System (TPDES) General Permit No. TXG870000 for point source discharge from the application of biological pesticides or chemical pesticides that leave a residue in water when such applications are made into or over, including near waters of the United State (U.S.) to control pests.

Issuing Office: Office of Water
Texas Commission on Environmental Quality
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Permit Action: New

I. Summary

The Texas Commission on Environmental Quality (TCEQ) is proposing to issue a general permit authorizing the application of pesticides into or over, including near waters of the U.S. for the control of mosquito and other insect pests, vegetation and algae pest, animal pest, area-wide and forest canopy pests. These operations are currently regulated under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) of the U.S. Environmental Protection Agency (EPA).

The annual pest management area threshold for mosquito and other insect pests, area-wide pest and forest canopy pest controls is 6,400 acres or greater; and for vegetation and algae pest and animal pest controls, the treatment area threshold is 100 acres in water and 200 linear miles at water's edge. The permit specifies which operator may be authorized under this general permit and those which must be authorized by an individual TPDES permit. The permit identifies three levels of authorization for eligible operators, Levels I (IA and IB), II, and III. Level IA operators meet the pest management or treatment area thresholds and may apply Restricted Use Pesticides (RUP) or State-Limited-Use (SLU) pesticide or Regulated Herbicides (RH) and therefore meet the criteria and are required to submit a Notice of Intent (NOI) to obtain authorization. Level IB consists of operators that meet the pest management or treatment area threshold but will be applying General Use pesticides (GUP) or private entities applying GUP, RUP, SLU pesticides or RH to waters of the U.S where there is only private access and therefore are required to submit a complete Self Certification Form to the Commission to obtain permit coverage. Level II are smaller operators that do not meet the pest management area threshold and may be applying RUP, SLU pesticide, RH or GUP and are required to complete a Self Certification Form and keep it onsite. Level III are public or private entities that apply GUP to less than 1 acre of waters of the U.S per calendar year and are required to follow the FIFRA label.

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II. Executive Director's Recommendation

The Executive Director has made a preliminary decision that the general permit, if issued, meets all statutory and regulatory requirements. The proposed permit will expire five years from the date of issuance in accordance with 30 TAC §205.5(a).

III. Permit Applicability

A. Discharges Eligible for Authorization

1. If a chemical pesticide leaves any excess or residue after performing its intended purpose, such excess or residue would be considered a pollutant, and excess quantities of a biological pesticide and the biological pesticide itself are considered a pollutant under the Clean Water Act.

This general permit authorizes the discharge of biological pesticides or chemical pesticides (including insecticides, nematicides, rodenticides, fungicides and herbicides) that leave a residue in water when such applications are made into or over, including near waters of the United States (U.S.) including exceptional, high, intermediate, limited or no significant aquatic life use receiving waters as designated in the Texas Surface Water Quality Standards only according to limitations, requirements and other conditions set forth in this general permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the TCEQ (Commission). The discharge of pesticides in accordance with the terms and conditions of this general permit will provide adequate protection of non-target organisms and will not have a significant adverse effect on receiving water quality or violate the standards of the receiving water's classification. The general permit covers the following use patterns:

- (a) Mosquito and Other Insect Pest Control.

Pesticide applications to control mosquitoes and nuisance insect pests, such as Mayflies, Caddisflies, Stoneflies or Black flies, that develop or are present during a portion of their life cycle in or above standing or flowing water. 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 Waters of the U.S. 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 often are performed several times per year.

- (b) Vegetation and Algae Pest Control.

Pesticide applications to control invasive or nuisance vegetation and algae in waters of the U.S. and at water's edge, including, but not limited to, free-floating plants such as duck weed or watermeal, emergent plants such as cattails, noxious weeds, non-native and potentially invasive plants, filamentous algae,

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Cyanobacteria, or phytoplankton and other vegetation growth patterns that would reduce or impede water flows. This use pattern includes the application, by any means, of contact or systemic herbicides to control vegetation and algae in Waters of the U.S. and at water's edge, including ditches and/or canals. Applications of this nature typically are single spot pesticide applications to control infestations or staged large scale pesticide applications intended to control pests in several acres of waterway. Pesticide applications in a treatment area may be performed one or more times per year to control the pest problem.

(c) Animal Pest Control.

Pesticide applications to control invasive or nuisance animals in waters of the U.S. and at water's edge. Animal pests include, but are not limited to, fish, lampreys, mollusks, or rodents. This use pattern includes the application, by any means, of chemicals into Waters of the U.S. to control a range of animal pests for purposes such as fisheries management, invasive species eradication or equipment operation and maintenance. Applications of this nature are often made over an entire or large portion of a water body as typically the target pests are mobile. Multiple pesticide applications to a waterbody for animal pest control are often made several years apart.

(d) Area-Wide Pest Control.

Aerial and ground application of a pesticide to control the population of a target pest where control technologies over large areas are most effective to avoid substantial and widespread economic or social impact. These efforts involve aerial and ground pesticide applications to areas that include a wide range of diverse habitats such that a portion of the pesticide applied will unavoidably be applied over and deposited into Waters of the U.S. to target the pests effectively. Examples include, but are not limited to, aerial crop dusting, aerial and ground application for the control of nuisance and disease borne mosquitoes using pesticides, ground application of pesticides for the maintenance of rights-of-ways, drainage ditches, and other governmental infrastructure for crucial functions of health and safety; urban landscaping, treating orchard pests, or controlling fruit flies.

(e) Forest Canopy Pest Control.

This use pattern includes aerial and ground pest control projects, in and over forest canopies where Waters of the U.S. exist below the canopy and the use of pesticide will unavoidably be discharged into waters. in the course of controlling the pest. Applications of this nature usually occur over large tracts of land, and are typically made in response to specific outbreaks. These pests are not necessarily aquatic (e.g., airborne non-aquatic insects) but are detrimental to industry, the environment, and public health. Mosquito adulticides may be applied to forest canopies. Examples include spraying trees to control target pest

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like aphids or pecan weevils, using pesticides herbicides to manage in forested stands or those planned for reforestation, or using herbicides to manage vegetation to maintain right of ways, or application of pesticides for fungi, insects, weed or vertebrate pests in forest trees management.

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 U.S. that the US EPA covered under the NPDES permit. In developing the Texas Pesticides GP, the EPA draft was presented to the stakeholders and their inputs were among those used to draft the TPDES. Among their suggestions was that no group should be denied coverage under this permit and as such a fifth use pattern, the Area-Wide Pest Control which was in the original EPA draft was added. This will provide coverage for Agricultural Producers and Forestry operations that might need coverage if they have an intermittent stream or creek that are waters of the U.S. running across their pest management area. All pesticides applied directly to water to control pests in or over, including near waters are covered by this permit.

2. Determination of Pest Management Area Annual Threshold for the Pesticide Use Patterns.

In most instances, pesticides applications are repeated five times or more to control most pests (Impact Assessment Inc. and the California Department of Health Services, Environmental Health Investigations Branch, 2000; Texas Parks & Wildlife Department, 2010; Harris County Mosquito Control District, 2009). Therefore for calculating the annual pest management or treatment area totals for this permit, the U.S. EPA thresholds (640 acres, 20 acres and 20 linear miles) have been increased ten-fold for the mosquito and other insect pests, area wide pest control and forest canopy pest use patterns and five-fold for vegetation and algae pest and animal pest controls. Each pesticide application activity is not considered as a separate activity as long as it is carried out on the same pest management or treatment area due to the number of applications required to control the pests in certain areas. Therefore, only the operators that meet or exceed the annual thresholds have been required to submit a NOI if the operators will be applying restricted use or state-limited-use pesticides or regulated herbicides to waters of the U.S.

To calculate the annual threshold for vegetation and algae and animal pest control in water, 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 pesticide application. For calculating annual threshold for vegetation and algae and animal pest control at water's edge, calculations should include the area of the application made at water's edge adjacent to: (1) waters of the U.S. and (2) conveyances with a hydrologic surface connection to a water of the U.S. at the time of pesticide application. Calculations should include either the linear extent of or the surface area of waters for applications made to Waters of the U.S. Count each treatment areas once, regardless of the number of pesticide application activities performed on that area in a given year. If a pest management area has multiple

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treatment area, treatment areas are not additive. At least, one treatment area must meet the threshold for the purpose of determining whether NOI is required. Also, for linear feature (e.g. a canal or ditch), use the length of the linear feature whether treating in or adjacent to the feature, regardless of the number of applications made to that feature during the calendar year. For example, whether treating the bank on one side of a two hundred (200) – mile long ditch, banks on both sides of the ditch, and/or water in that ditch, the total treatment area is two hundred miles for purposes of determining if a NOI is required to be submitted. Additionally, if the same two hundred miles area is treated more than once in a calendar year, the total area treated is still two hundred miles. The treatment area for these two use patterns is not additive over the calendar year.

The annual threshold for mosquito and other insect pest, area-wide pest and forest canopy pest controls include land and water. If an operator has 6,400 acres or more of land that has a creek or an intermittent stream that is a Water of the U.S. within it (pest management area), the operator is required to submit a NOI for coverage under the general permit. However, if there is no creek or intermittent stream in the pest management area, the operator is not required to submit a NOI. It is believed that in the course of applying the pesticide to the pest management area that the operator will not turn off the nozzle when they get to the creek to continue on the other side of the creek. Therefore, the pesticide will be applied directly to water to control pests that are present near waters. The following annual thresholds have been set for the various use patterns covered by the permit:

- (a) Mosquito and Other Insect Pests Control- Pest management area of 6,400 acres or more;
- (b) Vegetation and Algae Pest Control- Treatment on canals and irrigation system conveyances of 100 acres in water or 200 linear miles at water's edge;
- (c) Animal Pest Control- Treatment area of 100 acres in water or 200 linear miles at water's edge;
- (d) Area-wide Pest Control- Pest management area of 6,400 acres or more; or
- (e) Forest Canopy Pest Control- Pest management area of 6,400 acres or more.

B. Permit Limitations

Irrigation return flows from agriculture or agricultural stormwater runoff or nonpoint source silvicultural activities is exempt from this permit, even when they contain pesticides or pesticide residues, as the CWA specifically exempts these categories of discharges from requiring TPDES permit coverage. Additionally, other stormwater runoff is either: (a) already required to obtain TPDES permit coverage as established in section 402(p) of the CWA or (b) classified as a non-point source discharge for which TPDES permit coverage is not required. Existing stormwater permits for

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construction, industry, and municipalities already address pesticides in stormwater. The Commission has determined not to issue permit coverage under this permit if:

1. The use pattern is not listed in the permit.
2. The waters of the U.S. is identified as impaired on the current EPA approved 303(d) list of impaired waters, as required by 33 USC §1313(d), where the water is impaired for the pesticide or its degradates, unless the discharges are consistent with the U.S. EPA approved TMDL and the TCEQ implementation plan. Impaired waters for the purposes of this permit include both waters with EPA-approved and EPA-established Total Maximum Daily Loads (TMDLs) and waters for which EPA has not yet approved or established a TMDL.
3. The water body is designated as Tier 3 (outstanding natural resource waters) for anti-degradation purposes under 30 TAC §307.5(b)(3).
4. The operator is currently covered for the discharge of pesticides under another TPDES permit, or covered within five years prior to the effective date of this permit by an individual permit or alternative general permit where that permit established site-specific numeric water quality-based limitations or the activities under any TPDES permit has been or in the process of being denied, terminated, or revoked by Commission.
5. The discharges are prohibited by 30 TAC, Chapter 311 (relating to Watershed Protection), 30 TAC, Chapter 213 (relating to the Edwards Aquifer), or any other applicable rules or laws.
6. The discharges would cause or contribute to a violation of water quality standards or would fail to protect and maintain existing designated uses of receiving waters.
7. Authorization may be denied if the Executive Director determines that the discharge will not maintain existing uses of receiving waters, or deny a NOI or revoke authorization if the applicant submits any false information in a NOI, or cancel, revoke, or suspend authorization to discharge based on a finding of historical and significant noncompliance with the provisions of this general permit, or operator has a customer classification that is a poor performer under 30 TAC § 60 (relating to Compliance History).

IV. Permit Coverage

1. Level IA: Operators that meet the following criteria:
 - (a) public entities applying Restricted Use Pesticides (RU), State Limited Use (SLU) Pesticides or Regulated Herbicides (RH) to waters of the U.S. where there is public or private access or private entities applying RU or SLU pesticide or RH to waters of the U.S. where there is public access; and

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- (b) meet or exceed the annual pest management area thresholds for the pesticide use patterns in one calendar year.

Submittal of a NOI is required for Level IA authorization. Public or private entities with more than five (5) pest management areas within a single county or a county whose pest management area is the same as its jurisdictional boundary may submit a single NOI for a county-wide permit and persons or entities with more than ten (10) pest management areas within the state of Texas may submit a single NOI for a statewide permit. The NOI form must require, at a minimum, the following information:

- (a) the legal name, address and telephone number of the applicant;
- (b) the site name or identifier of the Pest Management Area(s);
- (c) the name of the water body (receiving waters) or TCEQ 4-digit Segment Number that will receive the pesticide discharge;
- (d) the county where the Pest Management Area is located;
- (e) the contact and contact address for the PDMP;
- (f) the pesticide use pattern(s); and
- (g) certification that the PDMP will be prepared and implemented.

Operators in this category include but are not limited to state and federal agencies, cities, counties, school districts and pest control companies.

2. Level IB: Operators that meet the following criteria:

- (a) public entities applying general use (GU) pesticides to waters of the U.S. where there is public or private access, private entities applying GU pesticides to waters of the U.S. where there is public access, or private entities applying GU, RU or SLU pesticides or RH to an area where there is only private access; and
- (b) meet or exceed the pest management area threshold for the pesticide use patterns in one calendar year.

Operators meeting the description and criteria that qualify for Level IB are not required to submit a NOI in order to be authorized under this general permit. However, the operators are required to submit a complete Self Certification Form to the Commission and comply with all applicable permit conditions to demonstrate authorization under this permit.

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Operators in this category include but are not limited to state and federal agencies, cities, counties, pest control companies doing pest control in Parks, farmers, homeowner's association, pest control company doing pest control in neighborhoods.

3. Level II: Operators that meet the following criteria:
 - (a) Public or private entities applying RU or SLU pesticides or RH to waters of the U.S. where there is public or private access, or public or private entities applying GU pesticides to one (1) acre or more of waters of the U.S. in one calendar year where there is public or private access; and
 - (b) do not meet the pest management area thresholds for the pesticide use patterns in one calendar year.

Operators are required to complete a Self Certification Form and keep it onsite.

Operators in this category include but are not limited to state agencies, cities, and counties, farmers on stock ponds, homeowner's association around lake, pest control company doing pest control in neighborhoods.

4. Level III: Public or private entities applying GUP to less than one (1) acre of waters of the U.S. where there is public or private access. According to the U.S. EPA, it is estimated that 74 % of all U.S. households used some form of pesticide, and spent \$20/year for pesticides applied by the homeowner (but not hired applicators). As such operators in this group are required to follow the pesticide label instructions only and are not required to keep record or report pesticide use. Operators in this group may include but are not limited to state agencies, cities, and counties, farmers on stock ponds, homeowner's association around lake, pest control company doing pest control in neighborhoods, homeowners, gardeners.
5. Discharge Authorization Date

Provisional authorization to discharge under the terms and conditions of this general permit begins 48 hours after a completed NOI is postmarked for delivery to the TCEQ. For electronic submittal of NOIs, provisional authorization begins 24 hours following confirmation of receipt of the electronic NOI form by the TCEQ. Following review of the NOI, the Executive Director will: 1) determine that the NOI is complete and confirm coverage by providing a written notification and an authorization number; 2) determine that the NOI is incomplete and request additional information needed to complete the NOI; or 3) deny coverage in writing. Denial of coverage will be made in accordance with TCEQ rules related to General Permits for Waste Discharges, 30 TAC §205.4.

Provisional authorization has been provided for all operators that are required to submit a NOI or Self Certification Form from the effective date of this permit until 90 days after the effective date of this permit . All operators required to submit a NOI or

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Self Certification Form must do so prior to the deadline to continue authorization under this general permit. Failure to submit a NOI or Self Certification Form by the deadline will result in expiration of the provisional authorization to operate under the general permit.

6. Notice of Change

Permittees that submitted a NOI are required to submit a Notice of Change (NOC) to supplement or correct information if any of the following occurs:

- (a) the permittee knows or should have known that the permittee failed to submit any relevant facts or incorrect information in the NOI; or
- (b) relevant facts in the NOI change, including but not limited to: permittee address, permittee phone number, the addition or removal of a pest management area, the site name or identifier of the Pest Management Area, a change in the location of records for the pest management area, a change in the location of the PDMP, or a change in the contact or contact address for the PDMP.

7. Termination of Coverage

Termination of Permit coverage under the terms and conditions of this general permit are as follows:

- a. Permittees that are required to submit a NOI will terminate coverage by the submittal of a Notice of Termination (NOT) on a form approved by the Executive Director when: 1) the permittee changes; 2) the discharge becomes authorized under an individual permit or alternative general permit; or 3) when the permittee determines that the annual threshold will not be exceeded during the remainder of the permit term.

Authorization to discharge terminates at midnight on the day that a NOT is postmarked for delivery to the TCEQ. If TCEQ provides for electronic submission of NOTs, then authorization to discharge terminates immediately following confirmation of receipt of the electronic NOT form by the TCEQ.

- b. Permittees that are not required to submit a NOI will terminate permit coverage when they no longer have a discharge from the application of pesticides. These operators are not required to submit a NOT to terminate permit coverage.

V. Permit Conditions and Effluent Limitations

The effluent limitations in the permit are non-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 U.S. in a treatment area. The effluent limitations provide for protection of

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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. TCEQ 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.

- A. The non-numeric 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 U.S. 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 U.S. Operators are required to minimize the discharge of pesticides to waters of the U.S. by:

1. Using only the amount of pesticide and frequency of pesticide applications necessary to control the target pest using equipment and application procedures appropriate for this task.

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

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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.

2. Maintaining pesticide application equipment in proper operating condition, including requirement to calibrate, clean, and repair such equipment and prevent leaks, spills, or other unintended discharges.

To minimize discharges of pesticide, operators must ensure that the equipment is calibrated (i.e. nozzle choice, droplet size, etc.) to deliver the appropriate quantity of pesticide needed to achieve greatest efficacy against the target pest. Improperly calibrated pesticide equipment may cause either too little or too much pesticide to be applied. This lack of precision can result in excess pesticide being available or result in ineffective pest control. When done properly, equipment calibration can assure uniform application to the desired target and result in higher efficiency in terms of pest control and cost. It is important for applicators to know that pesticide application efficiency and precision can be adversely affected by a variety of mechanical problems that can be addressed through regular calibration. Sound calibration practices to consider are:

- (a) Choosing the right spray equipment for the application
 - (b) Ensuring proper regulation of pressure and choice of nozzle to ensure desired application rate
 - (c) Calibrating spray equipment prior to use to ensure the rate applied is that required for effective control of the target pest
 - (d) Cleaning all equipment after each use or prior to using another pesticide unless a tank mix is the desired objective and cross contamination is not an issue
 - (e) Checking all equipment regularly (e.g., sprayers, hoses, nozzles, etc.) for signs of uneven wear (e.g., metal fatigue/shavings, cracked hoses, etc.) to prevent equipment failure that may result in inadvertent discharge into the environment; and
 - (f) Replacing all worn components of pesticide application equipment prior to application.
3. Assessing weather conditions (e.g. temperature, precipitation, and wind speed) in the treatment area to ensure application is consistent with all applicable federal requirements.

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Weather conditions may affect the results of pesticide application. Permittees are required to assess the treatment area to determine whether weather conditions support pest populations and are suitable for pesticide application.

B. Water Quality Based Effluent Limitations.

Levels I and II operators are required to maintain the applicable water quality standard in accordance with 30 TAC §307 and take corrective action if a discharge causes or contributes to an excursion of any applicable water quality standard. The Executive Director may require a permittee to obtain coverage under an individual permit as necessary to protect water quality.

Compliance with the pesticide label and other terms and conditions in this permit will meet applicable water quality-based effluent limitations. The permit does not cover discharges of any pesticide into a body of water that is impaired for that pesticide or the pesticide degrades, or into a Tier 3 water.

VI. Integrated Pest Management (IPM) Practices

Level I must develop and implement written IPM practices to comply with the non numeric effluent limitations in the permit.

IPM is a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks. It is a series of pest management evaluations, decisions and controls that minimize pesticide use. Using pesticide as pest management strategy should be the last option if all other pest control strategies fail so as to reduce potential environmental effects of the chemicals.

Operators whose discharges of pesticides to waters of the U.S. are solely from pesticide research and development activities are required to comply with the additional technology-based effluent limitations only to the extent the limits may not compromise the research design.

1. Pest Problem Identification.

Operators are required to identify the pest problem, identify the target pest, establish an action threshold and document all the processes used to determine the pest problem. Action threshold is the point at which pest populations or environmental conditions can no longer be tolerated necessitating that pest control action must be taken based on economic, human health, aesthetics, or other effects considerations. Action thresholds help determine both the need for control actions and the proper timing of those actions. The permit requires operators to use existing surveillance data (if it is available) to meet the conditions of the permit.

2. Pest Management Strategy

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Operators must evaluate both pesticide and non-pesticide methods of pest management strategies by considering and evaluating the following options: no action, prevention, mechanical or physical methods, cultural methods, biological control agents, and pesticides.

In the evaluation of these options, operators must consider impacts to water quality, impacts to non-target organisms, pest resistance, feasibility, and cost effectiveness. Operators could choose to combine any of the pest management strategies that will effectively control the target pest(s) and produce no adverse or toxic effect on non-target organisms.

3. Pesticide Use

Operators must conduct pest surveillance prior to pesticide application to verify the need for using pesticide as a pest management strategy. Operators are required to reasonably justify the proposed treatment and should only apply pesticide when the action threshold has been met so as to reduce the impact on the environment and non-target organisms. Operators must adhere to FIFRA and the pesticide label instructions. The pesticide label is a binding legal agreement between the EPA, the registrant, and the user.

Pesticide application can only be carried out by a trained, certified pesticide applicator if the pesticide is classified as Restricted Use, State-Limited-Use Pesticides or Regulated Herbicides. Pesticides that will be applied directly to surface water must be a pesticide that is registered by the U.S. EPA as an aquatic pesticide.

It is a violation of the CWA and this permit if a pesticide is used in a way or place not specified on the label.

VII. Pesticide Discharge Management Plan (PDMP)

Level I authorized operators must prepare a PDMP for the pest management area within 90 days of coverage under this permit to comply with the permit conditions. Operators must document the implementation (including inspection, maintenance, monitoring, and corrective action) of control measures being used to comply with the effluent limitations set forth in Part III of the permit.

The following must be documented in the PDMP: (1) pesticide discharge management team (2) pest problem identification (3) evaluation and selection of pest management strategies and (4) response procedures (e.g., spill response procedure, adverse incident response procedure, visual evaluations, pest surveillance, and assessing environmental conditions) and pertaining to other actions necessary to minimize discharges (e.g., spill response procedures, adverse incident response procedures, and pesticide monitoring schedules and procedures) The PDMP must be kept up-to-date and modified whenever necessary to document any corrective actions as necessary to meet the effluent limitations in this permit.

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The PDMP requirements set forth in the permit are terms or conditions under the CWA because the operator is documenting information on how it is complying with the effluent limitations (and inspection and evaluation requirements) contained elsewhere in the permit.

VIII. Visual Evaluation Requirements

Levels I and II 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.

IX. Recordkeeping

Levels I and II operators are required to keep a copy of this permit (electronic copy also acceptable) and any adverse incident reports. Level I operators are required to keep records of all pesticide use. Records will allow evaluation of pest control efforts and help plan future treatments. Level III operators are not required to keep records.

The permit authorizes Level I operators to harmonize the state law (4 TAC §7.33), the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and CWA recordkeeping practices, where appropriate. The following records are required to be kept for a period of at least 5 years from the date the record was created and must be made available to the Executive Director upon request:

1. a copy of spill or leak reports;
2. a copy of the NOI submitted to TCEQ along with any correspondence to/from TCEQ specific to coverage under this permit;
3. a copy of the acknowledgment certificate issued by TCEQ or Self Certification Form submitted to TCEQ; and
4. pesticide application records for each treatment area must be recorded as soon as possible but no later than fourteen (14) days after implementing the pest management strategy to include the following:

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- (a) The name(s) of the record keeper;
- (b) Pesticide applicator's name
- (c) Target Pest(s);
- (d) Pest management strategies used and what action threshold(s) have been met;
- (e) Date of pre- and post-application surveillance and visual evaluations;
- (f) Date pest management strategy was conducted;
- (g) Name and total amount (in gallons or pounds) of pesticide product applied, including the product's EPA registration numbers;
- (h) Concentration (%) of active ingredient in formulation;
- (i) Identify which treatment area or portion of a treatment area was treated;
- (j) Any observed toxic or adverse effects to non-target organisms;
- (k) A copy of any modifications made to the PDMP during the term of the permit;
and
- (l) Date that application equipment was calibrated, cleaned, and repaired, if applicable.

X. Reporting and Notification

Level IA operators must submit an annual report. The annual report includes the operator's name; authorization number(s); contact person name, title, e-mail address (if any), and phone number. Information about the each treatment area that summarizes the amount of pesticides used, target pest(s) and pesticide use patterns in a pest management area during one calendar year must also be reported. The permit specifies conditions for the reporting requirements that include: 24hour potential adverse incident or spill or leak notifications(required for the Levels I and II), fourteen (14) days adverse incident or spill or leak written reports, (required for Levels I and II) and other 24hour reporting of situations that may endanger human health or safety, or the environment to the TCEQ. Reporting will assist the Commission to better understand and remedy pesticide water pollution problems that may arise, identify possible permit violations, identify where permit may need modification to further protect water quality and help with data collection on aquatic pesticide use in Texas.

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XI. Addresses

Questions concerning this general permit should be sent to:

James M. Moore, Section Manager
Water Quality Assessment Section (MC-150)
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087
(512) 239-4671
e-mail: PGP@tceq.state.tx.us

Comments regarding this general permit should be sent to:

Chief Clerk's Office (MC-105)
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Supplementary information on this Fact Sheet is organized as follows:

- IV. Permit Coverage
- V. Permit Conditions and Effluent Limitations
- VI. Integrated Pest Management Practices
- VII. Pesticide Discharge Management Plan
- VIII. Visual Evaluation Requirements
- IX. Recordkeeping
- X. Reporting and Notification
- XI. Addresses
- XII. Legal Basis
- XIII. Regulatory Background and Legal History
- XIV. Procedures for Final Decision
- XV. Administrative Record

XII. Legal Basis

Section 26.121 of the Texas Water Code (TWC) makes it unlawful to discharge pollutants into or adjacent to water in the state except as authorized by a rule, permit, or order issued by the commission. TWC § 26.027 authorizes the commission to issue permits and amendments to permits for the discharge of waste or pollutants into or adjacent to water in the state. TWC § 26.040 provides the commission with the authority to amend or adopt, as necessary to implement this section, rules adopted under § 26.040, and to authorize pesticides discharges by general permit.

On September 14, 1998, the TCEQ received authority from the United States Environmental Protection Agency (EPA) to administer the Texas Pollutant Discharge Elimination System

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(TPDES). The TCEQ and the EPA have signed a Memorandum of Agreement that authorizes the administration of the National Pollutant Discharge Elimination System (NPDES) program to the TCEQ as it applies to the State of Texas.

CWA §§ 301, 304, and 401 (33 United States Code (USC), §§ 1331, 1314, and 1341) include provisions that state that NPDES permits must include effluent limitations requiring authorized discharges to: (1) meet standards reflecting levels of technological capability; (2) comply with EPA-approved state water quality standards 30 TAC §307; and (3) comply with other state requirements adopted under authority retained by states under CWA § 510, 33 USC, § 1370.

XIII. Regulatory Background and Legal History

The Commission was given authority to issue general permits by HB 1542 that passed during the 75th legislative session. Further clarification of general permit authority was provided in subsequent legislation, HB 1283, passed during the 76th legislative session. As a result of this authority, and in accordance with a memorandum of agreement between the EPA and TCEQ relating directly to the TPDES permit program, the commission is seeking to issue this general permit.

EPA regulates the sale, distribution and use of pesticides in the U.S. under the statutory framework of FIFRA 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 EPA assesses a variety of potential human health and environmental effects associated with use of the product. When EPA approves a pesticide for a particular use, the Agency imposes restrictions through labeling requirements governing that use. The restrictions are intended to ensure that the pesticide serves an intended purpose and avoids unreasonable adverse effects. States have primary authority under FIFRA to enforce "use" violations, but both the States and EPA have ample authority to prosecute pesticide misuse when it occurs.

The Texas Department of Agriculture licenses pesticide applicators and dealers and regulates pesticide storage facilities by imposing enforcement actions, including monetary penalties, for law violation, investigates cases of human or animal exposure to pesticides, collects waste pesticides and monitors agricultural pesticides. The TCEQ conducts focused groundwater monitoring for pesticides, and conducts investigations of surface water and groundwater contamination suspected from pesticides.

In the case of the National Cotton Council et al., v. EPA (2009), the court evaluated the legality of a 2006 EPA rule that provided that the application of pesticides and herbicides to and over surface water to control pests, weeds and insects consistent with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) does not require a NPDES Permit. On January 07, 2009 the U.S. Sixth Circuit Court of Appeals ruled that Clean Water Act permits are required for all biological pesticide applications and chemical pesticide

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applications that leave a residue in water when those applications are made in or over, including near, waters of the U.S.

On April 09, 2009, EPA 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 November 2, 2009, industry petitioners of the Sixth Circuit Case petitioned the Supreme Court to review the Sixth Circuit's decision. On February 22, 2010, the Supreme Court denied the request to hear industry's petition, leaving the April 2011 effective date unchanged. On March 3, 2011, the U.S. Environmental Protection Agency (EPA) requested an extension to allow more time for pesticide operators to obtain permits for pesticide discharges into U.S. waters. 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 extended the deadline for when permits will be required from April 9, 2011 to October 31, 2011.

XIV. Procedures for Final Decision

The Memorandum of Agreement between the EPA and TCEQ provides that EPA has no more than 90 days to comment, object, or make recommendations to the draft general permit before it is published in the *Texas Register*. According to 30 TAC, Chapter 205, when the draft general permit is proposed, notice must be published, at a minimum, in at least one newspaper of statewide or regional circulation. The commission may also publish notice in additional newspapers of statewide or regional circulation. Mailed notice must also be provided to the following:

- A. the county judge of the county or counties in which the discharges under the general permit could be located;
- B. if applicable, state and federal agencies for which notice is required in 40 CFR, §124.10(c);
- C. persons on a relevant mailing list kept under 30 TAC, §39.407, relating to Mailing Lists; and
- D. any other person the Executive Director or Chief Clerk may elect to include.

After notice of the general permit is published in the *Texas Register* and the newspaper(s), the public will have 30 days to provide public comment on the proposed permit.

Any person, agency, or association may make a request for a public meeting on the proposed general permit to the Executive Director of the TCEQ before the end of the public comment period. A public meeting will be granted when the Executive Director or Commission determines, on the basis of requests, that a significant degree of public interest

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in the draft general permit exists. A public meeting is intended for the taking of public comment, and is not a contested case proceeding under the Administrative Procedure Act. The Executive Director may call and conduct public meetings in response to public comment.

If the Executive Director calls a public meeting, the Commission will give notice of the date, time, and place of the meeting, as required by Commission rule. The Executive Director shall prepare a response to all significant public comments on the draft general permit raised during the public comment period. The Executive Director shall make the response available to the public. The general permit will then be filed with the Commission to consider final authorization of the permit. The Executive Director's response to public comment shall be made available to the public and filed with the Chief Clerk at least ten days before the Commission acts on the general permit.

XV. Administrative Record

The following section is a list of the fact sheet citations to applicable statutory or regulatory provisions and appropriate supporting references.

A. 40 CFR Citations

Part 122, 124 and 136

B. TCEQ Rules

30 TAC Chapters 39, 205, 281, 305, 307, 319, 331, and 335

C. Miscellaneous

EPA, National Recommended Water Quality Criteria:2002, EPA-822-R-02-047, November 2002, EPA's Draft Pesticides General Permit , Texas Water Code Chapter 26.0286 and Texas 2006 Clean Water Act Section 303 (d) list.

D. Impact Assessment, Inc. and the California Department of Health Services, Environmental Health Investigations Branch, 2000: Analytical Procedures, Methodologies, and Field Protocols to Monitor and Determine Environmental Contaminants: Pesticide Use in California: U.S./Mexico Border Region.

E. Texas Parks and Wildlife Department, 2010: Data presented to the TCEQ in TPWD Informal Comments on Pesticide General Permit Draft Presented at stakeholder meeting September 9, 2010.

F. Harris County, Texas Public Health and Environmental Services Mosquito Control Division, 2009: Annual Report titled "Field Headquarters Operations 2009" Submitted to the TCEQ on November 17, 2010.