

Agricultural & Environmental Safety unit — <http://www-aes.tamu.edu>

Texas Pesticide Pollutant Discharge Elimination System Permit (TPDES)

Dr. Don Renchie

Many of you have heard about a new Texas Commission on Environmental Quality (TCEQ) requirement/regulation relating to pesticide applications to, over, or near water. The regulation is the result of federal court decisions which place pesticide applications and use under not only the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), but also under the Clean Water Act (CWA).

TCEQ and other state environmental protection agencies nationwide (including Puerto Rico, Guam and Samoa) had until October 31, 2011 to develop or adopt a Pollutant Discharge Elimination System (PDES) permit. TCEQ worked with stakeholders and EPA to develop an acceptable permit for Texans from all pesticide user communities (agriculture, structural pest management, governmental/political subdivisions, and consumer/homeowner..) to comply with without much financial burden.

There are **five sites of pesticide application to aquatic environments** which have thresholds requiring operators to file a "Notice of Intent" (NOI) with TCEQ ten days prior to the application. A NOI is good for 1 year.

Operators are defined by TCEQ as individuals responsible for the site where pesticides will be applied. They can be an applicator (commercial or noncommercial), an entity (city or county), or an organization (homeowners association...) or an individual (farmer, rancher, or homeowner...).

1. Applications made to control "**Mosquitoes and Other Flying Insect Pests**" where the treatment area is greater than 6,400 contiguous acres and containing waters of the U.S. will require the "Operator" to submit a NOI ten days prior to the application.

2 a. Applications made to control "**Aquatic Weeds and Algae**" **In Water** where the treatment area exceeds 100 contiguous surface acres will require the operator to submit a NOI ten days prior to the

application.

2b. Applications made to control "**Aquatic Weeds and Algae**" **At Water's Edge** where the treatment area exceeds 200 contiguous linear miles will need to file a NOI ten days prior to the application.

3a. Applications made to control "**Aquatic Nuisance Animals**" (undesirable fish, lamprey eels...) **In Water** where the treatment area exceeds 100 contiguous surface acres will need to file a NOI ten days prior to the application.

3b. Applications made to control "**Aquatic Nuisance Animals**" **At Water's Edge** where the treatment area exceeds 200 contiguous linear miles will need to file a NOI ten days prior to the application.

4. Applications made **Over Forest Canopies** for "**Forest Canopy Pest Control**" where the treatment area exceeds 6,400 contiguous acres and containing waters of the U.S. will need to file a NOI ten days prior to the application.

5. Applications made for "**Area Wide**" pest control where the treatment area exceeds 6,400 contiguous acres and containing waters of the U.S. will need to file a NOI ten days prior to the application.

There are three levels of compliance, each based on application site and access, type of entity making the pesticide application, and the size or distance of the application to, over, or near waters of the U.S.

Level I has two subcategories (**Level IA and Level IB**). The operator must insure applicators have TDA licenses for the application of restricted use or state-limited-use pesticides and regulated herbicides. In addition, **Level IA** operators (applicators) must submit a written or electronic **NOI** along with the appropriate fee(s) ten days before they commence any applications in a "**Pest Management Area (PMA)**". Annually they must file certain information for all pesticide applications to, over, or near waters of the U.S. with TCEQ.

Level IB operators (applicators) do not pay “**NOI**” fees, but they must submit a “**Self Certification Letter**” to the nearest TCEQ Regional Office ten days before they commence any applications to, over, or near waters of the U.S. If they use restricted use or state-limited use pesticides, the applicator must be licensed with TDA. No annual reports are required. However, if an adverse incident occurs, the applicator must report the event to TCEQ within 24 hours.

Level II and **Level III** are not subcategorized and have no financial or reporting implications for any affected operators (applicators). If restricted use or state-limited-use pesticides or regulated herbicides are applied, the applicator must have the appropriate TDA license. If an adverse incident occurs, the applicator must report the event to TCEQ within 24 hours.

All operators (applicators), including homeowners must keep records of all applications of pesticides to, over, or near waters of the U.S. regardless of threshold limitations for three years.

At the end of this Chemogram you will find a TCEQ Threshold Determination chart. This chart delineates each application area and the compliance efforts, fees, licensing requirements and reporting responsibilities based on the level of compliance an operator falls under.

More information about the TPDES can be found under the AES website “Links” section (<http://www-aes.tamu.edu/links/>).

EPA Rodenticide Risk Mitigation Dr. Mark Matocha

The U.S. Environmental Protection Agency has announced new safety measures that are intended to protect children from accidental exposure to rodent-control products. These measures are also intended to reduce the risk of accidental poisonings of pets and wildlife.

EPA Final Risk Decision Link:

<http://www.epa.gov/pesticides/reregistration/rodenticides/finalriskdecision.htm>

EPA’s rodenticide risk mitigation plan came out on May 28, 2008. Manufacturers will not be allowed to ship non-compliant products as of **June 4, 2011**, although distributors will be allowed to sell all inventory of rodenticides obtained prior to the risk mitigation requirement deadline; and Pest

Management Professionals (PMP’s) can use their inventory of rodenticides obtained prior to the risk mitigation requirements, after June 4, 2011, without restrictions.

EPA has announced measures to reduce risks associated with ten rodenticides:

- Brodifacoum
- Bromadiolone
- Bromethalin
- Chlorophacinone
- Cholecalciferol
- Difenacoum
- Difethialone
- Diphacinone
- Warfarin
- Zinc phosphide

Differences Among the Rodenticides - The ten rodenticide active ingredients covered by this action are divided into three categories:

- first-generation anticoagulants: warfarin, chlorophacinone, and diphacinone;
- second-generation anticoagulants: brodifacoum, bromadiolone, difenacoum, and difethialone; and
- non-anticoagulants: bromethalin, cholecalciferol and zinc phosphide.

The anticoagulants interfere with blood clotting, and death can result from excessive bleeding.

The second-generation anticoagulants are considered especially hazardous for several reasons. They are highly toxic, and they persist a long time in body tissues. The second-generation anticoagulants are designed to be toxic in a single feeding, but since time-to-death is several days, rodents can feed multiple times before death, leading to carcasses containing residues that may be many times the lethal dose. Predators or scavengers that feed on those poisoned rodents may consume enough to suffer harm.

The non-anticoagulants work in different ways. Bromethalin is a nerve toxicant that causes respiratory distress. Cholecalciferol is vitamin D3, which in small dosages is needed for good health in most mammals, but in massive doses is toxic, especially to rodents. Zinc phosphide causes liberation of toxic phosphine gas in the stomach.

Summary of Safety Measures

1. “Consumer Size” Products (Products containing ≤ 1 pound of bait)

May not contain brodifacoum, difethialone, bromadiolone, or difenacoum (the second-generation anticoagulants).

- Loose bait forms such as pellets are prohibited.
- Each retail unit must include a bait station.
- Bait refills may be sold with bait stations in a single retail unit.
- All outdoor above ground use must be in a bait station and be applied within 50 feet of buildings.

2. Second-Generation Anticoagulant Products for Use Around Agricultural Buildings

- Products must contain at least eight pounds of bait.
- Bait stations are required for all outdoor, above-ground placements of second-generation anticoagulant products.
- Bait stations are required indoors if exposure to children, pets, or non-target animals is possible.
- Product labels must indicate that the product is for use only in and around agricultural buildings and that use in residential use sites is prohibited.
- Distribution to and sales in “consumer” stores including grocery stores, drug stores, hardware stores, club stores will be prohibited.
- All outdoor above ground use must be in a bait station and be applied within 50 feet of buildings.

3. Second-Generation Anticoagulant Products for Professional Applicators

- Products must contain at least 16 pounds of bait.
- Bait stations are required for all outdoor, above-ground placements of second-generation anticoagulants.
- Bait stations are required indoors if exposure to children, pets, or non-target animals is possible.

Distribution to and sales in “consumer” stores including grocery stores, drug stores, hardware stores, club stores will be prohibited.

- All outdoor above ground use must be in a bait station and be applied within 50 feet of buildings.

Use Site Restrictions

For second-generation anticoagulant bait products in packages with at least 8 but not more than 16 pounds of bait, labels must state that products may only be

used in and around agricultural buildings (e.g., barns, hen houses), and bear the statement “Do not use this product in homes or other human residences.”

2012 Last Chance Video and Aerial Applicator Course Numbers Don L. Renchie, Ph.D

The Texas Department of Agriculture (TDA) has assigned new course numbers for the “Last Chance Videos (LCVs)” we use to facilitate applicator recertification. In addition, we have two “Aerial Applicator” videos addressing “Drift Minimization for Aerial Application of Pesticides” and “Aerial Application - The Human Factor” (<http://www-aes.tamu.edu/aerial/>).

The 2012 course numbers for the Last Chance Videos are:

LCV Part 1 – LAWS & REGULATIONS
2012 TDA Course Number – 0613660
CEUs in L&R 1.5, General 0.5

LCV Part 2 – INTEGRATED PEST MANAGEMENT (IPM)
2012 TDA Course Number – 0613661
CEUs in IPM 2.0

LCV Part 3 – DRIFT MINIMIZATION
2012 TDA Course Number – 0613662
CEUs in Drift 1.5, General 0.5

LCV Part 4 – SAFETY
2012 TDA Course Number – 0613664
CEUs in General 2.0

Aerial Applicator Videos:

“Drift Minimization for Aerial Application of Pesticides” and “Aerial Application - The Human Factor” can be found at <http://www-aes.tamu.edu/aerial/>, or by following the CEA Resources link to the Aerial page.

Aerial Applicator – 5 Hour CEU Activity

In addition, you can offer a 5 hour TDA approved CEU course for Aerial Applicators by the Aerial Applicator – 5 Hour CEU Activity consisting of – the Aerial Application Video, the Aerial Application – The Human Factor video, the Last Chance Video #2 (You only need the first half of the video – 1 hour), the Last Chance Video #4 (You only need one hour

of this video), and the Centra presentation – Dr. Don Renchie – Laws and Regulations (<http://www-aes.tamu.edu/pesticide-safety-education-resources/pact/>).

The 2012 TDA Course Number is “0613665”, and is approved for 2.0 Gen (1 for Human Factors), 1.0 IPM, 1.0 L&R, and 1.0 Drift to fulfill the requirements for Texas aerial applicators. This course has been extended for the 2012 calendar year.

Information you need for PSEP Education programs can be found on our “CEA Resources” at the url: <http://www-aes.tamu.edu/pesticide-safety-education-resources/pact/>. You will need the password for County Extension Agents to get into the site. That password is available for CEA’s by contacting AES at 979-845-3849.

In addition to the CEU course numbers for Last Chance Videos, you will also find MP4 downloads for the Aerial, the Last Chance Videos, and the Private Applicator Video. Also, the order form for Private Applicator Packets for CEA’s ONLY is available on the site, as are the New Employee handbook (including information about PCR), Agent Centras, and Centras for CEU courses. More information is added as available, so let us know if there is something you are looking for but can’t find.

There is a non-password CEA site as well (<http://www-aes.tamu.edu/pesticide-safety-education-resources/>) that you may find useful. We have a catalog of available PSEP trainings, TDA CEU fill in the blank pdf certificate, a SPCS CEU fill in the blank pdf certificate, the original Private Applicator Certification DVD Training Teacher’s Guide, a fill in the blank pdf PA-411 Pesticide Recertification Roster, and information about the TPDES General Permit and Self-Certification. More information about the TPDES General Permit and Self-Certification can be found under our Links section.

Please use these tools to facilitate applicators who find themselves in a bind. TDA prefers that applicators participate in proctored recertification activities in an effort to receive current technical, production, and pest management strategies and information.

Also, you will find more than 22 companies and individuals (retired TDA inspectors, structural pest control applicators, former chemical company employees...) have entered into the applicator certification and recertification business.

Most importantly, Texas AgriLife Extension Service does not have exclusivity in any of the applicator training or licensing domains. Consequently, if we are going to remain the “GoTo” organization, make every effort to provide timely, relevant educational programs and service to the regulated community. Try not to send a customer away, as they may not come back.

We appreciate the hard work each of you and your staff(s) put into this high visibility program area. Your efforts help sustain the economic viability of not only our agricultural enterprises, but also help sustain jobs in the private (structural pest management businesses) and public sectors (governmental and political subdivisions).

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Extension Service is implied. Educational programs of the Extension Service are open to all citizens without regard to race, color, sex, disability, age or national origin.

TPDES GENERAL PERMIT NO. TXG870000

PESTICIDES GENERAL PERMIT REQUIREMENT MATRIX

ANNUAL THRESHOLD	LOCATION OF USE	TYPE OF PESTICIDE USED	PERMIT REQUIREMENTS
Above Annual Threshold	Use by public entities where there is either public or private access (Examples: State Agencies, Cities and Counties)	Restricted or State-Limited Use Pesticide or Regulated Herbicide	Level IA Compliance NOI Required – ePermit TCEQ HQ ** Annual report required Operator must be licensed by TDA Fees: NOI - \$100 paper or \$75 ePermit; Annual - \$100 with \$500 cap for county-wide or state-wide
	OR		
	Use by private entities where there is public access (Examples: pest control company doing nuisance insect control in parks)	General Use Pesticide	Level IB Compliance – no annual report Self Certification Form to TCEQ Regional Office No fees
	Use by private entities where there is only private access (Examples: farmers on stock ponds or creeks, homeowner’s association around lake; pest control company doing nuisance insect control in neighborhoods)	Restricted or State-Limited Use Pesticide or Regulated Herbicide	Level IB Compliance – no annual report Self Certification Form to TCEQ Regional Office Operator must be licensed by TDA No fees
General Use Pesticide		Level IB Compliance – no annual report Self Certification Form to TCEQ Regional Office No fees	
Below Annual Threshold (No NOI Required)	Restricted or State-Limited Use Pesticide or Regulated Herbicide		Level II Compliance Self Certification Form (Onsite) Operator must be licensed by TDA No fees
	General Use Pesticide 1 acre of Waters of the U.S. or more annually		Level II Compliance Self Certification Form (Onsite) No fees
	General Use Pesticide Less than 1 acre of Waters of the U.S. annually		Level III Compliance No fees

****Single Pest Management Area NOI; or 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 NOI; or if a person or an entity has more than ten (10) pest management areas within the state the person or entity can apply for state-wide NOI.**