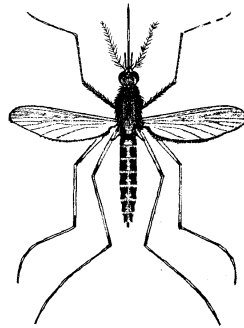




John P. Cahill
Commissioner

**ENVIRONMENTAL LAWS, RULES AND REGULATIONS
RELATING TO MOSQUITO CONTROL IN NEW YORK
STATE - PESTICIDE USE, HABITAT MODIFICATION, FISH
STOCKING AND WILDLIFE COLLECTION**



Acknowledgments

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**ENVIRONMENTAL LAW, RULES AND REGULATIONS RELATING TO MOSQUITO CONTROL IN
NEW YORK STATE - PESTICIDE USE, HABITAT MODIFICATION, FISH STOCKING AND
WILDLIFE COLLECTION**

EXECUTIVE SUMMARY

Since the West Nile arbovirus was discovered in the downstate area in the late summer of 1999, considerable attention has focused on pesticide-related activities that target control of the vector—the larval and adult stages of mosquitoes, primarily the Northern Household Mosquito. The purpose of this manual is to establish a comprehensive and consistent Statewide approach to complying with the requirements of environmental laws, rules and regulations of New York State as they relate to all activities associated with a mosquito abatement program, pesticidal and non-pesticidal. In addition, the manner in which these rules and regulations are influenced by public health emergencies is also addressed. Discussions in this manual do not extend to activities regulated by other agencies including permitting requirements of federal agencies responsible for the management of lands under their control.

Each of the major subjects covered in the Executive Summary are addressed in greater detail in the complete manual.

Impacts of Health Emergency on Environmental Laws & Regulations

Health emergencies can be declared by the New York State Department of Health (NYSDOH) in response to requests from County government. When a health emergency exists, authorization can be granted that influence some permit and regulatory requirements. However, these emergency authorizations are limited to the specific county or other area affected by the emergency, and applies only to the first season in which the emergency occurs. Furthermore, they do not influence all permits and regulatory requirements.

A public health emergency can influence Article 24/Part 663 Freshwater Wetland Permits; Article 25/Part 661 Tidal Wetland Permits; Special Wildlife Permits, and SEQRA. Public health emergencies have no influence on the other regulatory and permit requirements associated with mosquito abatement programs.

The following discussion of the New York State requirements associated with mosquito abatement note the influence of public health emergencies where applicable:

ECL ARTICLE 24/PART 663 FRESHWATER WETLAND PERMITS —Pesticide Use and Habitat Modification activities are subject to Article 24/Part 663 Freshwater Wetland Permits. With respect to pesticide use, these permits are often necessary regardless of whether an Article 15/Part 329 Aquatic Pesticide Permit is required. Habitat Modification activities, such as water management or draining a wetland area, are also regulated activities subject to Article 24/Part 663 Freshwater Wetland Permit requirements.

Certain activities are allowed under a public health threat or a health emergency that would not be allowed under a routine mosquito control program.

The agency proposing to conduct regulated mosquito control activities is charged with evaluating impacts associated with regulated activities in a stepwise fashion. Specifically, if alternatives exist which allow the applicant to **avoid** impacts to the wetland, the Department will require that the best alternative be used. Since quite often all impacts cannot be avoided, alternatives that **minimize** impacts will be required. If alternatives to the proposed activity cannot be found, and impacts to the wetland and its benefits are severe enough, the Department can require that the applicant **mitigate** damages.

In all but exceptional circumstances, the Department has the ability to determine and require the best alternatives for control.

Habitat modification should be considered only as a last resort. The Department generally does not support the alteration of freshwater habitats if other alternatives exist. Permanent alteration or loss of wetlands is not consistent with the Environmental Conservation Law. It would be difficult to imagine circumstances that would warrant such an extreme action especially with all of the alternatives that exist in today's mosquito control arsenal.

In addition, Article 24/Part 663 Freshwater Wetland Permits are included under the umbrella of the Uniform Procedures Act. Uniform Procedures Act Emergency Authorization procedures authorize only public agencies to undertake emergency actions if prior notification to the Department is not possible.

If regulated freshwater wetlands or their adjacent areas are potential target sites to receive application of larvicide, pupicide or adulticide in connection with any mosquito control activities, the applicator or health department employee responsible for such proposed use of pesticide must contact the appropriate DEC Regional Permit Administrator to pursue compliance with Article 24 of the ECL, and Parts 621 and 663 of Title 6 of the NYCRR.

ECL ARTICLE 25/PART 661 TIDAL WETLAND PERMITS — Pesticide Use and Habitat Modification activities, such as water management, are also regulated activities subject to Article 25/Part 661 Tidal Wetland Permit requirements.

In cases in which an Article 15/Part 329 Aquatic Pesticide Permit is required, and has been issued, the action is regarded as “otherwise authorized by law”; and a separate Article 25/Part 661 Tidal Wetlands Permit is not issued.

Article 25/Part 661 Tidal Wetland Permits are also included under the umbrella of the 6 NYCRR Part 621 UPA regulations. Consequently, only public agencies are authorized to undertake emergency actions if prior notification to the Department is not possible.

If regulated tidal wetlands or their adjacent areas are potential target sites to receive application of larvicide, pupicide or adulticide in connection with any mosquito control activities, the applicator or health department employee responsible for such proposed use of pesticide must contact the appropriate DEC Regional Permit Administrator to pursue compliance with Article 25 of the ECL, and Parts 621 and 661 of Title 6 of the NYCRR.

SPECIAL WILDLIFE PERMIT — The Environmental Conservation Law of New York State (ECL) contains provisions which regulate the taking of Wildlife. In addition, the State Sanitary Code and Public Health Law contain provisions authorizing local and state health agencies to diligently investigate and ascertain the existence and causes of disease outbreaks.

In a health emergency situation, State and local health agencies have the authority to collect wildlife in support of an investigation, without obtaining special licenses issued by the Department of Environmental Conservation.

STATE ENVIRONMENTAL QUALITY REVIEW ACT (SEQRA) — Mosquito surveillance and control activities are subject to review under the State Environmental Quality Review Act (SEQRA) if any state or local agency has the authority to issue a discretionary permit, or other type of approval for that action. SEQRA also applies if an agency funds or directly undertakes a project.

When a public health emergency exists, an Environmental Impact Statement (EIS) or Negative Declaration (Neg Dec) is not required. However, the local agency must establish a record of the decision to undertake the activity.

6 NYCRR PART 325 PESTICIDE APPLICATOR CERTIFICATION REQUIREMENTS

— Any individual engaged in the commercial application of pesticides must be a Certified Pesticide Applicator, a Certified Commercial Pesticide Technician, or Commercial Apprentice. An individual engaged in the private application of restricted pesticides must be certified as a Private Applicator, or be working under the direct supervision of a Certified Private Applicator.

AGENCY AND BUSINESS REGISTRATION is required of each agency that applies mosquito larvicide, pupicide or adulticide, and each business offering, advertising or providing the services of commercial application of such mosquitocides.

NEW YORK STATE PESTICIDE PRODUCT REGISTRATION must be in effect on the date each mosquitocide is in use. Any pesticide must be registered with the New York State Department of Environmental Conservation prior to its sale and use in New York State. Any sale or use of non-NYS-registered pesticide is an unlawful act that subjects the offending party to administrative, civil or criminal sanctions.

ECL ARTICLE 15/PART 329 AQUATIC PESTICIDE PERMITS are required if any mosquito larvicide or pupicide is to be used in or over any surface waters of the State, with

limited exception. Waters are exempt from Article 15/Part 329 Aquatic Pesticide Permit requirements only if they meet all four specific criteria presented in the manual.

Application of adulticides in non-aquatic sites does not constitute use of pesticide in or over surface waters; therefore, such pesticide use is not subject to Article 15/Part 329 Aquatic Pesticide Permit requirements.

6 NYCRR PART 190 TEMPORARY REVOCABLE PERMITS, when required, are handled in concert with Article 15/Part 329 Aquatic Pesticide Permits.

With respect to the use of larvicide and pupicide in surface waters, the Regional Natural Resources Supervisor indicates authorization to treat such lands by counter-signing the Article 15/Part 329 Aquatic Pesticide Permit. Any concerns related to the proposed action are incorporated as additional terms and conditions of the Article 15/Part 329 Aquatic Pesticide Permit.

With respect to the proposed use of larvicide or pupicide that is not subject to Article 15/Part 329 Aquatic Pesticide Permit requirements, or the proposed use of any adulticides in or over State lands under the jurisdiction of the Department of Environmental Conservation, the applicator must contact the Regional Land Manager to discuss making *Application for Revocable Permit for the Temporary Use of State Land*.

PESTICIDE LABELING REQUIREMENTS — All pesticide label directions, precautions and restrictions must be followed. This is mandated under both federal and State law. Interpretations and clarifications of label requirements i.e., acceptable wind speeds, acceptable target sites will be provided by the Department when necessary.

PRE-APPLICATION LABEL INFORMATION NOTIFICATION of both larviciding, pupiciding and adulticiding activities are included in the manual. It presents options for the prior notification for the different types of pesticide applications.

DAILY USE RECORDS must be kept on a daily basis and created contemporaneously with time of application (to provide a true and accurate account of total amount used at each target site). Required elements can be found in the manual. In contrast to annual reporting requirements, daily use records are not required to be kept on a specific form. However, the Department has available a recommended form for recording each instance of pesticide use.

ANNUAL REPORTS of pesticides used must be filed by February 1 of each year, and must account for every instance of pesticide use during the previous calendar year.

COMMERCIAL LAWN APPLICATION CONTRACTS are required when providing a barrier or perimeter delivery of mosquito adulticide, but are not required when applying adulticide by ultra-low volume aerosol or fog delivery, or when applying larvicide or pupicide to surface

waters. This contract requirement does not apply to the application of pesticides by or on behalf of agencies; therefore, State, regional and local municipal mosquito control programs applying pesticides to ground, trees and shrubs are exempt from this requirement.

VISUAL NOTIFICATION is required when providing a barrier or perimeter delivery of mosquito adulticide, but is not required when applying adulticide by ultra-low volume aerosol or fog delivery, or when applying larvicide or pupicide to surface waters. This visual notification requirement does apply to the application of pesticides by or on behalf of agencies when such application is within 100 feet of a dwelling, multiple dwelling, public building or public park; therefore, State, regional and local municipal mosquito control programs applying pesticides to ground, trees and shrubs must comply with this requirement.

FISH STOCKING PERMIT — Fish or fish eggs shall not be placed in any waters of the State unless a permit is first obtained from the Department. All fish stocking permits, including those for mosquito control, are reviewed and issued on a case-by-case basis by the Regional Fisheries Manager in each DEC Region.

COMPLAINT RESPONSE — The Department will fully investigate complaints relating to the use of pesticides in connection with mosquito control. Violators of pesticide law, rule or regulation are subject to administrative, civil and criminal sanctions. An emergency situation does not reduce, suspend or otherwise modify the Department's enforcement responsibilities.

This information regarding State requirements pertains to any individual or party engaging in activities identified in this guide. For example, the information relating to pesticide use is as relevant to the independent commercial pesticide applicator performing nuisance mosquito control at a single residential property as it is to the municipality planning a large-scale vector control program that involves community-wide, county-wide, or city-wide operation associated with the threat of arboviral transmission.

**ENVIRONMENTAL LAW, RULES AND REGULATIONS RELATING TO MOSQUITO CONTROL IN
NEW YORK STATE - PESTICIDE USE, HABITAT MODIFICATION, FISH STOCKING AND
WILDLIFE COLLECTION**

March 30, 2000

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I. INTRODUCTION: This document identifies New York State's key environmental laws, rules, regulations, policies and procedures relating to mosquito surveillance and control activities involving pesticide use (larvicides, pupicides, and adulticides); habitat modification [i.e., Open Marsh Water Management (OMWM) activities]; fish stocking [i.e., *Gambusia affinis* (Mosquito Fish)], and the collection, handling and transport of wildlife (in connection with bird and mammal surveillance activities). This information was prepared in anticipation of the need to respond to an increase in mosquito surveillance and control activities in connection with the unprecedented introduction of West Nile virus into New York State during the late summer of 1999. However, this information is not limited to vector control activities, and relates to the conduct of mosquito control activities performed under any circumstances. The growing threat of the emergence of other mosquito-borne diseases underscores the need for a document such as this.

This information pertains to any individual or party engaging in the activities identified in this guide. For example, the information relating to pesticide use is as relevant to the independent commercial pesticide applicator performing nuisance mosquito control at a single residential property as it is for the municipality planning large-scale vector control activities that involve community-wide, county-wide, or city-wide operations associated with the threat of arboviral disease transmission.

Since the West Nile virus was discovered in the downstate area in the late summer of 1999, considerable attention has focused on pesticide-related activities that target control of the vector - the larval and adult stages of mosquitoes, primarily *Culex pipiens pipiens* Linnaeus, the Northern Household Mosquito. Referring to this document when considering mosquito surveillance and control activities will provide the reader with information needed to comply with the environmental laws, rules and regulations of New York State. By adhering to the requirements set forth in this manual, those engaged in mosquito surveillance and control activities to combat West Nile virus will be protective of human health and the environment, and will be in compliance with applicable laws, rules and regulations.

II. NOTES:

A. Activities Regulated by Other Agencies: Discussions do not extend to permitting requirements of federal agencies or military units responsible for the management of lands under their control. Depending on the situation, you may need to consult with such federal agencies as the following:

U.S. Department of the Interior, National Park Service or Fish (e.g., Fire Island National Seashore)

U.S. Department of the Interior, Fish and Wildlife Service (e.g., the Wertheim, Iroquois and Montezuma Wildlife Refuges) - A Special Use Permit is required for pesticide use in Wildlife Refuges)

U.S. Department of Agriculture (e.g., Plum Island Animal Disease Center)

U.S. Department of Energy (e.g., Brookhaven National Lab)

U.S. Department of Defense (e.g., Army Bases)

U.S. Coast Guard (e.g., Coast Guard Stations)
U.S. Department of Transportation (e.g., Federal Aviation Administration)
U.S. Army Corps of Engineers

B. Guidelines for Surveillance, Prevention, and Control of West Nile Virus in the United States: On November 08 and 09, 1999, the federal Centers for Disease Control and Prevention (CDC) sponsored the *Workshop on West Nile Virus in the United States*, held at the USDA National Wildlife Research Center, Fort Collins, Colorado. Following the plenary session, participants broke into specific workgroups. The Entomology Breakout Panel was responsible for developing mosquito control recommendations relative to the West Nile virus outbreak in New York. Recommendations of that panel were published in the January 21, 2000-edition [49(02); 25-8] of the Centers for Disease Control and Prevention's publication entitled: *Morbidity and Mortality Weekly Report*. The article is entitled: *Guidelines for Surveillance, Prevention, and Control of West Nile Virus Infection — United States*. A copy accompanies this report as Appendix AB.

The uniform regulatory procedures summarized below take into consideration the information contained in the CDC document. This discussion of New York State environmental laws, rules and regulations complements the CDC guidelines for prevention and control.

C. West Nile Virus Ecology: An in-depth knowledge of the science of West Nile virus and any other vector-borne disease such as Eastern Equine Encephalitis and malaria, will help mosquito control staff to refine management strategies. This document reflects that understanding, but also recognizes that such technical information is not necessary to achieve compliance with environmental requirements relating to mosquito control activities. The public health community's pursuit of a better understanding of the newly-introduced West Nile virus may result in modification of their mosquito control strategies; however, the information contained in this document should accommodate any such changes. The environmental requirements addressed in this report relate to any mosquito control activities, whether undertaken in the presence or absence of a threat of vector-borne disease transmission.

D. 6NYCRR Part 325 Certification Regulations: This manual captures changes in the 6NYCRR Part 325 Certification regulations that took effect January 21, 2000. See Appendix C - 6NYCRR Part 325 Certification Regulations. The changes, as they relate to mosquito control, are discussed in Section III-Applicator Certification.

E. Emergency Authorizations: The influence of an emergency situation, regardless of whether such situation is declared as a public health threat¹ by the New York State Department of Health, was considered in preparing this report. Exemptions from environmental statutory and regulatory requirements are not found within the text of the Public Health Law and its associated rules and regulations, but are found expressed within the text of certain individual passages of the

¹NYS Public Health Law §611 and 10NYCRR Part 44

Environmental Conservation Law, and its associated rules and regulations. See the comments in each of the following sections to determine what, if any, influence an emergency situation might have on a requirement of the New York State Environmental Conservation Law and associated rules and regulations.

THE INFLUENCE OF A PUBLIC HEALTH EMERGENCY

The following requirements are not reduced, suspended or modified as the result of an emergency situation: Applicator Certification; Agency and Business Registration; Pesticide Product Registration (with exceptions related to Special Local Needs and Emergency Exemptions); Article 15/Part 329 Aquatic Pesticide Permits; Part 190 Temporary Revocable Permits; Labeling Interpretations and Clarifications; Pre-Application Label Information Notification (with alternative procedural compliance options); Daily Use Records; Annual Reporting (with alternative procedural compliance options); Commercial Lawn Application Contracts; Visual Notification Posting; Fish Stocking Permits, and Complaint Response.

A public health emergency does have an influence on Article 24/Part 663 Freshwater Wetlands Permits; Article 25/Part 661 Tidal Wetlands Permits; Special Wildlife Permits, and State Environmental Quality Review Act (SEQRA).

Any influence an emergency situation has on environmental laws, rules and regulations is limited by two important factors. One, the influence is limited to the specific area affected by the emergency. Two, the influence applies only to the first season in which the emergency occurs, as further discussed below. The Department does not recognize a “continuing emergency” that extends beyond the first year it is so classified, nor does it recognize the emergency as existing in municipalities adjacent to, or near the area where the emergency exists.

This is also the case with respect to (1) the exclusions to activities subject to Article 24/Part 663 Freshwater Wetlands Permits found at ECL §24-0701(5) and 6NYCRR Part 663.2(z)(3); (2) the exclusions to activities subject to Article 25/Part 661 Tidal Wetlands Permits found at ECL §25-0401(4), and (3) the emergency authorizations found in the Uniform Procedures Regulations found at 6NYCRR Part 621.

Although 10NYCRR Part 44 (State Aid for Approved Vector Surveillance and Control Programs) recognizes a “public health threat” as extending beyond a single year under certain circumstances, such recognition relates to conditions under which a municipality is eligible for State aid reimbursement. Such a situation is not to be viewed as a “continuing emergency” for the purposes of determining whether surveillance and control activities are subject to the environmental laws, rules and regulations of the State.

Mosquito surveillance and control activities are exempt from certain requirements of environmental law, rule and regulation, only during the season in which the emergency is based on

current activity of an arthropod-borne disease. This is determined by the presence of human vector-borne disease or the presence of disease-specific etiologic agents in a known or suspected vector, and by the substantiation by specific risk assessment activities described in 10NYCRR Part 44.51.

Mosquito surveillance and control activities are not exempt from subject requirements of environmental law, rule and regulation, during any season in which those activities are associated with the historical risk an arthropod vector-borne disease. For State aid reimbursement purposes, the New York State Department of Health identifies a historical risk as the presence of human vector-borne disease or the presence of disease-specific etiologic agents in a known or suspected vector once in the previous three years, or two or more times in the previous ten years. This presence must be in combination with the finding (based on risk assessment), that the conditions pose a substantial risk to human health.

In each of the individual sections of this manual, the influence of an emergency is explained. In addition to individual requirements relating to each permit discussed in this manual, the provisions of 6NYCRR Part 621.12 of the Uniform Procedures Regulations provide general and specific requirements for all permit applications covered by these regulations. These provisions do not relate to Article 15/Part 329 Aquatic Pesticide Permits, Article 11 Fish Stocking Permits, or Special Wildlife Permits. They do relate to Article 24/Part 663 Freshwater Wetlands Permits, Article 25/Part 661 Tidal Wetlands Permits, and Part 190 Temporary Revocable Permits.

With respect to emergencies, Part 621.12 of the Uniform Procedures Act (UPA) regulations states:

Emergency authorizations. For projects carried out in response to an emergency, the following procedures shall apply:

(a) All procedural requirements of this Part related to application processing are waived, except as provided in this section.

(b) Prior to commencement of the project, the department must be notified and must determine whether to grant approval pursuant to subdivision (c) of this section. If circumstances warrant immediate action by a state or local government agency and prior notice to the department is not possible, then the department must be notified by that agency within 24 hours after commencement of the project and must subsequently respond. In either case notification may be by certified mail, telegram, mailgram or other written form of communication. This notification must be followed within 24 hours by submission of the following information:

- (1) a description of the proposed action;
- (2) location map and plan of the proposed project; and
- (3) reasons why the situation is an emergency.

All notifications, requests for authorizations and information submitted to support such requests shall be sent to the appropriate regional permit administrator as listed in Appendix 1.

(c) Prior to issuing an emergency authorization, the department must:

- (1) make a finding of emergency stating why immediate action is needed and the consequences if the action is not immediately taken; and
- (2) determine from the available information that the project will be carried out in a manner that will cause the least change, modification or adverse impact to life, health, property or natural resources. The department may attach conditions to emergency authorizations and enforce them to assure compliance with the authorization and other regulatory standards that would apply to such actions absent an emergency.

(d) The department will issue a decision granting or denying the emergency authorization within two business days of receipt of the information required in subdivision (b) of this section.

(e) An emergency authorization may be issued for a term not to exceed 30 calendar days. It may be renewed for one term not to exceed 30 calendar days. On or before 60 calendar days after the department's original approval, the project must be concluded or the authorized person must file with the department a complete application for any necessary permit and be subject to all the procedural requirements of this Part.

(f) The department may issue an order summarily suspending either an action begun before the grant of an emergency authorization, if the department finds that no emergency exists, or an emergency authorization, if the department finds that an action is no longer immediately necessary to protect life, health, property, or natural resources. Such action must cease immediately upon receipt of the order by the responsible party.

(g) A person who violates any provision of this section or any term or condition of an emergency authorization will be ordered to perform any necessary restoration or mitigation of environmental damage resulting from that action. In the event that the person fails to undertake the work ordered, the department or its agent may enter upon the lands or waters where the action took place and perform restoration or other activities necessary to mitigate or eliminate environmental damage caused by the action. If the department undertakes the remedial action, or causes it to be undertaken, the full cost for the work will be charged to and become the responsibility of the person who conducted the action.

In addition, Type II emergency provisions found in 6NYCRR Part 617.5(c)(33) of the State Environmental Quality Review Act (SEQRA) regulations identify conditions related to any agency when they invoke this provision. For example, the agency needs to provide (and have on file) ample written justification and should have the appropriate, responsible agency official sign a letter explaining justification for invoking the Type II provision. See the section relating to SEQRA for additional information.

III. APPLICATOR CERTIFICATION requirements were recently revised. The revised 6NYCRR Part 325 regulations took effect on January 21, 2000.

Any individual engaged in the commercial application of pesticides must be a Certified Pesticide Applicator, a Certified Commercial Pesticide Technician, or Commercial Apprentice. An individual engaged in the private application of restricted pesticides must be a Certified Private Applicator, or must work under the direct supervision of a Certified Private Applicator. Depending on the situation, an individual may engage in the residential application² of unclassified (general use) pesticide without certification authorization.

Use of pesticide devices³ does not require certification authorization.

There are certain eligibility requirements that must be met before an individual can be admitted to take a certification examination. Eligibility requirements for Commercial Pesticide Applicator and Private Pesticide Applicator are detailed at 6NYCRR Part 325.8. Those for Commercial Pesticide Technician are detailed at 6NYCRR Part 325.9. A summary of these requirements appears in Appendix F.

The eligibility requirements for a Commercial Apprentice are detailed at 6NYCRR Part 325.10.

Applicators certified by other states should contact the Department regarding reciprocity possibilities.

Appendix C consists of a copy of the publication entitled: "Part 325 Rules and Regulations Relating to the Application of Pesticides, Revised January 21, 2000."

For information about registering for an exam, and for a list of parties that offer training approved by the Department of Environmental Conservation (DEC), please contact your regional office of the DEC, listed in Appendix A.

Below is a summary of certification requirements as they relate to use of mosquito larvicide, pupicide and adulticide by (A) Certified Commercial Pesticide Applicators; (B) Certified Commercial Technicians; (C) Commercial Pesticide Apprentices; (D) Certified Private

²ECL §33-0101(41) - 'Residential application' shall mean the application of general use pesticides by ground equipment on property owned or leased by the applicator, excluding any establishment selling or processing food and any residential structure other than the specific dwelling unit in which the applicator resides.

³FIFRA §2(h) - The term 'device' means any instrument or contrivance (other than a firearm) which is intended for trapping, destroying, repelling, or mitigating any pest or any other form of plant or animal life (other than man and other than bacteria, virus, or other microorganism on or in living man or other living animals); but not including equipment used for the application of pesticides when sold separately therefrom. Such devices include certain ultraviolet light systems, ultrasonic devices, and high frequency sound generators, as well as traps used in monitoring and surveillance activities - such as gravid mosquito traps, CDC miniature light traps, CO² traps, and standard New Jersey light traps.

Applicators; (E) Non-Certified Private Applicators, and (F) homeowners and other non-certified individuals engaged in residential application of pesticide.

Applicator certification requirements are not reduced, suspended or otherwise modified as the result of an emergency situation.

A. Certified Commercial Pesticide Applicators are authorized to engage in the commercial use of any mosquito larvicide, pupicide or adulticide registered for use in New York State, in accordance with the following:

1. Commercial Subcategory 5B-Aquatic Insect authorizes use of any mosquito larvicide and pupicide only. This authorization includes the application of larvicide or pupicide to water located in or on a structure, such as rooftop accumulations of rainwater and flooded basements. Use of adulticide is not authorized under any circumstances.

2. Commercial Subcategory 7A-Structural and Rodent authorizes use of any adulticide to control adult mosquitoes only when adult mosquitoes are located within a structure, and only when such control is incidental to the pursued control of another target organism in the same target site. Use of adulticide outside a structure requires certification in Category 8-Public Health. Use of larvicide and pupicide is not authorized under any circumstances.

3. Commercial Subcategory 7F-Food Processing authorizes use of adulticide to control adult mosquitoes only when they are located within a food establishment structure, other than an individual residence, where exposed food or food products are prepared, packaged or held for further distribution or consumption, and only when such control is incidental to the pursued control of another target organism in the same target site. Use of adulticide outside a food establishment requires certification in Category 8-Public Health. Use of larvicide and pupicide is not authorized under any circumstances.

4. Commercial Category 8-Public Health authorizes use of any mosquito adulticide in connection with a public health program, or an independent nuisance mosquito control program. Applicators are authorized to apply mosquito larvicide and pupicide only if employed by, or working under contract with, a public health program administered by the federal, State, regional, or local government agency. Indoor and outdoor use of adulticide is authorized. Applicators are not authorized to use larvicide or pupicide unless performed in connection with a public health mosquito control program.

5. Other Categories and Subcategories of Commercial Application, such as Commercial Subcategory 3A-Ornamentals and Turf, do not authorize use of mosquito larvicide, pupicide or adulticides under any circumstances.

B. Certified Commercial Pesticide Technicians engaged in the ground application of microbial larvicide,⁴ such as *Bacillus thuringiensis var. israelensis* and *Bacillus sphaericus* by ground equipment, can operate without working under the on-site or off-site direct supervision of a Certified Commercial Pesticide Applicator, if that Certified Commercial Pesticide Technician has successfully completed a Department-approved, 30-hour certification course related to this specific type of application.

Certified Commercial Pesticide Technicians engaged in the ground application of microbial larvicide,⁵ who have not successfully completed a Department-approved, 30-hour certification course related to this specific type of application, can only engage in such activity if working under the on-site direct supervision⁶ of a Certified Commercial Pesticide Applicator.⁷

⁴6NYCRR Part 325.1(am) - “Microbial pesticide” means any pesticide that is classified by the United States Environmental Protection Agency as a microbial pesticide and whose active ingredients consist of living microbial entities capable of survival, growth, reproduction and infection (i.e., bacteria, fungi, viruses and protozoans). [Also see 40CFR Part 158.65]

⁵See Footnote 4.

⁶6NYCRR Part 325.1(bg) - ‘Under the direct supervision of’ means: the act or process in which the application of a pesticide is made by a certified commercial pesticide technician or commercial pesticide apprentice acting under the instruction, control and authorization of a certified commercial applicator employed by the same registered business or agency . . . who is responsible for the actions of that individual.

6NYCRR Part 325.7(d)(3) - During pesticide use by an individual under the supervision of a certified private pesticide applicator, a technician, or an apprentice, that requires on-site direct supervision, the certified pesticide applicator must be physically present at the application site and within voice contact of the individual being supervised

⁷See Footnote 4.

Certified Commercial Pesticide Technicians engaged in the ground application of unclassified⁸ non-microbial larvicide⁹ and pupicide can operate without working under the on-site or off-site direct supervision of a Certified Commercial Pesticide Applicator.

Certified Commercial Pesticide Technicians engaged in the ground application of restricted non-microbial larvicide, such as the biochemical¹⁰ larvicide methoprene (*Altosid*), and restricted pupicide such as a monomolecular surface film (*Arosurf*[®] MSF and *Agnique*[™] *MMF*, containing the active ingredient Poly(oxy-1,2-ethanediyl), á -isooctadecyl- ù -hydroxy/hydroxyl), are required to work under the on-site direct supervision of a Certified Commercial Pesticide Applicator, except that on-site direct supervision is not required when a Certified Commercial Pesticide Technician applies larvicide or pupicide to temporary pools of water (e.g., snow melt pools) that do not have an outlet. This exception is adopted from provisions relating to the lower tier of commercial applicator classification - that of Commercial Pesticide Apprentice expressed at 6NYCRR Part 325.7(d)(2)(i)(b). For purposes of this certification provision, containerized waters are considered temporary pools of water.

For off-site supervision to apply, however, these containerized waters must not have an outlet. Such containerized waters would include bird baths, flower pots, tree holes, rain barrels, roof gutters, unused swimming pools, old automobile tires, and water gardens.

Certified Commercial Pesticide Technicians engaged in the ground application of unclassified adulticide can operate without working under the on-site or off-site direct supervision of a Certified Commercial Pesticide Applicator.

⁸Pesticides are classified as either “restricted use,” “unclassified” (formerly referred to as general use) or “general use” (chlorine gas). Unclassified products with one exception do not bear the term “General Use” as discussed in 40CFR Part 152.60. The one exception involves products containing the active ingredient, chlorine gas. These products are the only products which may bear the classification “General Use.” If a label under review by the US Environmental Protection Agency involves a product containing an active ingredient other than chlorine gas and the label contains the pesticide classification “General Use,” the EPA will instruct the registrant to remove the designation in accordance with EPA Policy and Criteria Notice 2460.2. Until New York State regulations are updated to be consistent with EPA terminology, “general use pesticide” will mean “a pesticide which does not meet the State criteria for a restricted pesticide as established under authority of section 33-0303 of Article 33 of the New York State Environmental Conservation Law.” [6NYCRR Part 325.1(af)]

⁹No larvicides that are both unclassified and non-microbial are presently registered for use in New York State.

¹⁰Note that while *Bacillus thuringiensis* var. *israelensis* (Bti), *Bacillus sphaericus*, and methoprene are all classified as biopesticides (or biological pesticides), Bti and *Bacillus sphaericus* are further classified as microbial biopesticides, while methoprene is further classified as a biochemical biopesticide. The third category of biopesticides are the plant-pesticides (i.e., B.t. CryIIA delta-endotoxin and the genetic material necessary for its production in potatoes).

Certified Commercial Pesticide Technicians engaged in the ground application of restricted adulticide must be working under the off-site (or on-site) direct supervision¹¹ of a Certified Commercial Pesticide Applicator.

Certified Commercial Pesticide Technicians engaged in the use of any larvicide, pupicide or adulticide that bears a label requiring on-site supervision must work under the on-site direct supervision of a Certified Commercial Pesticide Applicator in compliance with such label directions.

A Certified Commercial Pesticide Technician engaged in the aerial application of any larvicide, pupicide or restricted adulticide must be working under the on-site direct supervision of a Certified Commercial Pesticide Applicator. If applying unclassified adulticide by aerial delivery, a Certified Commercial Pesticide Technician can work under the off-site direct supervision of a Certified Commercial Pesticide Applicator, but the Certified Commercial Pesticide Technician must maintain radio contact with the Certified Commercial Pesticide Applicator.

Certified Commercial Pesticide Technicians are subject to the same category and subcategory interpretations discussed in Section III. A. - Applicator Certification.

CERTIFIED COMMERCIAL PESTICIDE TECHNICIAN		
No Direct Supervision	Off-Site Direct Supervision	On-Site Direct Supervision
microbial larvicide w/ 30-hr. course by ground 325.7(a)(7)/325.7(d)(1)(iv)	any larvicide to temporary pool of water (including containerized water) without outlet 325.7(d)(2)(i)(b)	microbial larvicide w/o 30-hr. course 325.7(a)(7)
unclassified non-microbial larvicide by ground (none NYS-registered for use in surface waters) 325.7(a)(1)	restricted adulticide by ground 325.7(a)(2)/325.7(d)(4)	any pupicide or non-microbial larvicide 325.7(d)(1)(iv)
unclassified adulticide by ground 325.7(a)(1)	aerial delivery of unclassified adulticide 325.7(d)(6)/325.7(d)(4)	any label requiring on-site direct supervision 325.7(d)(1)(iii)

¹¹6NYCRR Part 325.7(d)(5) - During pesticide use that allows off-site direct supervision, the certified commercial applicator must ensure that the technician has a means to contact and is able to contact the supervising certified applicator within a reasonable time not to exceed 30 minutes.

No Direct Supervision	Off-Site Direct Supervision	On-Site Direct Supervision
		aerial delivery of any larvicide, pupicide or restricted adulticide 325.7(d)(4)/325.7(d)(6)

C. Commercial Pesticide Apprentices engaged in the use of mosquito larvicide and pupicide must work under the on-site direct supervision of a Certified Commercial Pesticide Applicator. Off-site direct supervision¹² is permitted when individuals apply larvicide to temporary pools of water (e.g., snow melt pools) that do not have an outlet. For purposes of this certification provision, containerized waters are considered temporary pools of water. For off-site supervision to apply, however, these containerized waters must not have an outlet. Such containerized waters would include bird baths, flower pots, tree holes, rain barrels, roof gutters, unused swimming pools, old automobile tires, and water gardens.

Commercial Pesticide Apprentices engaged in the use of any mosquito adulticide must work under the on-site or off-site direct supervision of a Certified Commercial Pesticide Applicator.

When required to work under the off-site direct supervision of a Certified Commercial Pesticide Applicator, the certified applicator must ensure that the Commercial Pesticide Apprentice has a means to contact and is able to contact the supervising Certified Commercial Pesticide Applicator within a reasonable time not to exceed 30 minutes.

Commercial Pesticide Apprentices are prohibited from engaging in the aerial application of any mosquito larvicide, pupicide or adulticide.

Commercial Pesticide Apprentices engaged in the use of any larvicide, pupicide or adulticide that bears a label requiring on-site supervision must work under the on-site direct supervision of a Certified Commercial Pesticide Applicator in compliance with such label directions.

Commercial Pesticide Apprentices engaged in the use of any mosquitocide within or on the premises of licensed day care facilities, elementary and secondary schools, and hospitals must work under the on-site direct supervision of a Certified Commercial Pesticide Applicator.

¹²See experience and training requirements associated with off-site supervision of a Commercial pesticide Apprentice expressed at 6NYCRR Part 325.10(a).

COMMERCIAL PESTICIDE APPRENTICE		
No Direct Supervision	Off-Site Direct Supervision	On-Site Direct Supervision
	any larvicide to temporary pool of water (including containerized water) without outlet 325.7(d)(2)(i)(b)	any larvicide or pupicide 325.7(a)(3)/325.7(d)(2)(i)(b)
	any adulticide 325.7(a)(3)/325.7(d)(4)	federally restricted 325.7(a)(3)/325.7(d)(2)(i)(a)
		any label requiring on-site 325.7(a)(3)/325.7(d)(2)(i)(c)
		any mosquitocide within or on the premises of licensed day care facilities, elementary and secondary schools and hospitals
aerial application is prohibited 325.7(d)(2)(iii)		

D. Certified Private Applicators are not authorized to engage in the commercial application of any mosquito larvicide, pupicide and adulticide. Certified Private Pesticide Applicators are authorized to engage in the private use of mosquito larvicide, pupicide and adulticide, but only when such use is associated with production of an agricultural commodity (i.e., the maintenance of irrigation water holding ponds, or the control of mosquitoes affecting agricultural animals).¹³

1. Private Category 41-Aquatic Pest Control authorizes the private application of unclassified and restricted mosquito larvicide and pupicide, only if target waters are used in agricultural production. Use of mosquito adulticide is not authorized under any circumstances.

The characteristics of the particular body of water will determine if any of the permits discussed in this manual are required. See individual sections of this report for further information about the permits.

2. Private Category 31-Agricultural Animal Pest Control authorizes the private application of unclassified and restricted adulticide, only if such use is related to controlling

¹³6NYCRR Part 325.1(aw) - Private application of pesticides means the application of restricted use pesticide for the purpose of producing an agricultural commodity: (1) On property owned or rented by the applicator or the applicator's employer; or (2) if applied without compensation other than the barter of personal services between producers of agricultural commodities, on property owned or rented by a party to such a barter transaction.

mosquitoes affecting agricultural animals. Use of mosquito larvicide and pupicide is not authorized under any circumstances.

E. Non-Certified Private Applicators are authorized to engage in the application of unclassified larvicide, pupicide and adulticide only when such use is related to the production of an agricultural crop or the care of agricultural animals (i.e., the maintenance of irrigation water holding ponds, or the control of mosquitoes affecting agricultural animals). The characteristics of the particular body of water will determine if any of the permits discussed in this manual are required.

Non-Certified Private Applicators are authorized to engage in the use of restricted use larvicide, pupicide and adulticide while working under the direct supervision of a Certified Private Applicator, but only if such use is associated with the production of an agricultural crop, or is related to the care of agricultural animals.

F. Homeowners, and other individuals who are not certified and not working under the direct supervision of a certified applicator, are limited to engaging in the residential application¹⁴ of unclassified mosquito larvicide, pupicide and adulticide (over-the-counter products) only. They are limited to applying unclassified (general use) mosquitocides by ground equipment on property they own or lease, excluding any establishment selling or processing food and excluding any residential structure other than the specific dwelling unit (apartment) in which they reside.

At present, there are no unclassified pupicides registered for use in New York State. A single unclassified larvicide is presently registered for residential application in New York State -- *Mosquito Dunks* (EPA Reg. No. 6218-47). Application of this microbial larvicide (a.i.: *Bacillus thuringiensis* var. *israelensis*) is restricted to small areas of standing water located on residential property owned or leased by the individual applying the larvicide.

Examples of labeled target sites include containerized standing water found near the home such as bird baths, flower pots, tree holes, rain barrels, roof gutters, unused swimming pools, old automobile tires, and water gardens. In addition, residential application of *Mosquito Dunks* (EPA Reg. No. 6218-47) also extends to small temporary pools (e.g., snow melt pools) that are wholly situated on residential property owned or leased by the individual making application.

Mosquito Dunks (EPA Reg. No. 6218-47) can only be used to treat containerized water and small temporary pools of standing water around the home. They are prohibited from use on any commercial, institutional, industrial, recreational, agricultural, or any other non-residential properties.

¹⁴See Footnote No. 2.

A Certified Applicator is also authorized to apply *Mosquito Dunks* (EPA Reg. No. 6218-47) to a limited number of residential target sites as indicated. Other larvicides are also available to the Certified Applicator seeking to manage a mosquito larvae population on residential property.

Regardless of who applies *Mosquito Dunks* (EPA Reg. No. 6218-47), an Article 15/Part 329 Aquatic Pesticide Permit is required for any temporary pool that measures one acre or more in size; for any temporary pool that has an outlet to other waters; for any temporary pool that contains fish, and for any temporary pool that is not wholly situated on property privately owned or leased by the individual making or authorizing the application.

Regardless of who applies *Mosquito Dunks* (EPA Reg. No. 6218-47), an Article 24/Part 663 Freshwater Wetlands Permit or Letter of Permission may be required if the temporary pool is located in a regulated freshwater wetland or its adjacent area; an Article 25/Part 661 Tidal Wetlands Permit may be required if the temporary pool is located in a tidal wetland or its adjacent area, and a Part 190 Temporary Revocable Permit may be required if the temporary pool is located in lands under the jurisdiction of the Department of Environmental Conservation. See those sections of this manual for further information.

Pesticides “labeled for direct application to or in surface waters” are classified as restricted use. For the purposes of this provision of the 6NYCRR Part 326 regulations, small temporary pools of water (i.e., snow melt pools) that do not have an outlet, that do not contain fish, and that are located on residential property, are not regarded as surface waters for the purposes of this provision of the 6NYCRR Part 326 regulations. However, they do constitute waters of the State subject to other statutory and regulatory requirements such as Article 15/Part 329 Aquatic Pesticide Permit.

IV. AGENCY AND BUSINESS REGISTRATION is required of each agency¹⁵ that applies mosquito larvicide, pupicide or adulticide, and each business offering, advertising or providing the services of commercial application of such mosquitocides.¹⁶

To apply for a DEC registration as a Pesticide Business or Agency, a business or agency using pesticides in Category 5-Aquatic Pest Control, Category 7-Industrial, Institutional and Structural Pest Control, or Category 11-Aerial must employ at least one Certified Commercial Pesticide

¹⁵ECL §33-0101(4) - ‘Agency’ means any state agency; municipal corporation; public authority; college . . . which applies pesticides.

This includes State, regional and local departments of health, and departments of public works.

ECL §33-0911(3) exempts any state agency, municipal corporation, public authority, or college from registration fees.

¹⁶ECL §§33-0907(1) and 33-1301(8a), and 6NYCRR Part 325.23(a)

Applicator who is certified in the appropriate categories.¹⁷ To apply for registration as a Pesticide Business or Agency, a business or agency using pesticides in Category 8-Public Health need only employ a Certified Commercial Pesticide Technician if engaged only in the use of unclassified mosquitocides.

Appendix P consists of a *Pesticide Business/Agency Registration Application* (Form No.44-99-1 (11-99), and the associated *Directions for Pesticide Business/Agency Registration Application*.

Agency and business registration requirements are not reduced, suspended or modified as the result of an emergency situation.

V. PRODUCT REGISTRATION

A. New York State Pesticide Product Registration must be in effect on each specific date a mosquitocide is in use. Every pesticide must be registered with the New York State Department of Environmental Conservation prior to its sale and use in New York State. Any sale or use of non-NYS-registered pesticide is an unlawful act that subjects the offending party to administrative, civil or criminal sanctions.¹⁸

This is an important consideration when Article 15/Part 329 Aquatic Pesticide Permits are issued to authorize use of mosquito larvicide and pupicide on a seasonal basis. The terms and conditions of each Article 15/Part 329 Aquatic Pesticide Permit will contain a statement identifying the acceptance date of the associated label of the specific pesticide permitted for use, as well as the expiration date if the registration is due to expire during the period the permit authorizes product use. The only product that can be used under the authority of an Article 15/Part 329 Aquatic Pesticide Permit is that which bears the exact same label as the one attached to the permit. When an applicant proposes to use more than one pesticide, a separate application for permit must be submitted for each product. Appendices K and L consist of two examples of permits issued during the 1999 season.

Appendix O consists of an alphabetized listing and the labeling of 43 of the mosquitocides most likely to be used during the upcoming season.

Appendix N identifies 144 mosquitocides registered for use in New York State as of March 2000. The corresponding expiration dates of each of these mosquitocides are also indicated. Products identified in Appendices N and O are those labeled for use in community-wide control programs, and for use by commercial applicators treating individual properties. Keep in mind that pesticide

¹⁷6NYCRR Part 325.23(h) - A registered business using pesticides in Category 7-Industrial, Institutional or Structural; Category 5-Aquatics . . . or businesses applying pesticides by aircraft must employ at least one certified commercial pesticide applicator, certified in these categories.

¹⁸ECL §§33-0701, 33-1301(1)(a), and 71-2907.

product registrations are renewable on a two-year cycle. A copy of the product label accepted for use in New York State will be attached to, and made part of, each Article 15/Part 329 Aquatic Pesticide Permit. Use inspections conducted by DEC staff will include a verbatim check to determine whether the label in actual use is the same as that accepted for registration by the Department, and the same as that which was attached to, and made part of, the corresponding Article 15/Part 329 Aquatic Pesticide Permit.

Pesticide registration requirements are not reduced, suspended or modified as the result of an emergency situation; however, the following situations may occur:

B. Federally-Registered Pesticide Not Registered in New York State: If a federally registered pesticide that is not registered in New York State is proposed to be used, the applicant will be immediately notified and advised to work with the manufacturer of the product to secure New York State registration.

C. FIFRA §24(c) Special Local Need: If a federally registered pesticide is proposed to be used in a manner not specified on the label, a “Special Local Needs” (SLN) registration may be issued by the Department to allow use in the proposed manner but only under certain limited conditions. Under the authority of FIFRA §24(c), states may register an additional use of a federally registered pesticide product, or a new end use product to meet special local needs. The EPA reviews these registrations, and may disapprove the state registration if, among other things, the use is not covered by necessary tolerances, or the use has been previously denied, disapproved, suspended or canceled by the Administrator, or voluntarily canceled subsequent to a notice concerning health or environmental concerns.

D. FIFRA §18 Emergency Exemption: If a pesticide is proposed to be used for which there is no federal registration for the active ingredient, or, if the proposed use is in a commercial agricultural area¹⁹ and no residue tolerance or exemption from tolerance exists for the pesticide, then the product cannot be used except under an Emergency Exemption issued by the EPA.

To approve an Emergency Exemption, the EPA must find that the pesticide use poses no unreasonable adverse effects and that there is a reasonable certainty of no harm to human health and the environment.

An Emergency Exemption can only be issued by the EPA and only under emergency conditions. It is not envisioned that such an Emergency Exemption would be needed in connection with control efforts directed at the West Nile virus situation, given the number of mosquito products currently available. However, if there is any indication that a product that is not federally-registered might be needed, it should be brought to the attention of the Pesticide Management Bureau of this Department as quickly as possible. That unit can be reached at: New York State

¹⁹Residential fruit, berry, and vegetable gardens are not included in this reference to agricultural areas.

Department of Environmental Conservation, Division of Solid and Hazardous Materials, Pesticide Product Registration Section, 50 Wolf Road, Albany, New York 12233-7254, Attention: Maureen Serafini, Section Supervisor; (518) 457-7446.

VI. ECL ARTICLE 15/PART 329 AQUATIC PESTICIDE PERMITS are required if any mosquito larvicide or pupicide²⁰ is to be used in or over any waters of the State, with limited exception.

Exempt waters are those surface waters that meet all of the following criteria:

- (1) lie wholly within the boundaries of lands privately owned or leased by the individual making or authorizing treatment, AND
- (2) measure one acre or less in size, AND
- (3) have no outlet to other waters, AND
- (4) are temporary ponds, or are ponds that do not contain fish.

Waters are exempt from Article 15/Part 329 Aquatic Pesticide Permit requirements only if they meet all four criteria. Waters that do not meet all four criteria are subject to Article 15/Part 329 Aquatic Pesticide Permit requirements. Examples of waters that are subject to Article 15/Part 329 Aquatic Pesticide Permit requirements - if they do not meet all four of the above-referenced criteria, include snow melt pools; sumps; recharge basins; roadside swales; man-made ornamental ponds; fresh and tidal wetlands and their adjacent areas, catch basins and storm drains.

Catch basins and storm drains that divert collected water through a sewer network that terminates at a wastewater treatment facility²¹ are viewed differently during the application review process than those catch basins that divert water to a wetland area, recharge basin, sump, or similar surface area.

²⁰Reference to aquatic insecticide is intentionally limited to larvicides and pupicides because adulticides are prohibited by label directions from use in or over surface waters, and are therefore not used in areas subject to Article 15/Part 329 Aquatic Pesticide Permit. The following are examples of such label restrictions: "For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark," "This pesticide is extremely toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas," "This product is extremely toxic to fish. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Use with care when applying in areas adjacent to any body of water," and "This pesticide is toxic to fish, aquatic invertebrates, and aquatic life stages of amphibians. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms near the application site."

²¹A State Pollutant Discharge Elimination System (SPDES) Permit is not required.

Containerized waters are not subject to Article 15/Part 329 Aquatic Pesticide Permit and include bird baths; flower pots; tree holes; rain barrels; roof gutters; unused swimming pools; old automobile tires, and water gardens. Structural accumulations of water found on a rooftop or flooded basements are not subject to Article 15/Part 329 Aquatic Pesticide Permit.

Note that waters (other than containerized and structural waters identified in the foregoing paragraph) which are exempt from Article 15/Part 329 Aquatic Pesticide Permit requirements may nevertheless be subject to Article 24/Part 663 Freshwater Wetlands Permit, Article 25/Part 661 Tidal Wetlands Permit, and 6NYCRR Part 190 Temporary Revocable Permit (TRP) requirements. Note that Article 24/Part 663 and Article 25/Part 661 Permits are, in turn, governed by Uniform Procedures Act (UPA) regulations expressed at 6NYCRR 621, which control the application procedures and review requirements.

Applications for permits governed by the Uniform Procedures Act (UPA) and its implementing regulations (ECL §70-0107 and 6NYCRR Part 621) are submitted to the Regional Permit Administrator. These include:

- C **Article 24/Part 663 Freshwater Wetlands Permits**, and
- C **Article 25/Part 661 Tidal Wetlands Permits**.

Applications for permits not governed by the UPA and its implementing regulations are processed as follows:

- C Applications for **Article 15/Part 329 Aquatic Pesticide Permits** are submitted to the Regional Pesticide Unit.
- C Applications for **Part 190 Temporary Revocable Permits** in connection with mosquito larviciding and pupiciding activities that are subject to Article 15/Part 329 Aquatic Pesticide Permit requirements are submitted to the Regional Pesticide Unit.
- C Applications for **Part 190 Temporary Revocable Permits** in connection with mosquito larviciding and pupiciding activities that are not subject to Article 15/Part 329 Aquatic Pesticide Permit requirements, or any use of adulticides are submitted to the Regional Land Manager. If the proposed activity relates to a Wildlife Management area, applications are submitted to the Bureau of Wildlife. If the proposed activity relates to lands under the control of the Division of Lands and Forests, applications are submitted to the Regional Forester.
- C Applications for **Fish Stocking Permits** are submitted to the Regional Fisheries Manager.

The application of adulticide by ultra-low volume (ULV) aerosol or fog space spray is prohibited in or over waters of the State. Ultra-low volume (ULV) aerosol or fog delivery of adulticide in non-aquatic sites would therefore not constitute use of pesticide in or over surface waters and would not be subject to Article 15/Part 329 Aquatic Pesticide Permit requirements. Application of adulticide in or over waters of the State would constitute a violation of federal and State law. As stated in 6NYCRR §329.3(b)(1),

These regulations permit control or elimination of biting insects whose life history involves an aquatic stage (e.g., mosquitoes, black flies, etc.) and which may be detrimental to the comfort and well-being of man, under such stipulated conditions as to protect the waters for the best usages assigned to them and the public health, safety and welfare, and terrestrial and aquatic life or the growth and propagation thereof, other than aquatic insects intended to be controlled or eliminated. These regulations do not apply to space treatment or residual treatment for controlling adult mosquitoes over land. However, any treatment resulting in direct entry of these chemicals into waters shall be deemed to be in violation of these regulations if the permit herein required has not been obtained.

“Lands privately owned or leased by the individual making or authorizing . . . treatment” does not extend to property owned by a corporation, association, organization, congregation, partnership, agency, municipality, or similar entity.

To be considered an ultra-low volume (ULV) aerosol or fog space spray, the pesticide must be delivered in accordance with label directions for ultra-low volume application. Application equipment must be capable of producing the droplet spectrum described on the label of the pesticide in use. Particle size is the description of the size of the individual spray droplets that comprise a spray pattern. Particles are measured in microns (micrometers).

If the size of individual droplets exceeds the measurement indicated by label directions, or if the percentages of droplet size ratios are exceeded, the application is considered a barrier or perimeter spray that leaves a residual deposit on vegetation and other surfaces in the target zone.

Consider the label directions for the following three adulticide examples:

FYFANON® ULV Insecticide (EPA Reg. No. 67760-34) - “1. The Mass Mean Diameter (MMD) of the droplets should not exceed 17 microns. The MMD is the drop diameter which divides the spray volume into two equal parts; i.e., 50% of the volume are drop sizes below the MMD and 50% are above the MMD. 2. Spray droplets should not exceed 32 microns in size. Three percent of the spray droplets (6 droplets out of 200) can exceed 32 microns, providing the MMD does not exceed 17 microns and no droplets exceed a maximum of 48 microns. Larger droplets, when transported by natural air currents, impinge more readily on objects in their pathway and will permanently damage automobile-type paints. 3. More than one-half of the total spray mass must consist of droplets in the 6 to 18 micron range to achieve adequate dispersal of insecticide over a 300-foot swath. 4. A minimum of two-thirds, preferably four-fifths of the total spray mass must consist of droplets not exceeding 24 microns in range.”

Clarke Anvil® 10+10 ULV (EPA Reg. No. 1021-1688-8329) - “Ground ULV Application . . . may be applied undiluted with a non-thermal ULV portable ‘backpack’ spray unit capable of delivering particles in the 5 to 25 micron range.” “Aerial applications should be done by suitable aerial ULV equipment capable of producing droplets with a MMD of 50 microns or less with no more than 2.5% exceeding 100 microns.”

Scourge[®] *Insecticide with SBP-1382*[®]/*Piperonyl Butoxide 4% + 12% MF Formula II* (EPA Reg. No. 432-716) - “For use in nonthermal ULV portable backpack equipment . . . Adjust equipment to deliver fog particles of 18-50 microns mass mean diameter . . . For truck mounted nonthermal ULV equipment . . . adjust equipment to deliver fog particles of 8-20 microns mass mean diameter.”

Note that surface waters subject to Article 15/Part 329 Aquatic Pesticide Permit requirements include not only freshwater and tidal wetland areas that contain surface water at time of application, but also those areas that may not contain surface water at time of application. If “dry” areas of wetlands can be expected to contain surface water following the application of pesticide, and during the period the pesticide is expected to remain present in that target site, that activity is subject to permit requirements. For example, if a tidal wetland area proposed to receive a mosquito larvicide is dry at time of application, but is expected to be flooded by waters associated with the next scheduled high tide, the area is subject to Article 15/Part 329 Aquatic Pesticide Permit. If, on the other hand, the proposed target site is a dry adjacent area [as that term is defined at 6NYCRR Parts 663.2(b) and 661.4(b)(1)] that is not subject to tidal flooding, the area would not be subject to Article 15/Part 329 Aquatic Pesticide Permit, but there would also be no reason to treat such a dry area with mosquito larvicide.

Key issues often incorporated in the terms and conditions of Article 15/Part 329 Aquatic Pesticide Permits include reinforcement of the Department’s interpretation and clarification relating to label directions, precautions and restrictions (e.g., weather conditions); protection of threatened and endangered species [e.g., Tiger Salamander (*Ambystoma tigrinum*), Piping Plover (*Charadrius melodus*), and Blue-spotted Salamander (*Ambystoma laterale*);²² and provisions tailored to consider whether a mosquito-borne disease such as West Nile virus is present in a target area, or has a historic presence warranting continued attention. The following are examples of some terms and conditions that may be incorporated into an Article 15/Part 329 Aquatic Pesticide Permit:

Permittee will not use the authorized chemicals in any manner, nor under any wind or such other conditions as may disturb active osprey nests. Periods of osprey activity range between March 15 and July 15.

No wheeled or tracked vehicles are to enter upon vegetated tidal wetlands or freshwater wetlands for the purpose of pesticide application, except:

- (1) low ground pressure tracked vehicles may be used for routine ditch maintenance and ground application of pesticides approved by this permit; and
- (2) low ground pressure tracked vehicles may be used for the construction and maintenance of water circulation and control systems for open marsh water management (OMWM) provided that such OMWM system designs

²²A list of the threatened and endangered species found in New York State is found in Appendix Q.

have been specifically approved by the appropriate regulatory agencies with the Department of Environmental Conservation.

Use of low ground pressure tracked vehicles in tidal wetlands is subject to Article 25 Permit requirements. Contact (the name, address and telephone number of the appropriate regional contact will be provided).

Use of low ground pressure tracked vehicles in freshwater wetlands is subject to Article 24 Permit requirements. Contact (the name, address and telephone number of the appropriate regional contact will be provided).

SANDOZ ALTOSID PELLETS MOSQUITO GROWTH REGULATOR (EPA Reg. No. 2724-448-64833) is prohibited from use in known fish habitat. This prohibition applies regardless of whether Eastern equine encephalitis virus (EEEV) has been isolated within the target area at any time.

SANDOZ ALTOSID PELLETS MOSQUITO GROWTH REGULATOR (EPA Reg. No. 2724-448-64833) is prohibited from use in tidal wetlands. This prohibition applies regardless of whether EEEV has been isolated within the target area at any time.

SANDOZ ALTOSID PELLETS MOSQUITO GROWTH REGULATOR (EPA Reg. No. 2724-448-64833) is permitted for use in non-tidal wetland areas, only when EEEV has been isolated in the target area within the past two years.

SANDOZ ALTOSID PELLETS MOSQUITO GROWTH REGULATOR (EPA Reg. No. 2724-448-64833) is prohibited from use in lakes, ponds or streams. This prohibition applies regardless of whether EEEV has been isolated in the target area at any time.

SANDOZ ALTOSID PELLETS MOSQUITO GROWTH REGULATOR (EPA Reg. No. 2724-448-64833) is prohibited from use within 100 feet of lakes ponds and streams, except when application is by ground equipment and EEEV has been isolated in the target area within the past two years.

SANDOZ ALTOSID PELLETS MOSQUITO GROWTH REGULATOR (EPA Reg. No. 2724-448-64833) is permitted for use by aerial application 100 feet from lakes, ponds and streams only when EEEV has been isolated in the target area within the past two years, and only when wind and other conditions will prevent drift from contacting lakes, ponds or streams.

Due to the documented occurrence of New York State and Federally-listed threatened and endangered species, delivery of pesticides by aerial application to the proposed target sites delineated on maps associated with this permit is

prohibited, in all instances, within 300 feet of piping plover and tern nesting sites. This restriction will remain in effect until August 31. Hand and ground application is also prohibited within 300 feet of piping plover and tern nesting sites.

The New York State Department of Environmental Conservation, Region 1, Endangered Species Unit must be notified at least 48 hours prior to any aerial or ground application of pesticides in areas occupied by endangered or threatened species. Contact (the name, address and telephone number of the appropriate regional contact will be provided).

SANDOZ ALTOSID PELLETS MOSQUITO GROWTH REGULATOR (EPA Reg. No. 2724-448-64833) is permitted for use in protected wetlands and recharge basins (sumps) that are not fish habitats and that do not have any direct connection to a lake, pond or stream.

The application of *SANDOZ ALTOSID PELLETS MOSQUITO GROWTH REGULATOR* (EPA Reg. No. 2724-448-64833) into swales, basins or other water holding areas or structures that drain into any of the trout holding waters listed in the following areas is prohibited:

Town of Babylon: Carlls River, Santapogue Creek, Amityville Creek
Town of Islip: Orowoc Creek and tributaries, Connetquot River,
Champlins Creek, Brown Creek, Green Creek, Sampwams Creek
Town of Brookhaven: Swan River, Patchogue River, Beaverdam Creek,
Tuthills Creek, Terrel River, Mud Creek, Carmans River, Yaphank Creek,
Hells Creek, Palace Brook
Town of Smithtown: Nissequogue River and tributaries

Note that each application for permit must be accompanied by a fifty-dollar (\$50.00) fee, in accordance with ECL §15-0313(4)(b).

A. Technical Administrative Guidance Memorandum No. 2007-Aquatic Pesticide Permit Program provides guidance in the administration of the Article 15/Part 329 Aquatic Pesticide Permit program. You will need to thoroughly review this TAGM prior to submitting an application for permit. See Appendix J.

Article 15/Part 329 Aquatic Pesticide Permit requirements are not reduced, suspended or modified as the result of an emergency situation. In fact, in referring to the New York State Department of Health's declares a public health threat, 10NYCRR Part 44.60(d)(6) reinforces the need for Article 15/Part 329 Aquatic Pesticide Permit in stating:

Sources for public water supplies will not be subjected to direct spray applications nor to the drift of such activities. Surface water shall not be subjected to mosquito larvicide application without a NYSDEC aquatic pesticide permit, when required,

and any such application shall comply with the label restrictions of the pesticide used.

VII. ECL ARTICLE 24/PART 663 FRESHWATER WETLANDS PERMITS

If regulated freshwater wetlands or their adjacent areas are potential sites of pesticide application or habitat modification, the applicator or health department employee responsible for such proposed action must contact the Regional Permit Administrator to pursue compliance with Article 24 of the ECL, and Parts 621 and 663 of Title 6 of the NYCRR. Regional Permit Administrators can be located by contacting your regional office of the DEC. See Appendix A.

A. Pesticide Use - With respect to pesticide use, Article 24/Part 663 Freshwater Wetlands Permits are often required independent of whether an Article 15/Part 329 Aquatic Pesticide Permit is required.²³ This is especially common when regulated “adjacent areas”²⁴ (which may not contain water at time of application) are targeted with adulticides. Since these regulated areas do not constitute “waters of the state,” pursuant to Article 17, pesticide use in such dry upland areas is not subject to Article 15/Part 329 Aquatic Pesticide Permit requirements, but is subject to the permitting requirements expressed at Article 24 and Part 663.4(d)(38-41).²⁵

Within the Adirondack Park, Article 24/Part 663 Freshwater Wetlands Permits are issued by the Adirondack Park Agency (APA). In all other areas outside the Adirondack Park, these permits are issued by the Department of Environmental Conservation.

B. Habitat Modification activities, such as water management or draining a wetland area, are regulated activities subject to Article 24/Part 663 Freshwater Wetlands Permit requirements.

Note that Article 24/Part 663 Freshwater Wetlands Permits are governed by Uniform Procedures Act (UPA) regulations expressed at 6NYCRR Part 621, which control application procedures and review requirements.

An emergency situation does influence Article 24/Part 663 Freshwater Wetlands Permit requirements, whether relating to pesticide use or modification of the wetland.

²³ECL §§24-0701 and 24-0703, and 6NYCRR Part 663

²⁴6NYCRR Part 663.2(b) - Areas of land or water that are outside a wetland and within 100 feet, measured horizontally, of the boundary of the wetland.

²⁵In the section dealing with Procedural Requirements relating to “Pollution and Pesticides”, there is reference to both “Application of a pesticide conducted pursuant to a permit issued under Article 15 of the Environmental Conservation Law . . .” [6NYCRR Part 663.4(d)(39)], and “Application of a pesticide where no permit is required under Article 15 of the Environmental Conservation Law . . .” [6NYCRR Part 663.4(d)(40)].

Public health activities conducted by the New York State Department of Health and mosquito control are addressed by ECL §24-0701(5) and (6), and 6NYCRR Part 663.2(z)(3). Under the authority of these laws and regulations, certain activities are allowed under a public health threat or a health emergency that would not be allowed under a routine mosquito control program. The statute also obligates the Department to exercise substantial control over a routine mosquito control program even when imminent human health issues are absent.

ECL §24-0701(5) states:

Public health activities, orders and regulations of the department of health shall be excluded from regulated activities. Copies of all such public health orders and regulation affecting wetlands shall be filed with the department of environmental conservation. The commissioner may request modification of such orders or regulations if he deems such necessary to implement the policy of this article.

6NYCRR Part 663.2(z)(3) states:

Public health activities, orders or regulations of the New York State Department of Health are not regulated under the Act or this part provided copies of all such orders or regulations affecting wetlands are filed with the Department of Environmental Conservation in advance. The Commissioner may request modification of these activities, orders or regulations if necessary to implement the policy of the Act.

ECL §24-0701(6) states:

The Commissioner shall review all current mosquito control projects to determine whether they are having any adverse impact on freshwater wetlands. Where any adverse impact is found, the commissioner may require modification of such projects if he deems such necessary for the implementation of the policies of this article.

In addition, permit standards explicitly regulate application of pesticides at items 6NYCRR Part 663.4(d)(39-41), which indicate:

ITEMS	ACTIVITIES	Procedure & Compatibility by Area	
		FWW	AA
39	Application of a pesticide conducted pursuant to a permit issued under Article 15 of the Environmental Conservation Law (see 6NYCRR Part 327, 328, 329).	P (N)	P(C)

ITEMS	ACTIVITIES	Procedure & Compatibility by Area	
		FWW	AA
40	Application of a pesticide where no permit is required under Article 15 of the Environmental Conservation Law (see 6NYCRR Part 327, 328, 329).	P(X)	P(X)
41	Application of a pesticide to the grounds of a private residence when such use is by the owner.	P(C)	L

FWW = Freshwater Wetland

AA = Adjacent Area

L = Letter of Permission required

P = Permit required

C = usually compatible; means that a regulated activity may be compatible with a wetland and its functions and benefits, although in some circumstances the proposed action may be incompatible.

N = usually incompatible; means that a regulated activity is usually incompatible with a wetland and its functions and benefits, although in some cases the proposed action may be insignificant enough to be compatible.

X = incompatible; means that a regulated activity is incompatible with a wetland and its functions and benefits.

These laws and regulations are consistent with the intent of the law and its implementation. The agency is charged with evaluating impacts associated with regulated activities in a stepwise fashion. Specifically, if alternatives exist which allow the applicant to **avoid** impacts to the wetland and its benefits, the Department will require that the best alternative be used. Since quite often all impacts cannot be avoided, alternatives that **minimize** impacts will be required. If alternatives to the proposed activity cannot be found, and impacts to the wetland and its benefits are severe enough, the Department can require that the applicant **mitigate** for the damages. Mitigation for severe impacts can be extensive and costly.

The Department's original approach, which requires that vector control programs develop and employ a comprehensive larvicide program as an alternative to adulticides or habitat modification, is consistent with the Department's charge to identify alternatives which minimize impacts to the resource. Additionally, if mosquitoes are effectively controlled in the larval or pupal stages, the frequency and extent of public health issues are likely to be reduced as well. This should effectively eliminate the need for habitat modification and extensive adulticiding. Therefore, under all but exceptional circumstances, the Department has the authority to determine and require the best alternatives for control.

In accordance with the provisions of ECL §24-0701(5) and 6NYCRR Part 663.2(z)(3), public health activities, orders and regulations of the New York State Department of Health are excluded from regulated activities. In addition, there are exemptions for certain non-emergency

activities which are addressed in ECL §24-0701(6). The Commissioner of the New York State Department of Environmental Conservation (the regional wetland managers/or directors) has the ability to “require modification of such projects . . . to implement the policy of this article.” The Department is authorized to require that, as part of their routine mosquito control, vector control agencies maintain a larvicide program that is an effective alternative to the use of adulticides or habitat modification.

All types of habitat modification should be considered only as an absolute last resort. It is unlikely that the Department would support the alteration of freshwater habitats if other alternatives exist, such as the removal of waste tires. The draining or filling of wetland is considered a long term impact which, in some cases, may not be reversible. Therefore, the permanent alteration or loss of wetlands is not consistent with the Environmental Conservation Law. It would be difficult to imagine circumstances that would warrant such an extreme action, or under which the Department would have to permit it, especially with all of the alternatives that exist in today’s mosquito control arsenal.

In addition, Article 24/Part 663 Freshwater Wetlands Permits are included under the umbrella of the 6NYCRR Part 621 Uniform Procedures Act (UPA) regulations. Both ECL §70-0105(6) and 6NYCRR Part 621.1(g) define an emergency as “. . . an event which presents an immediate threat to life, health, property, or natural resources.”

6NYCRR Part 621.12 contains emergency authorization procedures which are usually utilized for Uniform Procedures Act permits, including those regulated by Part 663. Uniform Procedures Act Emergency Authorization procedures have some distinct requirements. For example, only public agencies are authorized to undertake emergency actions if prior notification to the Department is not possible. See Section II. E. - Emergency Authorizations for additional information.

VIII. ECL ARTICLE 25/PART 661 TIDAL WETLANDS PERMITS:

A. Pesticide Use - Article 25/Part 661 Tidal Wetlands Permits, when required, are governed by the Uniform Procedures Act regulations at 6NYCRR §621, and are issued by an authorized Permit Administrator pursuant to these regulations. In addition, Article 25/Part 661 permit applications are submitted to the Regional Permit Administrator. The applications will then be forwarded to the appropriate technical program for review.

Most often, authorization to engage in pesticide use activities subject to Article 25/Part 661 Tidal Wetlands Permit can be expressed as a component of the Article 15/Part 329 Aquatic Pesticide Permit process. Permission to use pesticides in regulated tidal wetlands is indicated by the countersignature of the Regional Natural Resources Supervisor within the authorization text of an

Article 15/Part 329 Aquatic Pesticide Permit which bears reference to regulated tidal wetlands and their adjacent areas.²⁶

Permit standards explicitly regulate application of pesticides at items 6NYCRR Part 661.5(b)(53 and 55), which indicate:

ITEMS	USES	Area and Use Categories		
		FM, IM, HM	SM, LZ	AA
53	The use or application of any chemical, petrochemical or other toxic material, including any pesticide, where not authorized by law.	I	I	I
55	The use or application of any chemical, petrochemical or other toxic material, including any pesticide, where otherwise authorized by law. . .	NPN	NPN	NPN

- FM = Coastal Fresh Marsh
- IM = Intertidal Marsh
- HM = High Marsh or Salt Meadow
- SM = Coastal Shoals, Bars and Flats
- LZ = Littoral Zone
- AA = Adjacent Area
- I = Incompatible Use
- NPN = Uses Not Requiring a Permit

As indicated by table above, with respect to the classification of uses in coastal fresh marshes, intertidal marshes, coastal shoals, bars and flats, high marshes or salt meadows, littoral zones, and adjacent areas, 6NYCRR Part 661.5(b)(53) states: “The use or application of any chemical, petrochemical or other toxic materials, including any pesticide, where not authorized by law” constitutes a use classification of “I” - an incompatible use requiring Article 25/Part 661 Tidal Wetlands Permit authorization.

²⁶6NYCRR Part 661.4(b)(1) - ‘Adjacent area’ shall mean any land immediately adjacent to a tidal wetland within whichever of the following limits is closest to the most landward tidal wetland boundary . . . (i) 300 feet landward of said most landward boundary . . . however, . . . within the city of New York this distance shall be 150 feet . . . or (ii) to the seaward edge of the closest lawfully and presently existing . . . functional and substantial . . . man-made structure . . . which is a minimum of 100 feet in length . . . but not including buildings . . . or (iii) to the elevation contour of 10 feet above mean sea level, except when such contour crosses the seaward face of a bluff or cliff, or crosses a hill on which the slope equals or exceeds the natural angle of repose of the soil, then to the topographic crest of such bluff, cliff, or hill . . .

As indicated by the table above, with respect to the classification of uses in coastal fresh marshes, intertidal marshes, coastal shoals, bars and flats, high marshes or salt meadows, littoral zones, and adjacent areas, 6NYCRR Part 661.5(b)(55) states: “The use or application of any chemical, petrochemical or other toxic materials, including any pesticide, where otherwise authorized by law . . .” constitutes a use classification of “NPN” - uses not requiring a permit.

In cases in which an Article 15/Part 329 Aquatic Pesticide Permit is required, and has been issued bearing the countersignature of the Natural Resources Supervisor, the action is regarded as “otherwise authorized by law”; therefore, a separate Article 25/Part 661 Tidal Wetlands Permit is not issued. As determined necessary to protect tidal wetland resources, terms and conditions are incorporated into the Article 15/Part 329 Aquatic Pesticide Permit.

B. Habitat Modification activities, such as water management, are regulated activities subject to Article 25/Part 661 Tidal Wetlands Permits requirements. Construction or substantial modification of mosquito control ditches is a generally compatible use which requires an Article 25 Tidal Wetlands Permit. Ordinary maintenance and repair (not involving expansion or substantial restoration, reconstruction or modification) of existing mosquito control ditches does not require a permit provided that such activity does not involve a regulated activity.

Due to the detrimental impacts of mosquito ditching on tidal wetlands, it is the policy of the Department not to permit such activities by anyone other than the appropriate government agencies. Poorly designed, constructed or maintained mosquito ditches are both damaging and ineffective and are the equivalent of dredging and filling the marsh. These activities are presumptively incompatible uses in regulated tidal wetlands. Similarly, the Department strongly encourages the use of Open Marsh Water Management (OMWM) principles when creating or maintaining mosquito ditches. These principles include techniques such as using ditch plugs to more effectively control mosquito populations while minimizing adverse impacts on the hydrology and values of the marsh. Implementing OMWM techniques requires an Article 25 Tidal Wetlands Permit.

Note that Article 25/Part 661 Tidal Wetlands Permits are governed by Uniform Procedures Act (UPA) regulations expressed at 6NYCRR 621, which control application procedures and review requirements.

An emergency situation does influence Article 25/Part 661 Tidal Wetlands Permit requirements. 6NYCRR Part 661.5 Use Category 2 pertains to “Activities of the department of health or units of local government with respect to public health, when conducted in conformance with section 25-0401 of the Act.” This use category is classified as “NPN” - No Permit Necessary for all Area and Use Categories (FM, IM, HM, SM, LZ and AA).

ECL §25-0401(4) states:

Activities, orders, and regulations of the department of health or of units of local government with respect to matters of public health shall be excluded from

regulation hereunder, except as hereinafter provided. Copies of all such public health orders and regulations affecting tidal wetlands shall be filed with the department of environmental conservation. The Commissioner may require modification of such orders or regulations if he deems it necessary to implement the policy of this act.

ECL §25-0401(5) states:

The commissioner shall review all current mosquito control projects to determine whether they are having any adverse impacts on tidal wetlands. Where any adverse impact is found, the commissioner following a public hearing, may require modification of such projects if he deems it necessary to implement the policy of this act.

In addition, Article 25/Part 661 Tidal Wetlands Permits are included under the umbrella of the 6NYCRR Part 621 Uniform Procedures Act (UPA) regulations. ECL §70-0105(6) and 6NYCRR §621.1(g) define an emergency as “. . . an event which presents an immediate threat to life, health, property, or natural resources.”

6NYCRR Part 621.12 contains emergency authorization procedures which are those usually utilized for Uniform Procedures Act permits, including those regulated by Part 661. Uniform Procedures Act Emergency Authorization procedures have some distinct differences. For example, only public agencies are authorized to undertake emergency actions if prior notification to the Department is not possible. See Section II. E. - Emergency Authorizations for additional information.

If regulated tidal wetlands or their adjacent areas are potential target sites to receive application of larvicides or adulticides in connection with any mosquito control activities, the applicator or health department employee responsible for such proposed use of pesticide must contact the Regional Permit Administrator to pursue compliance with Article 25 of the ECL, and Parts 621 and 661 of Title 6 of the NYCRR. Regional Permit Administrators can be located by contacting your regional office of the DEC. See Appendix A.

IX. 6NYCRR PART 190 TEMPORARY REVOCABLE PERMITS, when required, are handled in concert with Article 15/Part 329 Aquatic Pesticide Permits when they are required in connection with larvicide or pupicide use. They are handled independent of Article 15/ Part 329 Aquatic Pesticide Permits in connection with adulticide use.

6NYCRR Part 190.9 states:

No pesticide shall be applied to any State land under the jurisdiction of the Department of Environmental Conservation except by written authorization from the department.

With respect to the use of larvicides and pupicides in waters of the State, the Regional Natural Resources Supervisor indicates authorization to treat such lands by countersigning the Article 15/Part 329 Aquatic Pesticide Permit. Any concerns are related to the proposed action are incorporated as additional terms and conditions of the Article 15/Part 329 Aquatic Pesticide Permit.

This countersignature also attains conformance to the requirements of 6NYCRR §329.4(c)(4) which states:

No permit shall be issued under this Part for lands under control of the Department of Environmental Conservation unless it is countersigned by the director of the division of the department having jurisdiction over the lands involved.

Section IV.H.2.d. of TAGM No. 2007 states:

In the case of insect control programs which include lands under the control of the Department, the application should be reviewed by the person designated by the Regional Director. A Temporary Revocable Permit (Part 190) must be issued. The Director, Division of Lands and Forests or his/her designee may co-sign the permit in lieu of a separate Part 190 permit.

With respect to the proposed use of larvicide and pupicide that is not subject to Article 15/Part 329 Aquatic Pesticide Permit requirements, or the proposed use of any adulticides in or over State lands under the jurisdiction of the Department of Environmental Conservation, the applicator must contact the Regional Land Manager to discuss submitting an *Application for Revocable Permit for the Temporary Use of State Land*. See Appendix A for a listing of regional offices.

6NYCRR Part 190 Permit requirements are not reduced, suspended or modified as the result of an emergency situation.

X. LABELING INTERPRETATIONS AND CLARIFICATIONS pertaining to label directions relating to weather conditions (i.e., wind speeds in excess of ten miles per hour), spray drift, target sites (i.e., agricultural lands), and target organism presence will be provided by the Department of Environmental Conservation when necessary. If ever in doubt about any label statement, contact your regional Pesticide Control Specialist staff.

For example, the applicator who uses mosquito adulticide over cropland must carefully consider use restrictions and tolerances. A tolerance is the maximum residue level of a pesticide that can legally occur in or on raw agricultural commodities transported in interstate commerce. Note that tolerances do not apply to home gardens.

In choosing an adulticide, you must consider whether any agricultural commodities are present within the target area. If so, you must identify which crops are in the proposed target site, and determine whether a tolerance has been established for the adulticide proposed for use, for each crop in question. If no tolerance has been established for the subject adulticide and crop, you must either choose an alternative adulticide for which a tolerance has been established, or avoid applying that adulticide in or over the area where the crop is located.

For example, if a target area includes a five-acre farm growing potatoes, you could perform an aerial application of *FYFANON*[®] ULV (EPA Reg. No. 4787-8) because tolerances have been established for its active ingredients - malathion. In contrast, *AgrEvo Scourge*[®] Insecticide with *SBP-1382*[®]/*Piperonyl Butoxide 18% + 54% MF Formula II* (EPA Reg. No. 432-667) could not lawfully be used because no tolerance has been established for one of its two active ingredients - resmethrin. In addition, the label for *AgrEvo Scourge*[®] Insecticide with *SBP-1382*[®]/*Piperonyl Butoxide 18% + 54% MF Formula II* (EPA Reg. No. 432-667) states: “Do not spray on cropland, feed or foodstuffs.”

The other option is to use the *AgrEvo Scourge*[®] Insecticide with *SBP-1382*[®]/*Piperonyl Butoxide 18% + 54% MF Formula II* (EPA Reg. No. 432-667), but not over the five-acre farm, nor within a distance that would result in the drift of resmethrin onto the crop.

Keep in mind that you will encounter situations where a pesticide proposed for use contains an active ingredient for which a tolerance has been established for the crop located within the target zone; however, the label directions may prohibit its use in or over cropland. For example, *Griffin Atrapa*[™] ULV Insecticide (EPA Reg. No. 1812-407) contains the active ingredient malathion for which a number of tolerances have been established; however, the label prohibits use over cropland with the statement: “Adult Mosquito Control: Use 2 to 4 fluid ounces of Atrapa ULV per acre to control adult mosquitoes on non-agricultural lands (wastelands, roadsides, soil bank lands).”

Any crop found to contain residues of a pesticide for which a tolerance is not in effect is regarded as unfit for human consumption and cannot be legally marketed.

State- and federally-enforced label directions, restrictions, and precautions are not reduced, suspended or modified as the result of an emergency situation.

XI. PRE-APPLICATION LABEL INFORMATION NOTIFICATION is required by ECL §33-0905(5) when applying any mosquitocide.

Terms and conditions of Article 15/Part 329 Aquatic Pesticide Permits address notification requirements relating to larviciding, pupiciding and adulticiding activities, even though the permits authorize only the use of larvicide and pupicide. Note that failure to comply with terms and conditions of an Article 15/Part 329 Aquatic Pesticide Permit may result in a denial of a permit for future mosquito control activities. This is a means of reinforcing the notification requirements relating to use of adulticide, as well as larvicide and pupicide.

ECL §33-0905(5) states:

(a) Every certified applicator shall, prior to the application of a pesticide within or on the premises²⁷ of a dwelling,²⁸ supply the occupants therein with a written copy of the information, including any warnings, contained on the label of the pesticide to be applied.

(b) Except as provided in paragraph c of this subdivision, every certified applicator shall, prior to the application of pesticide within or on the premises of a multiple dwelling,²⁹ building, or structure other than a dwelling supply the owner or his agent, with a written copy of the information, including all warnings, contained on the label of the pesticide to be applied. Such owner or agent shall make available upon request at reasonable times such information to the occupants or residents of such multiple dwelling, building, or structure.

(c) In the case where an occupant of a multiple dwelling unit³⁰ retains a certified applicator to apply pesticides within such unit, such certified applicator shall, prior to the application of a pesticide, supply any information, including all warnings, contained on the label of the pesticides to the occupants.

Any commercial application of mosquitocide is subject to these notification requirements, including ultra-low volume (ULV) aerosol or fog delivery of adulticide.

If the treatment consists of a community-wide, county-wide, or city-wide ground or aerial spray operation, you will be permitted to achieve compliance with statutory public notification requirements by following the procedures outlined below. These general notification requirements apply to all aerial and large-scale applications of pesticide within or on the premises of dwellings, multiple dwellings, buildings, or structures other than a dwelling.

A. The applicator must deliver a written copy of the information, including any warnings, contained on the label of the pesticide to be applied, to all persons in the proposed target area by one of the following means:

²⁷ECL §33-0905(5)d(iv) - 'Premises' shall mean land and improvements or appurtenances or any part thereof.

²⁸ECL §33-0905(5)d(i) - A 'dwelling' is any building or structure or portion thereof which is occupied in whole or in part as the home, residence or sleeping place for one or two families

²⁹ECL §33-0905(5)d(ii) - A 'multiple dwelling' shall mean any dwelling which is to be occupied as the residence or home of three or more families living independently of each other

³⁰ECL §33-0905(5)d(iii) - A 'multiple dwelling unit' shall mean that portion of a multiple dwelling occupied by one or more persons as the residence or home of such persons

1. In the case of all proposed aerial and large-scale ground applications of pesticide except government-sponsored and community-wide programs, by supplying written copies of the information, including all warnings, contained on the label of the pesticide to be applied, to occupants at all occupied buildings and structures within the target area. This requirement must be fulfilled by either hand delivery or mail delivery. The proper delivery of a copy of the label of the pesticide to be applied will be deemed to satisfy this requirement.

2. In the case of all proposed aerial and large-scale ground applications of pesticide that are government-sponsored and community-wide programs, by mailing copies of the general notification information described in Paragraph B below to property owners located within the treatment area, as well as to the program sponsor; or by newspaper publication of the general notification information described in Paragraph B below, at least twice, once at least one week in advance of the proposed pesticide application and once at least 48 hours in advance of the proposed application. As to an “abbreviated notification” as defined in Paragraph B below, by newspaper publication, once at least 48 hours in advance of the proposed pesticide application. The newspaper selected to publish this information must be the one with the largest circulation in the target area. The objective of such publication is to notify as many people as possible with respect to the proposed application.

B. Prior to undertaking any aerial or large-scale government-sponsored and community-wide pesticide application programs, the applicator must provide the following general notification information:

1. A detailed statement describing the proposed application, the purposes of the application and the sponsor of the application;

2. The product name, EPA product registration number(s) and common chemical names of the pesticide(s) to be applied, and the U.S. Environmental Protection Agency toxicity category of “danger,” “warning” or “caution” for each pesticide to applied;

3. A specific 7-day period during which each pesticide application is intended to occur. An optional 7-day period, during which each application is intended to occur in case of inclement weather, may also be specified. If the application cannot occur during the specified week or during the specified inclement weather week, the applicator must provide an “abbreviated notification” of a new, specified 7-day period during which the application is intended to occur. The abbreviated notification must, at a minimum, contain the name of the program sponsor, the information required by items “2”, “6” and “7” of these general notification requirements and a description of the area to be treated. The abbreviated notification must also specifically reference the prior notice.

4. The target pest(s) of the application;

5. A detailed description and/or map of the specific area(s) to be treated. Specific reference should be made to a map of the specific areas to be treated that is on file in a public

office in the municipality where the treatment is to be conducted, as well as the hours during which the map is available for public viewing;

6. The Department of Environmental Conservation's regional office, the regional Poison Control Center and the National Pesticide Telecommunications Network telephone numbers; and

7. The name, address and telephone number of a contact person located at the project sponsor's place of business and the hours of availability of the contact person, a statement that the contact person will answer questions regarding the proposed pesticide application, a statement that inquiries concerning symptoms of pesticide poisoning for the pesticides of concern should be made to the regional Poison Control Center and, unless the applicator and the sponsor agree otherwise in writing, a statement that the sponsor will be advised of the specific pesticide application date on the calendar day prior to the proposed application and may be contacted to obtain that information.

C. In the case of government-sponsored, community-wide aerial pesticide application programs, the applicator must supply the sponsor with written copies of the labels of all pesticides to be used, and the name, telephone number and address of the Department of Environmental Conservation's regional office for the region in which the pesticide application is to be performed. The applicator must require in writing, that the sponsor agrees to make this information available to the public, and must advise the sponsor in writing, that questions concerning the symptoms of pesticide poisoning for the pesticide(s) of concern should be referred to the regional Poison Control Center. The applicator must further request in writing, that the sponsor must contact any individual who requests that he or she be advised of the specific pesticide application date prior to such application.

The statutory requirements relating to pre-application label information notification are not reduced, suspended or otherwise modified as the result of an emergency situation; however, in emergencies, an alternative acceptable means of compliance may be authorized by the Department. This is evaluated on a case-by-case basis.

XII. DAILY USE RECORDS must be kept on a daily basis, created contemporaneously with time of application (to provide a true and accurate account of the total amount of undiluted pesticide used at each target site), and must include, at a minimum, the following elements of information³¹:

³¹6NYCRR Part 325.25(a) - All businesses required to register pursuant to section 325.23 of this Part shall keep true and accurate records in a manner specified by the department showing: the kind and quantity of each pesticide used; dosage rates; methods of application; target organisms; and the use, date and place of application for each pesticide used. These records shall be maintained on an annual basis and retained for a minimum of three years and shall be available for inspection upon request by the department.

ECL §33-1205(1) - All commercial applicators shall maintain pesticide use records for each pesticide application containing the following: a. EPA registration number; b. product name; c. quantity

- 1) kind of pesticide (by name and EPA registration number)
- 2) total quantity of each pesticide used
- 3) dosage rate
- 4) method of application
- 5) target organism
- 6) date applied
- 7) location of application by address (including five-digit zip code)
- 8) place of application **recorded with the degree of specificity required to allow a person to revisit the location and determine exactly where pesticide was applied**

With respect to aerial and ground delivery of pesticide to large contiguous areas, the place of application can be recorded using data generated by Global Positioning System (GPS) technology, or other suitable means. The record must clearly delineate and quantify any areas that were not treated within a particular target zone. If GPS technology is used, the data must be accurate to within between 15 meters (49.2 feet) and 100 meters (328 feet).

In contrast to annual reporting requirements, daily use records are not required to be kept on a specific form. However, the Department does have available a recommended form for recording each instance of pesticide use. See Appendix R.

Daily use record-keeping requirements are not reduced, suspended or modified as the result of an emergency situation.

XIII. ANNUAL REPORTS of pesticides used must be filed by February 01 of each year, and must account for every instance of commercial pesticide use during the previous calendar year.³²

Annual reporting requirements are not reduced, suspended or modified as the result of an emergency situation. The Department recognizes the problems associated with reporting thousands, or even millions of individual addresses associated with a large-scale community-wide spraying operation (such as the large-scale aerial applications that took place in New York City, Nassau County, Suffolk County, Westchester County and Rockland County in the late Summer of 1999).

Upon review of these unique scenarios, the inability at present time to obtain a precise database with street addresses, and accuracy entailing the reporting requirements for large aerial spraying, the Department will allow the applications to be reported by county, municipality and individual zip code. This will not only aid the Department in gaining more accurate reporting, it will also prevent an undue burden on the applicators who provide these services. Until the means of obtaining such a database is widely available, the street address can be omitted in these instances

of each pesticide used; d. date applied; e. location of application by address (including five-digit zip code).

³²ECL §33-1205.

only. The Department will be revising TAGM DSM 99-10, issued January 21, 2000, to reflect this change in policy.

In any event, the aerial applicator would be required to furnish a detailed map of the area of application so the Department and any health researcher could determine precisely where pesticide had been applied within a zip code. Any areas within a larger area that were not sprayed must be clearly identified and quantified. Total amount of pesticide used must be consistent with the measurement of the area actually treated, and should reflect a rate of application consistent with label directions (or as otherwise modified by a permit issued by the Department).

Two Technical Administrative Guidance Memoranda have been issued to provide guidance on annual reporting requirements. See TAGMs DSHM-97-05, January 20, 1998, and DSHM-99-10, January 21, 2000 at Appendix S and T.

Sample reporting forms referred to in the Technical Administrative Guidance Memorandum are attached as Appendix U.

XIV. COMMERCIAL LAWN APPLICATION CONTRACTS are required when providing a residual barrier or perimeter delivery of mosquito adulticide, but are not required when applying adulticide by ultra-low volume (ULV) aerosol or fog delivery, or when applying larvicide or pupicide to surface waters. For the purposes of this statutory requirement to enter into a written contract, the application of pesticides by or on behalf of agencies is not considered commercial lawn application;³³ therefore, State, regional and local municipal mosquito control programs applying pesticides to ground, trees and shrubs do not need to enter into a written contract with the owner or agent in charge of properties located within the target zone.

³³ECL §33-0101(46) - 'Commercial lawn application' means the application of pesticide to ground, trees, or shrubs on public or private outdoor property. For the purposes of this article the following shall not be considered commercial lawn application:

- a. the application of pesticide for the purpose of producing an agricultural commodity;
- b. residential application of pesticides;
- c. the application of pesticides around or near the foundation of a building for the purpose of indoor pest control;
- d. the application of pesticides by or on behalf of agencies except that agencies shall be subject to visual notification requirements pursuant to section 33-1003 where such application is within one hundred feet of a dwelling, multiple dwelling, public building or public park; and
- e. the application of pesticides on golf courses or turf farms.

ECL §33-1001 - Prior to any commercial lawn application the applicator shall enter into a written contract with the owner of the property or his agent specifying

Ultra-low volume (ULV) aerosol or fog delivery of mosquito adulticide³⁴ (using ground or aerial equipment) does not constitute commercial lawn application³⁵ because the pesticide is not applied to the ground, to trees or to shrubs. It is intended to control adult mosquitoes in flight in the target zone. Note that although ultra-low volume (ULV) aerosol or fog application is not considered “commercial lawn application” subject to written contract requirements, it does constitute a “commercial application of pesticide”³⁶ subject to other regulatory requirements such as pre-application label information notification, record-keeping and annual reporting.

Use of larvicides does not constitute commercial lawn application because the pesticide is applied to water - as distinguished from a terrestrial “ground” application.

Appendix V contains guidance relating to compliance with statutory commercial lawn application requirements.

Commercial lawn application contract requirements are not reduced, suspended or modified as the result of an emergency situation.

XV. VISUAL NOTIFICATION POSTING is required when providing a residual barrier or perimeter delivery of mosquito adulticide by aerial or ground delivery, but is not required when applying adulticide by ultra-low volume (ULV) aerosol or fog delivery, or when applying larvicide or pupicide to surface waters.³⁷ State, regional and local municipal mosquito control programs are subject to this visual notification requirement in situations where adulticide is delivered in such a manner that it is deposited on the surface of vegetation and other objects that are located within 100 feet of a dwelling, multiple dwelling, public building or public park.³⁸

As discussed in the previous section relating to commercial lawn application contracts, ultra-low volume (ULV) aerosol or fog delivery of mosquito adulticide (applied by aerial or ground

³⁴To be considered an ultra-low volume (ULV) aerosol or fog space spray, the pesticide must be delivered in such a manner that at least 85 percent of the droplets measure 20 microns or less in size (mass mean diameter, “MMD”), and no droplets measure greater than 50 microns in size (MMD). If more than 85 percent of the droplets exceed 20 microns in size, or if any of the droplets exceed 50 microns in size, the application is considered a barrier or perimeter spray that leaves a residual deposit on vegetation and other surfaces in the target zone.

³⁵See Footnote No. 33.

³⁶6NYCRR Part 325.1(p) - Commercial application of pesticides means any application of any pesticide except as defined in ‘private’ or ‘residential’ application of pesticides.

³⁷ECL §§33-0101(46) and 33-1003.

³⁸ECL §33-0101(46)(d).

equipment) does not constitute commercial lawn application³⁹ because the pesticide is not applied to the ground, to trees or to shrubs. As such, there are no posting requirements associated with this type of space spray.

Use of larvicides does not constitute commercial lawn application because the pesticide is applied to waters, as distinguished from terrestrial “ground.”

Visual notification posting requirements are not reduced, suspended or modified as the result of an emergency situation.

XVI. FISH STOCKING PERMIT: Fish stocking for mosquito control is regulated by ECL §11-0507(1) which states:

Fish or fish eggs shall not be placed in any waters of the state unless a permit is first obtained from the department; but no permit shall be required to place fish or fish eggs in an aquarium.

Fish stocking permits are reviewed and issued on a case by case basis by the Regional Fisheries Manager in each DEC Region. Any person or agency wishing to stock fish for mosquito control must submit an application for a Permit to Stock Fish to the Regional Fisheries Manager in the DEC Region where the stocking will occur. A sample Stocking Permit Application is included in Appendix AA.

Although many species of fish eat mosquito larvae, the mosquitofish (*Gambusia affinis* and *G. holbrooki*) is the species most widely used for mosquito control. These species (formerly considered subspecies of the same species) have been distributed worldwide as mosquito control agents. New York State is just north of the native range of the eastern species (*G. holbrooki*) which extended up the east coast into southern New Jersey. Because New York is north of the native range of *Gambusia*, stocked fish are susceptible to winter kill during cold winters. This increases the likelihood that the fish will have to be restocked to provide mosquito control from year to year, and reduces the possibility that stocked *Gambusia* will establish an undesirable population in New York State.

Factors considered in the review of applications to stock fish for mosquito control can include, but are not limited to the following:

1. Does the water body have an outlet?

Waters with outlets will allow escapement of the stocked fish. This poses two potential problems. First, the fish may move to another water where they are not desirable and second, if the fish leave the area where they are stocked they will not achieve the goal of mosquito control at that location.

³⁹See Footnote No. 33.

2. Is there an existing fish community in the water body?
Predation and competition from an existing fish community in the water body reduces the likelihood that the stocked fish will be able to establish a population of sufficient density to effectively control mosquitoes. Conversely, should the new species become established, they may adversely affect the fish species in the existing community.
3. Are there any endangered or threatened fish or amphibian species in the water body?
There are documented cases of *Gambusia* introductions resulting in the localized extinction of native fish and amphibian species.
4. What is the extent and type of vegetation in the water body?
Studies conducted in New Jersey determined that *Gambusia* were effective in controlling *Culex* and *Aedes* larvae, but in situations where there was extensive emergent or floating vegetation, they were ineffective at controlling *Anopheles* larvae.

Applicants who wish to use fish stocking for mosquito control will find that the review of their application will be expedited if they provide answers to the above questions with their permit application. In addition, answering the above questions will assist the applicant in determining if fish stocking for mosquito control is a viable alternative.

One situation where *Gambusia* stocking has been demonstrated to be effective for mosquito control is in unused swimming pools and ornamental ponds. Regional Fisheries Managers will consider applications from municipal agencies for a Stocking Permit that will allow the municipal agency to provide *Gambusia* to private individuals for stocking in unused swimming pools and privately owned ornamental ponds. Waters to be stocked under this permit must be manmade and must not have an outlet to natural surface waters. See Appendix A for a list of regional offices where the Regional Fisheries Manager in charge of your area can be contacted.

Fish Stocking Permit requirements are not reduced, suspended or modified as the result of an emergency situation.

XVII. SPECIAL WILDLIFE PERMIT: The Environmental Conservation Law of New York State (ECL) contains provisions which regulate the taking of Wildlife. In addition, the State Sanitary Code and Public Health Law contain provisions authorizing State, regional and local health agencies to diligently investigate and ascertain the existence and causes of disease outbreaks.

An emergency situation does influence Special Wildlife Permit requirements. Under the authority granted to State, regional and local health agencies, wildlife may be collected in support of an investigation, without requiring that special licenses issued by the Department of Environmental Conservation be obtained. Consequently, any individual may collect, possess and transport wildlife specimens if the State, regional or local health authority has directed that such specimens are required in connection with an ongoing disease investigation.

The requirement of need is a critical factor in the legality of wildlife collections without meeting DEC licensing requirements. As an example, individuals, including health department staff,

municipal employees and private individuals, who are responsible for the collection of surveillance and other specimens may consider collecting specimens from areas where such surveillance is no longer needed to provide public service, and maintain contacts with sources in the event that future surveillance collections may be required.

If collection of wildlife specimens is not directed by health authorities or part of the investigation/control program, an individual cannot take such actions without first obtaining a license from DEC. Consequently, an individual must be licensed by DEC before they may collect, transport, or possess any wildlife that is not part of a Health Department investigation. There are a few exceptions to the licensing requirement depending on the species being taken or the means of collection. Further information can be obtained from the Fish and Wildlife Unit located in the regional office responsible for your area. See Appendix A.

XVIII. COMPLAINT RESPONSE: The Department will fully investigate complaints alleging the conduct of mosquito surveillance and control activities in violation of the associated environmental laws, rules and regulations. Violators of environmental laws, rules and regulations are subject to administrative, civil and criminal sanctions. For example, violators of pesticide laws, rules or regulations are subject to administrative, civil and criminal sanctions announced in Section 71-2907 of the New York State Environmental Conservation Law.

In addition, if violations are documented, the Department may revoke, deny, suspend, or otherwise modify any permits authorizing mosquito surveillance and control activities, or any certification, registration or other related authorizations to engage in this activity.

An emergency situation does not affect the Department's enforcement of the Environmental Conservation Law and its related rules and regulations. Enforcement activities are not reduced, suspended or modified as the result of an emergency situation.

People may call if they have concerns or questions about potential health effects from pesticides. They should be referred to:

- The appropriate County Health Department or the New York City Department of Health
- New York State Department of Health
Tollfree Environmental Health Information Line: 1-800-458-1158
Center For Environmental Health
547 River Street
Troy, New York 12180

Other callers may believe they were sprayed by pesticides and are currently experiencing symptoms as a result of the exposure. If the caller has concerns about the symptoms, the caller should be referred to the following:

his or her personal physician for appropriate diagnosis and treatment; or

if their personal physician is not available or they do not have a personal physician, the appropriate Poison Control Center

Hudson Valley Poison Center
Nyack Hospital
160 North Midland Avenue
Nyack, NY 10960
(800) 336-6997
(914) 353-1000

Long Island Regional Poison Control Center
Winthrop University Hospital
259 First Street
Mineola, NY 11501
(516) 542-2323, -2324, -2325, -3813

New York City Poison Control Center
N.Y.C. Department of Health
455 First Avenue, Room 123
New York, NY 10016
(212) 340-4494
(212) POISONS
(212) 689-9014 (TDD)

XIX. STATE ENVIRONMENTAL QUALITY REVIEW ACT (SEQRA): Mosquito surveillance and control activities are subject to review under the State Environmental Quality Review Act (SEQRA) if any State, regional or local agency⁴⁰ has the authority to issue a discretionary permit, or other type of approval for that action. SEQRA also applies if an agency funds or directly undertakes a project.

In addition, SEQRA applies if a State, regional or local agency undertakes a mosquito control program that does not require any permits. In the case of such “direct actions,” State, regional or local agencies must comply with SEQRA requirements.

When SEQRA became law on August 01, 1975, it established a process that requires the consideration of environmental factors early in the planning stages of actions that are directly undertaken, funded or approved by State, regional and local agencies. By incorporating a systematic approach to environmental review in the early planning stages, projects can be modified as needed to avoid adverse impacts on the environment.

⁴⁰State and local agencies include all political subdivisions, districts, departments, authorities, boards, commissions, and public benefit corporations.

Compliance with SEQRA must occur prior to undertaking any mosquito surveillance or control action that is subject to SEQRA. This requirement relates to activities that include pesticide use, habitat modification, fish stocking, or wildlife handling and collection. The preparation of an Environmental Impact Statement (EIS) is the viable long-range plan to address the issue of West Nile virus.

The application of pesticides is defined as a physical alteration [6NYCRR Part 617.2(ab)]. This means that the application of pesticides that would affect more than ten (10) acres would be classified as a Type I action and require the use of a full Environmental Assessment Form (EAF). Applications that would affect less than ten (10) acres would be classified as “Unlisted Actions.” Use of a full EAF for unlisted actions is not required, but is strongly encouraged. In completing the full EAF, agencies are encouraged to use Part 1D to provide a narrative description of the proposed control activity and the affected environment to supplement the information contained in Part 1.

While larvicides and pupicides containing active ingredients listed at 6NYCRR §329.6 are authorized for use, this does not exempt them from SEQRA requirements. Any proposed use of these mosquito control agents requires that an assessment and declaration of environmental impact be performed. Note that most of these materials listed in 6NYCRR §329.6 are outdated and no longer available for use.

More recently registered larvicides that contain active ingredients not listed as an authorized pesticide in 6NYCRR §329.6(a)(1) and (2) also require assessment and declaration of environmental impact.

The Department of Environmental Conservation has prepared templates to help you prepare Negative Declarations relating to the four most commonly used larvicides identified below. These larvicides were introduced subsequent to Part 329 taking effect.

Bacillus thuringiensis var. *israelensis* (*Aquabac*, *Bactimos*, *Teknar*, *Vectobac*) - See Appendix W

Bacillus sphaericus (*Vectolex*) - See Appendix X

Methoprene (*Altosid*) - See Appendix Y

Monomolecular surface film, containing the active ingredient Poly(oxy-1,2-ethanediyl), á -isooctadecyl- ù -hydroxy/hydroxyl (*Agnique MMF*, *Arosurf MSF*)- See Appendix Z

Note that these templates represent approximately 80 percent of the type of information that would normally be contained in a complete Negative Declaration Statement. The other 20 percent would consist of the details relating to your specific activity and project (i.e., site description, potentially-impacted environmental resources, and application equipment). Preparation of a Negative Declaration Statement would need to be accompanied by a completed Environmental Assessment Form, and Public Notices pertaining to all Type I Negative Declarations must be published in the Environmental Notice Bulletin (ENB).

Type I Negative Declarations are no longer filed with the Commissioner of the New York State Department of Environmental Conservation.

The project-specific Negative Declaration Statement would also need to indicate monitoring and surveillance activities that will be conducted to assess larval populations. Keep in mind that 6NYCRR §329.4(c)(5) requires the following:

No permit shall be issued unless it appears to the permit-issuing official that the biting aquatic insects to be controlled in the waters or portions of the waters to be treated occur so as to be substantially detrimental to the health, safety, comfort or repose of the applicant or of any considerable number of persons.

This observation and assessment measure would be demonstrated by a detailed description of your monitoring and surveillance activities. The terms and conditions of Article 15/Part 329 Aquatic Pesticide Permit will require that monitoring and surveillance be conducted as a precondition to the use of larvicide and pupicide.

Specific project details would also include time of day of application, days of the week of application, precautions to protect public health and environmental quality, and the means by which adequate advance public notice would be provided to people located in areas to be treated.

Depending on the proposed activity, some adulticides are authorized for use in compliance with SEQRA requirements because they are included within the assessment contained in the New York State Department of Health's Generic Environmental Impact Statement (GEIS), which was filed in 1985. Plans are underway for the New York State Department of Health to update this generic EIS. Note that the updated GEIS will cover all aspects under which any proposed application of adulticides may occur.

Adulticides not evaluated in connection with the NYSDOH GEIS, will require SEQRA compliance. This would include proposed use of such adulticides as resmethrin (*Scourge*) and sumithrin/piperonyl butoxide (*Anvil*). Section 617.10 of the SEQRA regulations contains specific criteria for environmental evaluation of specific actions undertaken subsequent to a GEIS. See 6NYCRR Parts 617.10(c) and (d). For those adulticides not evaluated in connection with the NYSDOH Environmental Impact Statement, proper SEQRA compliance could require preparation of an Environmental Impact Statement.

Note that the information relating to "SEQRA Compliance" at section G of TAGM 2007 is outdated and no longer applies. Also note that the Aquatic Pesticide Programmatic Environmental Impact Statement (PIES) prepared by the Department of Environmental Conservation in 1981 applies to aquatic herbicides only, and does not include an address of aquatic insecticides (larvicides, pupicides or adulticides).

An emergency situation does influence SEQRA requirements. Control activities that are undertaken following the declaration of a public health emergency would qualify as “emergency actions” and be classified as a Type II action under SEQRA [6NYCRR Part 617.5(c)(33)].

The SEQRA regulations, unlike some other regulations reviewed herein, do not contain a definition of an “emergency” or “emergency action.” However, SEQRA does employ the term in its list of Type II actions contained in Section 617.5. Type II actions are specifically enumerated actions which will not result in a significant adverse environmental impact or those actions which are exempt from SEQRA review for other reasons.

Subsection 617.5(c)(33) is the specific provision of SEQRA which exempts emergency actions. The subsection declares that Type II actions are those:

Emergency actions that are immediately necessary on a limited and temporary basis for the protection or preservation of life, health, property or natural resources, provided that such actions are directly related to the emergency and are performed to cause the least change or disturbance, practicable under the circumstances, to the environment.

However, the last portion of this provision cautions that:

Any decision to fund, approve or directly undertake other activities after the emergency has expired is fully subject to the review procedures of this Part. . . .

Agencies are cautioned not to hastily invoke this Type II provision of the SEQRA regulations without careful forethought. Agencies that want to invoke the emergency provisions of SEQRA contained in 617.5(c)(33) should systematically work through the emergency action definition and should prepare ample written justification which adequately addresses how and why the agency believes the emergency action they are undertaking lies within the parameters of the definition. It is recommended that this written justification include the SEQRA Type II provision being invoked, that it be signed by an appropriate, responsible agency official and that this justification be maintained in a file in the agency offices. Following this procedure will help to ensure that the course of action ultimately chosen is not only the most effective response, but also the most appropriate for human health and the environment.

The emergency action provision contains several tests which must be met by the emergency action in order to qualify for the Type II. These tests are as follows:

- C It must be immediately necessary to respond to the documented public health threat
- C It must be the minimum necessary
- C It must be temporary
- C It must be required to protect or preserve life, health, property or natural resources
- C It must be directly related to the emergency

- C It must be undertaken to cause the least change or disturbance to the environment practicable.

In preparing the aforementioned written SEQRA Type II justification, the documentation should address the following:

1. What is the emergency at hand? Explain fully what human *life*, human *health, property* or *natural resources* are at risk and why? What is the degree of risk or peril? What will potentially happen if no emergency response is undertaken?
2. Why is the emergency action *immediately* necessary - why can such an action not be postponed to a later point in time?
3. How will the emergency action be *limited*, especially temporally and spatially? For example, what measures, such as monitoring, will be undertaken during the course of the emergency action to determine when the emergency has ceased and/or determine when the emergency action has successfully ended the existence of the emergency? What is the expected duration of the emergency and the emergency action?
4. How is the action only a *temporary* one? What measures will be employed to prevent this action from being transformed into a permanent or continuous action?
5. How is the action *directly related* to the emergency?
6. Of all alternative emergency actions available, how will this particular action be conducted so that it results in the *least change or disturbance, practicable under the circumstances, to the environment*? For example, what emergency action alternative offers the optimum combination of effectiveness and environmental protection? What precautions and mitigation measures will be undertaken or what constraints will be applied to avoid and minimize environmental disturbance, including impacts to human health?

Finally, as noted previously, the latter part of subsection 617.5 (c)(33) notes that once the emergency has ended, activities related to the emergency which had existed, such as preventive measures undertaken thereafter to reduce or prevent the recurrence of the emergency, would need to undergo a full SEQRA review. Accordingly, once a declaration has been made that an emergency has ceased and/or that emergency actions are no longer necessary due the cessation of the emergency, agencies should be careful to ensure they fully comply with SEQRA.