STATE OF MAINE

DEPARTMENT OF ENVIRONMENTAL PROTECTION

General Permit
Application of Aquatic Pesticides for the Control of Mosquito-Borne Diseases

Maine Pollutant Discharge Elimination System
Maine Waste Discharge License Program

Bureau of Land and Water Quality — July 27, 2010
Maine Pollutant Discharge Elimination System (MEPDES) Permit — #MEG140000
Maine Waste Discharge License (WDL) — #W008226-5Y-C-R

GENERAL PERMIT – APPLICATION OF AQUATIC PESTICIDES FOR THE CONTROL OF MOSQUITO-BORNE DISEASES

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PART III. FACT SHEET

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION
AUGUSTA, ME 04333

DEPARTMENT ORDER

IN THE MATTER OF

GENERAL PERMIT	)	MAINE POLLUTANT DISCHARGE
AQUATIC PESTICIDES FOR THE CONTROL	)	ELIMINATION SYSTEM PERMIT
OF MOSQUITO-BORNE DISEASES	)	
STATE OF MAINE	)	AND
#W008226-5Y-C-R	)	WASTE DISCHARGE LICENSE
#MEG140000 **APPROVAL**	)	**RENEWAL**

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, et. seq. and Maine law, 38 M.R.S.A. §414-A et seq., and applicable regulations, the Department of Environmental Protection (Department, MEDEP) has considered the issuance of a Maine Pollutant Discharge Elimination System (MEPDES) Permit / Maine Waste Discharge License (WDL) for the **APPLICATION OF AQUATIC PESTICIDES FOR THE CONTROL OF MOSQUITO-BORNE DISEASES** (GENERAL PERMIT), with its supportive data, agency review comments, and other related materials on file, and FINDS THE FOLLOWING FACTS:

PERMIT SUMMARY

Pursuant to applicable laws and rules of the State's Maine Pollutant Discharge Elimination System (MEPDES) / Maine Waste Discharge License (WDL) Program, the Department's Bureau of Land and Water Quality, Division of Water Quality Management is renewing its General Permit for the Application of Aquatic Pesticides for the Control of Mosquito-Borne Diseases. General Permit (GP) #MEG140000 / Maine WDL #W-008226-5G-A-N was issued on September 28, 2005 for a five-year period and was modified as GP #MEG140000 / Maine WDL #W-008226-5G-B-M on October 22, 2007. This GP is being issued as a MEPDES Permit / Maine WDL and has been assigned #MEG14000 / #W-008226-5Y-C-R. This GP authorizes the application (discharge) of aquatic pesticides for the control of mosquito-borne diseases in the interest of public health and safety to Class GPA, AA, A, B, C, SA, SB, SC waters of the State, tributaries to Class GPA waters, and those waters having a drainage area of less than 10 square miles, that constitute breeding habitat for mosquito species known to be potential vectors of infectious diseases and which meet criteria established herein.

PERMIT SUMMARY (cont'd)

This permitting action is similar to the September 28, 2005 Maine WDL and the 2007 permit modification in that it is carrying forward all previous terms and conditions with a few exceptions. This permitting action is different in that it is:

1. renewing the general permit as a MEPDES Permit / Maine WDL;
2. extending coverage to Class GPA waters and their tributaries;
3. including other materials / methods protective of non-targets as authorized aquatic pesticides;
4. providing for aerial applications under emergency conditions and with Department approval;
5. changing the demonstration of significant need from infectious disease in humans to mammals;
6. changing the maximum Department review period from 14 days to 30 days;
7. removing the need for annual demonstration of ongoing significant need and specifying conditions for cessation of coverage; and
8. clarifying notification requirements for the civil jurisdiction, abutters, agencies, and public.

CONCLUSIONS

Based on the findings in the attached Fact Sheet, dated July 27, 2010, and subject to the conditions listed in Parts I and II of this general permit, the Department makes the following CONCLUSIONS:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.
3. The provisions of the State's antidegradation policy, 38 M.R.S.A. §464(4)(F), will be met, in that:
   (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
   (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
   (c) The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
   (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
   (e) Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The discharge will be subject to effluent limitations that require application of best practicable treatment as defined in Maine law, 38 M.R.S.A. §414-A(1)(D).
5. The discharge of authorized aquatic pesticides in accordance with the terms and conditions of this general permit will provide adequate protection of non-target species.
6. The discharge of authorized aquatic pesticides in accordance with the terms and conditions of this general permit will not have a significant adverse effect on receiving water quality or violate the standards of the receiving water's classification.

ACTION

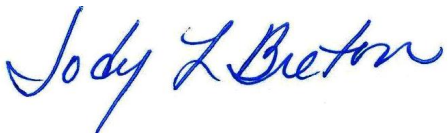
Based on the findings and conclusions as stated above, the Department APPROVES this Maine Pollutant Discharge Elimination System Permit / Maine Waste Discharge License General Permit for the APPLICATION OF AQUATIC PESTICIDES FOR THE CONTROL OF MOSQUITO-BORNE DISEASES to Class GPA, AA, A, B, C, SA, SB, and SC waters, tributaries to Class GPA waters, and those waters having drainage areas of less than ten square miles, that constitute breeding habitat for mosquito species known to be potential vectors of infectious diseases, SUBJECT TO THE ATTACHED CONDITIONS, including:

1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits", *revised July 1, 2002, copy attached.*

2. The attached Special Conditions included as Part I of this general permit.

3. The attached Standard Conditions included as Part II of this general permit.

The expiration date of this general permit is five (5) years from the date of signature below.



This permit has been digitally signed by Jody Breton on behalf of Commissioner David P. Littell. It is digitally signed pursuant to authority under 10 M.R.S.A. §9418. It has been filed with the Board of Environmental Protection as of the signature date.
2010.07.28 08:31:17 -04'00'

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

This Order prepared by Robert D. Stratton, BUREAU OF LAND & WATER QUALITY

PART I – SPECIAL CONDITIONS
A. AUTHORITY

A permit is required for the direct or indirect discharge of pollutants to waters of the State pursuant to Maine law, 38 M.R.S.A. § 413. The Maine Department of Environmental Protection (Department, MEDEP) may issue a general permit authorizing the discharge of certain pollutants pursuant to *General Permits for Certain Wastewater Discharges*, 06-096 CMR 529 (last amended June 27, 2007). The similarity of discharges from the application of authorized aquatic pesticides for the control of mosquito-borne diseases in the interest of public health and safety has prompted the Department to issue this general permit for those receiving waters not otherwise prohibited by Maine law and which constitute breeding habitat for mosquito species known to be potential vectors of infectious diseases, such as West Nile virus and Eastern Equine Encephalitis. A violation of a condition or requirement of a general permit constitutes a violation of the State's water quality laws, and subjects the discharger to penalties under Maine law, 38 M.R.S.A. § 349. Nothing in this general permit is intended to limit the Department's authority under the waste discharge and water classification statutes or rules. This general permit does not affect requirements under other applicable Maine statutes and Department rules.

B. SPECIALIZED DEFINITIONS

In addition to the definitions found in Department rule, 06-096 CMR 520 (effective January 12, 2001) and in the waste discharge and water classification laws, the following terms have the following meanings when used in this general permit.

1. **Authorized Aquatic Pesticide.** "Authorized aquatic pesticide" means granular, solid, powder, liquid, or other formulations of pesticides whose sole active ingredients are registered with both the United States Environmental Protection Agency (USEPA) and Maine Board of Pesticides Control (BPC) and are applied in accordance with USEPA approved label use by a licensed applicator to inhibit the growth or control the existence of larval stage mosquitoes known to be potential vectors of infectious diseases, such as West Nile virus and Eastern Equine Encephalitis. Specifically, the formulations that may be used under this permit contain or entail materials identified below, or successor formulations with substantially the same constituents. From time to time, formulations may be re-registered or minor modifications, including product names, may be made subject to EPA and Maine BPC registration. If new formulations replace these listed below, the Notice of Intent (NOI) will include those formulations proposed for use, their specifications, and information sufficient to allow the Department to conclude that conditions and safeguards in this permit will be met.

    a. materials containing the bacterium *Bacillus thuringiensis* var. *israelensis* (*Bti*),

    b. materials containing the bacterium *Bacillus sphaericus* serotype H5a5b strain 2362 (*Bs*),

    c. other approved formulations and/or combinations of these materials, or

PART I – SPECIAL CONDITIONS
B. SPECIALIZED DEFINITIONS (cont'd)

d. other materials and/or methods demonstrated to be protective of non-target organisms and resources, upon case-by-case approval by the Department. The materials / methods must be demonstrated to be effective for control of mosquito species that are not effectively controlled by the biological pesticides noted above. An example of this includes use of a non-toxic, short-lasting material to alter surface tension in contained, fishless microhabitats during times of year in which the target mosquito species is present and susceptible, but other aquatic insects are not at risk due to their life stages.

Aerial spraying from fixed or rotary wing aircraft will only be authorized under this general permit under emergency conditions and upon case-by-case Department approval.

2. **Licensed Applicator.** "Licensed Applicator" means a person licensed by the State of Maine Department of Agriculture, Board of Pesticides Control to apply aquatic pesticides for mosquito control.

3. **Mosquito Breeding Habitat.** "Mosquito breeding habitat" means Class GPA, AA, A, B, C, SA, SB, or SC waters of the State, tributaries to Class GPA waters, and those waters having a drainage area of less than 10 square miles, that serve as habitat for mosquito larval life stages of species known to be potential vectors of infectious diseases. These habitats are characterized by non-flowing (stagnant) water conditions and are devoid of predatory fish in sufficient numbers as to control the mosquito population at the time mosquito larvae are present. Examples of mosquito breeding habitats include stagnant waters found in river floodplains, freshwater wetlands, marshes, swamps, bogs, temporary or permanent woodland pools, and high elevation salt marsh pools. Examples of waters of the State that do <u>not</u> typically constitute mosquito breeding habitat for purposes of this general permit include flowing streams and brooks, great ponds, and coastal wetlands below the mean high tide elevation. It is noted that the classifications of waters of the state noted above do not typically provide mosquito breeding habitat. However, unclassified breeding areas described above are typically assigned the classification of a classified waterbody located in proximity.

4. **Notice of Intent (NOI).** "Notice of Intent" means a notification of intent to seek coverage under this general permit, submitted by the applicant to the Department on a form provided by the Department.

5. **Notice of Termination (NOT)**. "Notice of Termination" means a notification of intent to end coverage of a mosquito larvae control program licensed under this general permit, submitted by the applicant to the Department on a form provided by the Department.

PART I – SPECIAL CONDITIONS
B. SPECIALIZED DEFINITIONS (cont'd)

6. **Significant Need.** Significant need to control the target mosquito species includes, but is not limited to: demonstration that an affected waterbody provides preferred breeding habitat for mosquito species known to be vectors of infectious diseases, such as West Nile virus and Eastern Equine Encephalitis, and either: positive identification of the presence of mosquito species known to be vectors of infectious diseases or documentation by the Maine Department of Health and Human Services Maine CDC of mosquitoes, birds or mammals testing positive for infectious diseases within a 20-mile radius of the civil jurisdiction in which the proposed treatment site is located.

7. **Waters of the State.** "Waters of the State" means any and all surface and subsurface waters that are contained within, flow through, or under or border upon this state or any portion of the state except such waters as are confined and retained completely upon the property of one person and do not drain into or connect with any other waters of the state, as defined at 38 M.R.S.A., §361-A.7.

C. APPLICABILITY AND COVERAGE

Coverage under this general permit is limited to those receiving waters that conform to the Area of Coverage described below and that have had a completed NOI accepted by the Department. Applicability of this general permit is limited to activities described in the NOI that are in conformance with the terms and conditions of this general permit.

1. **Area of Coverage.** The geographic area covered by this general permit is the entire State of Maine. This general permit covers application of authorized aquatic pesticides by a licensed applicator to fresh and marine waters of the State classified by Maine's water classification laws as Class GPA, Class AA, Class A, Class B, Class C, Class SA, Class SB or Class SC waters of the State, tributaries to Class GPA waters, and those waters having a drainage area of less than 10 square miles, that constitute breeding habitat for mosquito species known to be potential vectors of infectious diseases and for which has been demonstrated a significant need to control mosquitoes, as defined above. Waters classified by Maine's water classification program as GW-A waters and waters that have flowing current and/or do not otherwise exhibit characteristics of mosquito breeding habitat are not covered by this general permit.

2. **General Restrictions.** Permittees covered by this General Permit shall use optimal methods and materials for successful treatment, while adhering to USEPA registered product label requirements and limiting impacts to non-target organisms and resources. Liquid formulations of *Bti*, *Bs*, or other approved aquatic pesticides may only be used where the waterbody proposed for treatment has no surface water connections to other waters of the State, unless the connected waters also constitute mosquito breeding habitat and are part of the approved treatment program, and where it can be demonstrated that it will not result in a discharge to groundwaters. Aerial spraying from fixed or rotary wing aircraft will only be authorized under this general permit under emergency conditions and upon case-by-case Department approval.

PART I – SPECIAL CONDITIONS
C. APPLICABILITY AND COVERAGE (cont'd)

3. **Timing Restrictions.** This general permit limits the application of authorized aquatic pesticides to periods when mosquito larvae are or will immediately be present and susceptible to mortality from biological pesticide treatments. Treatments should be timed to coincide with the presence of early-stage mosquito larvae when possible. For proposed treatments in high salt marsh pools, authorized aquatic pesticides must be applied immediately following flooding events (for example, spring high tides, storm tides, large rainfall events), when possible, to maximize efficacy and control of young mosquito larvae.

   For non-biological treatments, mosquito larvae must also be present and susceptible to the approved materials and methods. It is anticipated that such techniques may be used to control mosquito species for which biological treatment methods are shown to be ineffective. As noted in Permit Special Condition Part I.B.1, such materials/methods must be demonstrated to be protective of non-target organisms and resources as well as effective for control of the target mosquito species.

4. **Written Management Plan and Area-wide Control Strategy.** A person seeking coverage under this general permit must demonstrate to the Department that proposed applications of authorized aquatic pesticides shall be performed in conjunction with the implementation of a specific written management plan for the control of mosquito species known to be potential vectors of infectious diseases. In approving NOI applications, preference will be given to those applications that represent area-wide control strategies and make use of integrated control methods. Area-wide control strategies involve treatment plans focused on large contiguous areas that illustrate a significant need to control the target species as described in Special Conditions Part I.B.6 and Part I.D.2. Preferred treatment plans involve multiple landowners, neighborhoods, and development areas within a municipality with a high density of humans considered to be at a higher risk of infection, such as hospitals, elderly housing complexes, child daycare facilities or elementary schools. They also include provisions for the implementation of best management practices to reduce or eliminate mosquito breeding habitat (artificial stagnant waters) formed by structures and coordination of control efforts to prevent or minimize isolated treatments. The Department may deny applications within an area when the Department determines that proposed aquatic pesticide treatments are duplicative or ineffective in controlling the target species. Individual property owners seeking coverage under this general permit shall demonstrate to the Department their efforts to coordinate mosquito treatments with local governments, tribal governments, or state public health agencies.

PART I – SPECIAL CONDITIONS
D. NOTIFICATION AND ACCEPTANCE

1. **Notice of Intent (NOI) Required.** A person meeting the requirements of, and seeking coverage under, this general permit shall submit a completed NOI to the Department for review and approval, accompanied by the appropriate initial permit fee. NOI forms may be obtained from, and completed forms must be sent by certified mail (return receipt requested) to:

   Department of Environmental Protection
   Bureau of Land and Water Quality
   Division of Water Quality Management
   Permitting Section
   17 State House Station
   Augusta, ME 04333-0017

   Alternately, a person may hand-deliver completed NOI forms to the Department's Augusta office. The Department reserves the right to request additional information from the applicant, such as mosquito management plans, to determine if the application of authorized aquatic pesticides meets the intents and purposes of the General Permit. A separate NOI is required for each civil jurisdiction (for example, each city, town, plantation, reservation, unorganized township), unless otherwise determined by the Department.

2. **Required NOI Information.** A complete NOI must contain the following information for each individual waterbody or for each group of waterbodies having similar physical and hydrologic characteristics that the applicant seeks to treat within the proposed treatment area. If a treatment area(s) extends beyond the boundaries of a civil jurisdiction, a separate NOI must be submitted for each civil jurisdiction involved.

   a. The legal name, mailing address, telephone number, e-mail address (if available), and signature of the owner of the property on which the aquatic pesticide treatment is proposed. Provide evidence of Title, Right, or Interest (TRI) in the property(s) on which the treatment program(s) will be located, such as the property deed. See Department rule, Chapter 2, §11.d for TRI criteria.

   b. The legal name, mailing address, telephone number, email address (if available), and affiliation of any agents assisting, in full or in part, with the completion of the NOI form. Provide evidence of authorization for the agent to act on behalf of the property owner.

   c. The legal name, mailing address, telephone number, email address (if available), and Maine Board of Pesticides Control license number of the licensed applicator to perform the aquatic pesticide treatment.

PART I – SPECIAL CONDITIONS
D. NOTIFICATION AND ACCEPTANCE (cont'd)

d. A statement demonstrating a significant need to control the target species and why application of the authorized aquatic pesticides is the most effective means of mosquito control. The statement must provide reasonable justification for the proposed treatment. Significant need to control the target mosquito species includes, but is not limited to: demonstration that an affected waterbody provides preferred breeding habitat for mosquito species known to be vectors of infectious diseases, such as West Nile virus and Eastern Equine Encephalitis, and either: positive identification of the presence of mosquito species known to be vectors of infectious diseases or documentation by the Maine Department of Health and Human Services Center for Disease Control of mosquitoes, birds or mammals testing positive for infectious diseases within a 20-mile radius of the civil jurisdiction in which the proposed treatment site is located.

e. A statement demonstrating that the proposed aquatic pesticide application(s) will be performed in conjunction with a specific written management plan for the control of mosquito species known to be potential vectors of infectious diseases and an area-wide control strategy. The plans and strategy must include components of identification, public education, and elimination of non-natural mosquito breeding habitats in the vicinity of the treatment area. This may include such artificial sources of stagnant water as catch basins, roof gutters, discarded tires, etc. For individual property owners seeking coverage, a statement demonstrating efforts to coordinate mosquito treatments with local governments, tribal governments, state public health agencies, or other appropriate organizations must be submitted.

f. Information pertaining to all authorized aquatic pesticides planned for use, including the formulation, concentration (percent active ingredient), maximum application rate, frequency of application, and a copy of the USEPA approved label for the product(s).

g. Information pertaining to the water body(s) proposed for treatment, including the name of the water body(s), the estimated size of the area(s) to be treated reported in square feet or acres, and estimations of the average water depth (surface to substrate), at the time of treatment, of the portion of the waterbody (or group of waterbodies) to be treated based on the following depth ranges: (0-6"), (6-12"), (12-24"), (>24"). Average depth shall be based upon a representative sample of measurements and/or observations of the treatment area(s).

h. A statement as to whether the proposed waterbody(s) has been treated for mosquito control in the past and, if so, provide the dates, the aquatic pesticide(s) applied, and a brief description of the details of the event(s).

PART I – SPECIAL CONDITIONS
D. NOTIFICATION AND ACCEPTANCE (cont'd)

i. A description of each area to be treated, including, but not limited to, identification of any intermittent or permanent inlets to or outlets from the waterbody(s), characterization of any vegetation (herbaceous, woody) within the waterbody, and characterization of the land cover and use in the area immediately surrounding the waterbody (forested, open field, marsh, urban, rural, undeveloped, etc).

j. A copy of a topographic or similar type map extending at least one mile beyond each individual treatment site and specific detailed written directions to each proposed treatment site. The applicant shall indicate the approximate location of the waterbody(s) on the map.

k. A minimum of three color photographs showing the area(s) within each waterbody (or group of waterbodies having similar physical and hydrologic characteristics) to be treated and the name of each waterbody, if known. The photographs must be taken during a period when the waterbody and surrounding area is free of snow cover, and each must be labeled with the applicant's name and the civil jurisdiction in which the waterbody exists. The photographs must provide visual demonstration that the proposed treatment areas constitute viable mosquito breeding habitat.

l. Submit a statement that the Maine Department of Inland Fisheries and Wildlife (MDIFW) Non-Game Program and the Maine Department of Conservation Natural Areas Program (MNAP) have received written notice of the proposed treatment and have responded that no elements of special concern for rare, threatened, or endangered species or natural communities are known in the affected area or that the treatment as proposed is considered to not significantly threaten the species or natural communities in question. Include any responses from the agencies. Note: Maps showing areas of essential habitat are available from MDIFW regional headquarters, municipal offices, the Land Use Regulation Commission, and Department regional offices. If the treatment site is located within an essential habitat, the applicant must obtain a "certification of review and approval" from MDIFW for the proposed treatment(s).

Failure to submit all required NOI information may result in finding the NOI incomplete for processing and may delay processing or result in denial of the NOI.

PART I – SPECIAL CONDITIONS
D. NOTIFICATION AND ACCEPTANCE (cont'd)

3. **Filing of a NOI / Public Notice Required:** A copy of the NOI must be filed with the civil jurisdiction (the municipal office or, in LURC jurisdiction, the LURC regional office and County Commissioners' office) in which the proposed treatment will be located, at the time it is submitted to the Department. Notice of the proposed treatment program must also be provided to abutting landowners to affected resources. Further, a press release must be issued or an advertisement must be published in a newspaper having general circulation in the area of the proposed treatment program within the 30-day period prior to submittal of the NOI to the Department. Information to be provided in the press release or advertisement will include treatment purpose, treatment methods and materials, treatment location, date, and duration, how to get more information, and any applicable cautionary notes regarding human or domestic animal exposure from the product label.

4. **Review of NOI and Other Information.** Upon review of a NOI for determination of coverage under this general permit, the Department may, at its discretion, require an applicant to apply for an individual permit for any proposed treatment. In making such a determination, the Department may consider factors including, but not limited to, the location of the waterbody and water quality issues particular to that area, expressed comments from state or federal agencies or the general public, consideration of area-wide mosquito control strategies in or surrounding the proposed treatment sites, and potential effects on non-target organisms and resources.

5. **Effective Date of Coverage.** The Department shall notify an applicant of coverage under this general permit within 30 days of receipt of each complete NOI as to whether or not coverage for the specific discharge is permitted. If the Department does not notify the applicant within 30 days, the NOI is accepted and coverage is granted. In the event coverage is not granted, the Department shall notify the applicant of the reason(s) for not granting coverage. An applicant may apply for issuance of an individual MEPDES Permit / Maine Waste Discharge License if the proposed discharge(s) is not acceptable for coverage under this general permit.

   Pursuant to the Department's administrative Rule Concerning the Processing of Applications and other Administrative Matters (06-096, Chapter 2, section 24.B.1), "(w)*ithin 30 days of the filing of a license decision by the Commissioner with the Board* (of Environmental Protection)*, an aggrieved person may appeal to the Board for review of the Commissioner's decision*." The Department notes that a permittee has the legal authority to proceed with an approved project upon approval by the Commissioner and subject to any conditions established. However, the Department advises that **if a permittee proceeds with an approved project prior to the end of the 30-day appeal period, it assumes all risks and responsibilities in the event that the Commissioner's decision is overturned or modified on appeal.**

PART I – SPECIAL CONDITIONS
D. NOTIFICATION AND ACCEPTANCE (cont'd)

6. **Transfer of Ownership.** If ownership of a property is transferred to a new owner, coverage under this general permit may be transferred by the new owner notifying the Department in writing that the treatment program will continue as previously applied and approved, with no significant changes. The notice must be submitted to the Department within two weeks after the transfer of property and must include documentation of the new owner's title, right or interest in the property. If significant changes in the treatment program are proposed including, but not limited to, changes in the area(s) to be treated, the materials or methods to be used, etc., a new NOI must be submitted for review and approval. Permit transfers are subject to Maine law 38 M.R.S.A., §413(3) and Department rule 06-096 CMR 2(21)(C).

7. **Changed Conditions.** In the event that a person covered by this general permit proposes to make, or anticipates, significant changes in the nature or scope of the aquatic pesticide treatment(s) described in a NOI previously submitted and approved, the permit holder shall notify the Department as soon as becoming aware of and before implementing such changes. Based on its evaluation of proposed changes, the Department may require the submission of a new NOI, modification of the previous General Permit approval, or application for an individual MEPDES Permit / Maine Waste Discharge License. Significant changes include, but are not limited to, changes in the waterbody to receive treatments, changes in the size of area to be treated, changes in the hydrology in and surrounding the treatment area such that stagnant water conditions are permanently eliminated, or changes in facts or information described in the NOI previously submitted and approved, such as the materials or methods to be utilized, etc.

8. **Notice of Termination (NOT).** The person holding a general permit may submit a Notice of Termination (NOT) on a form provided by the Department at any time to voluntarily terminate coverage. A copy of the NOT Form must be filed with each civil jurisdiction in which the treatment has been located and with abutting landowners. Authorization to discharge under this general permit terminates on the day the signed NOT is received by the Department. Thereafter, activities for mosquito control involving the discharge of pollutants to waters of the State are prohibited unless otherwise approved by the Department.

E. CONTINUING COVERAGE AND TERMINATION

1. **Term of Coverage and Payment of Fees.** The term of this general permit is five years from the effective date indicated, unless reissued, replaced, or discontinued by the Department. Project coverage under this general permit begins pursuant to the conditions described in Permit Special Condition Part I, D.5., Effective Date of Coverage, above and continues until the earliest of: changes to the General Permit as noted immediately above, expiration of the General Permit, action by the Department to end project coverage, or the Department's receipt of a signed Notice of Termination from the permittee or approved agent. Ongoing coverage within the effective period of the General Permit is also

PART I – SPECIAL CONDITIONS
E. CONTINUING COVERAGE AND TERMINATION (cont'd)

dependant upon payment of an applicable annual fee pursuant to *Maine Environmental Protection Fund*, 38 M.R.S.A. § 353-B. Failure to pay the annual fee within 30 days of the anniversary date of previous NOI coverage is sufficient grounds for revocation or suspension of coverage.

Upon reissuance or replacement of the General Permit, the permittee or agent of a treatment project approved pursuant to the immediately preceding General Permit may apply for coverage under the new General Permit by:

a. completing and submitting a new NOI, excluding required and previously submitted maps, photographs, and other required attachments if no changes in the project are proposed;
b. submitting a statement that the treatment project will be conducted consistent with the project as previously proposed and approved except where changes are required by the reissued or replaced General Permit; and
c. submitting the difference, if any, in annual permit fees from the amount paid in the current year for coverage under the immediately preceding General Permit and the amount charged for coverage under the reissued or replaced General Permit.

2. **Individual Permit Coverage.** The Department may require that a permittee covered under this general permit apply for an individual permit to apply aquatic pesticides for the following reasons:

a. The aquatic pesticide application project is not in compliance with the conditions of this general permit.

b. The aquatic pesticide application project is a significant contributor of pollutants. In making this determination, the Department may consider factors including, but not limited to, the following:

1. the location of the project with respect to waters of the State;
2. the size of the discharge;
3. the quantity and nature of the pollutants discharged to waters of the State.

c. The project as proposed is determined to present significant adverse impacts on non-target organisms and/or resources;

d. Any other factors the Department determines are relevant including, but not limited to, information pursuant to Part I, §D.4 and §D.7, and pursuant to Department Rules, Chapter 529.

3. **Exclusion from Coverage.** When an individual MEPDES Permit / Maine Waste Discharge License (WDL) is issued to a permittee otherwise subject to this general permit, the applicability of this general permit to that permittee is automatically terminated on the effective date of the individual Permit/WDL.

PART II – STANDARD CONDITIONS

The application of authorized aquatic pesticides for mosquito control under this general permit must, at all times, comply with the State's water quality laws, including the following restrictions, limitations and conditions.

A. NARRATIVE EFFLUENT LIMITATIONS

1. The discharge shall not contain a visible oil sheen, foam or floating solids at any time which would impair the usages designated by the classification of the receiving waters.

2. The discharge shall not contain materials in concentrations or combinations which pose unacceptable risks to non-target organisms or resources or which would impair the usages designated by the classification of the receiving waters.

3. The discharge may not impart color, taste, turbidity, radioactivity, settleable materials, floating substances or other properties that cause the receiving water to be unsuitable for the designated uses ascribed to its classification.

4. Notwithstanding specific conditions of this general permit, the discharge must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

B. MONITORING REQUIREMENT. The Department may require, following approval of a NOI, any monitoring of an individual discharge as may be reasonably necessary in order to characterize the nature, volume or other attributes of that discharge or its sources.

C. OTHER INFORMATION. When a permittee becomes aware that it has failed to submit any relevant facts or submitted incorrect information in the NOI or in any other report to the Department, the permittee shall promptly submit such facts or information.

D. OTHER APPLICABLE CONDITIONS. The conditions applicable to all permits in *Waste Discharge License Conditions*, 06-096 CMR 523(2) and (3) (effective January 12, 2001) also apply to discharges pursuant to this general permit and are incorporated herein as if fully set forth.

E. ACCESSIBILITY. Employees and agents of the Department may enter any property at reasonable hours in order to determine compliance with water quality laws or this general permit.

F. SEVERABILITY. In the event that any provision, or part thereof, of this general permit is declared to be unlawful by a reviewing court, the remainder of the permit shall remain in full force and effect, and shall be construed and enforced in all aspects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

PART III – FACT SHEET (PROPOSED DRAFT)

APPLICATION OF AQUATIC PESTICIDES FOR THE CONTROL OF MOSQUITO-BORNE DISEASES

Maine Pollutant Discharge Elimination System
Maine Waste Discharge License Program

DATE: July 27, 2010

MEPDES Permit: **#MEG140000**
Maine WDL: **#W-008226-5Y-C-R**

PART III - FACT SHEET

A. AREA OF COVERAGE AND RECEIVING WATER CLASSIFICATION

The area of coverage under this general permit is the entire state of Maine. This general permit covers the direct discharge of authorized aquatic pesticides, as defined in Part I.B.1. of the general permit, to fresh and marine waters of the State classified by Maine's water classification laws as Class GPA, AA, A, B, C, SA, SB or Class SC waters, tributaries to Class GPA waters, and those waters having a drainage area of less than 10 square miles, that constitute breeding habitat for mosquito species known to be potential vectors of infectious diseases. Waters classified by Maine's water classification program as GW-A waters and waters that have flowing current and/or do not otherwise exhibit characteristics of mosquito breeding habitat are not covered by this general permit.

B. PERMIT SUMMARY

The Maine Department of Environmental Protection (Department, MEDEP) has re-issued and revised this general permit authorizing direct discharges (applications) of authorized aquatic pesticides to certain waters of the State for the control of mosquito-borne diseases in the interest of public health and safety. Each applicant seeking coverage under this general permit shall file a separate Notice of Intent (NOI) form with the Department. If a proposed treatment area(s) extends beyond the boundaries of a civil jurisdiction, a separate NOI must be submitted for each civil jurisdiction involved. A permittee is required to consult with the Maine Department of Inland Fisheries and Wildlife (MDIFW) Non-Game Program and the Maine Department of Conservation Natural Areas Program (MNAP) as to the presence and possible effects on any elements of special concern for rare, threatened, or endangered species or natural communities in the affected area. A copy of the NOI must be sent to the civil jurisdiction(s) in which the treatment program(s) will be located. Further, notice of the proposed treatment program must be provided to abutting landowners to affected resources and a press release must be issued or an advertisement must be published in a newspaper having general circulation in the area of the proposed treatment program within the 30-day period prior to submittal of the NOI to the Department.

Coverage under this general permit is dependent upon the ability to meet the eligibility, and the special, standard, and general conditions of the general permit. Individual project coverage under this general permit is continued during the term of the general permit contingent upon compliance with its terms and conditions, payment of an annual fee, and provided the treatment project will be conducted consistent with the project as previously proposed and approved. Coverage for an individual permittee or waterbody may be terminated in the event of non-compliance with the terms and conditions of the general permit or based on a Department determination that the discharge is having an adverse impact on receiving water quality, non-target organisms, or non-target resources. Persons or parties may apply for an individual Maine Pollutant Discharge Elimination System (MEPDES) Permit / Maine Waste Discharge License (WDL) for waterbodies or activities that are not covered by this general permit.

PART III - FACT SHEET
B. PERMIT SUMMARY (cont'd)

This permitting action is similar to the September 28, 2005 Maine WDL and the 2007 permit modification in that it is carrying forward all previous terms and conditions with a few exceptions. This permitting action is different in that it is:

1. renewing the general permit as a MEPDES Permit / Maine WDL;
2. extending coverage to Class GPA waters and their tributaries;
3. including other materials / methods protective of non-targets as authorized aquatic pesticides;
4. providing for aerial applications under emergency conditions and with Department approval;
5. changing the demonstration of significant need from infectious disease in humans to mammals;
6. changing the maximum Department review period from 14 days to 30 days;
7. removing the need for annual demonstration of ongoing significant need and specifying conditions for cessation of coverage; and
8. clarifying notification requirements for the civil jurisdiction, abutters, agencies, and public.

C. REGULATORY SUMMARY

A permit is required for the discharge of aquatic pesticides pursuant to Maine law, 38 M.R.S.A. §413(1) and Department rule, *Regulations Concerning the Use of Aquatic Pesticides*, 06-096 CMR 514 (last amended January 29, 1989). A general permit authorizing the discharge of certain pollutants may be issued pursuant to Department rule, *General Permits for Certain Wastewater Discharges*, 06-096 CMR 529 (last amended June 27, 2007). The similarity of discharges resulting from the application of authorized aquatic pesticides for the control of mosquito-borne diseases has prompted the Department to issue this general permit for those receiving waters not otherwise prohibited by Maine law and that constitute breeding habitat for mosquito species known to be vectors of infectious diseases. A violation of a condition or requirement of a general permit constitutes a violation of the State's water quality laws, and subjects the discharger to penalties under Maine law, 38 M.R.S.A. §349.

Pursuant to Maine law, 22 M.R.S.A. §1471-A, the Maine Board of Pesticides Control within the Maine Department of Agriculture, Food and Rural Resources regulates the sale and application of chemical insecticides, fungicides, herbicides and other chemical pesticides. Maine law, 22 M.R.S.A. §1471-D requires certification of commercial and private applicators for the use of any pesticide within the State.

On January 12, 2001, the Department received authorization from the U.S. Environmental Protection Agency (USEPA) to administer the National Pollutant Discharge Elimination System (NPDES) permit program in Maine, excluding areas of special interest to Maine Indian Tribes. On October 30, 2003, after consultation with the U.S. Department of Justice, USEPA extended Maine's NPDES program delegation to all but tribally owned discharges. That decision was subsequently appealed. On August 8, 2007, a panel of the U.S. 1st Circuit Court of Appeals ruled that Maine's environmental regulatory jurisdiction applies uniformly throughout the State.

PART III - FACT SHEET
C. REGULATORY SUMMARY (cont'd)

On November 27, 2006, the USEPA issued a final rule stating that pesticides applied in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) were exempt from the federal Clean Water Act's NPDES permitting requirements. The USEPA's determination specifically referenced the application of pesticides directly to waters of the United States in order to control pests that are present in those waters. On January 7, 2009, the US 6th Circuit Court of Appeals (*National Cotton Council, et al. v. EPA*) vacated USEPA's 2007 rule. On June 8, 2009, the 6th Circuit granted a two year stay of its mandate that USEPA issue NPDES permits for the pesticide discharges described, until April 9, 2011. USEPA sought the stay to provide time to develop a suitable permit program for state and tribal areas that do not have delegated permit authority.

It is noted that Maine law, 38 MRSA, Section 413, *Waste discharge licenses*, and MEDEP rule 06-096 CMR Chapter 514, Regulations Concerning the Use of Aquatic Pesticides, already provide MEDEP with the authority to regulate such discharges. Therefore, this General Permit is being issued pursuant to the Maine Pollutant Discharge Elimination System (MEPDES) permit and Maine Waste Discharge License (WDL) program and Maine's delegated permit authority.

Nothing in this general permit is intended to limit the Department's authority under the waste discharge and water classification statutes or rules. This general permit does not affect requirements under other applicable Maine statutes and Department rules.

D. ADMINISTRATIVE REQUIREMENTS

The administrative procedures and requirements associated with this general permit are based on the following Department rules (06-096): Chapter 2 (CMR 2), *Rules Concerning the Processing of Applications and Other Administrative Matters* (last amended April 1, 2003); Chapter 514 (CMR 514), *Regulations Concerning the Use of Aquatic Pesticides* (last amended January 29, 1989)*;* Chapter 529 (CMR 529), *General Permits for Certain Wastewater Discharges* (last amended April 27, 2007)*,* and applicable Maine laws. Applicants seeking coverage under this general permit must file a Notice of Intent (NOI) containing sufficient information and facts to describe all proposed aquatic pesticide treatments and waterbodies so as to allow the Department to determine if the proposed activities are anticipated to comply with the general permit terms and conditions. Once a completed NOI is received, the Department has a maximum of 30 days in which to act on it. If no other action is taken within that 30-day period, the NOI is considered approved at the close of business (5:00 p.m. Eastern Time Zone) on the thirtieth day following the Department's receipt of the NOI. Agency, abutter, civil jurisdiction, and public notice of the proposed treatment program must be provided as detailed in General Permit Part I.D and Fact Sheet Section B above.

PART III - FACT SHEET
D. ADMINISTRATIVE REQUIREMENTS (cont'd)

Pursuant to Chapter 2, section 24.B.1, "(w)*ithin 30 days of the filing of a license decision by the Commissioner with the Board* (of Environmental Protection)*, an aggrieved person may appeal to the Board for review of the Commissioner's decision*." The Department notes that a permittee has the legal authority to proceed with an approved project upon approval by the Commissioner and subject to any conditions established. However, the Department advises that if the permittee proceeds with an approved project prior to the end of the 30-day appeal period, it assumes all risks and responsibilities in the event that the Commissioner's decision is overturned or modified on appeal

If a property on which an activity covered by this general permit is transferred to a new owner, coverage under this general permit is subject to the provisions of Maine law 38 M.R.S.A., §413(3), Department rule 06-096 CMR 2(21)(C), and Part I.D.6 of this general permit.

The term of this general permit is five years from the effective date indicated, unless reissued, replaced, or discontinued by the Department. Project coverage under this general permit begins pursuant to the conditions described in Permit Special Condition Part I, D.5., Effective Date of Coverage, and continues until the earliest of: changes to the General Permit as noted immediately above, expiration of the General Permit, action by the Department to end project coverage, or the Department's receipt of a signed Notice of Termination from the permittee or approved agent. Individual project coverage under this general permit is continued during the term of the general permit contingent upon compliance with its terms and conditions, payment of an annual fee, and provided the treatment project will be conducted consistent with the project as previously proposed and approved. In the event that an approved aquatic pesticide treatment program is not conducted in compliance with this general permit or upon determination by the Department that the discharge is having an unreasonable adverse impact on receiving water quality, non-target organisms or resources, the Department may require that the permittee apply for an individual MEPDES Permit / Maine WDL or cease discharge. Examples of significant changes in activities include, but are not limited to, changes in the extent of the waterbody or areas to be treated, the hydrology in and surrounding the treatment area, methods or materials used, facts or information previously submitted and approved, or changes in anticipated impacts to non-target organisms or resources.

E. OVERVIEW OF MOSQUITO BIOLOGY AND BEHAVIOR

At the time of this printing, there are estimated to be approximately 45 species of mosquitoes in Maine. Mosquito species vary in their life histories, with differences in their habitats, the number of generations hatched per year, the time of year in which they are active, their feeding habits, etc. Some mosquito species feed on birds, some feed on mammals including humans, and some feed on both. West Nile Virus (WNV) and Eastern Equine Encephalitis (EEE) are viruses that exist mainly in bird populations, but which may be occasionally transmitted to mammals, including humans, by certain mosquito species that feed on both birds and mammals. These "bridge vector" species represent a small number of the mosquito species found in Maine. They breed in specific habitat types, which provides opportunities for

PART III - FACT SHEET
E. OVERVIEW OF MOSQUITO BIOLOGY AND BEHAVIOR (cont'd)

controlling the spread of infectious diseases, such as WNV and EEE, when incorporated into an effective, target-specific, management plan with an area-wide control strategy. Certain aspects of mosquito life history, anatomy, and characteristics provide the ability to utilize materials and methods for their control that are protective of non-target organisms and resources.

All mosquitoes undergo a complete metamorphosis, which includes four stages of development: egg, larva, pupa, and adult. All mosquitoes require aquatic environments for the first three stages of development. The adult is a flying insect that obtains food from plants and animals. Female mosquitoes lay eggs in or on water, in moist depressions or in mud, or on vegetation that will later become flooded by snow melt water, rain, or extreme high tides. Though the larval stage is relatively short, the larvae mosquitoes are confined to the aquatic environment and actively feeding on organisms and organic matter in their habitat. Mosquito body chemistry is unique in that the mosquito gut pH is alkaline instead of acidic like in humans and most other forms of life. Black flies and some midges also have alkaline pH guts. These characteristics make mosquitoes susceptible to treatment with authorized aquatic pesticides that are effective through ingestion and which are only effective on alkaline pH guts, such as Bti and Bs.

The majority of woodland mosquito species in Maine overwinter as eggs or larvae and produce only one hatch of adults (generation) per year. However, in wet years, some species have been known to have more than one hatch. Most woodland mosquitoes remain within a few miles of their larval habitat throughout their lives, in search of food. Mosquito species adapted to life in salt marsh habitats, however, produce many generations of adults per year and may fly or be blown up to 20 miles from their larval habitat in search of food. Eggs of coastal mosquito species hatch after being flooded by heavy rains and high tides. For mosquito species that rely on high tides to flood pools (for example, high salt marsh pools), the frequency of flood events (storm tides, spring high tide, heavy rainfall) determines the number of hatches. Another subset of mosquitoes are those adapted to urban areas. Urban mosquitoes breed in water which has collected in tires, roof gutters, buckets, dumpsters, birdbaths, etc.

F. PROJECT NEED AND PUBLIC HEALTH CONCERNS

The Maine CDC reports that no indigenously acquired human cases of WNV have been reported in Maine, although Maine has reported WNV positive birds and mosquitoes since 2001. As described in Maine CDC's 2009 arboviral response plan, testing from 2001 through 2008 indicated a range of positive results in birds from 0 to 98 individuals and in mosquito "pools" (groups of individuals of the same species collected on the same date) from 0 to 2. In 2009, limited testing revealed one positive WNV mosquito pool. The majority of human WNV infections are asymptomatic or may produce a mild fever and other flu-like symptoms, but the virus can cause severe and fatal infections in a small percentage of patients – mostly those who are at an increased risk of infection due to age and suppressed immune systems.

PART III - FACT SHEET
F. PROJECT NEED AND PUBLIC HEALTH CONCERNS (cont'd)

EEE was first identified in Maine in 2005 among mosquitoes, horses, and birds in southern Maine. Testing from 2001 through 2008 indicated a range of positive results in birds from 0 to 12 individuals, in mosquito pools from 0 to 1, and in horses from 0 to 2. The first potentially Maine acquired human case of EEE was identified in 2008. In 2009, Maine had 15 positive EEE cases in horses, one case in a llama, three infected pheasant flocks, and two positive mosquito pools, with a wide distribution indicating an expanding concern. Although EEE is difficult to contract, Maine CDC reports that of the humans who contract it and exhibit symptoms, one-third will die and one-half of the survivors will develop permanent neurologic damage.

Human cases of both diseases have been found in nearby states and their potential for a growing presence in Maine is a source of concern. The Maine Vectorborne Disease Workgroup is a joint public and private sector entity designed to coordinate efforts, share information, and educate citizens about these threats, as well as the options available for personal protection and both pesticide and non-pesticide means of prevention and control. This general permit is intended to provide a rapid response capability to protect citizens that is also protective of non-targets organisms and resources.

Authorized aquatic pesticides covered under this general permit have been reviewed by the USEPA during the registration process. Further, the professional applicators who are qualified to use these materials are licensed by the Maine Department of Agriculture, Board of Pesticide Control. Information on the authorized aquatic pesticides *Bti* and *Bs* can be found in Fact Sheet Attachment A.

G. AREA-WIDE CONTROL STRATEGIES

General Permit Part I.C.4. requires a person seeking coverage under this general permit to demonstrate that proposed applications of authorized aquatic pesticides shall be performed pursuant to a specific written management plan for the control of mosquito species known to be potential vectors of infectious diseases, with preference given to area-wide control strategies and integrated control methods. Area-wide control strategies involve treatment plans focused on large contiguous areas that illustrate a significant need to control the target species as described in General Permit Part I.D.2.d. Preferred treatment plans involve multiple landowners, neighborhoods, and development areas within a municipality with a high density of humans considered to be at a higher risk of infection, such as hospitals, elderly housing complexes, child daycare facilities or elementary schools. They also include provisions for the implementation of best management practices to reduce or eliminate mosquito breeding habitat (artificial stagnant waters) formed by structures and coordination of control efforts to prevent or minimize isolated treatments. For purposes of this general permit, "artificial" breeding habitats that must be addressed in a treatment plan include stagnated waters in roof gutters, discarded tires, containers and toys stored outside, catch basins, stormwater retention structures, etc. The Department does not consider small, isolated treatment projects conducted by individual property owners to be an effective means of controlling mosquito vectors for infectious diseases. The Department may

PART III - FACT SHEET
G. AREA-WIDE CONTROL STRATEGIES (cont'd)

deny applications within an area when the Department determines that proposed aquatic pesticide treatments are duplicative or ineffective in controlling the target species. Individual property owners seeking coverage under this general permit shall demonstrate to the Department their efforts to coordinate mosquito treatments with local governments, tribal governments, or state public health agencies.

H. DESCRIPTION OF AUTHORIZED ACTIVITIES

This general permit authorizes the discharge (application) of authorized aquatic pesticides as defined in general permit Part I.B.1 that are registered with both the USEPA and the Maine Board of Pesticides Control and are applied in accordance with USEPA approved label use to inhibit the growth or control the existence of larval stage mosquitoes known to be potential vectors of infectious diseases, such as West Nile virus and Eastern Equine Encephalitis. This general permit requires the use of a person (licensed applicator) who has been licensed by the State of Maine Department of Agriculture, Board of Pesticides Control to apply the authorized aquatic pesticides to waters of the State for mosquito control. Authorized aquatic pesticides should be applied at the lowest appropriate labeled rates whenever possible, during the most sensitive life stages (larval) of the target species, and in specific areas so as to minimize non-target impacts. Aerial spraying from fixed or rotary wing aircraft will only be authorized under this general permit under emergency conditions and upon case-by-case Department approval.

This general permit authorizes applications of authorized aquatic pesticides to those waterbodies specified in Section A of this fact sheet which have been shown to demonstrate a significant need to control the target species as described in Special Conditions Part I.B.6 and Part I.D.2, during periods when larval stage mosquito species known to be vectors of infectious diseases are or will immediately be present. The biological pesticides *Bti* and *Bs* are only effective during early larval life stages and are not effective on egg, pupa and adult stage mosquitoes. Thus, application of these biological pesticides during the egg stage or post-larvae developmental stages will not inhibit the growth or control the existence of mosquitoes. This general permit is not intended to serve as a mechanism for general mosquito eradication. Rather, it is intended to control certain populations of mosquitoes known to be vectors of infectious diseases to alleviate public health concerns associated with mosquito-borne diseases. It is noted, however, that certain waterbodies may contain several species of mosquitoes, including species that have not been documented as vectors of infectious diseases. The Department encourages applicants to enlist the assistance of a qualified entomologist to correctly identify mosquito species present in affected waters, thereby determining the risk for infectious diseases, the need for control of the mosquitoes present, and the applicability of a treatment program pursuant to this general permit.

PART III - FACT SHEET

I. DESCRIPTION OF AUTHORIZED AQUATIC PESTICIDES

This general permit authorizes the discharge (application) of authorized aquatic pesticides as defined in general permit Part I.B.1 as granular, solid, powder, liquid, or other formulations of pesticides whose sole active ingredients are:

a. the bacterium *Bacillus thuringiensis* var. *israelensis* (*Bti*),

b. the bacterium *Bacillus sphaericus* serotype H5a5b strain 2362 (*Bs*),

c. other approved formulations and/or combinations of these materials, or

d. other materials and/or methods demonstrated to be protective of non-target organisms and resources, upon case-by-case approval by the Department. The materials/methods must be demonstrated to be effective for control of mosquito species that are not effectively controlled by the biological pesticides noted above. An example of this includes use of a non-toxic, short-lasting material to alter surface tension in contained, fishless microhabitats during times of year in which the target mosquito species is present and susceptible, but other aquatic insects are not at risk due to their life stages.

Descriptions of the properties and potential effects of Bti and Bs are included as Fact Sheet Attachment A.

J. CONDITIONS OF PERMITS

Discharges of authorized aquatic pesticides under this general permit are subject to §414-A.1(E), provisions and conditions of Maine's Water Classification Program at 38 M.R.S.A. §§ 464(4), 465, and 465-A and Department rules Chapters 514 (Regulations Concerning the Use of Aquatic Herbicides), 523(2) (Waste Discharge License Conditions Applicable to All Permits), and 529 (General Permits for Certain Wastewater Discharges).

K. REGULATIONS CONCERNING THE USE OF AQUATIC PESTICIDES

Department Rules, Chapter 514, REGULATIONS CONCERNING THE USE OF AQUATIC PESTICIDES. Section 1, *Definition*. states, "an aquatic pesticide is any substance applied in, on or over the waters of the State or in such a way as to enter those waters for the purpose of inhibiting the growth or controlling the existence of any plant or animal in those waters". In accordance with Chapter 514, Section 2, *Criteria for Approving a License to Use Aquatic Pesticides,*

Subsection A, "Except as provided in 38 M.R.S.A. Section 362-A, no permit for aquatic pesticide use will be issued for a pesticide which is not registered for the intended use by the United States Environmental Protection Agency and the Maine Department of Agriculture".

PART III - FACT SHEET
K. REGULATIONS CONCERNING THE USE OF AQUATIC PESTICIDES (cont'd)

Subsection B, "No permit for aquatic pesticide use will be issued unless the applicant or agent for the applicant is certified and licensed in aquatic pest control by the Maine Board of Pesticides Control".

Subsection C, "A permit for aquatic pesticide use will be issued only if the applicant provides adequate protection for non-target species".

Subsection D, "A permit for aquatic pesticide use will be issued only if the applicant can demonstrate a significant need to control the target species and that pesticide control offers the only reasonable and effective means to achieve control of the target species. Demonstration of significant need may included, but not be limited to, health risk, economic hardship, or loss of use."

Subsection E, "In addition to paragraphs (A) through (D), any discharge of aquatic pesticides, alone or in combination with all other discharges, shall meet all other applicable requirements of Maine's waste discharge laws including, but not limited to, the provisions of 38 M.R.S.A. Sections 464 and 465".

In response to the citations above: this general permit only authorizes the discharge (application) of authorized aquatic pesticides as defined in general permit Part I.B.1 that are registered with both the USEPA and the Maine Board of Pesticides Control and are applied in accordance with USEPA approved label use to inhibit the growth or control the existence of larval stage mosquitoes. The permittee shall utilize a pesticide applicator who is certified and licensed in aquatic pesticide control by the Maine Bureau of Pesticide Control and shall provide proof of certification/licensing to the Department with the NOI. The materials (*Bti, Bs,* combinations thereof, and other materials upon Department approval) and methods for treatment covered by this general permit will ensure protection of non-target organisms and resources to the extent possible. In submitting a NOI for coverage under this General Permit, the applicant has demonstrated a significant need to control the target species, has explored potential treatment methods, and has designed an effective treatment program that includes components of identification, public education, and elimination of non-natural mosquito breeding habitats in the vicinity of the treatment area. The Department recognizes a potential for proposed treatment programs to result in short-term adverse impacts to non-target aquatic organisms, but believes that, if such impacts are realized, they will be necessary in order to eliminate valid threats of transmittal of infectious diseases. The Department finds that the aquatic pesticide treatment program described herein complies with Chapter 514.

PART III - FACT SHEET

L. RECEIVING WATER QUALITY STANDARDS

This general permit authorizes discharges to Class GPA, AA, A, B, C, SA, SB and SC waters, tributaries to Class GPA waters, and those waters having a drainage area of less than 10 square miles. Maine law, 38 M.R.S.A. §465-A describes the standards for Class GPA waters, 38 M.R.S.A. §465 describes the standards for Class AA, A, B and C waters, 38 M.R.S.A. §465-B describes the standards for Class SA, SB and SC waters, and 38 M.R.S.A. §464(4) describes the standards for tributaries to Class GPA waters and those waters having drainage areas of less than ten square miles.

M. RECEIVING WATER QUALITY CONDITIONS

The active ingredients in the aquatic pesticides authorized for use under this general permit are USEPA registered and formulated for aquatic use. They are naturally occurring bacterial agents generally characterized as microbial insecticides. Further discussion on the basic identification and information about *Bti* and *Bs* is included in Fact Sheet Attachment A. The bacterial standards established in Maine water classes are based on *Escherichia coli* (fresh waters) and enterococcus (marine waters) bacteria of human and domestic animal origin. Therefore, the discharge of authorized aquatic pesticides in accordance with the terms and conditions of this general permit will not cause or contribute to non-attainment of bacteria standards for any of the authorized receiving water classifications covered by this general permit. This general permit authorizes the use of other materials and/or methods when target mosquito species can not be effectively controlled by the biological pesticides noted above. However, such materials/methods will only be approved when demonstrated to be protective of non-target organisms and resources, and only upon case-by-case approval by the Department.

The Department has no information at this time that the discharge of the authorized aquatic pesticides in accordance with the terms and conditions of this general permit will cause or contribute to non-attainment of water quality standards or designated uses for the waters covered by this general permit. The Department has not identified any significant geographical areas of concern that should be excluded from coverage under this general permit.

N. ANTIDEGRADATION

Maine's antidegradation policy is set forth in Maine law at 38 M.R.S.A. §464(4)(F). The Department has determined that the discharge of the authorized aquatic pesticides in accordance with the terms and conditions of this general permit will not violate the provisions of the antidegradation policy.

PART III - FACT SHEET

O. PUBLIC COMMENTS

Public notice of this general permit renewal was made in the Bangor Daily News, Morning Sentinel, Kennebec Journal, Portland Press Herald, and The Times Record newspapers on or about June 8, 2010. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Application Processing Procedures for Waste Discharge Licenses, 06-096 CMR 522 (effective January 12, 2001).

P. DEPARTMENT CONTACTS

Additional information concerning this permitting action may be obtained from and written comments should be sent to:

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Division of Water Quality Management
Bureau of Land and Water Quality
Department of Environmental Protection
17 State House Station
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Q. RESPONSE TO COMMENTS

During the period of June 22, 2010 through July 23, 2010, the Department solicited comments on the proposed draft Maine Pollutant Discharge Elimination System Permit / Maine Waste Discharge License General Permit for Application of Aquatic Pesticides for the Control of Mosquito-Borne Diseases. The Department did not receive any comments that resulted in significant revisions to the general permit. Therefore, no response to comments has been prepared.

ATTACHMENT A

(PROPERTIES AND POTENTIAL EFFECTS OF APPROVED AQUATIC PESTICIDES)

(4 Pages)

1. *Bacillus thuringiensis* var. *israelensis;* 2. *Bacillus sphaericus*

a. Characterization and Mode of Action

b. Target Species Control

c. Toxicological and Ecological Effects

d. Environmental Face, Persistence and Behavior

1. *Bacillus thuringiensis* var. *israelensis*.

a. Characterization and Mode of Action. *Bacillus thuringiensis* var. *israelensis* is a biological component of commonly used pesticides that are applied to mosquito breeding habitats for the purpose of causing mortality to larval stage mosquitoes. *Bti* is a gram-positive, rod-shaped, endospore-forming aerobic or facultatively anaerobic bacterium that has been isolated globally from soil, insects, and plant surfaces. *Bti* was first registered in the United States in 1961 for use as an insecticide and was re-registered with the U.S. Environmental Protection Agency, Office of Pesticide Programs as Chemical Code #006401 in 1998. As of July 2005, 16 *Bti* and *Bs* products had been registered for use with the Maine Board of Pesticides Control.

Bti is not a contact pesticide; it must be ingested by the target insect to be effective. During sporulation (formation of spores), *B. thuringiensis* produces one or more parasporal protein crystals, which are delta endotoxins (δ-endotoxins) that are toxic to mosquitoes and other insects in the taxonomic order Diptera. The δ-endotoxins produced by the subspecies *israelensis* are pathogenic against members of the families Culicidae (mosquitoes) and Simuliidae (black flies), and has some virulence against certain other Diptera, especially Chironomidae (midges). *Bti* δ-endotoxins, however, are not pathogenic against other insect species, such as butterflies and moths (Order Lepodoptera) or bees and ants (Order Hymenoptera). In order for the δ-endotoxins to be effective, they must be ingested by the target insect and exposed to appropriate digestive enzymes at a pH of 9.0 to 10.5 standard units. The parasporal protein crystals are solubilized, and the δ-endotoxins thereby activated, by enzymes in the insect midgut. The δ-endotoxins bind to receptor cells on the midgut cell membrane (midgut epithelium) and create pores (ion channels in the midgut epithelium) which disrupt cellular osmotic balance and lead to starvation and ultimate death of the larvae. Chilcott, *et al*. report that *Bti* treated mosquito larvae generally cease feeding within one hour, demonstrate reduced activity after two hours, extreme sluggishness by four hours and general paralysis by six hours after ingestion. Insects that do not ingest the spores are not affected by its presence in the water, nor are organisms with acidic digestive enzymes, such as humans.

b. Target Species Control. Department rule 06-096 CMR 514 contains criteria for approving a license to discharge aquatic pesticides and states, in part, that a permit will only be issued if the applicant provides *"adequate protection for non-target species."* Scientists have identified several different isolates (subspecies) of *B. thuringiensis* based on differently shaped δ-endotoxins that affect different groups of insects. The application of *B. thuringiensis* subspecies *israelensis*, as used in the context of this general permit, is intended to target mosquito species known to be potential vectors of infectious diseases, notably West Nile virus and Eastern Equine Encephalitis. This general permit only authorizes use of the subspecies *israelensis* and restricts its use to waters serving as mosquito breeding habitat to ensure adequate protection for non-target species. Available literature indicates that black fly and midge species are the only other aquatic species known to exhibit significant adverse affects from ingesting *Bti*. Since the toxic proteins (δ-endotoxins) formed by the *Bti* bacterium require exposure to alkaline conditions typical of mosquito guts, it is a highly target-specific pesticide and is not pathogenic to other non-target species when applied in accordance

with label instructions. Mosquitoes occupy a different niche in the environment than black flies. Mosquitoes utilize stagnant waters, such as palustrine wetlands, woodland pools and high salt marsh (marine) pools, while black flies utilize moving waters, such as streams and rivers in their reproduction cycles. This characteristic of mosquito reproductive biology physically separates mosquito larvae from black fly larvae. Midge species occupy habitats that also provide mosquito breeding habitat and may be susceptible to mortality from aquatic pesticide treatments. The Department is making a best professional judgment determination that *Bti* and *Bs* represent the most effective larvicides currently available for mosquito control while minimizing the risk to non-target organisms. In consideration of the biological and ecological characteristics of mosquitoes and the properties of the active ingredients in the authorized aquatic pesticides, the Department concludes that applicants proposing treatments in compliance with the terms and conditions of this general permit will provide adequate protection of non-target species.

c. Toxicology and Ecological Effects. Microbial pesticides must undergo extensive short-term (acute) and long-term (chronic) laboratory testing prior to registration with the USEPA. In March 1998, the USEPA issued Reregistration Eligibility Decision (RED) – *Bacillus thuringiensis* (Document #EPA738-R-98-004). In general, the USEPA concluded that the usage of *B. thuringiensis* as a microbial pest control agent will not cause unreasonable risks to humans or the environment. The USEPA considered information in its historical toxicology database and reviewed ecological toxicity studies performed on terrestrial and aquatic animals as part of the reregistration process, and concluded that, *"toxicity and infectivity risks due to delta-endotoxin effects to nontarget avian, freshwater fish, freshwater aquatic invertebrates estuarine and marine animals, arthropod predators/parasites, honey bees, annelids and mammalian wildlife will be minimal to nonexistent at the label use rates of registered B. thuringiensis active ingredients."*

   The USEPA further concluded, with regard to human health, that no adverse effects to the endocrine or immune systems are expected from the labeled use of *Bti*. The USEPA requires carcinogenicity (ability to cause cancer) studies and reproductive and teratogenic (ability to cause malformations of an embryo or fetus) studies for microbial pesticides that demonstrate significant adverse health effects in acute toxicity studies. Acute studies using *Bti* did not identify significant health effects; therefore, carcinogenicity and reproductive and teratogenic studies were not performed for *Bti*. The USEPA further concluded in its 1998 RED that a review of plant toxicity data indicates that *Bti* and its byproducts do not cause detrimental effects on terrestrial, semi-aquatic or aquatic plant life.

d. Environmental Fate, Persistence and Behavior. Environmental fate and ground water effect studies are not required by the USEPA unless significant human health or ecological effects arise during the first round of studies. Studies using *Bti* did not identify significant human health or ecological concerns; therefore, federal regulations do not require testing for environmental fate and ground water effects. However, the behavior of *B. thuringiensis* has been thoroughly studied and is well known.

Generally, *Bti* persists in the environment for periods measured in days as compared to some alternative chemical-based insecticides that may persist for weeks. Factors that affect persistence and efficacy of *Bti* in the environment may include, but are not limited to, the formulation of the *Bti* product, agitation of the waterbody, receiving water quality and temperature. Solid and granule formulations, which act through a slow release action, generally persists for longer periods than liquid formulations. Agitation of sediments in the water column acts to resuspend *Bti* and, therefore, causes the bacterium to persist as an available pesticide for longer periods. Waters with higher organic content generally require higher doses of *Bti* due to lower ingestion rates by mosquito larvae. Similarly, lower water temperatures reduce the feeding rate of mosquito larvae and, therefore, may result in a longer persistence of the solid and granule formulations.

Toxins produced by *Bti* degrade rapidly in sunlight as a result of exposure to ultraviolet radiation. The National Pesticide Telecommunications Network's technical fact sheet entitled, *Bacillus thuringiensis* indicates that the typical half life for *Bti* products on foliage is 1-4 days, and that the bacterium is moderately persistent in soil with a half life of four months. The δ-endotoxins produced by *Bti* degrade by soil microorganisms with soil half lives of 3-6 days. *Bti*, as with other soil microbes, does not percolate through the soil and readily binds to sediments within the water column, and is, therefore, not available to contaminate ground water.

2. *Bacillus sphaericus.*

a. Characterization and Mode of Action. *Bacillus sphaericus* serotype H5a5b strain 2362 is a biological component of commonly used pesticides that are applied to mosquito breeding habitats for the purpose of causing mortality to larval stage mosquitoes. *Bs* is similar in characterization and mode of action as *Bti*. *Bs* is a gram-positive, endospore-forming aerobic or facultatively anaerobic bacterium common to soil and aquatic environments. As with *Bti*, *Bs* produces unique delta endotoxins (δ-endotoxins) that target and are toxic to specific mosquito species, including those in the genera *Culex*, *Anopheles*, *Aedes, Psorophora*, and *Coquillettidia*, of which several species are known West Nile vectors and are thought to potentially be vectors of Eastern Equine Encephalitis as well (Maine CDC 2009 arboviral response plan). *Bs* was first registered in the United States in 1991 for use as an insecticide, and *Bs* is currently registered with the USEPA, Office of Pesticide Programs as Chemical Code #119801. Inert ingredients for both *Bti* and *Bs* are held by manufactures as trade secrets. There are currently five products registered for use with the Maine Board of Pesticides Control.

b. Target Species Control. Target species control is similar to that of *Bti* described above. The toxic proteins (δ-endotoxins) formed by the *Bs* bacterium require exposure to alkaline conditions typical of mosquito guts, therefore, *Bs* is a highly target-specific pesticide. In consideration of the biological and ecological characteristics of mosquitoes and the properties of the active ingredients in the authorized aquatic pesticides, the Department concludes that applicants proposing treatments in compliance with the terms and conditions of this general permit will provide adequate protection of non-target species.

c. Toxicology and Ecological Effects. Available literature indicates that *Bs* is not acutely toxic to non-target species, including birds, mammals, fish and invertebrates. A 1999 USEPA fact sheet entitled, *Bacillus sphaericus* serotype H5a5b strain 2362 (128128) Fact Sheet, summarized that *"various tests revealed no expected harm to non-target organisms"* and the State of Washington, Department of Ecology concluded in its Fact Sheet for Aquatic Mosquito Control General National Pollutant Discharge Elimination System Permit, issued April 10, 2002 (modified June 8, 2004), that *"in tests, B. sphaericus was not pathogenic, infective or toxic in laboratory animals by the oral, dermal, pulmonary or intra-venous routes of exposure."* The Material Safety Data Sheets for *Bs* further indicate that the bacterium is not toxic to non-target organisms when applied in doses consistent with label instructions.

d. Environmental Fate, Persistence and Behavior. Dormant *Bs* spores may persist in the environment for several weeks to months; however, the δ-endotoxins generally persist for two to four weeks following application. Factors affecting its persistence are similar to those as described for *Bti* above, including the formulation of the *Bs* product, agitation of the waterbody, receiving water quality and temperature. As described for *Bti* above, the δ-endotoxins produced by *Bs* degrade rapidly in sunlight as a result of exposure to ultraviolet radiation and are degraded by soil microorganisms. *Bs*, as with other soil microbes, does not percolate through the soil and readily binds to sediments within the water column, and is, therefore, not available to contaminate ground water.

Based on available scientific literature, and conclusions drawn by the USEPA and other reputable sources, *Bs* is among the most environmentally sound insecticides available on the market. As compared to many alternative chemical-based insecticides, *Bs* has a lower persistence in the environment, does not pose a threat to ground water, and is non-toxic to non-target species.

ATTACHMENT B

(Selected References for the Previous and Current General Permit)
(2 Pages)

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ATTACHMENT C

(Notice of Intent for Coverage)
(4 Pages)

Form DEPLW0724A

Maine Department of Environmental Protection
General Permit Notice of Intent (NOI)
Aquatic Pesticides for the Control of Mosquito-Borne Diseases

NOTE: A copy of this NOI Form must be filed with each civil jurisdiction in which the treatment will be located (municipal office or LURC Regional Office and County Commissioners office) at the time it is submitted to the Department. Notice of the proposed treatment program must be provided to abutting landowners and issuance of a press release or newspaper advertisement must be conducted prior to submittal of the NOI, as described in the General Permit.

This NOI is subject to General Permit #MEG140000 / WDL #W-008226-5Y-C-R, issued by the Maine Department of Environmental Protection for the use of authorized aquatic pesticides for the control of mosquito-borne diseases in the interest of public health and safety.

1. Property Owner Information (use additional sheets if multiple property owners)

Name: _____

Mailing address: _____
Street Address

_____
Town State ZIP

Telephone: _____ E-mail: _____

2. Agent Information (if applicable)

Name/Affiliation: _____

Mailing address: _____
Street Address

_____
Town State ZIP

Telephone: _____ E-mail: _____

3. Licensed Applicator Information

Name/Affiliation: _____

Mailing address: _____
Street Address

_____
Town State ZIP

Telephone: _____ E-mail: _____

Maine Board of Pesticides Control License Number: _____

4. Significant Need to Control Target Species

Please check all that apply:

☐ The affected waterbody provides preferred breeding habitat for mosquito species known to be vectors for West Nile Virus, Eastern Equine Encephalitis, or other infectious diseases.
☐ There is positive identification of the presence of mosquito species in the affected waterbody known to be vectors of the infectious diseases noted.
☐ There is documentation by Maine CDC of mosquitoes, birds, or mammals testing positive for the infectious diseases within a 20-mile radius of the civil jurisdiction of the treatment area.
☐ There is other compelling evidence of significant need.

On separate paper, please provide information pertaining to the choices selected above, demonstrating a significant need to control the target species and that use of the authorized aquatic pesticide is the most effective means of mosquito control. The statements must provide reasonable justification for the proposed treatment. (See General Permit Section I.D.2.d.)

5. Specific Written Management Plan and Area-Wide Control Strategy

Please check all that apply. The proposed aquatic pesticide treatment program:

☐ will be performed in conjunction with a specific written management plan and an area-wide control strategy for mosquito species known to be vectors of infectious diseases.
☐ will include in the above plans and strategy, components of identification, public education, and elimination of non-natural mosquito breeding habitats in the vicinity of the treatment area.
☐ will not be performed in conjunction with a specific written management plan and an area-wide control strategy.

On separate paper, please provide information pertaining to the written management plan for the control of mosquito species known to be potential vectors of infectious diseases and coordination of the proposed treatment program through an area-wide control strategy with local governments, tribal governments, state public health agencies, the general public, and/or other appropriate organizations. Or, provide information as to why the proposed treatment program is not being conducted in this manner. (See General Permit Section I.D.2.e.)

6. Aquatic Pesticide Information

☐ Bti. Formulation:_____ Concentration:_____ Max. Application Rate_____
(granule, liquid, powder, etc.) (% active ingredient) Frequency_____

☐ Bs. Formulation:_____ Concentration:_____ Max. Application Rate_____
(granule, liquid, powder, etc.) (% active ingredient) Frequency_____

☐ Other materials/methods that will be protective of non-target organisms and resources with details of proposed use and evidence of target-specific nature, for Department case-by-case review.

Please include a copy of the label from each authorized aquatic pesticide to be use.

7. Waterbody Information (Provide the following information for each waterbody having different physical or hydrologic characteristics. Use additional sheets as necessary.)

Name of waterbody: _____

Size of area to be treated: _____(☐ square feet or ☐ acres)

Average Water Depth (check all that apply): ☐ 0-6" ☐ 6-12" ☐ 12-24" ☐ >24"

Has the waterbody been treated before for mosquito control? ☐ YES ☐ NO

If YES, provide dates and pesticides used:_____

8. A description of each area to be treated, including, but not limited to, identification of any intermittent or permanent inlets to or outlets from the waterbody, characterization of any vegetation (herbaceous, woody) within the waterbody, characterization of the area in and around the waterbody (forested, open field, marsh, etc). Use additional sheets as necessary.

9. A copy of topographic or similar map extending at least one mile beyond each treatment site with proposed treatment areas indicated

10. Specific detailed written directions to each proposed treatment site.

11. A minimum of three color photographs of each waterbody (or representative photos for a group of waterbodies having similar physical and hydrologic characteristics) to be treated. The photographs must be taken during a period when the waterbody and surrounding area is free of snow cover, must be labeled with the applicant's name and the civil jurisdiction (for example city, town, territory) in which the waterbody exists, and must relate to the location map submitted as part of this NOI form.

12. Conservation Agency Notification List

The following organizations have received written notification of this project, including but not limited to information in items 7-10 above, and have responded that no elements of special concern for rare, threatened, or endangered species or natural communities are known in the affected area or that the treatment as proposed is considered to not significantly threaten the species or natural communities in question. Please include responses.

☐ MDIFW Non-Game Program
☐ Maine Department of Conservation-Natural Areas Program

13. Public Notice

☐ A copy of the NOI was filed with the civil jurisdiction of _____
(name of municipality or the LURC regional office and County Commissioners office)
☐ Abutting landowners to all affected resources have been notified of proposed project (attach list and include any comments received. Note efforts undertaken to contact if unsuccessful.)
☐ A press release or newspaper advertisement of the proposed treatment project was issued (attach copy with date and medium used).

14. Title, Right, or Interest (TRI)

☐ Provide evidence of TRI in the property(s) on which the treatment program(s) will be located, such as the property deed. See Department rule, Chapter 2, §11.d for TRI criteria.
☐ Provide evidence of authorization for the agent to act on behalf of the property owner.

15. Signature of Applicant

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that the applicant has sufficient title, right or interest in the property where the proposed activity occurs.

Signature:_____ Date:_____

Printed Name:_____

Assisting Parties. If the applicant has been assisted in preparing this NOI Form, the person(s) assisting must sign below.

Signature:_____ Date:_____

Printed Name:_____

Keep a copy as record of permit. Send the form with attachments via certified mail to the Maine Department of Environmental Protection, 17 SHS, Augusta, ME 04333-0017 or as described in the general permit. A copy of this NOI must be provided to the civil jurisdiction and notice to abutters and the general public via press release or newspaper advertisement provided as described earlier. Continuing coverage is pursuant to the conditions outlined in the general permit. Work carried out in violation of any applicable standard is subject to enforcement action.

This area for office use only.

NOI #	Date Received	Date Approved	Date Returned	Staff
#MEG140_ _ _				

ATTACHMENT D

(Notice of Termination of Coverage)
(2 Pages)

Form DEPLW1168

Maine Department of Environmental Protection
General Permit Notice of Termination (NOT)
Aquatic Pesticides for the Control of Mosquito-Borne Diseases

NOTE: A copy of this NOT Form must be filed with each civil jurisdiction in which the treatment has been located (municipal office or LURC Regional Office and County Commissioners office) at the time it is submitted to the Department. Notice of Termination of the treatment program must also be provided to abutting landowners.

This NOT is subject to General Permit #MEG140000 / WDL #W-008226-5Y-C-R, issued by the Maine Department of Environmental Protection for the use of authorized aquatic pesticides for the control of mosquito-borne diseases in the interest of public health and safety.

1. Property Owner Information (use additional sheets if multiple property owners)

Name: _____

Mailing address: _____
Street Address

_____
Town State ZIP

Telephone: _____ E-mail: _____

2. Agent Information (if applicable)

Name/Affiliation: _____

Mailing address: _____
Street Address

_____
Town State ZIP

Telephone: _____ E-mail: _____

3. Licensed Applicator Information

Name/Affiliation: _____

Mailing address: _____
Street Address

_____
Town State ZIP

Telephone: _____ E-mail: _____

Maine Board of Pesticides Control License Number: _____

4. Public Notice

☐ A copy of the NOT was filed with the civil jurisdiction of _____
(name of municipality or the LURC regional office and County Commissioners office)

☐ Abutting landowners to all affected resources have been notified of termination of project
(attach list; note efforts undertaken to contact if unsuccessful.)

5. Signature of Applicant

By submittal of this Notice of Termination form to the Department, I am voluntarily terminating coverage for a mosquito control program permitted pursuant to the Department's General Permit for Application of Aquatic Pesticides for the Control of Mosquito-borne Diseases. Authorization to discharge under the general permit terminates on the day the signed NOT is received by the Department. I acknowledge that future activities for mosquito control involving the discharge of pollutants to waters of the State are prohibited unless otherwise approved by the Department.

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that the applicant has sufficient title, right or interest in the property where the activity has occurred.

Signature:_____ Date:_____

Printed Name:_____

Assisting Parties. If the applicant has been assisted in preparing this NOT Form, the person(s) assisting must sign below.

Signature:_____ Date:_____

Printed Name:_____

Keep a copy as record of permit termination. Send the form with attachments via certified mail to the Maine Department of Environmental Protection, 17 SHS, Augusta, ME 04333-0017 or as described in the general permit. A copy of this NOT must be provided to the civil jurisdiction and notice to abutters provided as described earlier. Work carried out in violation of any applicable standard is subject to enforcement action.

This area for office use only.

NOI #	Date Received	Date Approved	Date Returned	Staff
#MEG140_ _ _				