ATTACHMENT G – NOTICE OF INTENT

WATER QUALITY ORDER NO. 2011-0002-DWQ
GENERAL PERMIT NO. CAG 990004

STATEWIDE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FOR BIOLOGICAL AND RESIDUAL PESTICIDE DISCHARGES TO WATERS OF THE UNITED STATES FROM VECTOR CONTROL APPLICATIONS

I. NOTICE OF INTENT STATUS (see Instructions)

Mark only one item ☒ A. New Applicator ☐ B. Change of Information: WDID# _____

☐ C. Change of ownership or responsibility: WDID# _____

II. DISCHARGER INFORMATION

A. Name Lake County Vector Control District			
B. Mailing Address PO Box 310			
C. City Lakeport	D. County Lake	E. State CA	F. Zip Code 95453
G. Contact Person Jamesina J. Scott	H. Email address jjscott@lcvcd.org	I. Title District Manager & Research Director	J. Phone (707) 263-4770

III. BILLING ADDRESS (Enter Information *only* if different from Section II above)

A. Name			
B. Mailing Address			
C. City	D. County	E. State	F. Zip Code
G. Email address	H. Title	I. Phone	

IV. RECEIVING WATER INFORMATION

A. Biological and residual pesticides discharge to (check all that apply)*:

1. Canals, ditches, or other constructed conveyance facilities owned and controlled by Discharger.
☐ Name of the conveyance system: _____

2. Canals, ditches, or other constructed conveyance facilities owned and controlled by an entity other than the Discharger.
☐ Owner's name: _____
Name of the conveyance system: _____

3. Directly to river, lake, creek, stream, bay, ocean, etc.
☒ Name of water body: Surface waters and waters of the US within Lake County. Refer to Map (Figure 1) included in PAP.

* A map showing the affected areas for items 1 to 3 above may be included.

B. Regional Water Quality Control Board(s) where application areas are located (REGION 1, 2, 3, 4, 5, 6, 7, 8, or 9): Region 1 and 5S (Please refer to Map in Figure 1 of PAP)
(List all regions where pesticide application is proposed.)

A map showing the locations of A1-A3 in each Regional Water Board shall be included.

V. PESTICIDE APPLICATION INFORMATION

A. Target Organisms: X Vector Larvae X Adult Vector

B. Pesticides Used: List name, active ingredients and, if known, degradation by-products

See attached Pesticides Application Plan (PAP).

C. Period of Application: Start Date October 31, 2011 End Date December 31, 2016

D. Types of Adjuvants Added by the Discharger:

VI. PESTICIDES APPLICATION PLAN

A. Has a Pesticides Application Plan been prepared?*
☒ Yes ☐ No

If not, when will it be prepared? _____

* A copy of the PAP shall be included with the NOI.

B. Is the applicator familiar with its contents?
☒ Yes ☐ No

VII. NOTIFICATION

Have potentially affected governmental agencies been notified?

☒ Yes ☐ No

* If yes, a copy of the notifications shall be attached to the NOI.

VIII. FEE

Have you included payment of the filing fee (for first-time enrollees only) with this submittal?

☒ Yes ☐ NO ☐ NA

IX. CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, 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 or imprisonment. Additionally, I certify that the provisions of the General Permit, including developing and implementing a monitoring program, will be complied with."

A. Printed Name: Jamesina J. Scott

B. Signature: _____ **Date:** May 31, 2011

C. Title: District Manager and Research Director

X. FOR STATE WATER BOARD USE ONLY

WDID:	**Date NOI Received:**	**Date NOI Processed:**
Case Handler's Initial:	**Fee Amount Received:** **$**	**Check #:**

LAKE COUNTY VECTOR CONTROL DISTRICT
Office 707-263-4770 Fax 707-263-3653
info@lcvcd.org www.lcvcd.org

NOTICE OF INTENT TO APPLY PUBLIC HEALTH PESTICIDES FOR VECTOR CONTROL PURPOSES TO SURFACE WATERS AND WATERS OF THE US WITHIN LAKE COUNTY, CA

The Lake County Vector Control District is a public health agency that protects Lake County residents and visitors from vectors and vector-borne diseases. The District is an independent special district that operates under the California Health and Safety Code §§2000-2093. We conduct ongoing surveillance of mosquitoes, ticks, biting black gnats, and other vectors in Lake County to determine the threat of disease transmission and to direct our control activities. The District practices a program of integrated vector management (IVM), which includes surveillance for mosquitoes and other vectors; source reduction; biological control; larviciding and adulticiding as indicated by surveillance; resistance monitoring; disease surveillance in vectors and reservoirs of disease; and public education.

Certified vector control technicians may control mosquitoes and other aquatic vectors by using public health pesticides that are registered for use by California Environmental Protection Agency (Cal EPA) and the United States Environmental Protection Agency (EPA).

The District is now required to obtain a Statewide General National Pollutant Discharge Elimination System (NPDES) permit to apply public health pesticides due to a recent decision by the Sixth Circuit Court of Appeals. In its January 2009 ruling on National Cotton Council, et al. v. EPA, the Court vacated the EPA's 2006 rule that said NPDES permits were not required for applications of pesticides in, over and near U.S. waters when in compliance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) label, and determined that pesticides are pollutants. Consequently, point source discharges to water of the U.S. from the application of pesticides will require NPDES permits when the Court's mandate takes effect on October 31, 2011.

The NPDES permit requires that we notify potentially affected governmental agencies before the first application of aquatic pesticides each calendar year. This is the notification letter advising you that public health pesticides will be used to control mosquitoes and other vectors this year in Lake County.

Names of pesticides: Vectolex CG Biological Larvicide, Aquabac 200G, Vectobac-G Biological Mosquito Larvicide Granules, Vectobac-GS Biological Mosquito Larvicide Granules, Vectomax CG Biological Larvicide, Vectomax WSP Biological Larvicide, Altosid Pellets WSP, Altosid Pellets, Altosid XR Extended Residual Briquets, Mosquito Larvicide GB-1111, Agnique MMF Mosquito Larvicide & Pupicide, Agnique MMF G, FourStar Briquets, FourStar SBG, Prentox Pyronyl Crop Spray, Pyrocide Mosquito Adulticiding Concentrate for ULV Fogging 7396, Biomist 4+12 ULV Duet Dual-Action Adulticide, Zenivex E20, and Zenivex E-4.

Purpose of use: To protect public health by controlling mosquitoes and other vectors.

6/14/20

410 Esplanade PO Box 310 Lakeport, CA 95453

General time period and locations of expected use: Applications will be made in Lake County from January 1 through December 31, 2011.

Water use restrictions or precautions: There are no known water use restrictions or precautions during treatment.

Contact: Interested persons may contact Jamesina Scott at (707) 263-4770 for additional information.

Please call me if there are any concerns or questions.

Sincerely,

Jamesina J. Scott, Ph.D., SDA
District Manager and Research Director
jjscott@lcvcd.org

Mailing List

County of Lake
255 North Forbes St
Lakeport, CA 95453

City of Clearlake
14050 Olympic Drive
Clearlake, CA 95422

City of Lakeport
225 Park Street
Lakeport, CA 95453

Lake County Special Districts
230 N. Main St
Lakeport, CA 95453

Lake County Agricultural Commissioner
883 Lakeport Blvd
Lakeport, CA 95453

Lake County Environmental Health Department
922 Bevins Court
Lakeport, CA 95453

Clear Lake State Park
5300 Soda Bay Road
Kelseyville, CA 95451

Anderson Marsh State Historic Park
5300 Soda Bay Road
Kelseyville, CA 95451

North Coast Regional Water Quality Control Board
(Region 1)
5550 Skylane Blvd, Suite A
Santa Rosa CA 95403-1072

Central Valley Regional Water Quality Control Board
(Region 5S)
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

California Department of Fish and Game, Region 2
(North Central)
1701 Nimbus Road
Rancho Cordova, CA 95670

California Department of Public Health
Vector-borne Disease Section G164
850 Marina Bay Parkway
Richmond, CA 94804

Pesticides Application Plan (PAP) for the Lake County Vector Control District

The Discharger shall develop a Pesticides Application Plan (PAP) that contains the following elements:

1. **Description of ALL target areas, if different from the water body of the target area, in to which larvicides and adulticides are being planned to be applied or may be applied to control vectors. The description shall include adjacent areas, if different from the water body of the target areas;**
   The Lake County Vector Control District (LCVCD) is responsible for mosquito and vector control throughout Lake County. Most of Lake County lies within the Central Valley Regional Water Quality Control Board (RWQCB 5S), but the northern quarter of the county is within the North Coast RWQCB (RWQCB 1). Please refer to attached map (Figure 1) of the District's boundaries as they relate to the RWQCBs.

2. **Discussion of the factors influencing the decision to select pesticide applications for mosquito control;**
   Please see the Best Management Practices for Mosquito Control in California.

3. **Pesticide products or types expected to be used and if known, their degradation by-products, the method in which they are applied, and if applicable, the adjuvants and surfactants used;**
   Please see Attachments E and F within NPDES Permit for Biological and Residual Pesticide Discharges to Waters of the U.S. for Vector Control Applications. Products may be applied by hand, truck, backpack, hand can, helicopter, or airplane according to label directions.

4. **Description of ALL the application areas* and the target areas in the system that are being planned to be applied or may be applied. Provide a map showing these areas;**
   Any site that holds water for more than 96 hours (4 days) can produce mosquitoes. Source reduction is the District's preferred solution, and whenever possible the District works with property owners to affect long-term solutions to reduce or eliminate the need for continued applications as described in Best Management Practices for Mosquito Control in California. The typical sources treated by this District include:
   - Irrigated Pastures
   - Irrigated Crops
   - Rice Fields
   - Wetlands
   - Ponds
   - Horse Troughs
   - Isolated Pools/Ponding In Creeks
   - Roadside Ditches
   - Drainage Ditches
   - Flood Areas
   - Catch Basins
   - Drain Inlets
   - Sumps and Drains
   - Detention/Retention Ponds

- Unmaintained Swimming Pools/Spas
- Ornamental/Garden Ponds
- Fountains/Birdbaths
- Miscellaneous Man-Made Containers
- Potentially Any Aquatic Site That Has Water Standing for 96 Hours or More

The District also may apply to the margins of Clear Lake, Lake Pillsbury, Blues Lakes, and various creeks and their tributaries in Lake County including Cache Creek, Kelsey Creek, and Scotts Creek. Please refer to attached map (Figure 1) that shows the Waters of the US that are within the District's boundaries.

5. **Other control methods used (alternatives) and their limitations;**
With any source of mosquitoes or other vectors, the District's first goal is to look for ways to eliminate the source, or if that is not possible, for ways to reduce the potential for vectors. The most commonly used methods and their limitations are included in the Best Management Practices for Mosquito Control in California.

Specific methods used by the District include stocking mosquito fish (*Gambusia affinis*), educating residents that mosquitoes develop in standing water and encouraging them to remove sources of standing water on their property, and working with property owners to find long-term water management strategies that meet their needs while minimizing the need for public health pesticide applications.

6. **How much product is needed and how this amounts was determined;**
The need to apply product is determined by surveillance. Actual use varies annually depending on mosquito abundance. The pesticide amounts presented below were taken from the District's 2010 Pesticide Use Report (PUR) as an estimate of pesticide use in 2011. Other public health pesticides in addition to those listed below may be used as part of the District's best management practices.

Pesticide	EPA Registration #	Amount Used
Witco Mosquito Larvicide	8898-16	3.25 gal
Cognis Corp. Agnique MMF	53263-28	0.33 gal
Cognis Corp. Agnique MMF G	53263-30	2.0 lbs
Zoecon Altosid Pellets WSP	2724-448	0.86 lbs
Zoecon Altosid Pellets	2724-448	339.0 lbs
Zoecon Altosid XR Briquets	2724-421	8.67 lbs
Valent BioSciences VectoBac G	73049-10	2,639.5 lbs
Valent BioSciences VectoLex CG	73049-20	11.0 lbs
Valent BioSciences VectoLex CG WSP	73049-20	0.26 lbs
Valent BioSciences VectoMax CG	73049-429	6,640.0 lbs
Clarke Biomist 4+12	8329-34	388.26 gal
MGK Pyrocide Mosquito Adulticiding Concentrate 7396	1021-1569	60.23 gal
Prentox Pyronyl Crop Spray	655-489	4.65 gal

7. **Representative monitoring locations* and the justification for selecting these monitoring locations**
   Please see the MVCAC NPDES Coalition Monitoring Plan.

8. **Evaluation of available BMPs to determine if there are feasible alternatives to the selected pesticide application project that could reduce potential water quality impacts; and**
   Please see the Best Management Practices for Mosquito Control in California.

9. **Description of the BMPs to be implemented. The BMPs shall include at a minimum:**
   The District's BMPs are described in the Best Management Practices for Mosquito Control in California and in the California Mosquito-borne Virus Surveillance and Response Plan. Specific elements have been highlighted below under items a-f.

   a. **measures to prevent pesticide spill;**
      All pesticide applicators receive annual spill prevention and response training. District employees ensure daily that application equipment is in proper working order. Spill mitigation devices are placed in all vehicles and pesticide storage areas.

   b. **measures to ensure that only a minimum and consistent amount is used**
      Application equipment is calibrated at least annually as required by the Department of Pesticide Regulations (DPR) and the terms of a cooperative agreement with the California Department of Public Health (CDPH).

   c. **a plan to educate Coalition's or Discharger's staff and pesticide applicator on any potential adverse effects to waters of the U.S. from the pesticide application;**
      This will be included in our pesticide applicators' annual pesticide application and safety training, continuing education programs, and/or regional NPDES Permit training programs.

   d. **descriptions of specific BMPs for each application mode, e.g. aerial, truck, hand, etc.;**
      The District calibrates truck-mounted and handheld larviciding equipment each year to meet application specifications. Application records are reviewed daily to ensure appropriate amounts of material are being used. Ultra-low volume (ULV) application equipment is calibrated for output and droplet size to meet label requirements. Aerial larviciding equipment is calibrated by the Contractor

   e. **descriptions of specific BMPs for each pesticide product used; and**
      Please see the Best Management Practices for Mosquito Control in California for general pesticide application BMPs, and the current approved pesticide labels for application BMPs for specific products.

f. **descriptions of specific BMPs for each type of environmental setting (agricultural, urban, and wetland).**
Please see the Best Management Practices for Mosquito Control in California.

10. **Identification of the problem. Prior to first pesticide application covered under this General Permit that will result in a discharge of biological and residual pesticides to waters of the US, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the Discharger must do the following for each vector management area:**

a. **If applicable, establish densities for larval and adult vector populations to serve as action threshold(s) for implementing pest management strategies;**

The District staff only applies pesticides to sources of mosquitoes that represent imminent threats to public health or quality of life. The presence of any mosquito may necessitate treatment, however higher thresholds may be applied depending on the District's resources, disease activity, surveillance data, or local needs. Treatment thresholds are based on a combination of one or more of the following criteria:

- Mosquito species present
- Mosquito stage of development
- Pest, nuisance, or disease potential
- Disease activity
- Mosquito abundance
- Flight range
- Proximity to populated areas
- Size of source
- Presence/absence of natural enemies or predators
- Presence of sensitive/endangered species or habitats.

b. **Identify target vector species to develop species-specific pest management strategies based on developmental and behavioral considerations for each species;**
Please see the Best Management Practices for Mosquito Control in California and the California Mosquito-borne Virus Surveillance and Response Plan.

c. **Identify known breeding areas for source reduction, larval control program, and habitat management; and**
Any site that holds water for more than 96 hours (4 days) can produce mosquitoes. Source reduction is the District's preferred solution, and whenever possible the District works with property owners to implement long-term solutions to reduce or eliminate the need for continued pesticide applications as described in the Best Management Practices for Mosquito Control in California.

d. **Analyze existing surveillance data to identify new or unidentified sources of vector problems as well as areas that have recurring vector problems.**
This is included in the Best Management Practices for Mosquito Control in California and the California Mosquito-borne Virus Surveillance and Response Plan that the District uses. The District continually collects adult and larval mosquito surveillance data, dead bird reports, and sentinel chicken test results, and monitors regional mosquito-borne disease activity detected in humans, horses, birds, and/or other animals, and uses these data to guide mosquito control activities.

11. **Examination of Alternatives. Dischargers shall continue to examine alternatives to pesticide use in order to reduce the need for applying larvicides that contain temephos and for spraying adulticides. Such methods include:**
    a. **Evaluating the following management options, in which the impact to water quality, impact to non-target organisms, vector resistance, feasibility, and cost effectiveness should be considered:**
        - **No action**
        - **Prevention**
        - **Mechanical or physical methods**
        - **Cultural methods**
        - **Biological control agents**
        - **Pesticides**

    If there are no alternatives to pesticides, dischargers shall use the least amount of pesticide necessary to effectively control the target pest.
    The District uses the principles and practices of Integrated Vector Management (IVM) as described on pages 26 and 27 of the Best Management Practices for Mosquito Control in California. As stated in item #10 above, locations where vectors may exist are assessed, and the potential for using alternatives to pesticides is determined on a case-by-case basis. Commonly considered alternatives include: 1) Eliminate artificial sources of standing water; 2) Ensure temporary sources of surface water drain within four days (96 hours) to prevent adult mosquitoes from developing; 3) Control plant growth in ponds, ditches, and shallow wetlands; 4) Design facilities and water conveyance and/or holding structures to minimize the potential for producing mosquitoes; and 5) Use appropriate biological control methods that are available. Additional alternatives to using pesticides for managing mosquitoes are listed on pages 4-19 of the Best Management Practices for Mosquito Control in California.

    Implementing preferred alternatives depends on a variety of factors including availability of District resources, cooperation with stakeholders, coordination with other regulatory agencies, and the anticipated efficacy of the alternative. If a pesticide-free alternative does not sufficiently reduce the risk to public health, pesticides are considered, beginning with the least amount necessary to effectively control the target vector.

b. Applying pesticides only when vectors are present at a level that will constitute a nuisance.

The District follows an existing IVM program which includes practices described in the California Mosquito-borne Virus Surveillance and Response Plan and Best Management Practices for Mosquito Control in California.

A "nuisance" is specifically defined in California Health and Safety Code (HSC) §2002(j). This definition allows vector control agencies to address situations where even a low number of vectors may pose a substantial threat to public health and quality of life. In practice, the definition of a "nuisance" is generally only part of a decision to apply pesticides to areas covered under this permit. As summarized in the California Mosquito-borne Virus Surveillance and Response Plan, the overall risk to the public when vectors and/or vector-borne disease are present is used to select an available and appropriate material, rate, and application method to address that risk in the context of our IVM program.

12. Correct Use of Pesticides

Coalition's or Discharger's use of pesticides must ensure that all reasonable precautions are taken to minimize the impacts caused by pesticide applications. Reasonable precautions include using the right spraying techniques and equipment, taking account of weather conditions and the need to protect the environment.

This is an existing practice of the District, and is required to comply with the Department of Pesticide Regulation's (DPR) requirements and the terms of our California Department of Public Health (CDPH) Cooperative Agreement. All pesticide applicators receive annual safety and spill training in addition to their regular continuing education.

13. If applicable, specify a website where public notices, required in Section VIII.B, may be found.

The District's public notices will be available on the District's website at www.lcvcd.org.

References:

Best Management Practices for Mosquito Control in California. 2011. [Note: this document is updated annually by CDPH]. Available by download from the California Department of Public Health—Vector-Borne Disease Section at http://www.westnile.ca.gov/resources.php under the heading *Mosquito Control and Repellent Information*. Copies may be also requested by calling the California Department of Public Health—Vector-Borne Disease Section at (916) 552-9730 or the Lake County Vector Control District at (707) 263-4770.

California Mosquito-borne Virus Surveillance and Response Plan. 2011. [Note: this document is updated annually by CDPH]. Available by download from the California Department of Public Health—Vector-Borne Disease Section at http://www.westnile.ca.gov/resources.php under the heading *Response Plans and Guidelines*. Copies may be also requested by calling the California Department of Public Health—Vector-Borne Disease Section at (916) 552-9730 or the Lake County Vector Control District at (707) 263-4770.

MVCAC NPDES Coalition Monitoring Plan. 2011. Copies may be requested by calling the Mosquito and Vector Control Association of California (MVCAC) at

Figure 1. The Lake County Vector Control District serves all of Lake County. The map below shows boundaries of the District, the Waters of the US within the District, and the jurisdictions of the two RWQCBs that cover parts of Lake County.