

ATTACHMENT E – NOTICE OF INTENT

**WATER QUALITY ORDER 2016-XXXX-DWQ
GENERAL PERMIT CAG990004**

**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	<input checked="" type="checkbox"/> A. New Applicator	<input type="checkbox"/> B. Change of Information: WDID# _____
	<input type="checkbox"/> C. Change of ownership or responsibility: WDID# _____	
	<input type="checkbox"/> D. Enrolled under Order 2011-0002-DWQ: WDID# _____	

II. DISCHARGER INFORMATION

A. Name East Side Mosquito Abatement District			
B. Mailing Address 2000 Santa Fe Ave.			
C. City Modesto	D. County Stanislaus	E. State CA	F. Zip Code 95357
G. Contact Person Lloyd Douglass	H. Email address esmad@stbcglobal.net	I. Title Manager	J. Phone 209-522-4098

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: Various Land Owners & Irrigation Districts within District.
Name of the conveyance system: _____ See Map

3. Directly to river, lake, creek, stream, bay, ocean, etc.
Name of water body: San Joaquin, Stanislaus & Tuolumne Rivers

* 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 5
(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: Vector Larvae Adult Vector

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

C. Period of Application: Start Date Jan 1. End Date Dec 31

D. Types of Adjuvants Added by the Discharger: see attachment B

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 Pesticides Application Plan 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 Order, including developing and implementing a monitoring program, will be complied with."

A. Printed Name: Lloyd Douglass

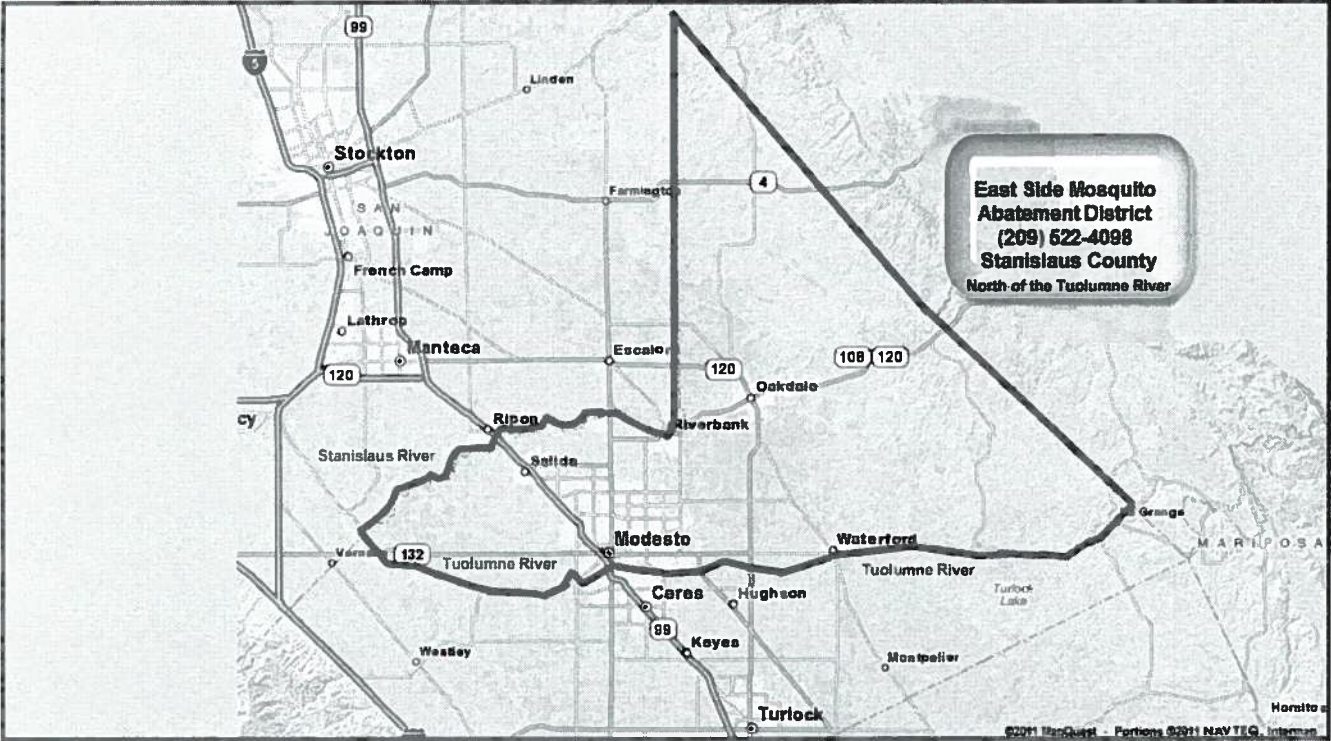
B. Signature: [Signature]

Date: 3/30/16

C. Title: Distnct Manager

X. FOR STATE WATER BOARD USE ONLY

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



Attachment B

East Side Mosquito Abatement District NOI

V. Pesticide Application Information

List of Active Ingredients that may be used under NPDES Permit.

Active Ingredient
Bacillus thuringiensis var. israelensis
Bacillus sphaericus (Lysinibacillus sphaericus)
Deltamethrin
Etofenprox
Lambda-Cyhalothrin
Malathion
Methoprene
Monomolecular Films
Naled
N-octyl Bicycloheptene Dicarboximide (MGK-264)
Petroleum Distillates
Permethrin
Piperonyl butoxide
Prallethrin
Pyrethrin
Resmethrin
Spinosad
Sumithrin
Temephos
Any 'minimum risk category" pesticides that are FIFRA exempt and registered for use in California and used in a manner specified in 40 C.F.R. section 152.25.

Attachment C
East Side Mosquito Abatement District
NPDES Government Contact List

Stanislaus County, Chief Executive Officer	Dick Monteith	1010 10th Street Suite 6800 Modesto, CA 95354
Stanislaus County, Chief Executive Officer	Terry Withrow	1010 10th Street Suite 6800 Modesto, CA 95354
Stanislaus County, Chief Executive Officer	William O'Brien	1010 10th Street Suite 6800 Modesto, CA 95354
City of Modesto Manager's Officer		P.O. Box 642 Modesto, CA 95353
City of Oakdale Manager		280 North 3rd Avenue Oakdale, CA 95361
City Mayor of Riverbank	Richard O'Brien	6707 3rd Street Riverbank, CA 95367
City Administrator of Waterford		P.O. Box 199 Waterford, CA 95386

BOARD OF TRUSTEES

KANDY SCHMIDT
Chairman, Waterford

BILL PRINGLE
Vice Chairman, Oakdale

CARL (TONY) OTT
Secretary, Modesto

RON GREENWOOD
Modesto

ANNA WEBB
Modesto

FRED WILDER
Modesto

CLARINE JOHNSTAD
Modesto

**EAST SIDE
MOSQUITO ABATEMENT DISTRICT**
Stanislaus County

**2000 Santa Fe Avenue
Modesto, CA 95357
209 522 4098**



LLYOD DOUGLASS
MANAGER

March 30, 2016

Dear Agency,

The East Side Mosquito Abatement District (District) may be making larvicide and or adulticide applications to waters of the U.S. under your jurisdiction for mosquito reduction purposes. Applications will be posted and copies can be obtained from the District office. The District is required to notify all Government Agencies that may be affected by these applications under the requirements of the Statewide National Pollutant Discharge Elimination System (NPDES) Permit Biological and Residual Pesticide Discharges to Waters of the United States from Vector Control Applications.

Please contact Lloyd Douglass at 209-522-4098 if you have additional questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Lloyd Douglass".

Lloyd Douglass,
District Manager
East Side Mosquito Abatement District

Notice of Intent to Apply Public Health Pesticides for Vector Control Purposes to Surface Waters and Waters of the U.S. Within East Side Mosquito Abatement District, Stanislaus County.

- The East Side Mosquito Abatement District intends to make public health pesticide applications to, over and adjacent to constructed conveyances, surface waters and other waters of the U.S. owned and controlled by an entity other than the District for vector control purposes per the requirements of the General NPDES Permit for Biological and Residual Pesticide Discharges for Vector Control Applications.
- The NPDES Permit requirements for listing of the Public Health Pesticides anticipated to be used were modified from the previous permit, to the new permit which will be issued in 2016. The newer requirements specify that any pesticide product can be used that contains approved active ingredients, provided all pesticide label restrictions and instructions are followed. In addition, pesticides which fall under the "minimum risk" category can be used. The minimum risk pesticides have been exempted from FIFRA requirements. The following table lists the active ingredients approved for the FIFRA regulated pesticides.

Active Ingredient for mosquito control
Bacillus thuringiensis var. israelensis
Bacillus sphaericus (Lysinibacillus sphaericus)
Deltamethrin
Etofenprox
Lambda-Cyhalothrin
Malathion
Methoprene
Monomolecular Films
Naled
N-octyl Bicycloheptene Dicarboximide (MGK-264)
Petroleum Distillates
Permethrin
Piperonyl butoxide
Prallethrin
Pyrethrin
Resmethrin
Spinosad
Sumithrin
Temephos
Any 'minimum risk category' pesticides that are FIFRA exempt and registered for use in California and used in a manner specified in 40 C.F.R. section 152.25.

- The purpose of the use of these pesticides containing these active ingredients to control mosquitoes at different life stages to minimize the threat of mosquito-borne diseases and biting annoyances.
- The general time period for the application of the pesticides is January the December, 2016. Locations of expected use will be constructed conveyances, surface waters and other waters of the U.S. located within East Side Mosquito Abatement District in Stanislaus County.
- There are no known water use restrictions or precautions during treatment.
- Interested persons may contact the District at 209-522-4098 for additional information.

Lloyd Douglass, District Manager
East Side Mosquito Abatement District
2000 Santa Fe Ave.
Modesto, CA 95357

East Side Mosquito Abatement District (District) Pesticide Application Plan (PAP):

- 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:**

Please see District Project Area Boundary Map including San Joaquin, Stanislaus and Tuolumne Rivers.

- 2. Discussion of the factors influencing the decision to select pesticide applications for vector control:**

The District uses Integrated Vector Management (IVM) to determine when pesticide applications are appropriate. The District considers source reduction, the elimination or reduction of mosquito breeding sites the best solution but is not always achievable for a variety of reasons. The District recognizes that the property owner/responsible party need to be educated on Best Management Practices (BMP) should that fail the District relies upon legal abatement as allowed under California Health and Safety Code sections 2060-2067, 100170, and 100175. Enclosed is the District's CEQA Preliminary Assessment of Integrated Vector Management Practices.

The District uses Best Management Practices for Mosquito Control in California as a guidance document. This document provides recommendations from the California Department of Public Health and the Mosquito and Vector Control Association of California to promote mosquito control on California properties, and enhance early detection of West Nile virus (WNV). This document can be obtained in its' electronic format by accessing the following website: <http://www.westnile.ca.gov/resources>.

- 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:**

The NPDES Permit for Biological and Residual Pesticide Discharges to Waters of the U.S. from Vector Control Applications was amended to list the approved active ingredients rather than having specific products named. All pesticide label restrictions and instructions will be followed for pesticides which contain the active ingredients listed below. In addition, pesticides which fall under the "minimum risk" category may be used. The minimum risk pesticide have been exempted from FIFRA requirements. Products will be applied by truck, backpack, hand-can, and airplane.

List of Active Ingredients

Bacillus thuringiensis var. israelensis
Bacillus sphaericus (Lysinibacillus sphaericus)
Deltamethrin
Etofenprox
Lambda-Cyhalothrin
Malathion
Methoprene
Monomolecular Films
Naled
N-octyl Bicycloheptene Dicarboximide (MGK-264)
Petroleum Distillates
Permethrin
Piperonyl butoxide
Prallethrin
Pyrethrin
Resmethrin
Spinosad
Sumithrin
Temephos
Any 'minimum risk category" pesticides that are FIFRA exempt and registered for use in California and used in a manner specified in 40 C.F.R. section 152.25.

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 East Side Mosquito Abatement District’s preferred solution, and whenever possible the District works with property owners to effect long-term solutions to reduce or eliminate the need for continued applications as described in Item 2 above. Mosquito breeding sources and areas that require adult mosquito control are difficult to predict from year to year based on the weather variations in local environmental conditions. However, the typical sources treated by this District include: permanent/semi-permanent/seasonal wetlands, irrigated crops, pastures, orchards, vineyards, dairy ponds, and associated water conveyance systems, and storm drains within District Project Area. Please see Boundary Map.

5. Other control methods used (alternatives) and their limitations:

With any mosquito source, East Side Mosquito Abatement District’s goal is to eliminate the source if possible. However, if a source can not be eliminated by the District, it uses IVM and BMP to reduce potential vector outbreaks.

The District also distributes *Gambusia affinis* (mosquitofish) to wetlands, irrigation drains and neglected swimming pools as needed. District Personnel identifies mosquito breeding sites and work with property owners and land managers to reduce or eliminate mosquito breeding habitats.

6. How much product is needed and how this amount 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 East Side Mosquito Abatement District’s 2015 NPDES Application Log. Other public health pesticides in addition to those listed below may be used as part of the agency’s BMPs.

Material	Ounces	Gallons
Petroleum Distillate	652.8	
Permethrin	847.6	
Naled		11.0

The above totals represent all pesticide applications within the District Project Area Boundaries. Pesticide amounts applied to U.S. waters from 2015 were used as a gauge to determine 2016 pesticide use.

7. Representative monitoring locations* and the justification for selecting these 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:

Please see District's CEQA Preliminary Assessment of IVM and BMP for Mosquito Control in California used to reduce the Risk of Mosquito-Associated Disease and Annoyance.

9. Description of the BMPs to be implemented. The BMPs shall include at a minimum:

The East Side Mosquito Abatement District’s BMPs are described in Item 2. Specific elements have been highlighted below under items A-F.

A. Measures to prevent pesticide spill;

District staff monitors application equipment on a daily basis to ensure proper working order. The Districts trains it employees on spill mitigation and response. Spill mitigation kits are provided in each spray vehicle and master spill kits for larger spills are located at the District office for immediate response for both on-site and off-site spills.

B. Measures to ensure that only a minimum and consistent amount is used;

Application equipment is calibrated 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). However, the pesticide label and associated registration by USEPA and CDPH are the authority of how much product can be legally applied to control the target.

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;

Applicators are required to complete pesticide training on an annual basis. Records are kept of these training sessions for review by the local agricultural commissioner and/or CDPH. Employees certified by the CDPH must perform at least 20 hours of Continuing Education units to maintain their certification.

D. Descriptions of specific BMPs for each spray mode, e.g. aerial spray, truck spray, hand spray, etc.; cease and desist order;

East Side Mosquito Abatement District will calibrate truck and hand larviciding equipment each year to meet application specifications. District personnel review spray records daily to ensure appropriate amounts of material are being used. Ultra Low Volume (ULV) equipment is calibrated for output and droplet size to meet label requirements. Aerial larviciding equipment is calibrated by the Contractor. District aircraft is equipped with advance guidance systems as well as drift management equipment to ensure the best available technology is being used to place product in the intended spray area.

E. Description 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 (agriculture, urban, and wetlands).

Please see Item 2. East Side Mosquito Abatement District works with Wetland Management to delay flooding for waterfowl habitat; works with land owners to eliminate agricultural sources; and residential areas are encouraged to not have water runoff into storm drains.

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:

The District’s BMPs are described in the Best Management Practices for Mosquito Control in California and the Districts CEQA Preliminary Assessment of IVM practices used to reduce the Risk of Mosquito-Associated Disease and Annoyance.

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

Only those sources that East Side Mosquito Abatement District determines to represent imminent threat to public health or quality of life are treated. The District recognizes that site specific and incident specific conditions are highly variable and unpredictable and that the District relies upon the professional judgment of its employees to determine treatment thresholds. The presence of any mosquito may necessitate treatment, however higher thresholds may be applied depending on the District's resources, disease activity, or local needs. Treatment thresholds are based on a combination of the following criteria:

- Mosquito species present
- Mosquito stage/development rate
- Disease potential/pest or nuisance value
- Disease activity
- Mosquito Abundance
- Flight range
- Proximity to populated areas
- Size of source
- Presence/absence of natural 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 Item 2. Our main target species are *Culex pipiens* and *Culex tarsalis* and are controlled through surveillance, source reduction and BMPs pesticide treatments.

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 applications as described in Item 2 above.

D. Analyze existing surveillance data to identify new or unidentified sources of vector problems as well as areas that have recurring vector problems.

This information is located at the East Side Mosquito Abatement District office. The District uses New Jersey Light Traps (NJLT) to collect abundance data for various mosquito species, Baited CO₂ traps for collecting adult female mosquitoes for virus surveillance and mosquito-vector abundance. The District also participates in the dead bird program through the California Department of Public Health Services. NJLT are located throughout the District in urban, suburban and rural habitats. Collections are made weekly beginning April through October of each year; Baited CO₂ traps and Sentential Chickens are set throughout the District to isolate virus activity and to assess current control program effectiveness. Control Operator inspections and trapping data provide the District with larval and adult mosquito abundance to determine future spray applications to reduce nuisance and risk of mosquito borne infections to people and their animals.

11. Examination of Pesticide Use 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 management and treatment options that may impact water quality, non-target organisms, vector resistance, feasibility, and cost effectiveness, such as:

- No action
- Source prevention
- Mechanical or physical source reduction methods
- Cultural methods
- Biological control agents
- Pesticides

If there are no alternatives to pesticides, dischargers shall use the least toxic pesticide necessary to control the target pest and apply pesticides only when vectors are present at a level that will constitute a nuisance or a threat to public health.

Implementing preferred alternatives depends on a variety of factors including availability of agency 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.

East Side Mosquito Abatement follows an existing IVM program which includes practices described in the Item 2 above.

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 proper 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. Website for Public Notice

East Side Mosquito Abatement District uses websites to keep residents and interested parties informed about mosquito control.

District site: eastsidemosquito.com.

Stanislaus County West Nile Virus Taskforce site: www.stanemergency.com/disease/wnv is designed to provide the public with updated information about WNV virus activity in the District.

References:

Best Management Practices for Mosquito Control in California. 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*.

California Mosquito-borne Virus Surveillance and Response Plan. 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*.

MVCAC NPDES Coalition Monitoring Plan.

East Side Mosquito Abatement District CEQA Preliminary Assessment of Integrated Vector Management Practices.

District Boundary Map, East Side Mosquito Abatement District (209) 522-4098.