

# WEST SIDE MOSQUITO & VECTOR CONTROL DISTRICT

P.O. BOX 205  
TAFT, CALIFORNIA 93268

7004 GAS COMPANY RD.

PHONE: (661) 763-3510  
FAX: (661) 763-5793  
EMAIL: [twestsidemosqui@bak.rr.com](mailto:twestsidemosqui@bak.rr.com)

Trustees  
VIRGIL BELL  
DAVID COOPER  
ROY HOUSE  
THOMAS LeCLAIR  
PAUL RUBADEAU

RECEIVED  
MAR 29 2016

Manager  
ERIC MITCHELL

DIVISION OF WATER QUALITY

March 23, 2016

State Water Resources Control Board  
Attention: Gil Vazquez  
NPDES Wastewater Unit, 15<sup>th</sup> Floor  
1001 I Street  
Sacramento, CA 95814

Subject: NPDES Packet and Payment

I have included the Pesticide Application Plan, Notice of Intent, and relevant supporting documents for our District in this packet. The payment for the NOI will be mailed separately from the Kern County Auditor-Controller, and should already be in transit. The Auditor processes our payments and mails them. However, large amounts of paperwork are often lost or misplaced, which is why the packet and payment were mailed separately. I tried to time the mailings so you receive the packet and payment within close proximity to each other.

Please also note that we are West Side Mosquito and Vector Control District from Taft, California. When we submitted our paperwork in 2011-2012 there was some confusion and we were mistakenly lumped together with Fresno Westside Mosquito Abatement District in Firebaugh, California. We are two separate agencies.

Thank you,



Eric Mitchell  
District Manager  
West Side Mosquito & VCD  
Taft, California

RECEIVED

MAR 29 2016

DIVISION OF WATER QUALITY

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 West Side Mosquito and Vector Control District			
B. Mailing Address P.O.Box 205			
C. City Taft	D. County Kern	E. State CA	F. Zip Code 93268
G. Contact Person Eric Mitchell	H. Email address twestsidemosqui@bak.rr.com	I. Title Manager	J. Phone 661-763-3510

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: Kern River, Buena Vista Lake, Kern Flood Channel. (Please See Attachment A)

\* 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

Please view Attachment B

C. Period of Application: Start Date January 1st      End Date December 31st

D. Types of Adjuvants Added by the Discharger: Water

**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

payment has been mailed separately

**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: Eric Mitchell

B. Signature: *Eric Mitchell*

Date: 3-4-16

C. Title: District Manager

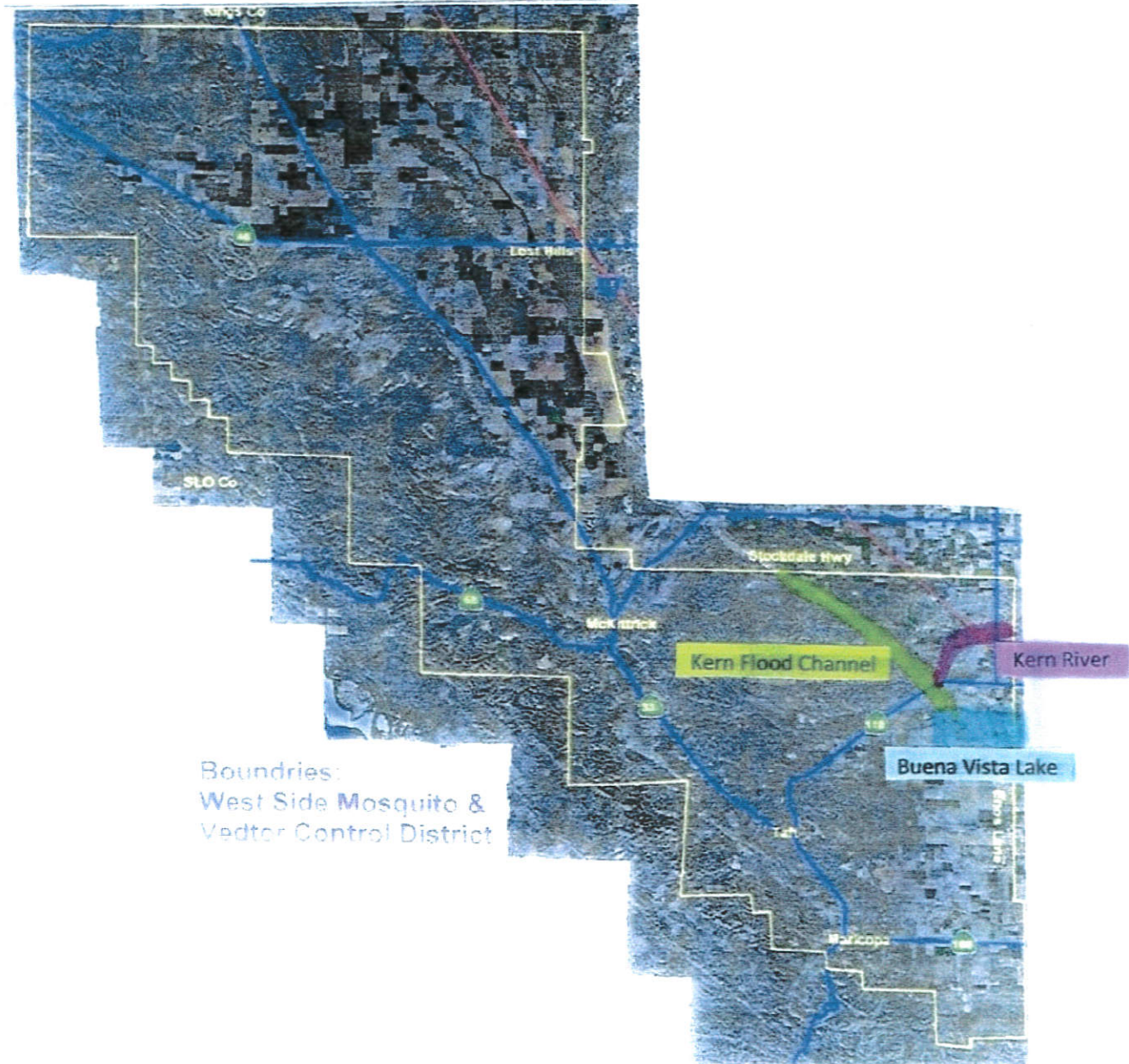
**X. FOR STATE WATER BOARD USE ONLY**

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

## Attachment A

### WEST SIDE MOSQUITO & VECTOR CONTROL DISTRICT BOUNDARY MAP

The West Side Mosquito and Vector Control District covers 1,500 square miles. The District handles many different mosquito breeding environments from rural and residential areas, farm lands, oilfields, and water banking fields from the City of Maricopa to the Kings County Line. Sources identified as WOTUS include the Kern River, Kern Flood Channel, and Buena Vista Lake.





# West Side Mosquito and Vector Control 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 the District Boundary Map. During high watershed years larvicides and adulticides may be applied to sites located in or around the Kern River, Kern Flood Channel, and Buena Vista Lake. Associated waterways include intermittent creeks, water banking cells, and irrigation canals that may be affected by the Districts applications.

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

With any source, the District's first action is to review the potential for source elimination, reduction, or management. Best Management Practices include vegetation management, timed flooding, shoreline maintenance, flooding from permanent water sources, and stabilization of water levels (Best Management Practices for Mosquito Control in California, p. 10-13). In addition, the District employs the use of biological control in the form of *Gambusia affinis* whenever possible to reduce the need for pesticide application.

The inability to implement BMP to prevent mosquito emergence is a significant factor in the decision to use pesticides for mosquito control. In addition, larval growth stages, adult mosquito populations, proximity to humans, and virus activity all contribute to the decision making process. In most cases, the District has found that a combination of source reduction or management, biological control (via *Gambusia affinis*) and pesticide application is necessary to provide effective mosquito control, especially in high watershed years.

- 3. Type(s) of pesticides used, the method in which they are applied, and if applicable, the adjuvants and surfactants used;**

All pesticide label restrictions and instructions will be followed for the pesticides listed below. Water is the only adjuvant used by the District and is mixed in accordance with the product labels. Products may be applied by handcan, backpack, truck, amphibious vehicle, boat, or helicopter.

#### **Adulticide:**

Biomist 4+12 ULV

Registration Number: 8329-34

#### **Larvicide:**

BVA 2 Mosquito Larvicide Oil

Registration Number: 70589-1

Teknar HP-D

Registration Number: 73049-404

Vectobac-G Biological Mosquito Larvicide Granules

Registration Number: 73049-10

**4. Description of the types and locations of the anticipated application area and the target area to be treated by the Discharger, recognizing that, with vector control, the precise locations may not be known until after surveillance;**

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 effect 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:

**Urban:** Storm drains, street gutters, runoff sumps, neglected swimming pools, broken septic systems, various outdoor containers holding rain water, fish ponds, horse troughs, and other standing water.

**Agricultural:** Irrigation return sumps, tail water, water line leaks, ground water recharge basins, canals and other standing water.

**Industrial:** Oil field waste water sumps, water leaks, steam generator plants and run off Sumps.

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

With any mosquito or other vector source, 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 vector potential. 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. Approximately how much product is anticipated to be used and how this amount was determined.**

<u>Material</u>	<u>Amount</u>
<u>Altosid Briquette</u>	<u>15.0 lbs</u>
<u>Biomist 4+12 Adulticide</u>	<u>0.40 gal</u>
<u>BVA 2 Larvicide Oil</u>	<u>1100.0 gal</u>
<u>Teknar HPD Larvicide</u>	<u>400.0 gal</u>
<u>Vectobac G Larvicide</u>	<u>60.0 lbs</u>



The District did not make any treatments to WOTUS in 2015 due to extreme drought conditions. The totals listed above in element 6 represent what the District may use in a year with average rainfall. These amounts will vary from year to year based on annual precipitation and the amount of pesticide required to achieve mosquito control in WOTUS.

**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;**

District policy mandates that all measures of biological and physical control be explored and evaluated prior to the application of pesticide. The location, terrain, and habitat associated with the sources mentioned above limit the options the District has at its disposal with regard to Best Management Practices. In addition, the District has experienced minimal cooperation with local water agencies regarding forms of physical control and vegetation maintenance. Biological control through *Gambusia affinis* has proven to be very successful. However, the initial onset of flooding requires the use of pesticide to curtail mosquitoes until populations of *Gambusia affinis* reach control levels. Once control levels are established, pesticide application is minimal or non-existent. The District also tries to enhance biological control through promotion of natural predators. Specifically, the District prefers to use Teknar HP-D as a narrow spectrum Larvicide to ensure that non-targeted populations of predatory insects remain established.

The available BMPs specified above are actively pursued by the District and have been evaluated according to the approach outlined in Best Management Practices for Mosquito Control in California (p. 20). The District's surveillance program includes regular larval inspection and adult mosquito collection to monitor BMP effectiveness, as specified in Best Management Practices for Mosquito Control in California (p. 20).

**9. Description of the BMPs to be implemented:**

- a. Pesticide spill prevention:** District personnel are trained annually on spill prevention and safe pesticide handling. Equipment inspections are performed daily to mitigate the probability of spills or other failures. Spill response equipment is kept with all vehicles and in areas where pesticide is stored.
- b. Measures to ensure consistency of pesticide application amounts:** All spray equipment is calibrated annually in accordance with the CDPH MOU. Employees are trained to carefully examine the conditions on site before applications are made, and are instructed to strictly follow the requirements of the product labels.
- c. Plan to educate staff members and applicators on potential adverse effects of pesticide applications to WOTUS:** District staff members and applicators receive pesticide training on an annual basis. Training records are kept for review by the CDPH and local Agricultural Commissioner. All employees certified by the CDPH must perform at least 20 hours of CE units to maintain their certification.

- d. Descriptions of specific BMPs for each spray mode:** Equipment is calibrated and tested each year to meet application standards. Spray records are monitored daily to ensure employees are using appropriate amounts of pesticide. Trucks and hand spray equipment are routinely checked for safe and proper operation. ULV equipment is calibrated for output and droplet size to meet label requirements. Aerial applications are done by a licensed contractor who specializes in agricultural spraying.
- e. Descriptions of specific BMPs for each pesticide product used:** All pesticide applications are done after exhausting all other alternatives. Source reduction, source management, and biological control are considered prior to applying any pesticide. Label instructions are strictly followed and conditions on site are carefully monitored prior to any pesticide application. Conditions on site are also monitored during and after the application to mitigate any adverse changes to the immediate and surrounding environment. This is true of all pesticide products used by the District.
- f. Descriptions of BMPs for each type of environmental setting (agriculture, urban, and wetlands):** Environmental settings are analyzed by District applicators and supervisors prior to pesticide applications. Product labels are consulted to identify any special requirements or limitations in regard to the environment. Potential for pesticide drift is analyzed prior to application, as well as other conditions that could result in a misapplication of pesticide. Wildlife and surrounding areas are studied prior to pesticide application to mitigate any potential adverse effects.

**10. Best Management Practices (BMPs)**

**The Discharger shall develop BMPs that contain the following elements:**

**a. Identify the Problem:**

Prior to first pesticide application covered under this General Permit that will result in a discharge of 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 to the following for each vector management area:

**1. Establish densities for larval and adult vector populations to serve as action threshold(s) for implementing pest management strategies:**

Only those mosquito sources that District staff determine to represent imminent threats to public health or quality of life are treated. 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 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.

**2. 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.

**3. 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 Best Management Practices for Mosquito Control in California.

**4. 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 Districts uses. The District continually collects adult and larval mosquito surveillance data, dead bird reports, and sentinel chicken test results and uses them to guide mosquito control activities.

**b. Examine the Possibility of Alternatives to Treatments:**

Dischargers should continue to examine the possibility of alternatives to reduce the need for applying larvicides that contain temephos and for spraying adulticides. Such methods include:

**1. 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

**2. Applying pesticides only when vectors are present at a level that will constitute a nuisance or threat to public health.**

**3. Using the least intrusive method of pesticide application.**

**4. Public education efforts to reduce potential vector breeding habitat.**

**5. Applying a decision matrix concept to the choice of the most appropriate formulation:**

This describes the District's existing integrated vector management (IVM) program, as well as the practices described in the California Mosquito-borne Virus Surveillance and Response Plan and Best Management Practices for Mosquito Control in California that are used by this agency.

**c. Correct Use of Pesticides:**

Users 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.

**1. All errors in application and spills are reported to the proper authority.**

**2. Staff training in the proper application of pesticides and handling of spills.**

This is an existing practice of the District, and is required to comply with the Department of Pesticide Regulation's (DRP) 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.

#### **11. Pesticide Application Log:**

The Discharger shall maintain a log for each pesticide application. The application log shall contain, At a minimum, the following information, when practical, for larvicide or adulticide applications:

- a. Date of application;
- b. Location of the application and target areas (e.g., address, crossroads, or map coordinates);
- c. Name of applicator;
- d. The names of the water bodies treated if known/named (i.e., canal, creek, lake, etc.);
- e. Application details, such as when the application started and stopped, pesticide application rate and concentration, water flow rate of the target area, surface water area, volume of water treated, pesticide(s) and adjuvants used the Discharger, and volume or mass of each component discharged;

This is an existing practice of the District as required to comply with DPR regulations and our CDPH Cooperative Agreement requirements.

#### **References:**

Best Management Practices for Mosquito Control in California. 2010. Available from the California Department of Public Health – Vector-borne Disease Section, (916) 552-9730 or by download from <http://www.westnile.ca.gov/resources.php> under the heading Mosquito Control and Repellent information.

California Mosquito-borne Virus Surveillance and Response Plan. 2010. (Note: this document is Updated annually by CDPH). Available from the California Department of Public Health Vector-Borne Disease Section, (916) 552-9730 or by download from <http://www.westnile.ca.gov/resources.php> under the heading Mosquito Control and Repellent Information.

MVCAC NPDES Coalition Monitoring Plan.

## WEST SIDE MOSQUITO & VECTOR CONTROL DISTRICT BOUNDARY MAP

The West Side Mosquito and Vector Control District covers 1,500 square miles. The District handles many different mosquito breeding environments from rural and residential areas, farm lands, oilfields, and water banking fields from the City of Maricopa to the Kings County Line. Sources identified as WOTUS include the Kern River, Kern Flood Channel, and Buena Vista Lake.

