**Attachment E - NOTICE OF INTENT**

**WATER QUALITY ORDER 2016-0039-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

A. New Applicator

B. Change of Information: WDID# 5A34AP00009

C. Change of ownership or responsibility: WDID# _____

D. Enrolled under Order 2011-0002-DWQ: WDID# _____

## II. DISCHARGE INFORMATION

A. Name Sacramento-Yolo Mosquito and Vector Control District

B. Mailing Address 8631 Bond Road

C. City Elk Grove

D. County Sacramento

E. State CA

F. Zip Code 95624

G. Contact Person Gary Goodman

H. Email address gwgoodman@fightthebite.net

I. Title Manager

J. Phone 916-685-1022

## 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 - See Attachment A

   Name of the conveyance system: applications may be made to various conveyance systems within Sacramento and Yolo Counties

3. Directly to river, lake, creek, stream, bay, ocean, etc.

   Name of water body: Various - See Attachment A - Applications historically have been made to high water marks of Consumnes, Sacramento or American Rivers and their tributaries.

   *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:

X Vector Larvae X Adult Vector

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

See Attachment B

C. Period of Application:

Start Date January 1 End Date December 31

D. Types of Adjuvants Added by the Discharger:

## VI. PESTICIDES APPLICATION PLAN

A. Has a Pesticides Application Plan been prepared?*

X 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?

X Yes No

Have potentially affected governmental agencies been notified?

X Yes No

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

## VIII. FEE

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

Yes No X 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: Gary Goodman

B. Signature: _____ Date: 03/22/23

C. Title: Manager

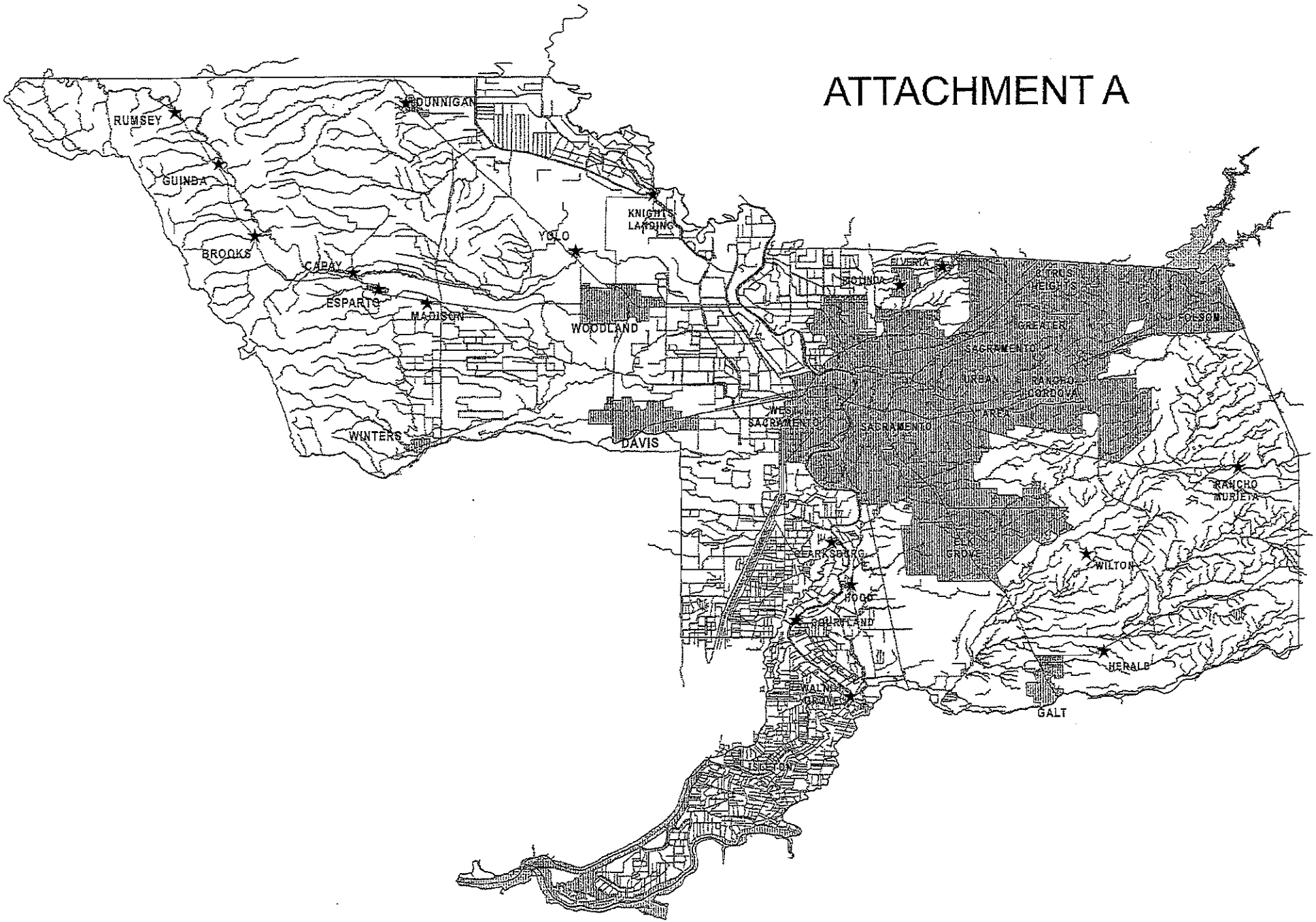
## X. FOR STATE WATER BOARD USE ONLY

WDID:_____ Date NOI Received:_____ Date NOI Processed: _____

GENERAL NPDES PERMIT FOR BIOLOGICAL AND RESIDUAL
PESTICIDE DISCHARGES FROM VECTOR CONTROL APPLICATIONS
ORDER 2016-0039-DWQ NPDES NO. CAG990004

Case Handler's Initial:_____Fee Amount Received: $ _____Check#:_____

# ATTACHMENT A



Attachment B

Sacramento-Yolo MVCD NOI

V. Pesticide Application Information

List of Active Ingredients that may be used under NPDES Permit

| Active Ingredient |
|---|
| Bacillus thuringienses 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 |
| Pyriproxyfen |
| 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 CFR section 152.25. |

NPDES Government Contact List 2023 Attachment C

| | | | |
|---|---|---|---|
| City of Davis, City Manager | Michael Webb | | cmoweb@cityofdavis.org |
| City of Woodland, City Manager | Ken Hiatt | City Hall 300 First St., Woodland, CA 95695 | jennifer.robinson@cityofwoodland.org |
| City of Sacramento, City Manager | Howard Chan | | HChan@cityofsacramento.org |
| City of Winters, City Manager | Kathleen Salguero Trepa | 318 1st St. Winters, CA 95694 | kathleen.trepa@cityofwinters.org |
| City of Folsom, City Manager | Elaine Andersen | 50 Natoma St, Folsom, CA 95630 | eandersen@folsom.ca.us |
| City of Galt | Lorenzo Hines Jr | 380 Civic Dr Galt CA 95632 | lhines@cityofgalt.org |
| City of Citrus Heights | Ashley Feeney | | citymanager@citrusheights.net |
| City of Rancho Cordova | Micah Runner | | mrunner@cityofranchocordova.org |
| City of Isleton | Charles Berson, P.E. | 101 2nd st, Isleton CA 95641 | cbergson@cityofisleton.com |
| City of West Sacramento | Aaron Laurel | 95691 | aaronl@cityofwestsacramento.org |
| City of Elk grove | Jason Behrmann | 8401 Laguna Palms Way, Elk Grove, CA 95758 | jbehrmann@elkgrovecity.org |
| California Dept of Water Resources | Vincent Wong | DWR - SacCounty properties | vincent.wong@water.ca.gov |
| California Dept of Water Resources Island wetlands | David Julian | DWR Twitchell and Sherman Island Wetlands | David.Julian@water.ca.gov |
| California Dept of Water Resources | Jake Aucelluzzo | DWR Yolo Flyway Farms | Jake.Aucelluzzo@water.ca.gov |
| Cosumnes River Preserve (CRP) | Mark Ackerman | CRP | mackerma@blm.gov |
| California Dept. of Fish and Wildlife Yolo Bypass Wildlife Area | Joe Hobbs | CDFW Yolo Bypass | joe.hobbs@wildlife.ca.gov |
| California Dept. of Fish and Wildlife | Kevin Thomas | Please forward as appropriate | kevin.thomas@wildlife.ca.gov |
| California Dept. of Fish and Wildlife - CRP | Eric Kleinfelter | CDFW - Sac | eric.kleinfelter@wildlife.ca.gov |
| USFWS, Stone Lakes National Wildlife Refuge | Bart McDermott | Stone Lakes | bart_mcdermott@fws.gov |
| Yolo County Flood Control and Water Conservation District | Kristen Sicke | YCFCD | ksicke@ycfcwcd.org |
| Sacramento Area Flood Control Agency | Richard Johnson | 1007 7th Street, 7th Floor, Sacramento CA 95814 | johnsonr@saccounty.net |
| American River Flood Control District | Timothy Kerr | 165 Commerce Circle, Suite D Sacramento CA 95815 | tkerr@arfcd.org |
| Clay Water District | | P.O. Box 445, Herald CA 95638 | info@sscawa.org |
| Galt Irrigation District | | P.O. Box 445, Herald CA 95638 | info@sscawa.org |
| Omochumne Hartnell Water District | | P.O. Box 445, Herald CA 95638 | info@sscawa.org |
| Cal Trans District 3 | Amarjeet S Benipal | 703 B St. Marysville,CA 95901 | amarjeet.benipal@dot.ca.gov |
| United States Bureau of Reclamation - Delta | Chuck Halstead | Reclamation-Delta | chalstead@usbr.gov |
| District | | 7806 Folsom Auburn Rd., Folsom, CA 95630 | ceqansc@parks.ca.gov |
| State of California Dept. of Parks and Recreation Capital District | | Capital District 101 J St., Sacramento, CA 95814 | ceqansc@parks.ca.gov |
| Cosumnes Community Services District | Joshua Green | 8820 Elk Grove Blvd, Elk Grove, CA 95624 | |
| United States Department of Agriculture Natural Resources Conservation Service (NRCS) | Carlos Suarez | | Carlos.Suarez2@usda.gov |
| Department of Pesticide Regulation | Liz Neese | | lneese@cdpr.ca.gov |
| Dixon Resource Conservation District | Kelly-Huff | 707-678-1655 | kelly-huff@dixonrcd.org |
| Florin Resource Conservation District | Bruce Kamilos | Elk Grove Water Service | bkamilos@egwd.org |
| Rancho Murieta CSD | Michael Fritschi | | mfritschi@rmcsd.com |
| Yolo County Resource Conservation District | Heather Nichols | | Nichols@yolorcd.org |
| Yolo County Board of Supervisors | Oscar Villegas | | oscar.villegas@yolocounty.org |

| | | | |
|---|---|---|---|
| Yolo County Board of Supervisors | Lucas Frerichs | | Lucas.Frerichs@yolocounty.org |
| Yolo County Board of Supervisors | Gary Sandy | | gary.sandy@yolocounty.org |
| Yolo County Board of Supervisors | Jim Provenza | | jim.provenza@yolocounty.org |
| Yolo County Board of Supervisors | Angel Barajas | 625 court st room 204 woodland, CA 95695 | Angel.Barajas@yolocounty.org |
| Sacramento County Board of Supervisors | Phil Serna | | SupervisorSerna@saccounty.net |
| Sacramento County Board of Supervisors | Patrick Kennedy | | SupervisorKennedy@saccounty.net |
| Sacramento County Board of Supervisors | Rich Desmond | | richdesmond@saccounty.net |
| Sacramento County Board of Supervisors | Sue Frost | | SupervisorFrost@saccounty.net |
| Sacramento County Board of Supervisors | Patrick Hume | | patrickh@saccounty.net |
| Sacramento Co. Agriculture Dept. | Chrisandra J. Flores | | AGCOMM@saccounty.net |
| Yolo Co. Agriculture Dept | Humberto Izguierdo | | Humbert.Izquierdo@yolocounty.org |
| Omochumne-Hartnell Water District | 7513 Sloughouse Rd. Elk Grove 95624 | po box 211, Wilton, CA 95693-0211 | info@ohwd.org |
| Saclafco Reclamation District 3 | Bruce Pisoni | P.O. Box 1011, Walnut Grove, CA 95690 | recdistrict3@hotmail.com |
| Reclamation District 317 BALMD has oversight | Gilbert Labrie | P.O. Box 183, Walnut Grove, CA 95690 | GLabrie@DCCEng.net |
| Reclamation District 341 | Morgan Johnson Jr. | P.O. Box 875 Rio Vista, CA 94571 | RD341.ShermanIsland@gmail.com |
| Reclamation District 349 | | District Office P.O. Box 87, Courtland, CA 95615 | SutterRD349@gmail.com |
| Reclamation District 369 | Clarence Chu | P.O. Box 987 Walnut Grove, CA 95690 | N/A |
| Reclamation District 407 BALMD has oversight | Gilbert Labrie | P.O. Box 183, Walnut Grove, CA 95690 | Glabrie@DCCEng.net |
| Reclamation District 537 | | PO Box 980605, West sacramento, CA 95798 | |
| Reclamation District 551 | Carel Von Loben Sels | P.O. Box 123, Courtland, CA 95690 | |
| Reclamation District 554 | Bruce Pisoni | P.O. Box 984, Walnut Grove, CA 95690 | |
| Reclamation District 556 | Kevin Steward | P.O. Box 1046, Walnut Grove, CA 95690 | |
| Reclamation District 563 | Victoria Hale | P.O. Box 470, Walnut Grove, CA 95690-0470 | deltabkm@citlink.net |
| Reclamation District 744 | Russell van Loben Sels | PO Box 517, Clarksburg, CA 95612-0517 | |
| Reclamation District 765 | Patrick Markham | 8950 Cal Center Drive Suite 210, Sacramento, CA 95826 | ptmarkham@jacobsonmarkham.com |
| Reclamation District 755 | D.J. Elliot | 11275 State Highway 160, Courtland, CA 95615 | |
| Reclamation District 785 | James Nolan | 20186 Old River Road, West Sacramento, CA 95691 | jvnolan@yololaw.com |
| Reclamation District 787 | | 41758 County Rd, #112, Knights Landing, CA 95645 | |
| Reclamation District 813 | Thomas Herzog | P.O. Box 557, Courtland, CA 95615 | |
| Reclamation District 827 | | 429 1st St, Woodland CA 95695 | |
| Reclamation District 900 | Blake Johnson | 889 Denver St., West Sacramento, CA 95691 | |
| Reclamation District 999 | Thomas Slater | 38563 Netherlands Rd, Clarksburg, CA 95612-5003 | recdist999@gmail.com |
| Reclamation District 1000 | Kevin L. King | 1633 Garden Highway, Sacramento, CA 95833 | kking@rd1000.org |
| Reclamation District 1002 | Lana Mirko, Pierson-Lambert Vineyards, LLC. | 962 Lambert Road, Courtland, CA 95615 | |
| Reclamation District 1600 | Kyle Lang | P.O. Box 655, Woodland CA 95776 | langorchardsllc@aol.com |
| Reclamation District 1601 | Rick Carter | 2360 West Twitchell Island Rd, Rio Vista, CA 94571 | rd1601@frontiernet.net |
| Reclamation District 2035 | Mike Hall | 45332 County Road 25, Woodland, CA 95776 | mike@conawayranch.com |
| Reclamation District 2067 BALMD has oversight | Harvey Correia | P.O. Box 338, Walnut Grove, CA 95690 (Same As 317) | Glabrie@dcceng.net |
| Reclamation District 2093 | Erik Vink | 1107 Ninth Street, Suite 1050, Sacramento, CA 95814 | |
| Reclamation District 2110 | Brent Tadman | P.O. Box 408, Walnut Grove, CA 95690 | |

| | | | |
|---|---|---|---|
| Reclamation District 2111 | Daniel Wilson | P.O. Box 248, Walnut Grove, CA 95690 | |
| Brannan-Andrus LM Dist | Larry Gardiner | P.O. Box 338, Walnut Grove, CA 95690 | LarryLGardiner@gmail.com |
| RD 150 | Warren Bogle | P.O. Box 390 Clarksburg, CA 95612 | recdist150@gmail.com |
| RD 537 | Kyle Lang | P.O. Box 655 Woodland CA 95776 | langorchardsllc@aol.com |
| RD 307 | Peter Dwyer Jr. | P.O. Box 518, Clarksburg CA 95612 | lisbon307@gmail.com |
| RD 108 | Lewis Bair | P.O. Box 50, Grimes CA 95950 | lbair@rd108.org |
| RD 2068 | Mike Hardesty | 7178 Yolano Rd, Dixon CA 95620-9621 | adminrd2068@cal.net |

Sacramento-Yolo
MOSQUITO & VECTOR
CONTROL DISTRICT

SACRAMENTO COUNTY
8631 Bond Road
Elk Grove, CA 95624

(800) 429-1022
www.FIGHTtheBITE.net

March 2nd, 2023

Dear Agency,

The Sacramento-Yolo Mosquito and Vector Control District (District) may be making larvicide and or adulticide applications to waters of the US under your jurisdiction for mosquito reduction purposes. Applications will be posted and can be viewed on our website at www.FIGHTtheBITE.net. 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 for Biological and Residual Pesticide Discharges to Waters of the United States from Vector Control Applications.

Please contact Gary Goodman at 800-429-1022 if you have additional questions.

Sincerely,

Gary Goodman
Manager
Sacramento-Yolo MVCD

Sacramento-Yolo
MOSQUITO & VECTOR
CONTROL DISTRICT

SACRAMENTO COUNTY
8631 Bond Road
Elk Grove, CA 95624

(800) 429-1022
www.FIGHTtheBITE.net

March 2nd, 2023

## Notice of Intent to Apply Public Health Pesticides for Vector Control Purposes to Surface Waters and Waters of the U.S. Within Sacramento and Yolo Counties.

- The Sacramento-Yolo Mosquito & Vector Control 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 requires listing the active ingredients of the Public Health Pesticides anticipated to be used. The current permit allows any pesticide products to be used that contain 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 tables list the active ingredients approved for the FIFRA regulated pesticides.

Active Ingredients for larval mosquito control:

| |
|---|
| *Bacillus thuringiensis* subsp. *israelensis (Bti)* |
| *Bacillus sphaericus (Bs)* |
| Methoprene |
| Monomolecular Films |
| Petroleum Distillates |
| Pyriproxyfen |
| Spinosad |
| Temephos |

Sacramento-Yolo
MOSQUITO & VECTOR
CONTROL DISTRICT

SACRAMENTO COUNTY
8631 Bond Road
Elk Grove, CA 95624

(800) 429-1022
www.FIGHTtheBITE.net

Active Ingredients for adult mosquito control:

| |
|---|
| Deltamethrin |
| Etofenprox |
| Lambda-Cyhalothrin |
| Malathion |
| Naled |
| N-octyl bicycloheptene dicarboximide (MGK-264) |
| Piperonyl butoxide (PBO) |
| Permethrin |
| Prallethrin |
| Pyrethrin |
| Pyriproxyfen |
| Resmethrin |
| Sumithrin |

- The purpose of the use of larvicide and adulticide pesticides containing these active ingredients is for the control of larval and adult mosquitoes to minimize the threat of mosquito-borne diseases and biting annoyances.

- The general time period for the application of the pesticides is January through December, 2023. Locations of expected use will be constructed conveyances, surface waters and other waters of the U.S. located within Sacramento and Yolo Counties.

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

- Interested persons may contact the District at 1-800-429-1022 for additional information.

Gary Goodman, Manager
Sacramento-Yolo MVCD
8631 Bond Road
Elk Grove, CA 95624
www.fightthebite.net

# Sacramento-Yolo Mosquito & Vector Control 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 Agency Boundary Map. Typical and historically treated sites will include most if not all water bodies in the Yolo Bypass, areas of high water marks along the Cosumnes, Sacramento and American River corridors, intermittent creeks, and other associated waterways and surface waters that could be affected by the Districts applications.

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

   Decisions to use pesticides for control of mosquitoes include, but are not limited to, growth stage of mosquito, habitat that may affect efficacy of certain pesticides, inability to implement BMP (such as draining or management of water) in a timely fashion to prevent emergence, adult mosquito counts and/or virus activity that require widespread ultra low volume application, etc....
   Details of these factors can be found in the Sacramento-Yolo MVCD's Mosquito and Mosquito-Borne Disease Management Plan; Appendices I and II
   http://www.fightthebite.net/download/Mosquito_Management_Plan.pdf

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 pesticides have been exempted from FIFRA requirements. Products will be applied by truck, backpack, hand can and airplane.

Active Ingredients:

| |
|---|
| *Bacillus thuringiensis* subsp. *israelensis (Bti)* |
| *Bacillus sphaericus (Bs) (Lysinibacillus sphaericus)* |
| Methoprene |
| Monomolecular Films |
| Petroleum Distillates |
| Spinosad |
| Temephos |
| Deltamethrin |
| Etofenprox |
| Lambda-Cyhalothrin |
| Malathion |
| Naled |
| N-octyl bicycloheptene dicarboximide (MGK-264) |
| Piperonyl butoxide (PBO) |
| Permethrin |
| Prallethrin |
| Pyrethrin |
| Pyriproxyfen |
| Resmethrin |
| Sumithrin |
| 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 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 the District's Mosquito Reduction Best Management Practices Document http://www.fightthebite.net'download/ecomanagement/SYMVCD_BMP_Manual.pdf. Mosquito breeding sources and areas that require adult mosquito control are difficult to predict from year to year based on the weather and environmental conditions variations. However, typical sources treated by this District include: permanent/semi-permanent/seasonal wetlands, rice fields, irrigated crops and associated water conveyance systems, storm drains, river seepage and creeks within aerial ULV spray blocks.
Please see Agency Boundary Map and response to Question Number 1.

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 District's Mosquito Reduction Best Management Practices Document http://www.fightthebite.net/download/ecomanangement/SYMVCD BMP Manual.pdf. An example of an alternative is the District':;; use of *Gambusia affinis* in rice fields, wetlands, irrigation drains and neglected swimming pools on a yearly basis. The District's Ecological Management Department also identifies mosquito breeding sites throughout the District and works with property owners and land managers to incorporate District BMPs to reduce or eliminate mosquito breeding habitat. Sites where BMP's have been applied to include, but are not limited to, drains and ditches, rice field and wetland postponement of (re)-:flooding, draining of duckclub habitat, vegetation management that provides water movement, discing, and legal abatement. These practices have been used in agricultural areas, wildlife areas (such as the Vic Fazio Wetlands) and other similar areas where appropriate and efficacious to control mosquitoes.

6. **How much product is needed and how this amount was determined;**

| *Material* | *Pounds* | *Gallons* |
|---|---|---|
| Methoprene 20% | | 9 |
| Methoprene 5% | | 1 |
| Poly-w-hydroxy (agnique) Liquid | | 2 |
| Poly-w-hydroxy (agnique) Granule | 6 | |
| Methoprene Pellets | 1,289 | |
| Methoorene Granule 7-day | 0 | |
| Spinosad liquid | | 10 |
| Methoprene Briquets 120 day | 7 | |
| Methoprene Granule 21 day | 26,574 | |
| Soinosad oranular 7-dav | 1 | |
| Bti Granule | 469,561 | |
| 5% Pvrethrin | | 1,365 |
| 6% Pyrethrin | | |
| Petroleum Distillate | | 324 |
| Soinosad 30 day Pellet | 2 | |
| Spinosad Briquet | 50 | |
| Spinosad Granular 30 day | 14,330 | |
| Naled | | 1,388 |
| Bti Liquid | | 1,160 |
| BtiWDG | 2,072 | |

| | | |
|---|---|---|
| Bs Granule | 1 | |
| Bti/Bs WSP | 148 | |
| Bti/Bs Granule | 3,491 | |

The above totals represent estimated pesticides applications within the District boundaries to Waters of the U.S. for 2015. These amounts will change from year to year due to annual variability in required pesticide applications for mosquito control. This data is provided as an example of the products and amounts used in one year.

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:**

The District's Ecological Management Department reviews post BMP implementation source pesticide application data to determine efficacy and compliance of BMP treatment. Examples that have resulted in the reduction of pesticide applications is the delay in fall flooding for duck club habitat, delay in flooding for rice field stubble breakdown, beaver dam management and discing and vegetation management on the Yolo Bypass refuge. Delays in fall habitat flooding have allowed the District to utilize single brood larvicide applications in place of higher concentrated residual larvicide applications on numerous wetlands located within the District. Discing and vegetation management performed on a sample field on the Yolo Bypass Wildlife area showed a 7 times reduction of immature mosquitoes on vegetation removal plots as compared to heavily vegetated control plots within the same field. Post beaver dam management project evaluations on two urban creeks have shown 89% and 100% reduction in larviciding acres between 2008 and 2010.

For a detailed explanation of other BMP's used by the District, please see the District's Mosquito Reduction Best Management Practices Document http://www.fightthebite.net/download/ecomanangement/SYMVCD_BMP_Manual.Rdf.

9. **Description of the BMPs to be implemented. The BMP's shall include, at the minimum:**

**a. measures to prevent pesticide spill;**

District staff monitors application equipment on a daily basis to ensure it remains in proper working order. Spill mitigation devices are placed in all spray vehicles and pesticide storage areas to respond to spills. Employees are trained on spill prevention and response annually.

**b. measures to ensure that only a minimum and consistent amount is used;**

Spray equipment is calibrated each year and is a part of the MOU with CDPH. However, the pesticide label and associated registration by USEPA and CDPR 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 if 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.;**

The District will calibrate truck and hand larviciding equipment each year to meet application specifications. Supervisors review spray records daily to ensure appropriate amounts of material are being used. ULV equipment is calibrated for output and droplet size to meet label requirements. Aerial larviciding equipment is calibrated by the Contractor. Aerial adulticide equipment is calibrated at a minimum of once per year and as needed based on efficacy results and total amount of product used per event. Droplet sizes are monitored by the District to ensure droplets meet label requirements. Airplanes used in ULV applications are equipped with advanced guidance and drift management equipment to ensure the best available technology is being used to place product in the intended spray area.

**e. descriptions of specific BMPs for each pesticide product used;**

Please see District's Mosquito Reduction Best Management Practices Document
http://www.fightthebite.net/download/ecomanagement/SYMVCD_BMP_Manual.pdf

f. **descriptions of specific BMPs for each type of environmental setting (agriculture, urban, and wetlands).**

Please see District's Mosquito Reduction Best Management Practices Document
http://www.fightthebite.net/download/ecomanagement/SYMVCD_BMP_Manual.pdf

**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 U.S., 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 a flow chart that can be found in the in Districts Mosquito Reduction Best Management Practices Document and the District's Mosquito and Mosquito- Borne Disease Management Plan.; Appendices I and II
http://www.fightthebite.net/download/Mosquito_Management_Plan.pdf AND
http://www.fightthebite.net/download/ecomanagement/SYMVCD_BMP_Manual.pdf

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

Please see Sacramento-Yolo MVCD's Mosquito and Mosquito-Borne Disease Management Plan; Appendices I and II

b. **Identify target vector species to develop species-specific pest management strategies based on developmental and behavioral considerations for each species;**

Please see Sacramento-Yolo MVCD's Mosquito and Mosquito-Borne Disease Management Plan; Appendices I and II

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 the District's Mosquito Reduction Best Management Practices Document.

**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 in the Sacramento-Yolo MVCD's Mosquito and Mosquito-Borne Disease Management Plan, Appendices I and II. The District utilizes mosquito surveillance traps on a weekly basis to obtain appropriate mosquito abundance and disease activity data to guide control decisions.

**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.**

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**

This is described in the District's existing integrated vector management (IVM) program, as well as the practices described in our Mosquito and Mosquito-Borne Disease Management Plan and Mosquito Reduction Best Management Practices Document.
http://www.fightthebite.net/download/Mosquito_Management_Plan.pdf

http://www.fightthebite.net/download/ecomanagement/SYMVCD_BMP_Manual.pdf

In addition, the District may utilize legal abatement authority to mitigate mosquito production.

**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. Website for Public Notice**

www.fightthebite.net

**References:**

Mosquito and Mosquito-Borne Disease Management Plan. 2005. Sacramento-Yolo Mosquito and Vector Control District. Download from http://www.fightthebite.net/mosquito-management-plan/

Mosquito Reduction Best Management Practices. Available from Sacramento-Yolo Mosquito & Vector Control District, by download from http://www.fightthebite.net/download/ecomanagement/SYMVCD_BMP_Manual.pdf or calling 800-429-1022

MVCAC NPDES Coalition Monitoring Plan.