

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	<input type="checkbox"/> A. New Applicator	<input type="checkbox"/> B. Change of Information: WDID# _____
	<input type="checkbox"/> C. Change of ownership or responsibility: WDID# _____	
	<input checked="" type="checkbox"/> D. Enrolled under Order 2011-0002-DWQ: WDID# <u>515AP00038</u>	

II. DISCHARGER INFORMATION

A. Name Delano Mosquito Abatement District			
B. Mailing Address PO Box 220			
C. City Delano	D. County Kern	E. State CA	F. Zip Code 93216
G. Contact Person Thai Thao	H. Email address tjthao@delanomosquito.com	I. Title District Manager	J. Phone 661-725-3114

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: See attachment A
Name of the conveyance system: Applications may be made to various conveyance system in Kern and Tulare Counties.

3. Directly to river, lake, creek, stream, bay, ocean, etc.
Name of water body: Lake Woollomes, White River, Deer Creek, Poso Creek (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

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?*

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. See attachment C

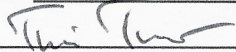
VIII. FEE

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: Thai Thao

B. Signature:  Date: 4/25/2023

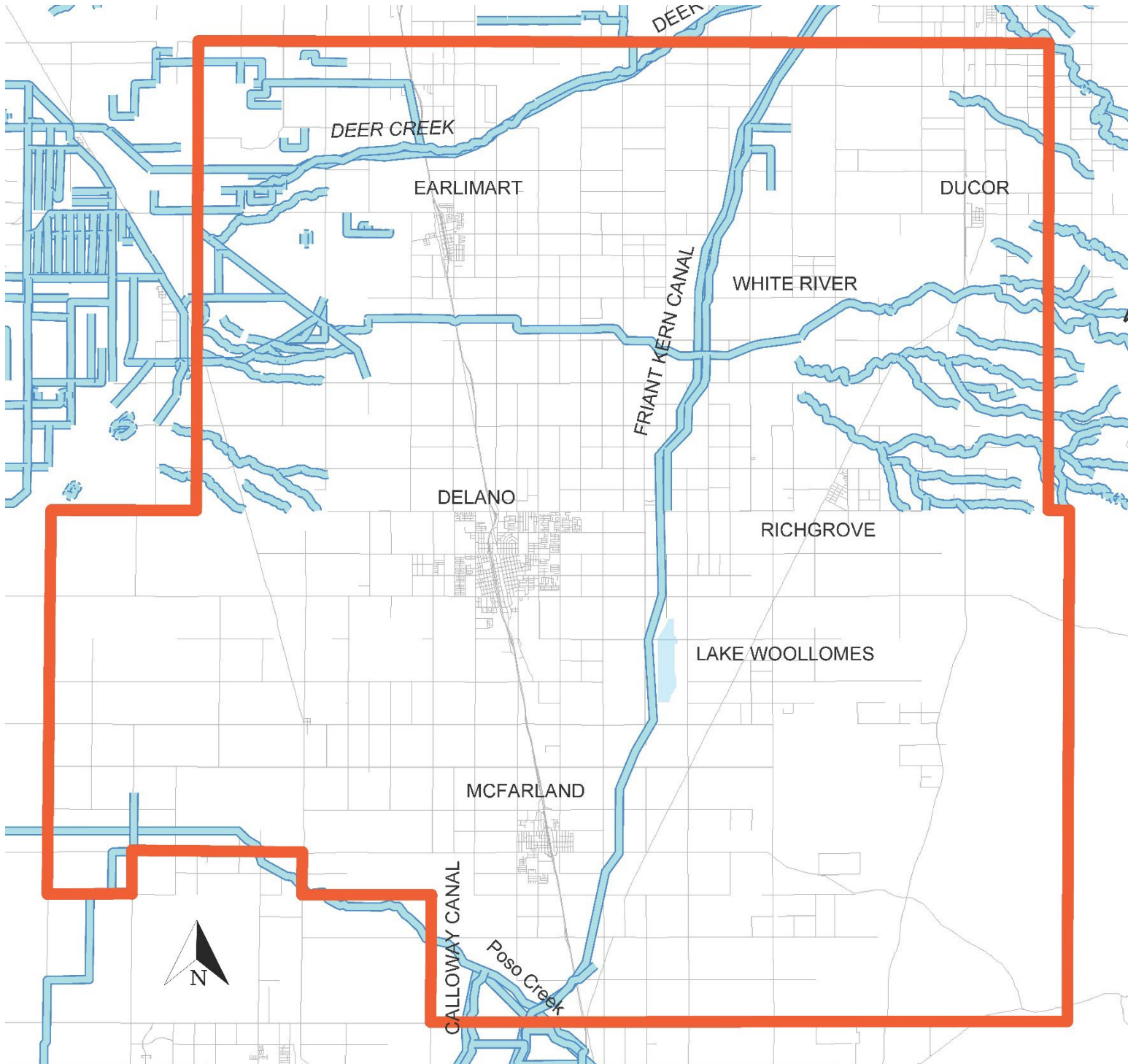
C. Title: District Manager

X. FOR STATE WATER BOARD USE ONLY

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

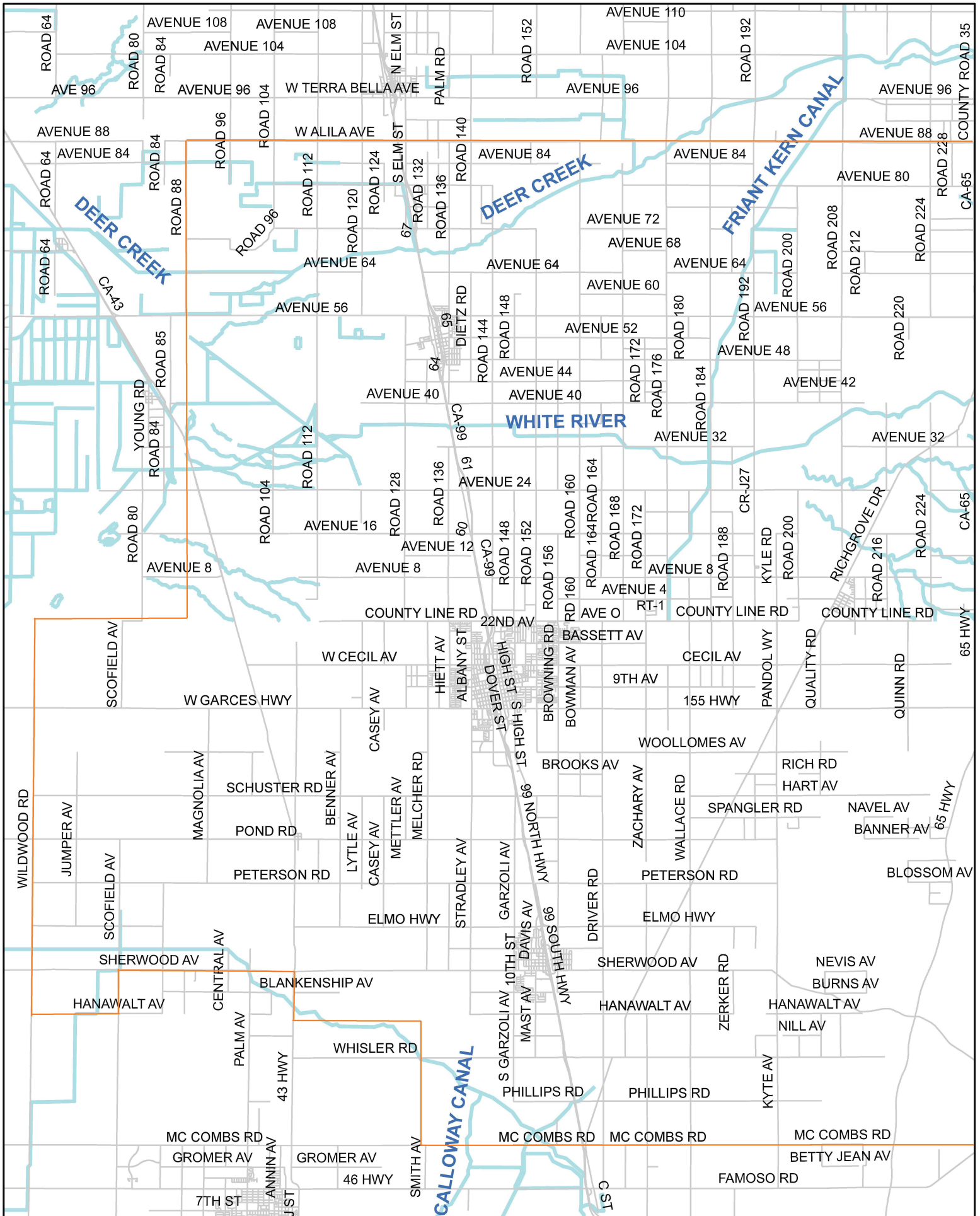
Delano Mosquito Abatement District

Attachment A



Delano Mosquito Abatement District

Attachment A - Map A2



Attachment B

Notice of Intent

V. PESTICIDE APPLICATION INFORMATION

List of active ingredients that may be used under NPDES Permit

PESTICIDE APPLICATION INFORMATION

Pesticides Used:

Larvicides	Active Ingredient	EPA Reg. No.
Agnique MMF Liquid	Poly (oxy-1,2-ethanediyl), α -(C16-20 branched and linear alkyl)- ω -hydroxy-	7969-333
Altosid ALL Concentrate	(S)-Methoprene	2724-446
Altosid Liquid Larvicide	(S)-Methoprene	2724-392
Altosid Pellets	(S)-Methoprene	2724-448
Altosid P35	(S)-Methoprene	89459-95
Altosid XRG	(S)-Methoprene	2724-451
Altosid Pellets WSP (pouches)	(S)-Methoprene	2724-448
Aquabac XT	<i>Bacillus thuringiensis israelensis</i>	62637-1
BVA 2 Mosquito Larvicide Oil	Mineral Oil	70589-1
CocoBear	Mineral Oil	8329-93
FourStar Briquets	<i>Bacillus sphaericus</i> , <i>Bacillus thuringiensis israelensis</i>	83362-3
MetaLarv S-PT (granules)	(S)-Methoprene	73049-475
Nyguard IGR Concentrate	Pyriproxyfen	1021-1603
Natular 2EC	Spinosad (A&D)	8329-82
Natular 20EC	Spinosad (A&D)	8329-106
Natular DT (tablets)	Spinosad (A&D)	8329-602
Natular G30 WSP (pouches)	Spinosad (A&D)	8329-91
Natular XRT (briquet)	Spinosad (A&D)	8329-84
Sumilarv 0.5G	Pyriproxyfen	1021-2819
VectoBac 12AS	<i>Bacillus thuringiensis israelensis</i>	73049-38
VectoBac WDG (granules)	<i>Bacillus thuringiensis israelensis</i>	73049-56
VectoLex WSP (pouches)	<i>Bacillus sphaericus</i>	73049-20
VectoMax WSP (pouches)	<i>Bacillus sphaericus</i> , <i>Bacillus thuringiensis israelensis</i>	43049-429

Adulticides	Active Ingredient	EPA Reg. No.
Anvil 10+10	3-Phenoxybenzyl-(1RS, 3RS; 1RS, 3SR)-2,2-dimethyl-3-(2-methylprop-1-enyl) cyclopropanecarboxylate, Piperonyl Butoxide	1021-1688-8329
BVA 13	Mineral Oil	55206-2
Duet	Prallethrin, Sumithrin, Piperonyl Butoxide	1021-1795-8329
Merus 2.0	Pyrethrins	8329-94
Zenivex E20	Etofenprox	2724-791

Attachment C

NOTIFICATION OF INTENT AGENCY LIST

VII. NOTIFICATION

Listing of governmental agencies that might be potentially affected by this NPDES permit and were therefor notified:

City Manager
Delano City Hall
1015 11th Ave
Delano, CA 93215

City Manager
McFarland City Hall
401 W. Kern Ave
McFarland, CA 93250

Manager
Southern San Joaquin Municipal Utility District
11281 Garzoli Ave
Delano, CA 93215

Manager
North Kern Water District
P.O. Box 81435
Bakersfield, CA 93380

Manager
Semitropic Water Storage District
1101 Central Ave
Wasco, CA 93280

Manger
Delano Earlimart Irrigation District
14181 Avenue 24
Delano, CA 93215

Chief Administrative Officer
Kern County Administrative Officer
1115 Truxtun Avenue, 5th Floor
Bakersfield, CA 93301

County Administrative Officer
Tulare County Administration Office
2800 W Burrel Ave
Visalia, CA 93291

Delano Mosquito Abatement District



Delano Mosquito

11281 Garzoli Ave – P.O. Box 220 – Delano, CA 93216
Phone: (661) 725-3114 – Fax: (661) 725-3179
Dmad@delanomosquito.com

Thai (Jay) Thao
District Manager

April 25, 2023

NOTICE OF INTENT TO APPLY PUBLIC HEALTH PESTICIDES FOR VECTOR CONTROL PURPOSES TO SURFACE WATERS AND WATERS OF THE USA WITHIN THE DELANO MOSQUITO ABATEMENT DISTRICT

The Delano Mosquito Abatement District (DMAD) is a public health agency that protects Kern and Tulare County residents and visitors within its borders from mosquitoes and mosquito-borne diseases. DMAD is an independent special district that operates under the California Health and Safety Code §§2000-2093. The District conducts ongoing surveillance of mosquitoes in order to determine the threat of disease transmission and to direct our control activities. DMAD practices a program of integrated vector management (IVM) which includes surveillance for mosquitoes, source reduction, biological control, larviciding and adulticiding as indicated by surveillance, resistance monitoring, disease surveillance in vectors and reservoirs of mosquito-borne pathogens, and public education.

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

DMAD is required and has obtained a Statewide General National Pollutant Discharge Elimination System (NPDES) permit to apply public health pesticides in, over and near waters of the USA. The NPDES permit requires that the District notify potentially affected government agencies about the application of aquatic pesticides each calendar year. This is the notification letter advising you that public health pesticides will be used to control mosquitoes within DMAD boundaries this year.

These pesticides are used to protect public health by controlling the development and populations of mosquitoes. Applications will be made within DMAD boundaries from February 1 through December 31, 2023. There are no known water use restrictions or precautions during treatment.

The following includes the label names of pesticides that DMAD may apply: Altosid Liquid Larvicide, Altosid P35, Altosid Pellets, Altosid Pellets WSP, Altosid XR-G, Altosid XR Briquet, Aquabac XT, BVA 2 Mosquito Larvicide Oil, Cocobear MLO, DUET, FourStar Briquets, FourStar Bti CRG, FourStar CRG, FourStar MBG, FourStar Bti Briquet, FourStar SBG, Metalarv S-PT, Natular DT, Natular G30, Natular G30 WSP, Natular 2EC, Natular 20EC, Natular XRT, Nyguard, Sumilarv, Sumilarv WSP, Vectobac 12AS, VectoBac WDG, VectoLex WDG, Vectolex WSP, VectoMax WDG, VectoMax WSP, Zenivex E20.

Interested persons may contact Thai Thao (Jay) at (661) 725-3114 or tjthao@delanomosquito.com for additional information. This notification shall be posted on the DMAD website:

www.delanomosquito.com

Sincerely,

A handwritten signature in black ink, appearing to read 'Thai Thao'.

Thai Thao, District Manager
Delano Mosquito Abatement District

BOARD OF TRUSTEES

Art Armendariz
County of Kern

County of Tulare

Rolando Perales
County of Kern

Ricardo Cano
City of McFarland

Mario Nunez Jr.
City of Delano

Delano Mosquito Abatement District

**11281 Garzoli Ave
Delano, CA 93215**

**PO Box 220
Delano, CA 93216**

**Phone (661) 725-3114
Fax (661) 725-3179
www.delanomosquito.com**

**Pesticide Application Plan
(PAP)**

April 2023

Delano 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;**

The Delano Mosquito Abatement District is a bi-county district located in the north western portion of Kern County and south western portion of Tulare County. The District services a total of 477 square miles between both counties, approximately 257 square miles of Kern County and approximately 220 square miles of Tulare County. **Please see Attachment A for the District boundaries.** Typical and historically treated sites will include areas of high-water marks along the White River, Deer Creek, Dyer Creek, Poso Creek, intermittent creeks, Kern Friant Canal, Lake Woollomes and other associated waterways and surface waters that could be affected by the District's applications. During some years, no applications are made to these areas due to the lack of water.

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

The District's foremost goal is to eliminate or reduce mosquito breeding sources with property owners through education, source reduction, alternative methods or physical control following Integrated Vector Management (IVM) as described on pages 26 through 34 of the *Best Management Practices for Mosquito Control in California*. Please See the *Best Management Practices for Mosquito Control in California* for more details.

While the District does consider and evaluate the use of other methods to control mosquitoes rather than apply pesticides, some methods have distinct limitations in their effectiveness.

The use of pesticides becomes necessary when source reduction efforts and/or physical control efforts as stated above have failed or have not been implemented and mosquito populations, larval or adult, reach unacceptable levels and threaten the public's health or quality of life. Other factors that influence the use of pesticides, but are not limited to, include the detection of mosquito-borne disease, high population of disease vectoring mosquitoes, climatic conditions, and service requests.

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 Water 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. All of these products are used according to label directions and may be applied by ground (hand, truck, ATV, backpack, etc) or by air (helicopter or fixed wing aircraft).

Active Ingredient for Larval Mosquito Control
<i>Bacillus thuringiensis var. israelensis</i>
<i>Bacillus sphaericus (Lysinibacillus sphaerius)</i>
Methoprene
Monomolecular Films
Petroleum Distillates
Pyriproxyfen
Spinosad
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.

Active Ingredients for Adult Mosquito Control
Deltamethrin
Etofenprox
Lambda-Cyhalothrin
Malathion
Naled
N-octyl Bicycloheptene Dicarboximide (MGK-264)
Permethrin
Piperonyl butoxide (PBO)
Prallethrin
Pyrethrin
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 pesticide applications as described in Item 2 above and *Best Management Practices for Mosquito Control in California*, especially pages 4 through 19.

Mosquito breeding sources and areas that require adult mosquito control are difficult to predict from year to year based on the weather and variations in local environmental conditions. The typical sources treated by the district include: duck clubs (seasonal), residential storm drain basins, agricultural sumps and ditches, non-maintained swimming pools, pastures, irrigated crops, livestock watering troughs and "standing" curb water.

During years of above-average rainfall (about every four or five years in Kern/Tulare County), certain water bodies and/or tributary waters of the White River, Deer Creek, Dyer Creek, Poso Creek, Lake Woollomes and certain water conveyances will have variable amounts of waterflow. These water bodies can become heavily vegetated and can breed mosquitoes in certain areas. Please see the Attachments A for map reference.

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* found on page 26 through 34.

Specific methods used by the District include stocking permanent or semi-permanent water sources with mosquito fish (*Gambusia affinis*), employing public education and outreach to teach residents about mosquito breeding sources and encourage them to safeguard their properties from being potential mosquito-breeding sites, 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 such as vegetation management, discing, and legal abatement.

Mosquitofish (*Gambusia affinis*) cannot control mosquitoes in locations where thick vegetation or shallow water prevents them from preying upon mosquito larvae. Mosquitofish cannot survive in polluted water so they cannot be used in types of situations such as some sewage treatment facilities. Mosquitofish are useful in permanent or semi-permanent water bodies, but in places where the water is only temporary, mosquitofish will have to be continually reintroduced which reduces their effectiveness. In the early spring when the temperatures are cool, *Gambusia* reproduction is at a minimum, so the number of fish available is limited. In seasons of above-normal rainfall or snow pack, there are not sufficient numbers of *Gambusia* available for every situation. The District does not have the financial resource and capacity to raise large numbers of mosquitofish, thus the District must harvest *Gambusia* from local sources and transfer them to areas that require attention. In years of

below-normal precipitation, *Gambusia* breeding sources are few, so the number of fish available for stocking is limited.

Another method used to control mosquitoes besides the application of pesticides involves physical control. Physical control methods consist of vegetation control and/or removal of soil in order to make an area deeper to impede vegetation growth and enable mosquitofish and other predators of mosquitoes to flourish. Unfortunately, physical control cannot be utilized in some areas because of the presence of threatened and endangered species

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

The totals below represent pesticide applications within the District boundaries to Waters of the U.S. for 2020. 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.

Active Ingredient	Pounds	Gallons
Bacillus thuringiensis var. israelensis	0	0
Bacillus sphaericus (Lysinibacillus sphaericus)	0	0
Deltamethrin	0	0
Etofenprox	0	0
Lambda-Cyhalothrin	0	0
Malathion	0	0
Methoprene	0	0
Mineral Oil	0	0
Monomolecular Films	0	0
Naled	0	0
N-octyl Bicycloheptene Dicarboximide (MGK-264)	0	0
Petroleum Distillates	0	0
Permethrin	0	0
Prallethrin	0	0
Pyrethrin	0	0
Resmethrin	0	0
Spinosad	0	0
Sumlthrin	0	0
Temephos	0	0

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 follows an IVM approach as noted in Item 2, and ensures all measures of biological and physical control be explored and evaluated prior to the application of pesticides. The District's **Source Reduction Specialist** and **Operation Supervisor** evaluates available BMPs in order to determine if there are feasible alternatives to selected pesticide application projects. Working with other agencies such as local water agencies to help with the removal of vegetation from ditches and impoundments allows for easier

inspections and enables natural predators to control mosquito larvae. The removal of vegetation, also, makes applications more effective when they are required. Also see: pages 5 through 20 of the *Best Management Practices for Mosquito Control in California*.

9. Description of the BMPs to be implemented:

a. Pesticide spill prevention;

District pesticide applicators 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 that only a minimum and consistent amount is used;

All spray equipment is calibrated at least annually as required by the Department of Pesticide Regulations (DPR) and terms of the cooperative agreement memorandum of understanding (MOU) with the California Department of Public Health.

c. A plan to educate the Coalition's or Discharger's staff and pesticide applicator on any potential adverse effects from the pesticide application;

All employees and applicators are required to receive annual pesticide training, continuing education programs, and/or regional NPDES Permit training programs. Additionally, the District conducts monthly staff and safety meetings with all employees where pesticide application, effects, modes of action, and other such things are covered.

d. Descriptions of specific BMPs for each application mode, e.g. aerial, truck, hand, etc.;

The Delano Mosquito Abatement District calibrates all vehicle-mounted and hand-held spray equipment at least annually and/or as needed to meet application specifications. Supervisors and administration staff review application records 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 applications are done by licensed contractors who specialized in agricultural spraying. Airplanes used in urban ULV applications are calibrated by the licensed Contractor who, also, makes sure the equipment is calibrated regularly and droplet size is appropriate. These airplanes are equipped with advanced guidance and drift management equipment to ensure the best available technology is being used to place the pesticide material within the intended area.

e. Descriptions of specific BMPs for each pesticide product used;

Please refer to the *Best Management Practices for Mosquito Control in California* (https://westnile.ca.gov/resources_reports.php?resource_category_id=2) 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 wetlands).

Please see the *Best Management Practices for Mosquito Control in California* - especially pages 4-19.

https://westnile.ca.gov/resources_reports.php?resource_category_id=2

10. Identify 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 Delano Mosquito Abatement District's staff only apply pesticides to sources of mosquitoes that may 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 agency's resources, disease activity, surveillance data or local needs. Treatment thresholds are based on a combination of one or more of the following criteria:

- i. Mosquito species present
- ii. Mosquito stage of development
- iii. Pest, nuisance, or disease potential
- iv. Disease activity
- v. Mosquito abundance
- vi. Flight range
- vii. Proximity to populated areas
- viii. Size of source
- ix. Presence/absence of natural enemies or predators
- x. Presence of sensitive/endangered species or habitats

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

Most Common Mosquitoes Present in District

<i>Aedes melanimon</i>	<i>Culiseta inornata</i>
<i>Aedes nigromaculis</i>	<i>Culex erythrothorax</i>
<i>Aedes aegypti</i>	<i>Culex pipiens complex</i>
<i>Anopheles freeborni</i>	<i>Culex stigmatosoma</i>
<i>Culiseta incidens</i>	<i>Culex tarsalis</i>

The District may target any mosquito species found within the District's boundaries that represent a nuisance or public health threat. Also 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, natural or man-made, that holds water for more than 96 hours (four 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*.

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

This type of information is included in the *Best Management Practices for Mosquito Control in California* and the *California Mosquito-borne Virus Surveillance and Response Plan* that the agency uses. The District continually collects adult and larval mosquito surveillance data, dead bird reports, 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:**
 - i. No action
 - ii. Prevention
 - iii. Mechanical or physical methods
 - iv. Cultural methods
 - v. Biological control agents
 - vi. 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 vegetation growth in ponds, ditches, and 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 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.**

The District follows an existing IVM program which includes practices described in Item 2 above, as well as the practices described in the *Best Management Practices for Mosquito Control in California* and *California Mosquito-borne Virus Surveillance and Response Plan*.

A "nuisance" is specifically defined in California Health and Safety Code (HSC) §20020). 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.

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

Public notices are posted on the District's website: www.delanomosquito.com

References:

Best Management Practices for Mosquito Control in California. July 2012. Available by download from the California Department of Public Health – Vector-borne Disease Section at <http://www.westnile.ca.gov> under the heading Mosquito Control and Repellent Information. Copies may also be requested by calling the California Department of Public Health – Vector-borne Disease Section at (916) 552-9730 or the Kern Mosquito & Vector Control District at (661) 589-2744.

California Mosquito-borne Virus Surveillance and Response Plan. May 2021. [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> under the heading Response Plans and Guidelines. Copies may also be requested by calling the California Department of Public Health – Vector-borne Disease Section at (916) 552-9730 or the Kern Mosquito & Vector Control District at (661) 589-2744.

Mosquito & Vector Control Association of California (MVCAC)
NPDES Coalition Monitoring Plan.