

Consolidated Mosquito Abatement District

2425 FLORAL AVENUE
MAIL: P.O. BOX 278
SELMA, CALIFORNIA 93662
(559) 896-1085
FAX (559) 896-6425
www.mosquitobuzz.net

April 4, 2016

RECEIVED

APR 12 2016

DEPARTMENT OF WATER QUALITY

State Water Resources Control Board
ATTN: Gil Vazquez
NPDES Wastewater Unit, 15th Floor
Sacramento, CA 95814

Rd: NPDES Permit Application for Vector Control Operations

Dear Mr. Vazquez:

The following items are enclosed for Consolidated Mosquito Abatement District's application for the Water Quality Order No. 2016-XXXX-DWQ General Permit No. CAG 990004:

- 1) Completed NOI document
- 2) List of notified governmental agencies and copy of letter
- 3) Completed Pesticide Application Plan
- 4) Application Fee

Sincerely,

Mark Amorino, for Steve Mulligan

Steve Mulligan, Manager
Consolidated Mosquito Abatement District

RECEIVED

APR 12 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 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# 510AP00023	

II. DISCHARGER INFORMATION

A. Name Consolidated Mosquito Abatement District			
B. Mailing Address P.O. Box 278			
C. City Selma	D. County Fresno	E. State CA	F. Zip Code 93662
G. Contact Person Steve Mulligan	H. Email address smulligan@mosquitobuzz.net	I. Title District Manager	J. Phone 559-896-1085

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	

APR 12 2016

DIVISION OF WATER QUALITY

GENERAL NPDES PERMIT FOR BIOLOGICAL AND RESIDUAL PESTICIDE DISCHARGES FROM VECTOR CONTROL APPLICATIONS

ORDER 2016-XXXX-DWQ NPDES NO. CAG990004

IV. RECEIVING WATER INFORMATION

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

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

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

3. Directly to river, lake, creek, stream, bay, ocean, etc. Name of water body: Surface waters and waters of the US within Consolidated Mosquito Abatement District. Refer to map (attachment 1) * A map showing the affected areas for items 1 to 3 above may be included. in PAP

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. Pesticides Used: List name, active ingredients and, if known, degradation by-products See attached Pesticides Application Plan (PAP)

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

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: Steve Mulligan

B. Signature: *Steve Mulligan* Date: 04/04/2016

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 #:

Consolidated Mosquito Abatement District

2425 Floral Avenue • P.O. Box 278
Selma CA 93662

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**Pesticides Application Plan
(PAP)**

January 2016

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, CMAD works with property owners to affect long-term solutions to reduce or eliminate the need for continued applications, as described in **Item 2** above. Target areas that require treatment of immature mosquitoes and areas that require adult mosquito control are difficult to predict from year to year based on the weather and variations in local environment conditions. However, the typical target areas treated by this agency year by year that would be considered waters of the USA include permanent and semi-permanent seasonal wetlands, creeks, streams, rivers, lakes, and tributary waters of the Kings and San Joaquin Rivers.

Please see Attachment 1 for a map of the District.

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

With any source of mosquitoes or other vectors, CMAD'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 alternative control methods and their limitations are described in the *Best Management Practices for Mosquito Control in California* (pp. 4-20, 26-27).

Specific alternative control methods used by CMAD include stocking sources with 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.

CMAD stocks mosquito fish everywhere that it is ecologically appropriate. However, the limitations of fish include sensitivity to predation, disease, water temperature, pH, dissolved oxygen levels, and desiccation of the habitat.

CMAD works with various municipalities and private landowners to reduce the need for repeated applications of pesticides in sources associated with completed projects. These measures are limited by costly improvements that may be necessary in order to minimize or eliminate mosquito breeding, regular maintenance needed to sustain mosquito-free habitats, mechanical failure resulting in unexpected mosquito problems, and neglect or indifference to the importance of mosquito source reduction.

The District has a public outreach program that includes participation in educational events at local fairs, parades, schools, clubs and town hall meetings. These engagements are designed to encourage people to take responsibility by eliminating their own sources of standing water, thus reducing chemical means of control.

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

Application equipment is calibrated at least annually as required by the California Department of Pesticide Regulation (CDPR) and the terms of a cooperative agreement with the California Department of Public Health (CDPH). 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 of the U.S. from the pesticide application;

This will be included in our pesticide applicators' annual pesticide application and safety training, continuing education programs, and/or regional NPDES Permit training programs.

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

CMAD calibrates vehicle-mounted and handheld larviciding equipment each year to meet application specifications. Application records are reviewed daily to ensure appropriate amounts of material are being used. Ultra-low volume (ULV) application equipment is calibrated for output and droplet size to meet label requirements. Equipment for aerial larviciding and adulticiding is calibrated by the Contractor.

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

Please see the *Best Management Practices for Mosquito Control in California* (pp. 27-30) for general pesticide application BMPs and the CDPR website, <http://www.cdpr.ca.gov/docs/label/labelque.htm>, for the current approved pesticide labels for application BMPs for specific products.

f. descriptions of specific BMPs for each type of environmental setting (agricultural, urban, and wetland).

Please see **Item 2** above and the *Best Management Practices for Mosquito Control in California* (pp. 4-20).

An example of a BMP for an agricultural setting is working with farmers to reduce the number of days irrigation water stands on the property in order to disrupt the mosquito life cycle. Over the years, the encouragement and

Please see **Item 2** above and the *Best Management Practices for Mosquito Control in California* (pp. 31-34). Please see also the *California Mosquito-borne Virus Surveillance and Response Plan* (pp. 8-10).

CMAD may target any and all mosquito species found within the District that become problematic due to nuisance or vector-borne disease potential.

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 agency's preferred solution and, whenever possible, the agency works with property owners to implement long-term solutions to reduce or eliminate the need for continued pesticide 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.

Please see **Item 2** above. CMAD continually collects adult and larval mosquito surveillance data and dead bird reports, monitors regional mosquito-borne disease activity detected in humans, horses, birds, and/or other animals, and uses these data to guide mosquito control activities. The District employs aerial photography and uses a GIS program to gather data on new and existing sources such as wetland habitats and neglected swimming pools. This technology assists District technicians in the field, who continually sample water and are trained to seek new treatment areas.

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.

CMAD uses the principles and practices of Integrated Vector Management (IVM) as described on pages 26 and 27 of the *Best Management Practices*

techniques and equipment, taking account of weather conditions and the need to protect the environment.

This is an existing practice of CMAD, and is required to comply with the Department of Pesticide Regulation's (CDPR) 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 and in-house training.

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

Please visit the CMAD website at www.mosquitobuzz.net.

References:

Best Management Practices for Mosquito Control in California. 2010. Available by download from the California Department of Public Health—Vector-Borne Disease Section at <http://www.westnile.ca.gov/resources.php> under the heading *Mosquito Control and Repellent Information*. Copies may be also requested by calling the California Department of Public Health—Vector-Borne Disease Section at (916) 552-9730 or the Consolidated Mosquito Abatement District at (559) 896-1085.

California Mosquito-borne Virus Surveillance and Response Plan. 2010. [Note: this document is updated annually by the California Department of Public Health [CDPH]. Available by download from the California Department of Public Health—Vector-Borne Disease Section [CDPH-VBDS] at <http://www.westnile.ca.gov/resources.php> under the heading *Response Plans and Guidelines*. Copies may be also requested by calling CDPH-VBDS at (916) 552-9730 or the Consolidated Mosquito Abatement District at (559) 896-1085.

Monitoring Plan for Mosquito Larvicides and Adulticides (MVCAC NPDES Coalition Monitoring Plan). 2011. Copies may be requested by calling the Mosquito and Vector Control Association of California [MVCAC] at (916) 440-0826 or the Consolidated Mosquito Abatement District at (559) 896-1085.

Attachment 2

Notice of Intent

V. Pesticide Application Information

List of Active Ingredients that may be used under NPDES Permit

Active Ingredients:

Bacillus thuringiensis var. israelensis

Bacillus sphaericus (Lysinbacillus sphaericus)

Deltamethrin

Etofenprox

Lambda Cyhalothrin

Malathion

Methoprene

Monomolecular Films

Naled

N-octyl Bicycloheptene Dicarboximide (MGK-264)

Petroleum Distillates

Permethrin

Piperonyl butoxide

Prallethrin

Pyrethrin

Resmethrin

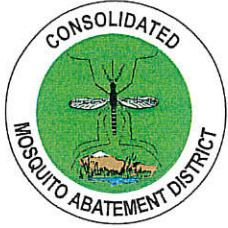
Spinosad

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.

VectoBac GR	5425.36125	lb	573
VectoBac GS	2354.7395	lb	339
VectoLex CG	1241	lb	41
VectoLex FG	934.19	lb	379
VectoLex WDG	132.74	lb	1316
VectoLex WSP	3043	packet	277
VectoMax FG	92.265	lb	473
Zenivex E20	16.405	gal	77



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March 10, 2016

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

The Consolidated Mosquito Abatement District (CMAD) is a public health agency that protects Fresno and Kings County residents and visitors within its borders from mosquitoes and mosquito-borne diseases. CMAD is an independent special district that operates under the California Health and Safety Code §§2000-2093. We conduct ongoing surveillance of mosquitoes in order to determine the threat of disease transmission and to direct our control activities. CMAD 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).

CMAD 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 we 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 the CMAD boundaries this year.

These pesticides are used to protect public health by controlling the development and populations of mosquitoes. Applications will be made within CMAD boundaries from February 1 through December 31, 2016. There are no known water use restrictions or precautions during treatment.

The following includes the names of pesticides that CMAD may apply: Agnique MMF, Altosid Liquid Larvicide, Altosid Pellets, Altosid Pellets WSP, Altosid XR-G, Altosid XR Briquet, Anvil 10+10 ULV, Aqualuer 20-20, BVA 2 Mosquito Larvicide Oil, Cocobear MLO, DeltaGuard, Duet, Evergreen EC 60-6, FourStar Briquets, FourStar Bti CRG, FourStar CRG, FourStar MBG, FourStar Bti Briquet, FourStar SBG, Fyfanon ULV, Gowan Malathion 8, Kontrol 4-4, Natular G30, Natular 2EC, Natular XRT, Prentox Pyronyl Crop Spray, Prentox Pyronyl 5-25, Pyrocide 7067, 5% Skeeter Abate, VectoBac G, Vectobac GR, VectoBac GS, VectoBac WDG, VectoBac 12AS, VectoLex CG, Vectolex FG, VectoLex WDG, Vectolex WSP, Zenivex E20.

Interested persons may contact Steve Mulligan at (559) 896-1085 for additional information. This notification shall be posted on the CMAD website: www.mosquitobuzz.net.

Sincerely,

Steve Mulligan, District Manager
Consolidated Mosquito Abatement District
smulligan@mosquitobuzz.net

Mailing List of Governmental Agencies

Alta Irrigation District	Lemoore Canal & Irrigation Company
Burrell Ditch Company	Liberty Canal Company
California Department of Fish & Game, Region 4	Liberty Mill Race Company
Cal Trans District 6	Liberty Water District
City of Clovis, City Manager	Orange Cove Irrigation District
City of Fowler, City Manager	Peoples Ditch Company
City of Fresno, City Manager	Pinedale County Water District
City of Kingsburg, City Manager	Pinedale Public Utility District
City of Orange Cove, City Manager	Raisin City Water District
City of Parlier, City Manager	Reed Ditch Company
City of Reedley, City Manager	Riverdale Irrigation District
City of Sanger, City Manager	Riverdale Public Utility District
City of Selma, City Manager	Stinson Canal & Irrigation Company
Caruthers Community Services District	Tri-Valley Water District
Central California Irrigation District	United States Army Corp of Engineers
Consolidated Irrigation District	United States Bureau of Reclamation
Crescent Canal Company	Waterworks District No. 18
Del Rey Community Services District	
Freewater County Water District	
Fresno County Agricultural Department	
Fresno County Board of Supervisors, Chairman	
Fresno County Board of Supervisors, Special Districts Administrator	
Fresno County Resources Division	
Fresno Irrigation District	
Fresno Metropolitan Flood Control District	
Garfield Water District	
Hills Valley Irrigation District	
International Water District	
John Heinlen Mutual Water Company	
Kings County Agricultural Department	
Kings County Board of Supervisors	
Kings County Parks & Recreation	
Kings River Conservation District	
Kings River Water Association	
Kings River Water District	
Lanare Community Services District	
Laguna Irrigation District	
Last Chance Water Ditch Company	
Laton Community Services District	

Manager
Alta Irrigation District
PO BOX 715
DINUBA CA 93618

Christine Cox-Kovacevich
Cal Trans District 6
1352 W OLIVE AVE
FRESNO CA 93778-2616

Bruce Rudd
City of Fresno
2600 FRESNO ST
FRESNO CA 93721

Israel Lara, Jr
City of Parlier
1100 E PARLIER AVE
PARLIER CA 93648

Ken Gray
City of Selma
1710 TUCKER ST
SELMA CA 93662

Manager
Consolidated Irrigation District
PO BOX 209
SELMA CA 93662

Freewater County Water District
17504 E TRIMMER SPRINGS RD
SANGER CA 93657

John Thompson
Fresno County Resources Div. Parks
2220 TULARE ST 6TH FLR
FRESNO CA 93721

Manager
Fresno Metropolitan Flood Control
5469 E OLIVE AVE
FRESNO CA 93727

International Water District
9010 E TOLLHOUSE RD
CLOVIS CA 93612

Manager
Burrell Ditch Company
3899 W DAVIS AVE
RIVERDALE CA 93656

Robert Woolley
City of Clovis
1033 5TH ST
CLOVIS CA 93612

Alex Henderson
City of Kingsburg
1401 DRAPER ST
KINGSBURG CA 93631

Nicole Zieba
City of Reedley
1717 9TH ST
REEDLEY CA 93654

Caruthers Community Services Dist.
PO BOX 218
CARUTHERS CA 93609

Manager
Crescent Canal Company
c/o Errotabere Ranches
22895 S DICKENSON AVE
RIVERDALE CA 93656

Fresno County Ag. Commissioner
1730 S MAPLE AVE
FRESNO CA 93702

Fresno County Special Districts
Administrator
2220 TULARE ST 6TH FLR
FRESNO CA 93721

Manager
Garfield Water District
PO BOX 337
CLOVIS CA 93613

Manager
John Heinlen Mutual Water Co
PO BOX 647
LEMOORE CA 93245

Julie Vance
CA Dept of Fish & Game Region 4
1234 E SHAW AVE
FRESNO CA 93710-7802

David Elias
City of Fowler
128 S 5TH ST
FOWLER CA 93625

Samuel Escobar
City of Orange Cove
633 6TH ST
ORANGE COVE CA 93646

Tim Chapa
City of Sanger
1700 7TH ST
SANGER CA 93657

Manager
Central California Irrigation District
PO BOX 1231
LOS BANOS CA 93635

Manager
Del Rey Community Services Dist.
PO BOX 186
DEL REY CA 93616

Debbie Poochigian
Fresno County Board of Supervisors
Hall of Records, Room 301
2281 TULARE ST
FRESNO CA 93721

Manager
Fresno Irrigation District
2907 S MAPLE AVE
FRESNO CA 93725

Hills Valley Irrigation District
PO BOX 911
VISALIA CA 93279

Kings County Ag Commissioner
680 CAMPUS DR STE B
HANFORD CA 93230

Chairman
Kings County Board of Supervisors
Government Center
1400 W LACEY BLVD
HANFORD CA 93230

Park Superintendent
Kings County Public Works
1400 W LACEY BLVD BLDG 6
HANFORD CA 93230

Manager
Kings River Conservation District
4886 E JENSEN AVE
FRESNO CA 93725

Watermaster
Kings River Water Association
4888 E JENSEN AVE
FRESNO CA 93725

Kings River Water District
15142 E GOODFELLOW AVE
PO BOX 457
SANGER CA 93657

Manager
Lanare Community Services District
20620 S GRANTLAND AVE
RIVERDALE CA 93656

Manager
Laguna Irrigation District
5065 19 1/2 AVE
RIVERDALE CA 93656

Manager
Last Chance Water Ditch Company
PO BOX 131
HANFORD CA 93232

Laton Community Services District
PO BOX 447
LATON CA 93242

Manager
Lemoore Canal & Irrigation Co
PO BOX 647
LEMOORE CA 93245

Manager
Liberty Canal Company
PO BOX 223
RIVERDALE CA 93656

Manager
Liberty Mill Race Company
PO BOX 126
RIVERDALE CA 93656

Liberty Water District
2904 W MAIN ST
VISALIA CA 93291

Manager
Orange Cove Irrigation District
1130 PARK BLVD
ORANGE COVE CA 93646

Manager
Peoples Ditch Company
PO BOX 1261
HANFORD CA 93232

Manager
Pinedale County Water District
480 W BIRCH AVE
PINEDALE CA 95650

Manager
Pinedale Public Utility
2560 W SHAW AVE STE 102
FRESNO CA 93711

Manager
Raisin City Water District
PO BOX 174
RAISIN CITY CA 93652

Chairman
Reed Ditch Company
PO BOX 445
RIVERDALE CA 93656

Riverdale Irrigation District
PO BOX 683
RIVERDALE CA 93656

Superintendent
Riverdale Public Utility District
PO BOX 248
RIVERDALE CA 93656

Manager
Stinson Canal & Irrigation Company
1100 W SHAW AVE STE 148
FRESNO CA 93711

Tri-Valley Water District
15142 E GOODFELLOW AVE
SANGER CA 93657

Regulatory Branch
US Army Corp of Engineers
Sacramento District
1325 J ST
SACRAMENTO CA 95814-2922

Area Manager
US Bureau of Reclamation
S-C Cal Area Office
1243 N ST
FRESNO CA 93721-1813

Manager
Waterworks District No. 18
PO BOX 92
FRIANT CA 93626