

DEPOTS
CLOVIS
KINGSBURG
REEDLEY
SANGER
WESTSIDE

Consolidated Mosquito Abatement District

DISTRICT OFFICE
2425 FLORAL AVENUE
MAIL: P. O. BOX 278
SELMA, CALIFORNIA 93662
(559) 896-1085
(559) 888-2619
FAX (559) 896-6425

RECEIVED
JAN 24 2012
DIVISION OF WATER QUALITY

January 19, 2012

State Water Resources Control Board
ATTN: Phil Isorena, NPDES Unit: 15th floor
1001 "I" Street – P.O. Box 100
Sacramento, CA 95814

RE: NPDES Permit Application for Vector Control Operations

Dear Mr. Isorena:

The following items are enclosed for Consolidated Mosquito Abatement District's application for the Water Quality Order No. 2011-0002-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,



Steve Mulligan, Manager
Consolidated Mosquito Abatement District

ATTACHMENT G – NOTICE OF INTENT

**WATER QUALITY ORDER NO. 2011-0002-DWQ
GENERAL PERMIT NO. CAG 990004**

**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# _____

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 conmad@pacbell	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	

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) in PAP
* 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 attached Pesticides Application Plan (PAP)

C. Period of Application: Start Date February 1, 2012 End Date Ongoing

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 PAP shall be included with the NOI.

B. Is the applicator familiar with its contents?

Yes No

VII. NOTIFICATION

Have potentially affected governmental agencies been notified?

Yes No

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

VIII. FEE

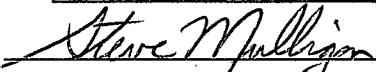
Have you included payment of the filing fee (for first-time enrollees only) with this submittal?

Yes NO NA

IX. CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. Additionally, I certify that the provisions of the General Permit, including developing and implementing a monitoring program, will be complied with."

A. Printed Name: Steve Mulligan

B. Signature: 

Date: 01/19/2012

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 #:

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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 now required to obtain a Statewide General National Pollutant Discharge Elimination System (NPDES) permit to apply public health pesticides due to a recent decision by the Sixth Circuit Court of Appeals. In its January 2009 ruling on National Cotton Council, et. al. vs. EPA, the Court (1) vacated the EPA's 2006 rule that said NPDES permits were not required for applications of pesticides in, over and near waters of the USA when in compliance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) label and (2) determined that pesticides are pollutants. Consequently, point source discharges to waters of the USA from the application of pesticides will require NPDES permits in accordance with the Court's mandate effective on October 31, 2011.

The NPDES permit requires that we notify potentially affected government agencies before the first 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.

The following includes the names of pesticides that CMAD may apply: Agnique MMF, Agnique MMF G, Altosid Liquid Larvicide, Altosid Pellets, Altosid Pellets WSP, Altosid XR-G, Anvil 10+10 ULV, Aqualuer 20-20, Aqua-Kontrol, Aqua-Reslin, BVA 2 Mosquito Larvicide Oil, Duet, Evergreen EC 60-6, Fyfanon ULV, Kontrol 4-4, Natular G30, Natular 2EC, Pyrenone Crop Spray, Pyrenone 25-5, Pyroicide 7067, Pyroicide 7396, Scourge 4+12, 5% Skeeter Abate, VectoBac G, VectoBac GS, VectoBac TP, VectoBac 12AS, VectoLex CG, VectoLex WDG, VectoLex WSP, Zenivex E20.

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, 2012. There are no known water use restrictions or precautions during treatment.

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
conmad@pacbell.net

Community health, comfort and prosperity are promoted by effective, continuous mosquito abatement measures.

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	

Consolidated Mosquito Abatement District

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

**Phone (559) 896-1085
Fax (559) 896-6425
www.mosquitobuzz.net**

**Pesticides Application Plan
(PAP)**

January 2012

Elements of Pesticides Application Plan (PAP)¹

- 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 Consolidated Mosquito Abatement District (CMAD or District) is composed of 1,058 square miles, 18 of which lie in Kings County with the balance in Fresno County. CMAD occupies the central portion of Fresno County, bordered on the west by three adjacent mosquito control districts and on the east by the foothills of the Sierra Nevada. The San Joaquin River, along the portion of the northern border between Fresno and Madera Counties, and the Kings River, flowing through portions of the District's eastern and southern areas, are the principal waters of the USA in which larvicides and adulticides may be applied to control mosquitoes. Associated tributaries of the aforementioned water bodies could also be affected by such applications.

Please see Attachment 1 for a map of the District.

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

CMAD uses the principles and practices of Integrated Vector Management (IVM) as described in *Best Management Practices for Mosquito Control in California* (Appendix A, pp. 26-27). When IVM or IPM techniques, source elimination, source reduction and biological control methods have become exhausted, chemical means are used to reduce mosquito populations. Other factors that influence the decision to select pesticide applications include larval stage (instar), number of larvae, number of predators, presence of mosquito-borne disease in the region, abundance of mosquito species that vector the disease, positive dead bird information, climatic influences, presence of listed species, specialized habitats, and citizen based 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.**

Please see Attachment 2 for the list of products that may be used by CMAD for larval and adult control. This list is directly from Attachments E and F within the NPDES Permit for Biological and Residual Pesticide Discharges to Waters of the U.S. for Vector Control Applications. All of these products may be applied by ground (hand, truck, ATV, backpack, etc.) or by air (helicopter or fixed wing aircraft).

¹Statewide National Pollutant Discharge Elimination System (NPDES) Permit [Permit] for Biological and Residual Pesticide Discharges to Waters of the United States from Vector Control Applications. Water Quality Order No. 2011-0002-DWQ. General Permit No. CAG 990004. VIII: C (16-18). State Water Resources Control Board. 1001 "I" Street, Sacramento, CA 95814.

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.

*Defined in *Permit*. Attachment A – Definitions (A-2)

CMAD also coordinates with other Fresno County agencies to disperse public information and uses newspaper articles, radio spots, and our website www.mosquitobuzz.net to enhance communication alternatives. Public outreach may be limited by the number of residents receiving the education and the necessity to constantly remind the public of their responsibilities.

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

The need to apply product is determined by surveillance. Actual use varies annually depending on mosquito abundance. The pesticide amounts illustrated are the total of CMAD's 2011 applications, which include applications to waters of the USA. These amounts are representative of an estimate of pesticide use in 2012. Other public health pesticides in addition to those listed may be used as part of the District's best management practices.

Please see Attachment 3 for a list of all public health pesticides applied within the District during 2011.

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; and

Please see the *Best Management Practices for Mosquito Control in California* (p. 20).

Please also refer back to **Items 2 and 5** above.

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

CMAD's BMPs are described in **Item 2** above. Specific elements have been highlighted below under items **a-f**.

a. measures to prevent pesticide spill;

All pesticide applicators receive annual spill prevention and response training. Agency employees ensure daily that application equipment is in proper working order. Spill mitigation devices are placed in all vehicles and pesticide storage areas.

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

*Defined in *Permit*. Attachment C – Monitoring and Reporting Program (C-3)

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).

- 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 implementation of drip irrigation systems (as opposed to flood irrigation) has dramatically reduced the need for pesticide applications in farm habitats.

BMPs for urban settings include reminding homeowners to get rid of containers that accumulate water, encouraging people to dump/drain or maintain their ornamental ponds and other water features, and urging residents to report neglected swimming pools. These are done through the District's public outreach, surveillance, or when responding to service requests.

An example of a BMP for a wetland area is stocking the source with mosquito fish. Wetlands that retain water for lengthy periods are usually able to sustain fish populations that effectively reduce or eliminate mosquito breeding and preclude the need for pesticide application.

10. Identification of the problem. Prior to first pesticide application covered under this General Permit that will result in a discharge of biological and residual pesticides to waters of the US, and at least once each calendar year thereafter prior to the first pesticide application for that calendar year, the Discharger must do the following for each vector management area:

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

CMAD's personnel apply pesticides to sources of mosquitoes that represent threats to the health of humans, domestic animals, or wildlife or to overall 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:

- 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.

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

Please see **Item 2** 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 for Mosquito Control in California* and is discussed in **Item 2** above. 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 plant growth in ponds, ditches, and shallow 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.

CMAD follows an existing IVM program which includes practices described in **Item 2** above.

A "nuisance" is specifically defined in California Health and Safety Code (HSC) §2002(j). This definition allows vector control agencies to address situations where even a low number of vectors may pose a substantial threat to public health and quality of life. In practice, the definition of a "nuisance" is generally only part of a decision to apply pesticides to areas covered under this permit. As summarized in the *California Mosquito-borne Virus Surveillance and Response Plan*, the overall risk to the public when vectors and/or vector-borne disease are present is used to select an available and appropriate material, rate, and application method to address that risk in the context of our IVM program.

12. Correct Use of Pesticides

Coalition's or Discharger's use of pesticides must ensure that all reasonable precautions are taken to minimize the impacts caused by pesticide applications. Reasonable precautions include using the right spraying 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.

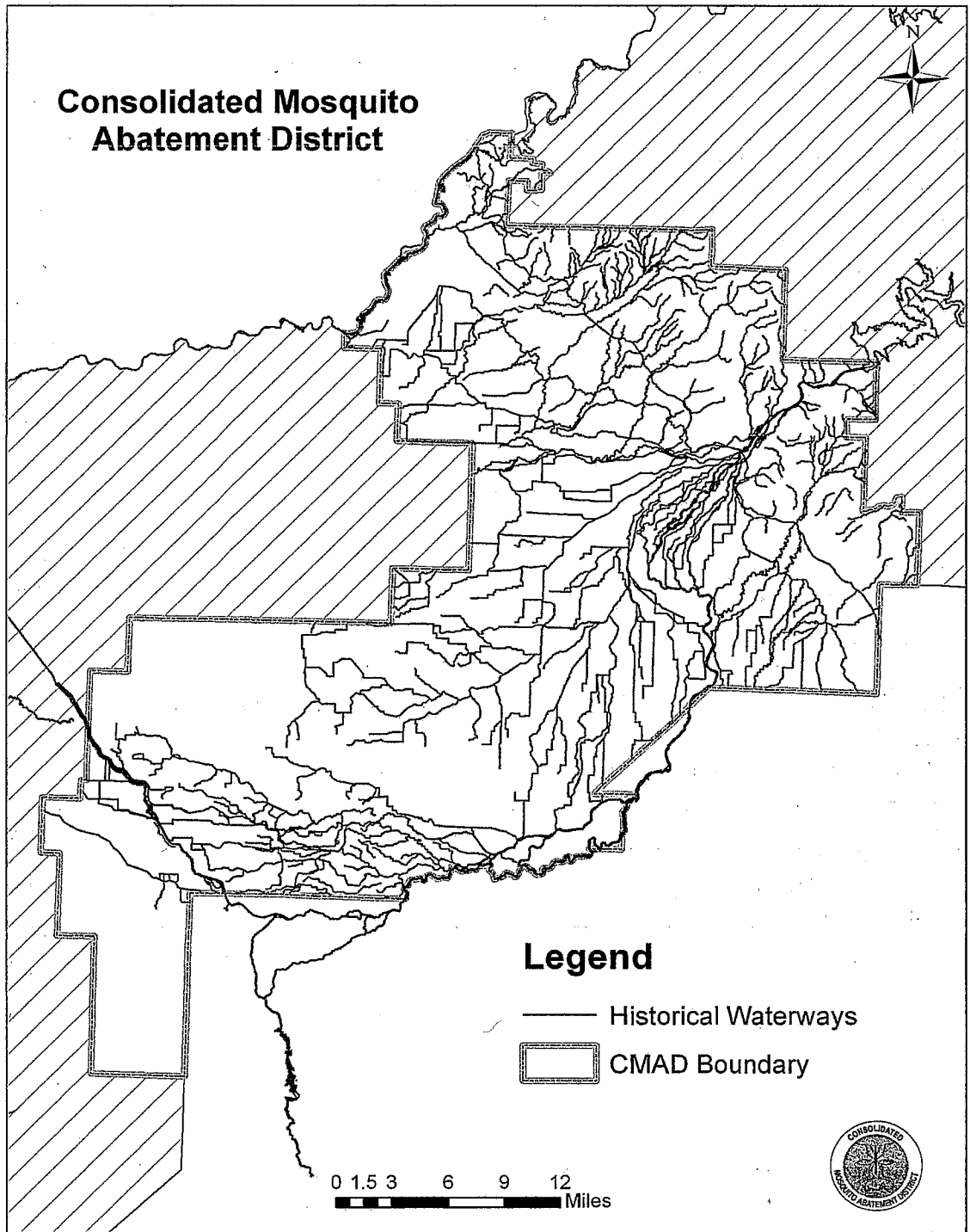
Please visit the CMAD website at www.mosquitobuzz.net.

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 1

MAP OF THE CONSOLIDATED MOSQUITO ABATEMENT DISTRICT



Attachment 2 (page 1)¹

LIST OF PERMITTED ADULTICIDE PRODUCTS

Product Name	Registration Number
Pyroicide Mosquito Adulticiding Concentrate for ULV Fogging 7395	1021-1570
Evergreen Crop Protection EC 60-6	1021-1770
Pyrenone Crop Spray	432-1033
Prentox Pyronyl Crop Spray	655-489
Pyroicide Mosquito Adulticiding Concentrate for ULV Fogging 7396	1021-1569
Aquahalt Water-Based Adulticide	1021-1803
Pyroicide Mosquito Adulticide 7453	1021-1803
Pyrenone 25-5 Public Health Insecticide	432-1050
Prentox Pyronyl Oil Concentrate #525	655-471
Prentox Pyronyl Oil Concentrate or 3610A	655-501
Permanone 31-66	432-1250
Kontrol 30-30 Concentrate	73748-5
Aqualuer 20-20	769-985
Aqua-Reslin	432-796
Aqua-Kontrol Concentrate	73748-1
Kontrol 4-4	73748-4
Biomist 4+12 ULV	8329-34
Permanone RTU 4%	432-1277
Prentox Perm-X UL 4-4	655-898
Allpro Evoluer 4-4 ULV	769-982
Biomist 4+4	8329-35
Kontrol 2-2	73748-3
Scourge Insecticide with Resmethrin/Piperonyl Butoxide 18%+54% MF Formula II	432-667
Scourge Insecticide with Resmethrin/Piperonyl Butoxide 4%+12% MF Formula II	432-716
Anvil 10+10 ULV	1021-1688
AquaANVIL Water-based Adulticide	1021-1807
Duet Dual-Action Adulticide	1021-1795
Anvil 2+2 ULV	1021-1687
Zenivex E20	2724-791
Trumpet EC Insecticide	5481-481
Fyfanon ULV Mosquito	67760-34

¹ Excerpted from General NPDES Permit for Biological and Residual Pesticide Discharges from Vector Control Applications (Attachment E – List of Permitted Adulticide Products)

Attachment 2 (page 2)¹

LIST OF PERMITTED LARVICIDE PRODUCTS:

Product Name	Registration Number
Vectolex CG Biological Larvicide	73049-20
Vectolex WDG Biological Larvicide	73049-57
Vectolex WSP Biological Larvicide	73049-20
Vectobac Technical Powder	73049-13
Vectobac-12 AS	73049-38
Aquabac 200G	62637-3
Teknar HP-D	73049-404
Vectobac-G Biological Mosquito Larvicide Granules	73049-10
Vectomax CG Biological Larvicide	73049-429
Vectomax WSP Biological Larvicide	73049-429
Vectomax G Biological Larvicide/Granules	73949-429
Zoecon Altosid Pellets	2724-448
Zoecon Altosid Pellets	2724-375
Zoecon Altosid Liquid Larvicide Mosquito Growth Regulator	2724-392
Zoecon Altosid XR Extended Residual Briquets	2724-421
Zoecon Altosid Liquid Larvicide Concentrate	2724-446
Zoecon Altosid XR-G	2724-451
Zoecon Altosid SBG Single Brood Granule	2724-489
Mosquito Larvicide GB-1111	8329-72
BVA 2 Mosquito Larvicide Oil	70589-1
BVA Spray 13	55206-2
Agnique MMF Mosquito Larvicide & Pupicide	53263-28
Agnique MMF G	53263-30
Abate 2-BG	8329-71
5% Skeeter Abate	8329-70
Natular 2EC	8329-82
Natular G	8329-80
Natular XRG	8329-83
Natular XRT	8329-84
FourStar Briquets	83362-3
FourStar SBG	85685-1
Aquabac xt	62637-1
Spheratax SPH (50 G) WSP	84268-2
Spheratax SPH (50 G)	84268-2

¹ Excerpted from General NPDES Permit for Biological and Residual Pesticide Discharges from Vector Control Applications (Attachment F – List of Permitted Larvicide Products)

Attachment 3

PUBLIC HEALTH PESTICIDE APPLICATIONS IN 2012

Pesticide	Manufacturer	EPA #	Amount	
Agnique MMF	Cognis Corporation	53263-28	23.87	gal
Agnique MMF G	Cognis Corporation	53263-30	409.13	lb
Altosid Liquid Larvicide	Wellmark International	2724-392	4.94	gal
Altosid Pellets WSP	Wellmark International	2724-448	662.77	lb
Altosid XR-G	Wellmark International	2724-451	98.00	lb
Anvil 10+10 ULV	Clarke Mosquito Control	1021-1688-8329	18.02	gal
Aqualuer 20-20	Value Garden Supply	769-985	1.18	gal
Aqua-Kontrol Concentrate	Univar USA, Inc.	73748-1	3.30	gal
BVA 2 Mosquito Larvicide Oil	BVA Oils	70589-1	10,827.99	gal
Duet Dual-Action Adulticide	Clarke Mosquito Control	1021-1795-8329	1.85	gal
Evergreen EC 60-6	MGK Company	1021-1770	1.33	gal
Fyfanon ULV	Cheminova, Inc.	67760-34	11.49	gal
Gowan Malathion 8	Gowan Company	10163-21	32.21	gal
Kontrol 4-4	Univar USA, Inc.	73748-4	14.33	gal
Natular 2EC	Clarke Mosquito Control	8329-82	6.80	gal
Natular G30	Clarke Mosquito Control	8329-83	76.06	lb
Pyrocide 7396	MGK Company	1021-1569	24.15	gal
Suspend SC	Bayer Environmental Science	432-763	1.79	gal
VectoBac 12AS	Valent BioSciences	73049-38	1,234.96	gal
VectoBac G	Valent BioSciences	73049-10	15,662.00	lb
VectoBac GS	Valent BioSciences	73049-10	4,625.00	lb
VectoBac TP	Valent BioSciences	73049-13	2,234.00	lb
VectoLex CG	Valent BioSciences	73049-20	650.00	lb
VectoLex WDG	Valent BioSciences	73049-57	32.00	lb
VectoLex WSP	Valent BioSciences	73049-20	480.39	lb
Zenivex E20	Wellmark International	2724-791	0.19	gal