

**RECEIVED**

**APR 28 2016**

**DIVISION OF WATER QUALITY**

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

**II. DISCHARGER INFORMATION**

A. Name Madera County Mosquito & Vector Control District			
B. Mailing Address 3105 Airport Drive			
C. City Madera	D. County Madera	E. State CA	F. Zip Code 93637
G. Contact Person Leonard Irby	H. Email address leoi_mnvcd@unwiredbb.com	I. Title Manager	J. Phone (559)662-8880

**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: Please see Attachment "A"  
Name of the conveyance system: \_\_\_\_\_
- 3. Directly to river, lake, creek, stream, bay, ocean, etc.  
Name of water body: Chowchilla, Fresno, San Joaquin River Systems and 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:  Vector Larvae       Adult Vector

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

Please see Attachment "B"

C. Period of Application: Start Date Jan. 1      End Date Dec. 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.

**VIII. FEE**

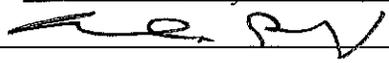
Have you included payment of the filing fee (for first-time enrollees only) with this submittal?

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:** Leonard Irby

B. **Signature:** 

**Date:** 04/21/2016

C. **Title:** Manager

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

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

# Attachment "A"

# Application Sites for Waters of US in Madera County 2016

Source	Owner
09-14-33-2000	COELHO GABRIEL O TRUSTEE ETAL
09-14-33-2001	COELHO GABRIEL O TRUSTEE ETAL
09-14-33-2002	COELHO GABRIEL O TRUSTEE ETAL
09-14-33-2003	COELHO GABRIEL O TRUSTEE ETAL
09-14-33-3000	COELHO GABRIEL O TRUSTEE ETAL
09-14-33-3001	ANTONIO RANCH
09-15-23-1000	DE JAGER EDWARD & COBI TRUSTEE
09-15-23-1001	GRAY EDWARD W & SHARON H TR
09-15-23-1002	CHOWCHILLA WATER DISTRICT
09-15-23-1003	HERMAN RICHARD & LINDA L
09-15-23-1004	SOUTH VALLEY INVESTORS LLC
09-15-23-1005	CHOWCHILLA WATER DISTRICT
11-17-13-7101	Drain #101
11-17-13-7102	Drain #102
11-17-13-7103	Drain #103
11-17-13-7104	Drain #104
11-17-13-7105	Drain #105
11-17-13-7106	Drain #106
11-17-13-7107	Drain #107
11-17-13-7108	Drain #108
11-17-13-7109	Drain #109
11-17-13-7110	Drain #110
11-17-13-7111	Drain #111
11-17-13-7112	Drain #112
11-17-13-7113	Drain #113
11-17-13-7114	Drain #114
11-17-13-7115	Drain #115

<i>Source</i>	<i>Owner</i>
11-17-13-7116	Drain #116
11-17-13-7117	Drain #117
11-17-13-7118	Drain #118
11-17-13-7119	Drain #119
11-17-13-7120	Drain #120
11-17-13-7121	Drain #121
11-17-13-7122	Drain #122
11-17-13-7123	Drain #123
11-17-13-7124	Drain #124
11-17-13-7125	Drain #125
11-17-13-7126	Drain #126
11-17-13-7127	Drain #127
11-17-13-7128	Drain #128
11-17-13-7129	Drain #129
11-17-13-7130	Drain #130
11-17-13-7131	Drain #131
11-17-13-7132	Drain #132
11-17-13-7133	Drain #133
11-17-13-7134	Drain #134
11-17-13-7135	Drain #135
11-17-13-7136	Drain #136
11-17-13-7137	Drain #137
11-17-13-7138	Drain #138
11-17-13-7139	Drain #139
11-17-13-7140	Drain #140
11-17-13-7141	Drain #141
11-17-13-7142	Drain #142
11-17-13-7143	Drain #143
11-17-14-7081	Drain #81

<i>Source</i>	<i>Owner</i>
11-17-14-7082	Drain #82
11-17-14-7083	Drain #83
11-17-14-7084	Drain #84
11-17-14-7085	Drain #85
11-17-14-7086	Drain #86
11-17-14-7087	Drain #87
11-17-14-7088	Drain #88
11-17-14-7089	Drain #89
11-17-14-7090	Drain #90
11-17-14-7091	Drain #91
11-17-14-7092	Drain #92
11-17-14-7093	Drain #93
11-17-14-7094	Drain #94
11-17-15-7061	Drain #61
11-17-15-7062	Drain #62
11-17-15-7063	Drain #63
11-17-15-7064	Drain #64
11-17-15-7065	Drain #65
11-17-15-7066	Drain #66
11-17-15-7067	Drain #67
11-17-15-7068	Drain #68
11-17-15-7069	Drain #69
11-17-15-7070	Drain #70
11-17-15-7071	Drain #71
11-17-15-7072	Drain #72
11-17-15-7073	Drain #73
11-17-15-7074	Drain #74
11-17-15-7075	Drain #75
11-17-15-7076	Drain #76

<i>Source</i>	<i>Owner</i>
11-17-22-7001	Drain #1
11-17-22-7002	Drain #2
11-17-22-7003	Drain #3
11-17-22-7004	Drain #4
11-17-22-7005	Drain #5
11-17-22-7006	Drain #6
11-17-22-7007	Drain #7
11-17-22-7008	Drain #8
11-17-22-7009	Drain #9
11-17-22-7010	Drain #10
11-17-22-7011	Drain #11
11-17-22-7012	Drain #12
11-17-23-7051	Drain #51
11-17-23-7052	Drain #52
11-17-23-7053	Drain #53
11-17-23-7054	Drain #54
11-17-23-7055	Drain #55
11-17-23-7056	Drain #56
11-17-23-7057	Drain #57
11-17-23-7058	Drain #58
11-17-23-7263	Drain #263
11-17-24-7151	Drain #151
11-17-24-7152	Drain #152
11-17-24-7153	Drain #153
11-17-24-7154	Drain #154
11-17-24-7155	Drain #155
11-17-24-7156	Drain #156
11-17-24-7157	Drain #157
11-17-24-7158	Drain #158

<i>Source</i>	<i>Owner</i>
11-17-24-7159	Drain #159
11-17-24-7161	Drain #161
11-17-24-7162	Drain #162
11-17-24-7163	Drain #163
11-17-24-7164	Drain #164
11-17-24-7165	Drain #165
11-17-24-7166	Drain #166
11-17-24-7167	Drain #167
11-17-24-7168	Drain #168
11-17-24-7169	Drain #169
11-17-24-7170	Drain #170
11-17-24-7171	Drain #171
11-17-24-7172	Drain #172
11-17-24-7173	Drain #173
11-17-24-7174	Drain #174
11-17-24-7175	Drain #175
11-17-24-7176	Drain #176
11-17-24-7177	Drain #177
11-17-24-7178	Drain #178
11-17-24-7179	Drain #179
11-17-24-7180	Drain #180
11-17-24-7181	Drain #181
11-17-24-7182	Drain #182
11-17-24-7183	Drain #183
11-17-24-7184	Drain #184
11-17-24-7185	Drain #185
11-17-24-7186	Drain #186
11-17-24-7187	Drain #187
11-17-24-7188	Drain #188

<i>Source</i>	<i>Owner</i>
11-17-24-7189	Drain #189
11-17-24-7190	Drain #190
11-17-24-7191	Drain #191
11-17-24-7192	Drain #192
11-17-24-7193	Drain #193
11-17-24-7194	Drain #194
11-17-24-7195	Drain #195
11-17-24-7196	Drain #196
11-17-24-7197	Drain #197
11-17-24-7198	Drain #198
11-17-24-7199	Drain #199
11-17-24-7200	Drain #200
11-17-24-7201	Drain #201
11-17-24-7262	Drain #262
11-18-08-2002	FISCHER CAL & LAURENE JILL TR
11-18-18-7250	Drain #250
11-18-18-7251	Drain #251
11-18-18-7252	Drain #252
11-18-18-7253	Drain #253
11-18-18-7254	Drain #254
11-18-18-7255	Drain #255
11-18-18-7256	Drain #256
11-18-18-7257	Drain #257
11-18-18-7258	Drain #258
11-18-18-7259	Drain #259
11-18-18-7260	Drain #260
11-18-18-7261	Drain #261
11-19-28-2003	MOOSIOS
12-14-15-4000	FRUSETTA ROBERT M ETAL

<i>Source</i>	<i>Owner</i>
12-14-22-4002	FANCHER PATRICK H & FANCHER MARK C TR
12-14-27-2003	COLUMBIA CANAL CO
12-14-27-3008	ANTONIO DANNY & DOMINGA TRUSTEE
12-14-28-5120	SAN JOAQUIN RIVER
12-19-25-5120	FRESNO COUNTY BOARD OF EDUCATION
12-19-28-1003	ANDERSON MERLE W & ESTHER H
12-19-28-2000	MOOSIOS RIVER RANCH
12-19-31-1004	BORBA FARMS INC
12-19-31-3005	BORBA FARMS INC
12-19-31-3006	BORBA FARMS INC
12-19-31-3007	BORBA FARMS INC
12-20-03-2001	GUNNER RICHARD V & MARGARET S TR
12-20-20-2000	COBB II
12-20-21-3000	COBB II
12-20-21-4003	COBB II
12-20-21-4004	COBB II
12-20-21-4005	COBB II
12-20-21-4006	COBB II
12-20-21-4007	COBB II
13-15-11-4002	PARAMOUNT LAND COMPANY LLC

# Attachment "B"

**Madera County Mosquito and Vector Control District  
NPDES Pesticide Application Plan  
3105 Airport Dr.  
Madera, CA 93637  
(559) 662-8880**

The NPDES Permit requires a Pesticides Application Plan (PAP) that contains the following elements:

a. **Description of the target area and adjacent areas, if different from the water body of the target area;**  
Our boundaries are provided on attachment A. However no impacted areas exist in Madera County.

b. **Discussion of the factors influencing the decision to select pesticide applications for mosquito control;**  
Please see the Best Management Practices for Mosquito Control in California

c. **Type(s) of pesticides used, the method in which they are applied, and if applicable, the adjuvants and surfactants used;**  
Please see the Best Management Practices for Mosquito Control in California

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

Any site that holds water for more than 96 hours (4 days) can produce mosquitoes. Source reduction is the District's preferred solution, and whenever possible the District works with property owners to effect long-term solutions to reduce or eliminate the need for continued applications as described in Best Management Practices for Mosquito Control in California. The typical sources treated by this District include: Dairy Lagoons, irrigated pastures, tires, swimming pools, seepage, flood control basins, non-tilled vines, row crops, tree crops, storm drains, horse troughs, water features i.e. fountains, underground sewage systems, septic tanks, sewer farms, gutters, potentially any aquatic site.

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

With any mosquito or other vector source, the District's first goal is to look for ways to eliminate the source, or, if that is not possible, for ways to reduce the vector potential. The most commonly used methods and their limitations are included in the Best Management Practices for Mosquito Control in California. Specific methods include stocking the forementioned sources with mosquito fish (*gambusia affinis*) we hold public relation events in order to educate the public. We educate the people to remove the standing water and

encourage good water practices and find long term water management strategies that meet their needs while minimizing our spray efforts.

- f. Approximately how much product is anticipated to be used and how this amount was determined.

We anticipate (depending upon mosquito & virus activity) using the following chemicals listed below in the 2015 mosquito season. These numbers are based on the 2015 Agricultural Commissioner's report. We then forecasted what we will need again for the 2016 season. This year we anticipate rotating in a few new products which have also been listed below. The listed chemicals are in pounds of active ingredient (AI) AI + inerts. This list may vary in amounts or chemicals based on virus activity.

<b>Chem name</b>	<b>MFG</b>	<b>amount</b>	<b>epa #</b>
BVA II	BVA	12000 gallons	70589-1
Altosid (xr,wsp)	Zoecon	250 pounds	2724-448, 2724-421
Vectolex WSP	Valent Biosciences	250 pounds	73049-20
Vectolex WDG	Valent Biosciences	32 pounds	73049-47
Vectobac G	Valent Biosciences	1600 pounds	73049-10
Natular (xrt, G)	Clarke	250 pounds	8329-84, 8329-80
Vectolex CG	Valent Biosciences	640 pounds	73049-20
AquaHalt	Clarke	55 gal	1021-1803-8329
Pyrocide 7395	Adapco	10 gal	1021-1770
Demand CS	Prentis	1.5 gal	70589-1
AquaAnvil		55 gal	
Vectobac 12as	Valent	2200 gal	73049-38
Pyronyl crop spray	Prentyx	1 gal	655-489
Evergreen	MGK	30 gal	1021-17-70
Aquabac 200g		1500 lbs	
CoCo Bear		2000 gal	
Fourstar		250 lbs	
Kontrol 4-4		55 gal	

<b>Merus</b>		<b>50 gal</b>	
<b>Mineral Oil</b>		<b>55 gal</b>	
<b>Natular 2EC</b>		<b>25 gal</b>	
<b>Natular T30</b>		<b>250 lbs</b>	
<b>Pyrocide 7067</b>		<b>55 gal</b>	
<b>Spheratax WSP</b>		<b>200 lbs</b>	
<b>Spheratax 50g</b>		<b>200 lbs</b>	
<b>Vectobac WDG</b>		<b>250 lbs</b>	

**g. Representative monitoring locations\* and the justification for selecting these monitoring locations**

Please see the MVCAC NPDES Coalition Monitoring Plan

**h. 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

**i. Description of the BMPs to be implemented**

Please see the Best Management Practices for Mosquito Control in California

**2. The Discharger shall update the PAP periodically and submit the revised PAP to the State Water Board for approval if there are any changes to the original PAP.**

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

The Discharger shall develop BMPs that contain the following elements:

The District's BMPs are described in the Best Management Practices for Mosquito Control in California and the California Mosquito-borne Virus Surveillance and Response Plan.

**1. Identify the Problem**

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

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

Only those mosquito sources that District staff determine to represent imminent threats to public health or quality of life are treated. The presence of any mosquito may necessitate treatment, however higher thresholds may be applied depending on the District's resources, disease activity, or local needs. Treatment thresholds are based on a combination of one or more of the following criteria:

- Mosquito species present
- Mosquito stage of development
- Pest, nuisance, or disease potential
- Disease activity
- Mosquito abundance
- Flight range
- Proximity to populated areas
- Size of source
- Presence/absence of natural enemies or predators
- Presence of sensitive/endangered species or habitats.

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

Please see the Best Management Practices for Mosquito Control in California and the California Mosquito-borne Virus Surveillance and Response Plan.

**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 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 is included in the Best Management Practices for Mosquito Control in California and the California Mosquito-borne Virus Surveillance and Response Plan that the Districts uses. The district has a surveillance department where we continuously collect and process mosquito larvae and adults. We have used sentinel chickens in the past, this year we will end the program. Testing mosquitoes and birds for virus is much more accurate and timely. We use dead birds and mosquito surveillance data to direct our mosquito control efforts. We also use source reduction techniques to help detour mosquito breeding.

## **2. Examine the Possibility of Alternatives to Treatments**

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

- a. Evaluating management and treatment options that may impact water quality, non-target organisms, vector resistance, feasibility, and cost effectiveness, such as:
  - No action
  - Source prevention
  - Mechanical or physical source reduction methods
  - Cultural methods
  - Biological control agents
  - Pesticides
- b. Applying pesticides only when vectors are present at a level that will constitute a nuisance or threat to public health
- c. Using the least intrusive method of pesticide application.
- d. Public education efforts to reduce potential vector breeding habitat.
- e. Applying a decision matrix concept to the choice of the most appropriate formulation.

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

## **3. Correct Use of Pesticides**

Users of pesticides must ensure that all reasonable precautions are taken to minimize the impacts caused by pesticide applications. Reasonable precautions include using the proper spraying techniques and equipment, taking account of weather conditions and the need to protect the environment.

- a. All errors in application and spills are reported to the proper authority.
- b. Staff training in the proper application of pesticides and handling of spills.

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

## **E. Pesticide Application Log**

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

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

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

**References:**

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

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

MVCAC NPDES Coalition Monitoring Plan. [In development at the time of this draft]

# Madera County Mosquito and Vector Control District

