

RECEIVED

MAR 15 2011

ATTACHMENT G – NOTICE OF INTENT

WATER QUALITY ORDER NO. 2011-XXXX-DWQ
GENERAL PERMIT NO. CAG XXXXXX

DIVISION OF WATER QUALITY

STATEWIDE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
FOR RESIDUAL PESTICIDE DISCHARGES TO WATERS OF THE UNITED STATES
FROM MOSQUITO CONTROL APPLICATIONS

I. NOTICE OF INTENT STATUS (see Instructions)

Mark only one item A. New Applicator B. Change of Information: WDID# _____
 C. Change of ownership or responsibility: WDID# _____

II. DISCHARGER INFORMATION

A. Name NORTHERN SALINAS VALLEY MOSQUITO ABATEMENT DISTRICT			
B. Mailing Address 342 AIRPORT BOULEVARD			
C. City SALINAS	D. County MONTEREY	E. State CA	F. Zip 93905
G. Contact Person DENNIS D. BORONDA	H. Email address dborondansvmad@yahoo.com	I. Title Manager- Biologist	J. Phone (831) 422-6438

III. BILLING ADDRESS (Enter Information only if different from Section II above)

A. Name			
B. Mailing Address Same			
C. City	D. County	E. State	F. Zip
G. Email address	H. Title	I. Phone	

3/11/2011

IV. RECEIVING WATER INFORMATION

A. Pesticide residues 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: MONTEREY COUNTY WATER RESOURCES AGENCY
Name of the conveyance system: RECLAMATION DITCH 1665

3. Directly to river, lake, creek, stream, bay, ocean, etc.
 Name of water body: SALINAS RIVER AND ELKHORN SLOUGH

B. Regional Water Quality Control Board(s) where application areas are located
(REGION 1, 2, 3, 4, 5, 6, 7, 8, or 9): Region 3 (CENTRAL COAST REGION)
(List all regions where pesticide application is proposed.)

V. PESTICIDE APPLICATION INFORMATION

A. Target Organisms: Mosquito Larvae Adult Mosquito

B. Pesticides Used: List Name and Active ingredients
SEE ATTACHMENT - "TABLE 1"

C. Period of Application: Start Date JANUARY 1ST End Date DECEMBER 31ST

D. Types of Adjuvants Used:
IMPED

VI. PESTICIDES APPLICATION PLAN

Has a Pesticides Application Plan been prepared and is the applicator familiar with its contents?
 Yes No

If not, when will it be prepared? _____

VII. NOTIFICATION

Have potentially affected public and governmental agencies been notified? YES NO

VIII. FEE

Have you included payment of the filing fee (for first-time enrollees only) with this submittal? ...
 YES NO NA

TEMPORARY ORDER

3/11/2011

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: DENNIS D. BORONDA

B. Signature: *Dennis D. Boronda*

Date: 3-11-11

C. Title: MANAGER-BIOLOGIST

MARCH 11, 2011

X. FOR REGIONAL WATER BOARD USE ONLY

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

TENTATIVE ORDER

Northern Salinas Valley Mosquito Abatement District Pesticide Application Plan

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; See attached map Table 2.** The target area is potentially any fresh or brackish water within the boundaries of the Northern Salinas Valley Mosquito Abatement District (NSVMAD). These are still or standing water sites, permanent or temporary, natural or man-made, that may or may not have potential inflow or outflow, wetland or wildlife values. A majority of these sites are attractive to mosquitoes by flooding, natural event, artificial means or be subject to high organic nutrient load and reduced animal and plant diversity. Within this area there are also discrete artificial and natural containers that breed mosquitoes.

- 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 (See References)

- 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 (See References)

- 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 NSVMAD's preferred solution, and whenever possible the NSVMAD 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 the NSVMAD include: Elkhorn Slough, Salinas River, wet lands, creeks, ponds, street gutters and catch basins, green swimming pools, rain gutters, old tires and other containers around homes.

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

With any mosquito or other vector source, the NSVMAD'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. (See References)

Specific methods used by the NSVMAD include stocking mosquito fish (*Gambusia Affinis*), education 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. To do this we utilize heavy equipment to maintain waterways by: cleaning out obstructions, mowing vegetation and using herbicides to prevent mosquito production. The NSVMAD also reviews development plans that create, restore or affect wetlands or storm water BMP's to evaluate and consult on their vector potential.

- f. **Approximately how much product is anticipated to be used and how this amount was determined; Below is the NSVMAD's anticipated mosquitocide use for 2011 year.** The amounts listed were based in part upon reported useage in 2010.
- g. (See Table 1')

- h. **Representative monitoring locations* and the justification for selecting these monitoring locations**
Please see the MVCAC NPDES Coalition Monitoring Plan (See References).

- i. **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 (See References)

- j. **Description of the BMPs to be implemented**
Please see the Best Management Practices for Mosquito Control in California (See References)

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. (See References)

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. (See References)

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. (See References)

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 District uses. The District continually collects adult and larval mosquito surveillance data, dead bird reports, and sentinel chicken test results and uses them to guide mosquito control activities.

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. (See References)

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 and pesticide labels are reviewed and strictly adhered to.

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 by download from the California Department of Public Health—Vector-Borne Disease Section at <http://www.cdph.ca.gov/HealthInfo/discond/Pages/MosquitoBorneDiseases.aspx> or <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 Northern Salinas Valley Mosquito Abatement District at 831-422-6438.

California Mosquito-borne Virus Surveillance and Response Plan. 2010. [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.cdph.ca.gov/HealthInfo/discond/Pages/MosquitoBorneDiseases.aspx> or <http://www.westnile.ca.gov/resources.php> under the heading Response Plans and Guidelines. Copies may be also requested by calling the California Department of Public Health—Vector-Borne Disease Section at (916) 552-9730 or the Northern Salinas Valley Mosquito Abatement District at 831-422-6438 MVCAC NPDES Coalition Monitoring Plan, 2011 will be with URS and available by April 9th, 2011 on the Mosquito & Vector Control Association of California web sit: <http://www.mvcac.org/> prepared by MVCAC with assistance from URS <http://urscorp.com/Mrkets/index.php?s=16>

TABLE 1

NSVMAD'S PROJECTED MOSQUITOCIDE USEAGE - 2011

Below is the NSVMAD's anticipated mosquitocide use for 2011 year. The amounts listed were based in part upon reported useage in 2010.

<u>AMOUNT</u>	<u>EPA#</u>	<u>MFG./PRODUCT</u>	<u>ACTIVE INGREDIENTS</u>
15 gals.	2302-14	Henkel-Agnique	isostearyl alcohol ethoxylate
210 gals.	73049-404	Valent-Teknar HP-D	<i>Bacillus thuringiensis israelensis</i>
10,000 lbs.	73049-10	Valent-Vectobac G	<i>Bacillus thuringiensis israelensis</i>
125 lbs.	73049-20	Valent-Vectolex CG	<i>Bacillus thuringiensis israelensis</i>
1,800 lbs.	2724-489	Zoecon-Altosid SBG	<i>s-Methoprene</i>
14 gals.	2724-392	Zoecon-Altosid ALL-SR5	<i>s-Methoprene</i>
1 gal.	2724-421	Zoecon-Altoside XR	<i>s-Methoprene</i>
10,000 lbs.	8329-80	Clarke-Natular G	<i>spinoside A & D</i>
600 lbs.	8329-83	Clarke-Natular XRG	<i>spinoside</i>
500 gals.	70589-1	Clarke-BVA 2	highly refined petroleum distillate
2 gals.	73748-4	Masterline-Kontrol 4-4	permetherin & piperonyl butoxide technical

TABLE 1

TABLE 2

The yellow area shows 458 sq. miles within NSVMAD boundaries of Monterey County. Hundreds of mosquito breeding sources found could drain into major receiving waters of the U.S. that flow into Monterey Bay (Salinas River, Elkhorn Slough, Moro Cojo Slough and Reclamation Ditch 1665).

