County of Santa Clara
Department of Environmental Health

Vector Control District
1580 Berger Drive
San Jose, California 95112
(408) 918-4770 FAX 298-6356

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MAR 17 2011
DIVISION OF WATER QUALITY

March 8, 2011

Philip Isorena
NPDES Wastewater Unit, 15th Floor
State Water Resources Control Board
1001 I Street, Sacramento, CA 95814

SUBJECT: NOTICE OF INTENT TO COMPLY WITH WATER QUALITY ORDER NO. 2011-XXXX-DWQ.

Dear Madame/Sir:

The Santa Clara County Vector Control District is submitting a Notice of Intent and supporting documentation with the intent to comply with the provision of the General Permit No. CAGXXXXXX. This packet contains the following enclosures: (1) a completed NOI (2) a check for $136 application fee, (3) the Vicinity Map of Santa Clara County, (4) the List of Aquatic Pesticides used by Santa Clara County, (5) the Statement of Best Management Practices for Mosquito Control in California and (6) California Mosquito-Borne Virus Response Plan. The Santa Clara County Vector Control District has joined the MVCAC Coalition and will be adopting the Coalition Monitoring and Reporting Plan. Copies of this NOI and supporting documentation have been submitted to the San Francisco Bay and Central Coast Region Water Quality Control Boards (Regions 2 and 3).

While the Santa Clara County Vector Control District is divided between Water Board Regions 2 and 3, the vast majority of aquatic pesticide applications occur within Region 2. Thus we are requesting that the San Francisco Bay Regional Water Quality Control Board act as lead agency for our NPDES Permit.

If you have any questions regarding any aspect of this application, please do not hesitate to give me a call or e-mail.

Sincerely,

Noor S. Tietze, Ph.D.
Scientific-Technical Services Manager
(408) 918-3482 noor.tietze@deh.sccgov.org

Linda S. Adams
Secretary for
Environmental Protection

State Water Resources Control Board

Division of Water Quality
1001 I Street • Sacramento, California 95814 • (916) 341-5455
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FAX (916) 341-5463 • http://www.waterboards.ca.gov

Arnold Schwarzenegger
Governor

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NOTICE OF INTENT

TO COMPLY WITH THE TERMS OF WATER QUALITY ORDER NO. 2004-0008-DWQ STATEWIDE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FOR DISCHARGES OF AQUATIC PESTICIDES TO SURFACE WATERS OF THE UNITED STATES FOR VECTOR CONTROL GENERAL PERMIT NO. CAG990004

I. NOTICE OF INTENT STATUS (See Instructions)

MARK ONLY ONE ITEM 1☒ New Applicator 2.☐ Change of Information for WDID#

II. PESTICIDE APPLICATOR INFORMATION

A. Name/Agency
Santa Clara County Vector Control District

B. Mailing Address
Santa Clara County-Vector Control District
1580 Berger Drive, San Jose, CA 95112

C. City	D. County	E. State	F. Zip
San Jose	Santa Clara County	California	95112

G. Contact Person	H. Title	I. Phone
Russ Parman	Acting Manager	(408) 918-4770

III. RECEIVING WATER INFORMATION

A. Provide a description of the types of waters of the United States that are usual treatment areas for potential vector control:

Any waters within Santa Clara County - see Appendix A for list of types of waters

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

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C. Name of receiving water(s): (river, lake, creek, stream, bay, ocean):
Major receiving waters include the south San Francisco Bay, Guadelupe Creek, Coyote Creek and Uvas Creek.

IV. PESTICIDE APPLICATION INFORMATION

A. Target Organism: _X_ Mosquito _X_ Black Fly _X_ Biting Midge

_X_ OTHER (identify): Chironomid midges

B. Aquatic Pesticides Used: List Name and Active ingredients:
See Appendix B - Pesticides used by Santa Clara County Vector Control District 2010

C. Period of Application: Start Date April 9, 2011 End Date _____

D. Types of Adjuvants Used: _____

V. VICINITY MAP AND FEE

A. Have you included vicinity map(s) with this submittal? ..... YES☒ NO☐
Separate vicinity maps must be submitted for each Region where a proposed discharge will occur.

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

VI. MONITORING AND REPORTING REQUIREMENTS

This permit includes a requirement to develop and implement an Individual Pesticide Monitoring Plan or participate in a Regional Pesticide Monitoring Program. Check the applicable Box or Boxes.

I will develop an Individual Pesticide Monitoring Plan in accordance with the permit requirements ..... ☐

I will participate in a Regional Pesticide Monitoring Program developed in accordance with the Permit requirements ..... ☒

VII. 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 permit, including developing and implementing a monitoring program, will be complied with."

A. Printed Name: Russ Parman

B. Signature: [signature] **Date:** 3/15/11

C. Title: Acting District Manager

VIII. FORM A SUBMITTAL INFORMATION

Send the completed and signed form A along with the filing fee, supporting documentation, and vicinity map(s) to the appropriate Regional Board.

X

Santa Clara County Vector Control 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 Vicinity Map of Santa Clara County where Proposed Discharge may occur.

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
Please see Appendix B. Pesticides used by Santa Clara County Vector Control District during 2010.

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:
See Appendix A. Types of typical treatment areas for vector Control

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 used by the District include stocking 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.

f. **Approximately how much product is anticipated to be used and how this amount was determined**
Please see Appendix B. Pesticides used by Santa Clara County Vector Control District during 2010.

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 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.

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 spray technique 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]

Appendix A. Types of typical treatment areas for vector control.

Bird Bath
BMP
Borrow Pit
Catch Basin
Cemetery Urn
Cemetery vases
Channel
Commercial
Container
Creek
Curbs
Diked Marsh
Drain
Duck Pond
Fish Pond
Flood Basement
Flooded Area
FW Marsh
Gravel Pit
Impound
Lake
Lawn
Leaking Pipe
Lift Station
Neglected Pool
Ornamental Pond
Park
Pasture
Pond
Porous pavement
Residential
Salt Marsh
School
Seepage
Sewer 2ndary Tr
Sewer Clarifier
Sewer Lines
Sewer Pond
Sewer Primary
Sewer Undergnd
Stock Pond
Sump
Tail Water
Tank
Treehole
Unoccupied NP
Utility Vault
Vegetated Swal
Watering Trough
Well

Appendix B. Pesticides used by Santa Clara County Vector Control District during 2010.

Name	Amount	Units	EPA Registration No.
Aerosurf M.S.F.	0.031	gals	42943-8
Agnique MMF	4.61	gals	53263-28
AGNIQUE MMF G	156.42	lbs	53263-30
Altosid Briquets 30	19.71	lbs	2724-375-50809
Altosid Liquid Larvi	2	gals	2724-392-64833
Altosid Liquid SR20	3.125	gals	2724-446
Altosid Pellets	1	lbs	2724-448
Altosid WSP	1.1	lbs	2724-489
Altosid XR Briquets	125.82	lbs	2724-375-64833
Altosid XR-G	322.80	lbs	37254-451
BVA 2 Mosquito Larvi	0.099	gals	70589-1
Fourstar 180 briq	53.48	lbs	83362-3
Fourstar 45 briq	1.72	lbs	83362-3
Fourstar 90 briq	16.61	lbs	83362-3
Golden Bear 1111 Oil	32.54	gals	8898-16
Summit B.T.I. Brique	1.44	lbs	6218-47
Pyrenone 25-5	44.62	gals	432-1050
Vectobac 12AS	272.70	gals	73049-38
Vectobac G	3306.68	lbs	73049-10
Vectolex CG	460.83	lbs	73049-20
Vectolex WDG	0.062	lbs	73049-57
Vectolex WSP	2.76	lbs	73049-20
Vectomax CG	142.58	lbs	73049-429

Vicinity Map of Santa Clara County where proposed discharge may occur