



**SAN MATEO COUNTY  
MOSQUITO & VECTOR  
CONTROL DISTRICT**

*Protecting public health since 1916*

1351 Rollins Road  
Burlingame, CA 94010

phone (650) 344-8592  
fax (650) 344-3843

[www.smcmvcd.org](http://www.smcmvcd.org)

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**May 13, 2016**

**State Water Resources Control Board Attention: Gil Vazquez  
c/o NPDES Wastewater Unit 1001 I Street, 151h Floor Sacramento, CA 95814**

**Re: NPDES Permit Application for Vector Control Operations**

**Dear Mr. Vazquez,**

**Please find enclosed our Notice of Intent, Pesticide Application Plan, and permit fee of \$241 for coverage under the NPDES vector control permit. Please contact our office with any questions you may have.**

**Sincerely,**

**Chindi Peavey  
District Manager**

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**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# <u>241AP00018</u>	

**II. DISCHARGER INFORMATION**

A. Name <u>San Mateo County Mosquito and Vector Control</u>			
B. Mailing Address <u>1351 Rollins Rd</u>			
C. City <u>Burlingame</u>	D. County <u>San Mateo</u>	E. State <u>CA</u>	F. Zip Code <u>94010</u>
G. Contact Person <u>Chindi Peavey</u>	H. Email address <u>cpeavey@smvmd.org</u>	I. Title <u>Manager</u>	J. Phone <u>650 344-8592</u>

**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: See Attachment A  
Name of the conveyance system: Systems within San Mateo County
- 3. Directly to river, lake, creek, stream, bay, ocean, etc.  
Name of water body: See Attachment A and B

\* 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 2  
(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 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?\*

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

*Sent through Draft PEIR 2015*

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

*See attached list C*

**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: Chindi Peavey

B. Signature: Chindi Peavey

Date: 5/12/16

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 #:

<b>Business Name</b>	<b>Agency</b>
Town of Atherton	Atherton Building Department
Town of Atherton	Atherton City Manager/City Clerk
Town of Atherton	Atherton Library
Town of Atherton	Atherton Mayor
Town of Atherton	Atherton Parks Department
Town of Atherton	Atherton Planning Department
Town of Atherton	Atherton Police Department
Town of Atherton	Atherton Public Works
Town of Atherton	Atherton/Menlo Fire Department
Bay Area Air Quality Management District	Bay Area Air Quality Management District
Bay Area Water Supply and Conservation Agency	Bay Area Water Supply and Conservation Agency
City of Belmont	Belmont City Clerk
City of Belmont	Belmont City Manager
City of Belmont	Belmont Community Development
City of Belmont	Belmont Fire Department
City of Belmont	Belmont Human Resources
City of Belmont	Belmont Mayor
City of Belmont	Belmont Parks & Recreation
City of Belmont	Belmont Police Department
City of Belmont	Belmont Public Works
City of Brisbane	Brisbane City Clerk
City of Brisbane	Brisbane City Manager
City of Brisbane	Brisbane Fire Department
City of Brisbane	Brisbane Marina
City of Brisbane	Brisbane Mayor
City of Brisbane	Brisbane Parks & Recreation
City of Brisbane	Brisbane Planning Department
City of Brisbane	Brisbane Police Department
City of Brisbane	Brisbane Public Works
Bureau of Land Management	Bureau of Land Management
Bureau of Reclamation	Bureau of Reclamation
City of Burlingame	Burlingame City Manager
City of Burlingame	Burlingame Community Develop.
City of Burlingame	Burlingame Fire Department
City of Burlingame	Burlingame Human Resources
City of Burlingame	Burlingame Library
City of Burlingame	Burlingame Mayor
City of Burlingame	Burlingame Parks & Recreation
City of Burlingame	Burlingame Police Department
City of Burlingame	Burlingame Public Works
California Air Resources Board	California Air Resources Board
California Bay-Delta Authority c/o Calfed Bay-Delta Program	California Bay-Delta Authority c/o Calfed Bay-Delta Program
California Coastal Commission	California Coastal Commission
California Department of Fish and Wildlife	California Department of Fish and Wildlife
California Department of Fish and Wildlife	California Department of Fish and Wildlife
California Department of Food and Agriculture	California Department of Food and Agriculture
California Department of Health Services	California Department of Health Services
California Department of Parks & Recreation	California Department of Parks & Recreation
California Department of Pesticide Regulation	California Department of Pesticide Regulation
California Department of Public Health	California Department of Public Health

California Department of Toxic Substances Control	California Department of Toxic Substances Control
California Department of Transportation	California Department of Transportation
California Department of Water Resources	California Department of Water Resources
California Division of Forestry and Fire Protection (CAL FIRE)	California Division of Forestry (CAL FIRE)
California Environmental Resources Evaluation System	California Environmental Resources Evaluation System
CHP Headquarters	California Highway Patrol
California Native American Heritage Commission	California Native American Heritage Commission
California Natural Resources Agency	California Natural Resources Agency
Office of Historic Preservation	California Office of Historic Preservation
California State Coastal Conservancy	California State Coastal Conservancy
California State Lands Commission	California State Lands Commission
California Stormwater Quality Association	California Stormwater Quality Association
City and County of San Francisco	City and County of San Francisco
Coastside Land Trust	Coastside Land Trust
Town of Colma	Colma Building Department
Town of Colma	Colma City Manager/City Clerk
Town of Colma	Colma Fire Department
Town of Colma	Colma Human Resources
Town of Colma	Colma Mayor
Town of Colma	Colma Parks & Recreation
Town of Colma	Colma Planning Department
Town of Colma	Colma Police Department
Town of Colma	Colma Public Works
City of Daly City	Daly City Building Department
City of Daly City	Daly City Clerk
City of Daly City	Daly City Fire Department
City of Daly City	Daly City Library
City of Daly City	Daly City Manager
City of Daly City	Daly City Mayor
City of Daly City	Daly City Parks & Recreation
City of Daly City	Daly City Police Department
City of Daly City	Daly City Public Works
City of East Palo Alto	East Palo Alto Building Division
City of East Palo Alto	East Palo Alto City Manager/City Clerk
City of East Palo Alto	East Palo Alto Community Development
City of East Palo Alto	East Palo Alto Human Resources
City of East Palo Alto	East Palo Alto Mayor
City of East Palo Alto	East Palo Alto Planning Division
City of East Palo Alto	East Palo Alto Police Department
City of Foster City	Foster City Building Inspection
City of Foster City	Foster City Clerk
City of Foster City	Foster City Community Development
City of Foster City	Foster City Fire Department
City of Foster City	Foster City Human Resources
City of Foster City	Foster City Manager
City of Foster City	Foster City Mayor
City of Foster City	Foster City Parks & Recreation
City of Foster City	Foster City Planning & Code Enforcement
City of Foster City	Foster City Police
City of Foster City	Foster City Public Works
City of Half Moon Bay	Half Moon Bay Building Department
City of Half Moon Bay	Half Moon Bay City Clerk

City of Half Moon Bay	Half Moon Bay City Manager
City of Half Moon Bay	Half Moon Bay Mayor
City of Half Moon Bay	Half Moon Bay Planning Department
City of Half Moon Bay	Half Moon Bay Police Department
City of Half Moon Bay	Half Moon Bay Public Works
City of Half Moon Bay	Half Moon Bay Recreation Service
Town of Hillsborough	Hillsborough Building Department
Town of Hillsborough	Hillsborough City Clerk
Town of Hillsborough	Hillsborough City Manager
Town of Hillsborough	Hillsborough Fire Department
Town of Hillsborough	Hillsborough Library
Town of Hillsborough	Hillsborough Mayor
Town of Hillsborough	Hillsborough Planning Department
Town of Hillsborough	Hillsborough Police Department
Town of Hillsborough	Hillsborough Public Works
Jasper Ridge Biological Preserve	Jasper Ridge Biological Preserve
City of Menlo Park	Menlo Park Building Department
City of Menlo Park	Menlo Park City Clerk
City of Menlo Park	Menlo Park City Manager
City of Menlo Park	Menlo Park Community Development
City of Menlo Park	Menlo Park Library
City of Menlo Park	Menlo Park Mayor
City of Menlo Park	Menlo Park Parks & Recreation
City of Menlo Park	Menlo Park Planning Department
City of Menlo Park	Menlo Park Police Department
Midpeninsula Regional Open Space	Midpeninsula Regional Open Space
City of Millbrae	Millbrae Building Department
City of Millbrae	Millbrae City Clerk
City of Millbrae	Millbrae City Manager
City of Millbrae	Millbrae Fire Department
City of Millbrae	Millbrae Library
City of Millbrae	Millbrae Mayor
City of Millbrae	Millbrae Planning Department
City of Millbrae	Millbrae Police Department
City of Pacifica	Pacifica City Clerk
City of Pacifica	Pacifica City Manager
City of Pacifica	Pacifica Fire Department
City of Pacifica	Pacifica Mayor
City of Pacifica	Pacifica Parks & Recreation
City of Pacifica	Pacifica Planning & Building Department
City of Pacifica	Pacifica Planning Commission
City of Pacifica	Pacifica Police Department
City of Pacifica	Pacifica Public Works Department
Town of Portola Valley	Portola Valley Building Department
Town of Portola Valley	Portola Valley Fire Department
Town of Portola Valley	Portola Valley Library
Town of Portola Valley	Portola Valley Mayor
Town of Portola Valley	Portola Valley Planning Department
Town of Portola Valley	Portola Valley Public Works
Town of Portola Valley	Portola Valley Town Clerk
Town of Portola Valley	Portola Valley Town Manager
Public Administrators Office	Public Administrators Office

City of Redwood City	Redwood City Building Department
City of Redwood City	Redwood City Clerk
City of Redwood City	Redwood City Fire Department
City of Redwood City	Redwood City Library
City of Redwood City	Redwood City Manager
City of Redwood City	Redwood City Mayor
City of Redwood City	Redwood City Parks & Recreation
City of Redwood City	Redwood City Planning Department
City of Redwood City	Redwood City Police Department
City of Redwood City	Redwood City Public Works
City of San Bruno	San Bruno City Clerk
City of San Bruno	San Bruno City Manager
City of San Bruno	San Bruno Fire Department
City of San Bruno	San Bruno Library
City of San Bruno	San Bruno Mayor
City of San Bruno	San Bruno Parks & Recreation
City of San Bruno	San Bruno Planning Department
City of San Bruno	San Bruno Public Services
City of San Carlos	San Carlos Acting Mayor
City of San Carlos	San Carlos Building Department
City of San Carlos	San Carlos City Clerk
City of San Carlos	San Carlos City Manager
City of San Carlos	San Carlos Fire Department
City of San Carlos	San Carlos Library
City of San Carlos	San Carlos Parks & Recreation
City of San Carlos	San Carlos Planning Department
City of San Carlos	San Carlos Police Department
San Francisco Bay Chapter Sierra Club	San Francisco Bay Chapter Sierra Club
San Francisco Bay Conservation Development Commission	San Francisco Bay Conservation & Development Commission
San Francisco Bay National Wildlife Refuge Complex	San Francisco Bay National Wildlife Refuge Complex
San Francisco Baykeeper	San Francisco Baykeeper
San Francisco Estuary Project	San Francisco Estuary Project
San Francisco International Airport	San Francisco International Airport
City and County of San Francisco Planning Department	San Francisco Planning Department
San Francisco Public Health	San Francisco Public Health
San Francisco Public Utilities Commission	San Francisco Public Utilities Commission
San Francisco Regional Water Quality Control Board	San Francisco Regional Water Quality Control Board
City of San Mateo	San Mateo Building Department
City of San Mateo	San Mateo City Clerk
City of San Mateo	San Mateo City Manager
City of San Mateo	San Mateo Community Develop
San Mateo County Agricultural Commissioner	San Mateo County Agricultural Commissioner
San Mateo County	San Mateo County Clerk
San Mateo County Department of Parks	San Mateo County Department of Parks
San Mateo County Environmental Health Services	San Mateo County Environmental Health Services
San Mateo County Farm Bureau	San Mateo County Farm Bureau
San Mateo County Office of Education	San Mateo County Office of Education
County of San Mateo Parks Department	San Mateo County Parks and Recreation
City of San Mateo	San Mateo Fire Department
San Mateo LAFCo	San Mateo LAFCo
County of San Mateo	San Mateo County Library
City of San Mateo	San Mateo City Library



City of San Mateo	San Mateo Mayor
City of San Mateo	San Mateo Parks & Recreation
City of San Mateo	San Mateo Planning Department
City of San Mateo	San Mateo Police Department
City of San Mateo	San Mateo Public Works
Santa Clara County Clerk	Santa Clara County Clerk
Santa Cruz County Clerk	Santa Cruz County Clerk
County of Santa Clara	Santa Clara County Department of Planning
County of Santa Cruz	Santa Cruz County Planning Department
City of South San Francisco	South San Francisco Building Department
City of South San Francisco	South San Francisco City Clerk
City of South San Francisco	South San Francisco City Manager
City of South San Francisco	South San Francisco Fire Department
City of South San Francisco	South San Francisco Library
City of South San Francisco	South San Francisco Mayor
City of South San Francisco	South San Francisco Parks & Recreation
City of South San Francisco	South San Francisco Planning Department
City of South San Francisco	South San Francisco Police Department
City of South San Francisco	South San Francisco Public Works
Stanford University	Stanford University
State Clearinghouse	State Clearinghouse
State Water Resources Control Board	State Water Resources Control Board
The San Francisco Zoological Society	The San Francisco Zoological Society
U.S. Fish & Wildlife Service	U.S. Fish & Wildlife Service
US Army Corps of Engineers	US Army Corps of Engineers
Town of Woodside	Woodside Building Department
Town of Woodside	Woodside Fire Department
Town of Woodside	Woodside Mayor
Town of Woodside	Woodside Parks & Recreation
Town of Woodside	Woodside Planning Department
Town of Woodside	Woodside Police Department
Town of Woodside	Woodside Public Works
Town of Woodside	Woodside Town Clerk
Town of Woodside	Woodside Town Manager

# Attachment C

## **San Mateo County Mosquito & Vector Control District (District) Pesticide Application Plan (PAP):**

- 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;**

Please see Agency Boundary Map. Typical and historically treated sites will include most if not all water bodies in San Mateo County, areas of high water marks along the San Francisco Bay, intermittent creeks, and other associated waterways and surface waters that could be affected by the Districts applications.

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

A detailed description of the factors influencing the decision to use pesticides to control mosquito larvae can be found in the "Best Management Practices for Mosquito Control in California" and in "Statement of Best Management Practices for the San Mateo County Mosquito and Vector Control District". This district does not use temephos or any other organophosphate product to control mosquitoes in the larval or adult stage. The district focuses control efforts on the larval stage of mosquitoes and rarely finds it necessary to apply adulticides. The decision to treat mosquitoes in the adult stage is based on the following:

- 1) The presence of mosquitoes positive for West Nile virus
- 2) Adult floodwater mosquitoes detected by CO2 traps at high densities near places of human habitation AND a high volume of reports from members of the public experiencing high numbers of mosquito bites. These conditions are reflective of a failure of larval control to prevent emergence of adult mosquitoes from seasonal impounds (typically saltmarsh) causing a significant impact on the health and quality of life of the district's residents. This situation has occurred historically on 1 occasion in the past 11 years.

- 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;**

The NPDES Permit for Biological and Residual Pesticide Discharges to Waters of the U.S. from Vector Control Applications was amended to list the approved active ingredients rather than having specific products named. All pesticide label restrictions and instructions will be followed for pesticides which contain the active ingredients listed below. In addition, pesticides which fall under the "minimum risk" category may be used. The minimum risk pesticides have been exempted from FIFRA requirements. Products will be applied by truck, backpack, hand can and helicopter.

Active Ingredients:

Bacillus sphaericus (Bs) (Lysinibacillus sphaericus)
Methoprene
Monomolecular Films
Petroleum Distillates
Spinosad
Deltamethrin
Etofenprox
Lambda-Cyhalothrin
N-octyl bicycloheptene dicarboximide (MGK-264)
Piperonyl butoxide (PBO)
Permethrin
Prallethrin
Pyrethrin
Resmethrin
Sumithrin
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

**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 East Side Mosquito Abatement 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 Item 2 above. Mosquito breeding sources and areas that require adult mosquito control are difficult to predict from year to year based on the weather variations in local environmental conditions. However, the typical sources treated by this District include: permanent/semi-permanent/seasonal wetlands, and associated water conveyance systems, storm drains, creeks, ponds, lakes and ditches within the District Project Area. Please see Boundary Map and application areas with attachment A.

**5. 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. However, each of these alternatives present significant limitations and

cannot always be used. Introduction of fish is restricted to manmade sources such as backyard ornamental ponds and horse troughs in this county. Public education is helpful, but small sources of standing water in yards are only a fraction of the places where mosquito larvae develop in this county and cannot, in itself, remove the threat of vector-borne disease. The district works with property owners whenever possible to reduce sources, but there are many other environmental regulations which restrict a property owner’s ability to make physical changes to wetlands on their land or make such work a monumental undertaking. The district does not have the resources to carry out large physical control projects and under the Health and Safety code, such projects are the responsibility of property owners themselves. For a detailed description of the limitations of each type of alternative please see attached document **“Statement of Best Management Practices for the San Mateo County Mosquito and Vector Control District”**

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

<b>Material</b>	<b>Pounds</b>	<b>Gallons</b>
Methoprene Liquid 20%		<b>2.6</b>
Methoprene Liquid 5%		<b>6.16</b>
Methoprene 120 day	<b>.5</b>	
Methoprene 30 day	<b>1</b>	
Methoprene granule 30 day	<b>308</b>	
Methoprene granule 21 day	<b>500</b>	
Spinosad Liquid		<b>2.5</b>
Spinosad 180 day	<b>7</b>	
Spinosad 30 day	<b>147</b>	
Bti Liquid		<b>100</b>
Bs	<b>3675</b>	
Bti/Bs granule	<b>330</b>	
BVA 2		<b>7.7</b>
Coco Bear		<b>.1</b>

The above totals represent estimated pesticides applications within the District boundaries to Waters of the U.S. for 2015. These amounts will change from year to year due to annual variability in required pesticide applications for mosquito control. This data is provided as an example of the products and amounts used in one year.

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

The District's Operations and Laboratory Management Department reviews post BMP implementation source pesticide application data to determine efficacy and compliance of BMP treatment. Examples that have resulted in the reduction of pesticide applications is

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.

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

Please see Table 2 for a list of species controlled in San Mateo County. The strategies used for these species is described in 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 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 district maintains a database of known sources of larval development and field technicians carry a copy of this database while recording larval control applications.

d. **Analyze existing surveillance data to identify new or unidentified sources of vector problems as well as areas that have recurring vector problems.**

This practice is included in the "Best Management Practices for Mosquito Control in California", the "California Mosquito-borne Virus Surveillance and Response Plan" and the "Statement of Best Management Practices for the San Mateo County Mosquito and Vector Control District" that describe the district's control program. 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. The district maintains a computerized database of sources of mosquito development and work that has been carried out at each location. Vector control technicians carry laptop computers in the field with copies of this database and have access to records of all the work that has been done at each site. The schedule of inspections and decisions on the

kind of control applied are based on information they obtain from this database. In addition, technicians continually search for new sites, sample water for larvae and answer requests for service from the public.

**9. Description of the BMPs to be implemented. The BMP's shall include, at the minimum:**

**a. measures to prevent pesticide spill;**

District staff monitors application equipment on a daily basis to ensure it remains in proper working order. Spill mitigation devices are placed in all spray vehicles and pesticide storage areas to respond to spills. Employees are trained on spill prevention and response annually.

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

Spray equipment is calibrated each year and is a part of the MOU with CDPH. However, the 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;**

Applicators are required to complete pesticide training on an annual basis. Records are kept of these training sessions for review by the local agricultural commissioner and/or CDPH. Employees certified by the CDPH must perform at least 20 hours of Continuing Education units to maintain their certification.

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

The District will calibrate truck and hand larviciding equipment each year to meet application specifications. Supervisors review spray records daily to ensure appropriate amounts of material are being used. ULV equipment is calibrated for output and droplet size to meet label requirements. Aerial larviciding equipment is calibrated by the Contractor. applications are equipped with advanced guidance and drift management equipment to ensure the best available technology is being used to place product in the intended spray area

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

Please see the Best Management Practices for Mosquito Control in California for general pesticide application BMPs, and the current approved pesticide labels for application BMPs for specific products.

**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 U.S., 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;**

The District staff only applies pesticides to sources of mosquitoes that represent threats to public health or quality of life. The presence of any mosquito may necessitate treatment, however higher thresholds may be applied depending on the District'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 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 pesticide applications as described in the 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 District uses. The District continually collects adult and larval mosquito surveillance data, dead bird reports, and sentinel chicken test results, and monitors regional mosquito-borne disease activity detected in humans, horses, birds, and/or other animals, and uses these data to guide mosquito control activities.

**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.**

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**

The District follows an existing IVM program which includes practices described in the California Mosquito-borne Virus Surveillance and Response Plan and Best Management Practices for Mosquito Control in California.

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 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.

## **13. Website for Public Notice**

The District's public notices are available on the District's website at [www.smcinvcd.org](http://www.smcinvcd.org)



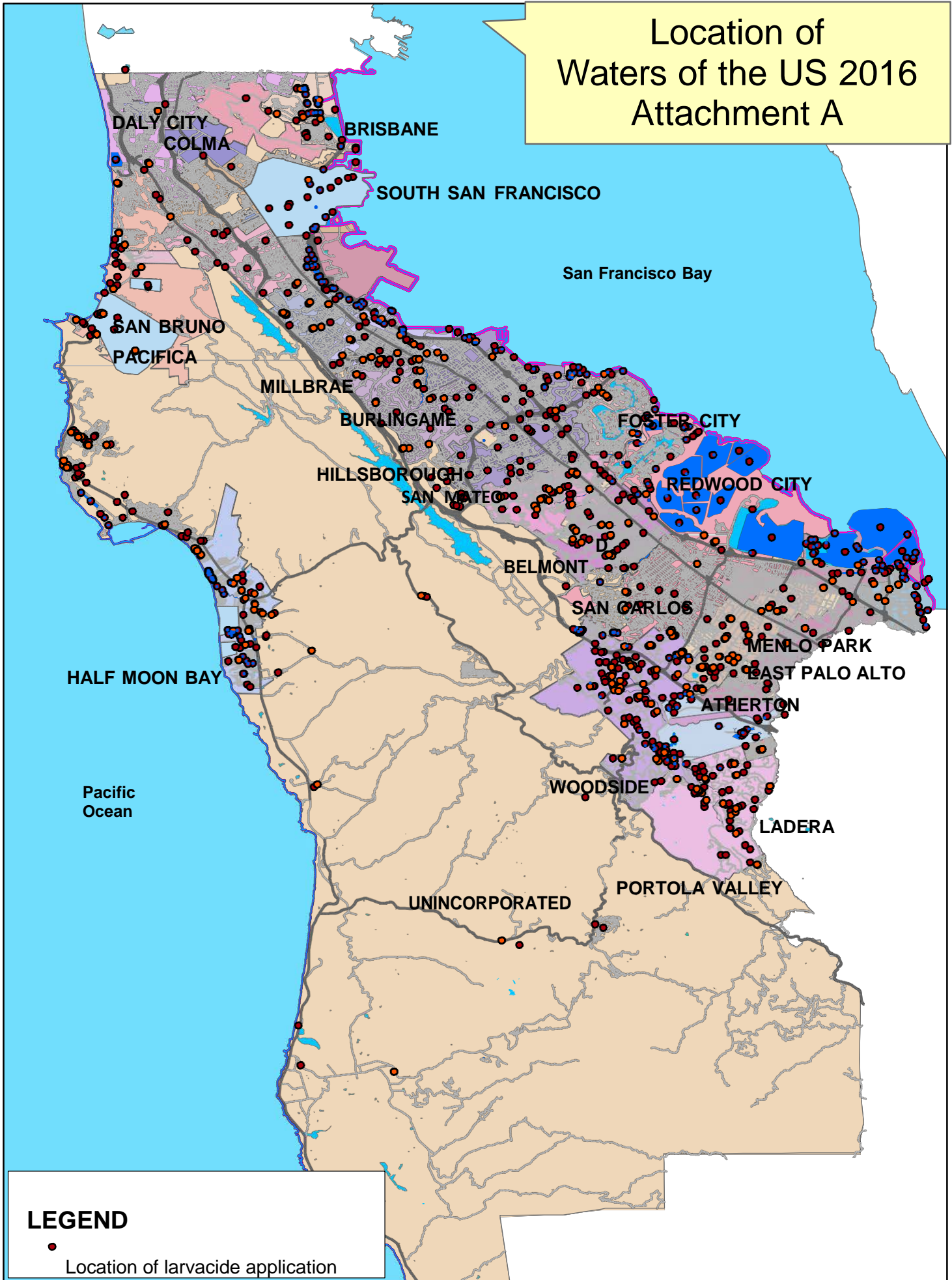
**References:**

Best Management Practices for Mosquito Control in California. July 2012. [Note: this document is updated regularly by CDPH]. 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 San Mateo County Mosquito Vector Control District at (650) 344-8592.

California Mosquito-borne Virus Surveillance and Response Plan. 2015. [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.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 San Mateo County Mosquito Vector Control District at (650) 344-8592.

MVCAC NPDES Coalition Monitoring Plan. 2011. Copies may be requested by calling the Mosquito and Vector Control Association of California (MVCAC).

Location of Waters of the US 2016 Attachment A



# Water Body List NOI 2016

## Attachment B

Water Body	City
Millbrae Creek	Millbrae
Adeline Creek	Burlingame
Easton Creek	Burlingame
Sanchez Creek	Burlingame
7th Day Adventist	Burlingame
Ralston Creek	Burlingame
Burlingame Creek	Burlingame
Davis Creek	Burlingame
San Mateo Creek	San Mateo
Borel Creek	San Mateo
Laurel Creek	San Mateo
East Laurel Creek	San Mateo
Fernwood Creek	San Mateo
Polhemus Creek	San Mateo
Peninsula Creek	San Mateo
Notre Dame Creek	Belmont
Belmont Creek	Belmont
Brittan Creek	San Carlos
Pulgas Creek	San Carlos
Cordilleras Creek	Redwood City
Club Creek	Redwood City
Stulsaft Creek	Redwood City
Atherton Channel	Atherton
San Francisquito Creek	Menlo Park
Los Trancos Creek	Menlo Park
West Union Creek	Woodside
Sausal Creek	Woodside
Corte Madera Creek	Woodside
Dry Creek	Woodside
Bear Gulch Creek	Woodside
Westridge Creek	Woodside
Corte Madera Creek	Portola Valley
Arroyo Canada Verde	Half Moon Bay
San Pedro creek	Pacifica
SF Water Co marsh	E Palo Alto
Carduff – Kavanaugh marsh	Menlo Park
SF Water Co marsh	E Palo Alto
Brisbane lagoon	Brisbane

# Water Body List NOI 2016

## Attachment B

OConnor Lagoon	E Palo Alto
Lower Emerald Lake	Redwood City
Cooley Landing marsh	E Palo Alto
Palo Alto marsh	E Palo Alto
Bair Is, B1 marsh	Redwood Shores
Bair Is, A12 marsh	Redwood City
Illinois St marsh	E Palo Alto
Littlefield Ave	South San Francisco
Facebook Marsh	Menlo Park