ATTACHMENT G – NOTICE OF INTENT

SWRCB Received Date: 4/11/2016

WATER QUALITY ORDER NO. 2016-0039-DWQ
GENERAL PERMIT NO. CAG 990004

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

I. NOTICE OF INTENT STATUS (see Instructions)

Mark only one item ☒ A. New Applicator ☐ B. Change of Information: WDID# _____

☐ C. Change of ownership or responsibility: WDID# _____

II. DISCHARGER INFORMATION

A. Name			
San Bernardino County Mosquito and Vector Control Program			
B. Mailing Address			
385 N. Arrowhead Ave., 2nd Floor			
C. City	D. County	E. State	F. Zip Code
San Bernardino	San Bernardino	CA	92410-0160
G. Contact Person	H. Email address	I. Title	J. Phone
Jennifer Osorio	Jennifer.Osorio@dph.sbcounty.gov	Supervising EHS	(800) 442-2283

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 1
Name of the conveyance system: _____

3. Directly to river, lake, creek, stream, bay, ocean, etc.
☒ Name of water body: See Attachment 1

* 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 6, 7, and 8
(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 Attachment 2

C. Period of Application: Start Date January 1st End Date December 31st

D. Types of Adjuvants Added by the Discharger: None

VI. PESTICIDES APPLICATION PLAN

A. Has a Pesticides Application Plan been prepared?*
☒ Yes ☐ No

If not, when will it be prepared? _____

* A copy of the PAP shall be included with the NOI.

B. Is the applicator familiar with its contents?

☒ Yes ☐ No

VII. NOTIFICATION

Have potentially affected governmental agencies been notified?

☒ Yes ☐ No

* If yes, a copy of the notifications shall be attached to the NOI. See Attachment 3

VIII. FEE

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

☒ Yes ☐ NO ☐ NA

IX. CERTIFICATION

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

A. Printed Name: Joshua Dugas

B. Signature: _____ **Date:** 03/01/2016

C. Title: Division Chief, Environmental Health Services

X. FOR STATE WATER BOARD USE ONLY

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

San Bernardino County
Mosquito and Vector Control Program
Receiving Water Information
Attachment 1

1. Region 6 – Lahontan Region

Any and all navigable waters of San Bernardino County that breed mosquitoes, black flies or midge flies and belong to the Lahontan Region and the Mojave River watershed and its tributaries and other streams that flow to the inland basins and various ponds and small lakes owned or operated by the County of San Bernardino Flood Control District including the Mojave River. Similar receiving waters owned or operated by all the cities in the county whose jurisdictions are in the Lahontan region including incorporated cities of Victorville, Hesperia, Apple Valley, Adelanto, Barstow, and several other unincorporated communities.

2. Region 7 – Colorado River Region

Any and all navigable waters of San Bernardino County that breed mosquitoes, black flies or midge flies and belong to the Colorado River Region watershed and its tributaries and other streams that flow within its basins, and various ponds and small lakes owned or operated by the County of San Bernardino Flood Control District including the Colorado River. Similar receiving waters owned or operated by all the cities in the county whose jurisdictions are in the Colorado River Region including Needles, Joshua Tree, Twenty Nine Palms and other unincorporated communities.

3. Region 8 – Santa Ana Region

Any and all navigable waters in San Bernardino County that breed mosquitoes, black flies or midge flies and belong to the Santa Ana Region watershed and the rivers and their tributaries and other streams that flow to the pacific ocean, and various ponds and small lakes owned or operated by the County of San Bernardino Flood Control District including Lake Arrowhead, Lake Gregory and Big Bear Lake. Similar receiving waters owned or operated by all the cities in the county whose jurisdictions are in the Santa Ana Region including Upland, Fontana, Rialto, Colton, Grand Terrace, Loma Linda, San Bernardino, Highland, Redlands, Yucaipa, Big Bear Lake, and other unincorporated communities.

385 N. Arrowhead Ave. 2nd Floor, San Bernardino, CA 92415 | Phone: 800.442.2283 Fax: 909.387.4323
www.SBCounty.gov

SAN BERNARDINO COUNTY

Public Health
Environmental Health Services

Trudy Raymundo
Director

Maxwell Ohikhuare, M.D.
Health Officer

Joshua Dugas, REHS
Division Chief

ATTACHMENT 2

1. Active Ingredients for larval mosquito control

Bacillus thuringiensis subsp. *israelensis (Bti)*
Bacillus sphaericus (Bs)
Methoprene
Monomolecular Films
Petroleum Distillates
Spinosad
Temephos

2. Active Ingredients for adult mosquito control

Deltamethrin
Etofenprox
Lambda-Cyhalothrin
Malathion
Naled
N-octyl bicycloheptene dicarboximide (MGK-264)
Piperonyl butoxide (PBO)
Permethrin
Prallethrin
Pyrethrin
Resmethrin
Sumithrin

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Health Officer

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Division Chief

ATTACHMENT 3

February 29, 2016

Dear Agency,

Subject: Notification to apply pesticide to Control Vector-borne disease

The San Bernardino Mosquito and Vector Control Program (MVCP) uses several methods to eliminate nuisance conditions and disease transmission, such as West Nile virus, from mosquito's, black flies and midges. This method is called integrated pest management (IPM). At times, it is necessary to use environmentally responsible pesticides that target these organisms when other methods fail. Thus, it is a requirement to send this notification in anticipation of pesticide applications.

This notification is mandated by the State Water Resource Control Board "National Pollution Discharge Elimination System (NPDES) permit for biological and residual pesticide discharge to waters of the U.S. from vector control applications".

The included notification is required to be sent to government agencies that may own ditches, canals and other water conveyances that may require treatment. The MVCP treats these areas every year to keep people and animals safe. This is only a notification and no response is required. If you do have questions, don't hesitate to contact MVCP at (800) 442-2283.

Sincerely,

Jason Phillippe, Interim Program Manager
San Bernardino County
Mosquito and Vector Control Program
(800) 442-2283

San Bernardino County Mosquito and Vector Control Program

Agency Contact Information

ID	City/Agency Contact	Contact Title	City/Agency Name	Street Address	City	State	Zip Code
1	William R. Smith	City Manager	City of Colton	650 North La Cadena Drive	Colton	CA	92324
2	Ken Hunt	City Manager	City of Fontana	8353 Sierra Avenue	Fontana	CA	92335
3	G. Harold Duffey	City Manager	City of Grand Terrace	22795 Barton Road	Grand Terrace	CA	92313
4	Joe Hughes	City Manager	City of Highland	27215 Baseline Street	Highland	CA	92346
5	T. Jarb Thaipejr	City Manager	City of Loma Linda	25541 Barton Road	Loma Linda	CA	92354
6	Rick Daniels	City Manager	City of Needles	817 3rd Street	Needles	CA	92363
7	N. Enrique Martinez	City Manager	City of Redlands	P.O. Box 3005	Redlands	CA	92373
8	Mike Story	City Administrator	City of Rialto	150 South Palm Avenue	Rialto	CA	92376
9	Mark Scott	City Manager	City of San Bernardino	300 North D Street, 6th Floor	San Bernardino	CA	92418
10	Rod Butler	City Manager	City of Upland	460 North Euclid Avenue	Upland	CA	91786
11	Ray Casey	City Manager	City of Yucaipa	34272 Yucaipa Boulevard	Yucaipa	CA	92399
12	Jeff Mathieu	City Manager	City of Big Bear Lake	P.O. Box 10000	Big Bear Lake	CA	92315
13	Brendon Biggs	Deputy Director-Operations	SBC Public Works	825 East 3rd Street, Room 108	San Bernardino	CA	92415-0835
14	Jackie Madsen		Metropolitan Water District	P.O. Box 38	Parker Dam	CA	92267

385 N. Arrowhead Ave. 2nd Floor, San Bernardino, CA 92415 | Phone: 800.442.2283 Fax: 909.387.4323
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SAN BERNARDINO COUNTY

Public Health
Environmental Health Services

Trudy Raymundo
Director

Maxwell Ohikhuare, M.D.
Health Officer

Joshua Dugas, REHS
Division Chief

February 29th, 2016

NOTICE OF INTENT TO APPLY PUBLIC HEALTH PESTICIDES FOR VECTOR CONTROL PURPOSES TO SURFACE WATERS AND WATERS OF THE U.S. WITHIN SAN BERNARDINO COUNTY, CA

1. The San Bernardino County Mosquito and Vector Control Program (MVCP) intends to apply public health pesticide to, over and adjacent to ditches, canals or other conveyance facilities owned and controlled by an entity other than MVCP as well as surface waters and waters of the U.S. for vector control purposes per the requirements of the General NPDES Permit for Biological and Residual Pesticide Discharge for Vector Control Applications (the permit) issued by the State Water Resource Control Board (SWRCB).

2. The NPDES Permit requirements for listing of the Public Health Pesticides anticipated to be used were modified from the previous permit, to the new permit which will be issued in 2016. The newer requirements specify that any pesticide product can be used that contains approved active ingredients, provided all pesticide label restrictions and instructions are followed. In addition, pesticides which fall under the "minimum risk" category can be used. The minimum risk pesticides have been exempted from Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requirements. The following tables list the active ingredients approved for the FIFRA regulated pesticides.

3. Active Ingredients for larval mosquito control

Bacillus thuringiensis subsp. *israelensis (Bti)*
Bacillus sphaericus (Bs)
Methoprene
Monomolecular Films
Petroleum Distillates
Spinosad
Temephos

4. Active Ingredients for adult mosquito control

Deltamethrin
Etofenprox
Lambda-Cyhalothrin
Malathion
Naled
N-octyl bicycloheptene dicarboximide (MGK-264)
Piperonyl butoxide (PBO)
Permethrin
Prallethrin
Pyrethrin
Resmethrin
Sumithrin

5. The purpose of the use of larvicide and adulticide pesticides containing these active ingredients is for the control of immature and adult mosquitoes. Controlling vectors will reduce annoyance and suppress the threat of disease transmission to humans, domestic animals and wildlife.

6. The general time period for the application of the pesticides is January through December, 2016. The locations of expected use will be ditches, canals or other conveyance facilities owned and controlled by an entity other than the District, as well as surface waters and waters of the U.S. within San Bernardino County.

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

8. Interested persons my contact MVCP at (800) 442-2283 for inquiry.

Jason Phillippe, Interim Program Manager
San Bernardino County Mosquito and Vector Control Program
172 W. 3rd Street, 1st Floor
San Bernardino CA 92410
(800) 442-2283

SAN BERNARDINO COUNTY MOSQUITO AND VECTOR CONTROL PROGRAM (MVCP)

PESTICIDE APPLICATION PLAN (PAP)

NPDES PERMIT FOR BIOLOGICAL AND RESIDUAL PESTICIDE DISCHARGES TO WATERS OF THE UNITED STATES FROM VECTOR CONTROL APPLICATIONS

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

Prepared by

San Bernardino County Mosquito and Vector Control Program (MVCP)

March 01, 2016

For:

COLORADO REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD

San Bernardino County
Mosquito and Vector Control Program
PESTICIDE APPLICATION PLAN

San Bernardino County Mosquito and Vector Control Program (MVCP) is an integral part of the County's Department of Public Health, Division of Environmental Health Services, whose responsibilities are to reduce the risk of disease transmission by mosquitoes and other vectors, for the residents and visitors of the County within our sphere of influence. In meeting our responsibilities, it is our objective to utilize the most effective and efficient Best Management Practices (BMPs) to reduce mosquito breeding sources and to minimize the use of pesticides which may have an effect on the environment and the water of the United States.

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:**

   MVCP provides an integrated pest management (IPM) service within San Bernardino County, except for the area serviced by West Valley Mosquito and Vector Control Program (WVMVCD) to the west and various cities outside our sphere of influence. San Bernardino County is the largest county in the contiguous United States and covers over 20,000 square miles of land. The county is bordered by Los Angeles, Orange, Riverside, Inyo, and Kern counties as well as the Arizona and Nevada state lines. Three regional water quality control boards (Colorado, Lahontan and Santa Ana) have territory within San Bernardino County. Please see Attachment 1 for a county map delineating the regional boards' areas. Please refer to Attachment 2 for a map showing MVCPs service area. Larvicide and adulticide applications may occur anywhere in the specified region to bodies of water when deemed necessary by key mosquito and arbovirus surveillance indicators.

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

   MVCP utilizes the California Department of Public Health (CDPH) recommended **Best Management Practices for Mosquito Control in California** in its decision making process regarding selected pesticide applications for the control of mosquitoes. These recommended practices, when properly implemented, can reduce mosquito populations through a variety of means including: 1) reducing or eliminating breeding sites, 2) increasing the efficacy of biological control, and 3) decrease the amount of pesticides applied while increasing the efficacy of chemical control measures. Details of these recommended practices and other factors can be found in the document titled **Best Management for Mosquito Control in California** and on CDPHs website at http://www.cdph.ca.gov/HealthInfo/discond/Documents/BMPforMosquitoControl07-12.pdf.

3. **Pesticide products or types expected to be used and if known, their degradation byproducts, 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 United States 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 vehicle-mounted, backpack, hand-held and aerial-mounted sprayers. See Table 1 below.

Table 1: List of active ingredients used for mosquito control

Bacillus thuringiensis subsp. *israelensis (Bti)*
Bacillus sphaericus (Bs)
Methoprene
Monomolecular Films
Petroleum Distillates
Spinosad
Temephos
Deltamethrin
Etofenprox
Lambda-Cyhalothrin
Malathion
Naled
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 MVCPs preferred solution, and whenever possible MVCP works with agencies and property owners to affect long-term solutions to reduce or eliminate the

need for continued applications as described in the document titled **Best Management for Mosquito Control in California.**

Mosquito breeding sources and areas that require adult mosquito control are difficult to predict from year to year based on the weather and variations in local environmental conditions. Please see Attachment 2 for map of Targeted Application Areas and Service Area for San Bernardino County MVCP.

The typical sources treated by MVCP include:

- Abandon or neglected above and underground swmming pools/spas
- Residential development: unmaintained above and underground storm water BMP devices
- Persistently clogged street gutters and storm drains
- Flood control channels and basins
- Sewage treatment facilities with tertiary treated holding ponds
- Seasonal creeks and streambeds
- Seasonal pools of standing water
- Depressions holding water in fields for agricultural purposes
- Drainage ditches along roadways
- Irrigation and return channels
- Dairy ponds
- Other small backyard sources
- Any miscellaneous standing water sources

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

With any mosquito or other vector source, MVCPs primary objective is to look for ways to eliminate the source, or, if that is not practical, ways to reduce the vector potential through land and water management, public education and biological control. The most commonly used methods and their limitations are included in the **Best Management Practices for Mosquito Control in California.**

MVCPs best management practices are based on integrated pest management (IPM). The Program promotes public awareness and outreach of removing standing water to decrease mosquito breeding through schools, community meetings, fairs and expositions. MVCP maintains numerous educational handouts and routinely issues press releases. A major limitation of the educational approach is the level of willingness of the public to realize the severity of the problem and whether or not they have the sincere desire to abate or incorporate water and vegetation management practices.

MVCP utilizes surveillance and public outreach for environmental management of mosquito breeding. This Program maintains a list of over 6,000 potential water sources, which are inspected for mosquito breeding. Source elimination and reduction are priority in the plan. MVCP works closely with property owners, managers and other agencies regarding source maintenance, which reduces or eliminates breeding when the water

source cannot be eliminated or reduced. Abandoned and neglected swimming pools must be restored to normal operational conditions or drained. Above-ground and underground BMPs must be kept weed and debris free and not allow standing water for more than 96 hours (4 days). A limiting factor for abandoned or neglected swimming pools is that most are located in backyards and are not visible from the street. The Program depends on residents to report the neglected swimming pools. BMPs are required for many new development projects, however, as new housing and commercial developments are completed the limiting factor is that cities are not disclosing the location of new BMPs to MVCP.

MVCP employs biological controls through the use of mosquito fish (*Gambusia affinis*). This Program maintains an aquarium stocked with mosquito fish, which are placed in mosquito breeding areas for the control of mosquito larva in residential areas, such as ornamental ponds, abandoned swimming pools or other permanent water sources that are not connected to any of the water ways. MVCP provides mosquito fish for free to residents within our jurisdiction. Limiting factors include availability of mosquito fish, vegetation density, and water influx for fish survivability. This Program actively seeks ways to reduce mosquito breeding sources by means other than the use of pesticides, which is considered a last resort.

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

The need to apply pesticide is determined by surveillance. Products are applied according to label specifications which have been determined by EPA under FIFRA. Actual use varies annually depending on environmental factors, mosquito abundance and the presence of potential breeding sources. The totals in Table 2 (below) represent estimated pesticide applications within MVCPs boundaries to Waters of the U.S. for 2015. These amounts will vary from year to year due to unpredictable pesticide applications required for mosquito control. This data is provided as an example of the products and amounts used in one calendar year. See Table 2.

Table 2: Estimated pesticide application amounts used in 2015 by MVCP

ACTIVE INGREDIENT	AMOUNT USED	UNIT OF MEASUREMENT
Bs WDG	1	pound
Bs WSP	1	pound
Bti Liquid	115	gallons
Bti Pellets	300	pounds
Bti/Bs Briquets	55	pounds
Bti/Bs Granule	1,046	pounds
Bti/Bs WSP	9	pounds
Deltamethrin	1	gallon
Methoprene 20%	1	gallon
Methoprene Briquets 30 day	9	pounds
Methoprene Pellets	339	pounds
Methoprene WSP	1	pound

Methoprene XR Briquets 150 day	113	pounds
Petroleum Distillate	13	gallons
Piperonyl butoxide (PBO)	7	pounds
Pyrethrin 5%	464	gallons
Spinosad 2.5%	485	pounds
Spinosad 8.33%	13	pounds

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:**

   MVCP adheres to CDPHs **Best Management Practices for Mosquito Control in California**. All alternatives are explored to determine their feasibility for mosquito control prior to the use of a pesticide.

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

   a. **Measures to prevent pesticide spill:**

      MVCP staff monitors application equipment on a daily and weekly basis to ensure it remains in proper working order. Devices to contain spills are present in all vehicles that carry pesticides and areas where pesticides are stored. Staff is trained on spill prevention and response annually and as often as necessary.

   b. **Measures to ensure that only a minimum and consistent amount is used:**

      Spray equipment used to apply pesticides is calibrated each year as part of the MOU with CDPH.

   c. **A plan to educate Coalition's or Discharger's staff and pesticide applicator on any potential adverse effects to waters of the U.S. from the pesticide application:**

      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.:**

MVCP calibrates all equipment used to apply pesticides at least annually. Records of treatment are stored in an electronic database and reviewed daily for accuracy. Ultra Low Volume (ULV) equipment is calibrated for output and droplet size to meet label requirements. If aerial equipment were to be used to apply pesticides, the contractor would be responsible for its calibration. Any aircraft that applies pesticides is required to use the best available system to apply the product correctly and in the intended spray area.

e. Descriptions of specific BMPs for each pesticide product used:

Please refer to the **Best Management Practices for Mosquito Control in California**.

f. Descriptions of specific BMPs for each type of environmental setting (agricultural, urban, and wetland):

Please refer to the **Best Management Practices for Mosquito Control in California**.

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

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

MVCP staff only applies pesticides to mosquito-breeding water sources that represent imminent 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 Program'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 or absence of natural enemies or predators
- Presence of sensitive or 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 refer to the **Best Management Practices for Mosquito Control in California** and to the **California Mosquito-borne Virus Surveillance and Response Plan,** located on CDPHs website at: http://www.cdph.ca.gov/programs/vbds/Documents/2015CAResponsePlan.pdf

c. Identify known breeding areas for source reduction, larval control program, and habitat management:

Any site that holds water for more than 96 hours (4 days) can produce mosquitoes. Source reduction is MVCPs preferred solution, and whenever possible the Program 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:

MVCP adheres to CDPHs **Best Management Practices for Mosquito Control in California** and the **California Mosquito-borne Virus Surveillance and Response Plan**. MVCP continually collects adult mosquito surveillance data, dead bird reports, and sentinel chicken test results. This Program also monitors regional mosquito-borne disease activity detected in humans, horses, birds, and/or other animals, and uses this data to guide mosquito control activities and make guided control decisions.

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.

The MVCP staff use the principles and practices of Integrated Pest Management (IPM) as described in **Best Management Practices for Mosquito Control in**

California. Locations where vectors may exist are assessed, and the potential for using alternatives to pesticides is determined on a case-by-case basis. Commonly considered alternatives include: 1) Eliminate artificial sources of standing water; 2) Ensure temporary sources of surface water drain within 96 hours (4 days) to prevent adult mosquitoes from developing; 3) Control plan growth in ponds, ditches, basins and shallow wetlands; 4) Recommend designs of facilities and water conveyances and/or holding structures to minimize the potential for producing mosquitoes; 5) Use appropriate biological control methods that are available. Additional alternatives to using pesticides for managing mosquitoes are listed in **Best Management Practices for Mosquito Control in California.**

Implementing preferred alternatives depends on a variety of factors including availability of Program resources, cooperation with cities and other 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.

MVCP uses CDPHs recommendations for IPM as described in **Best Management Practices for Mosquito Control in California** and the **California Mosquito-borne Virus Surveillance and Response Plan.** As summarized in the above documents, 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 the Program's IPM program. In addition, MVCP may utilize legal abatement authority to mitigate mosquito production, when deemed necessary.

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.

MVCP ensures all reasonable precautions are taken to minimize the impact caused by pesticide applications. This is an existing practice, and is required to comply with the Department of Pesticide Regulation's (DPR) requirements and the terms of our CDPH Cooperative Agreement. All pesticide applicators receive annual safety and spill training in addition to their regular continuing education.

13. **If applicable, specify a website where public notices, required in Section VIII.B, may be found.**

    http://www.sbcounty.gov/dph/dehs/Depts/VectorControl/mosquito_and_vector_control_home.aspx

References:

Best Management Practices for Mosquito Control in California. July 2012. Available to download from the California Department of Public Health – Vector-Borne Disease Section at http://www.cdph.ca.gov/HealthInfo/discond/Documents/BMPforMosquitoControl07-12.pdf

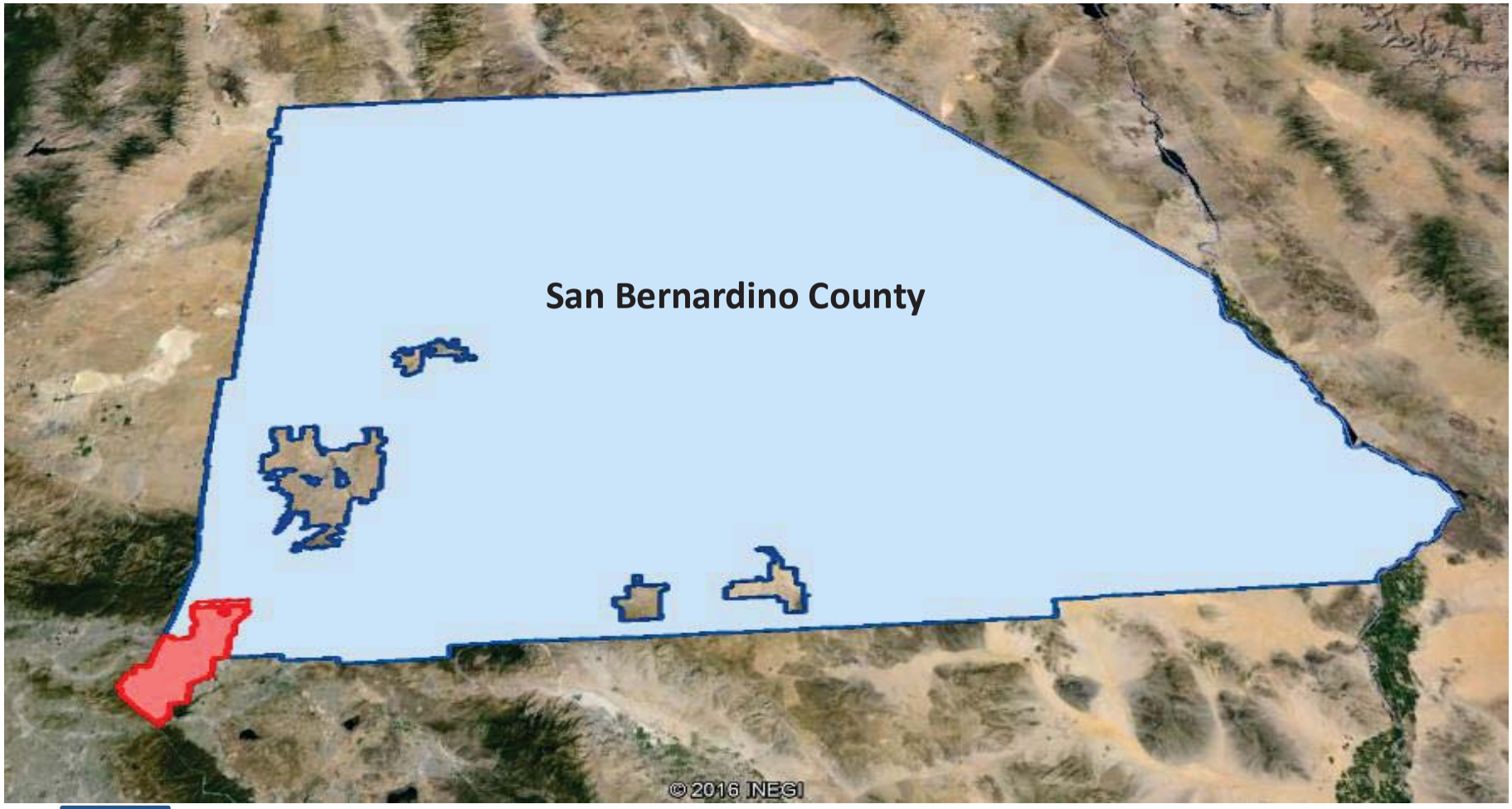
California Mosquito-borne Virus Surveillance and Response Plan. April 2015. Available to download from the California Department of Public Health – Vector-Borne Disease Section at http://www.cdph.ca.gov/programs/vbds/Documents/2015CAResponsePlan.pdf.

MVCAC NPDES Coalition Monitoring Plan

ATTACHMENT 1
Regional Water Quality Boards within San Bernardino County

ATTACHMENT 2

Map of Targeted Application Areas and Service Area for San Bernardino County Mosquito and Vector Control Program



San Bernardino County Mosquito and Vector Control Program (MVCP)

West Valley Mosquito and Vector Control District (WVMVCD)

385 N. Arrowhead Ave. 2nd Floor, San Bernardino, CA 92415 | Phone: 800.442.2283 Fax: 909.387.4323
www.SBCounty.gov

SAN BERNARDINO COUNTY

Public Health
Environmental Health Services

Trudy Raymundo
Director

Maxwell Ohikhuare, M.D.
Health Officer

Joshua Dugas, REHS
Division Chief

February 29th, 2016

NOTICE OF INTENT TO APPLY PUBLIC HEALTH PESTICIDES FOR VECTOR CONTROL PURPOSES TO SURFACE WATERS AND WATERS OF THE U.S. WITHIN SAN BERNARDINO COUNTY, CA

1. The San Bernardino County Mosquito and Vector Control Program (MVCP) intends to apply public health pesticide to, over and adjacent to ditches, canals or other conveyance facilities owned and controlled by an entity other than MVCP as well as surface waters and waters of the U.S. for vector control purposes per the requirements of the General NPDES Permit for Biological and Residual Pesticide Discharge for Vector Control Applications (the permit) issued by the State Water Resource Control Board (SWRCB).

2. The NPDES Permit requirements for listing of the Public Health Pesticides anticipated to be used were modified from the previous permit, to the new permit which will be issued in 2016. The newer requirements specify that any pesticide product can be used that contains approved active ingredients, provided all pesticide label restrictions and instructions are followed. In addition, pesticides which fall under the "minimum risk" category can be used. The minimum risk pesticides have been exempted from Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requirements. The following tables list the active ingredients approved for the FIFRA regulated pesticides.

3. Active Ingredients for larval mosquito control

Bacillus thuringiensis subsp. *israelensis (Bti)*
Bacillus sphaericus (Bs)
Methoprene
Monomolecular Films
Petroleum Distillates
Spinosad
Temephos

4. Active Ingredients for adult mosquito control

Deltamethrin
Etofenprox
Lambda-Cyhalothrin
Malathion
Naled
N-octyl bicycloheptene dicarboximide (MGK-264)
Piperonyl butoxide (PBO)
Permethrin
Prallethrin
Pyrethrin
Resmethrin
Sumithrin

5. The purpose of the use of larvicide and adulticide pesticides containing these active ingredients is for the control of immature and adult mosquitoes. Controlling vectors will reduce annoyance and suppress the threat of disease transmission to humans, domestic animals and wildlife.

6. The general time period for the application of the pesticides is January through December, 2016. The locations of expected use will be ditches, canals or other conveyance facilities owned and controlled by an entity other than the District, as well as surface waters and waters of the U.S. within San Bernardino County.

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

8. Interested persons my contact MVCP at (800) 442-2283 for inquiry.

Jason Phillippe, Interim Program Manager
San Bernardino County Mosquito and Vector Control Program
172 W. 3rd Street, 1st Floor
San Bernardino CA 92410
(800) 442-2283

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Dear Agency,

Subject: Notification to apply pesticide to Control Vector-borne disease

The San Bernardino Mosquito and Vector Control Program (MVCP) uses several methods to eliminate nuisance conditions and disease transmission, such as West Nile virus, from mosquito's, black flies and midges. This method is called integrated pest management (IPM). At times, it is necessary to use environmentally responsible pesticides that target these organisms when other methods fail. Thus, it is a requirement to send this notification in anticipation of pesticide applications.

This notification is mandated by the State Water Resource Control Board "National Pollution Discharge Elimination System (NPDES) permit for biological and residual pesticide discharge to waters of the U.S. from vector control applications".

The included notification is required to be sent to government agencies that may own ditches, canals and other water conveyances that may require treatment. The MVCP treats these areas every year to keep people and animals safe. This is only a notification and no response is required. If you do have questions, don't hesitate to contact MVCP at (800) 442-2283.

Sincerely,

Jason Phillippe, Interim Program Manager
San Bernardino County
Mosquito and Vector Control Program
(800) 442-2283

San Bernardino County Mosquito and Vector Control Program

Agency Contact Information

ID	City/Agency Contact	Contact Title	City/Agency Name	Street Address	City	State	Zip Code
1	William R. Smith	City Manager	City of Colton	650 North La Cadena Drive	Colton	CA	92324
2	Ken Hunt	City Manager	City of Fontana	8353 Sierra Avenue	Fontana	CA	92335
3	G. Harold Duffey	City Manager	City of Grand Terrace	22795 Barton Road	Grand Terrace	CA	92313
4	Joe Hughes	City Manager	City of Highland	27215 Baseline Street	Highland	CA	92346
5	T. Jarb Thaipejr	City Manager	City of Loma Linda	25541 Barton Road	Loma Linda	CA	92354
6	Rick Daniels	City Manager	City of Needles	817 3rd Street	Needles	CA	92363
7	N. Enrique Martinez	City Manager	City of Redlands	P.O. Box 3005	Redlands	CA	92373
8	Mike Story	City Administrator	City of Rialto	150 South Palm Avenue	Rialto	CA	92376
9	Mark Scott	City Manager	City of San Bernardino	300 North D Street, 6th Floor	San Bernardino	CA	92418
10	Rod Butler	City Manager	City of Upland	460 North Euclid Avenue	Upland	CA	91786
11	Ray Casey	City Manager	City of Yucaipa	34272 Yucaipa Boulevard	Yucaipa	CA	92399
12	Jeff Mathieu	City Manager	City of Big Bear Lake	P.O. Box 10000	Big Bear Lake	CA	92315
13	Brendon Biggs	Deputy Director-Operations	SBC Public Works	825 East 3rd Street, Room 108	San Bernardino	CA	92415-0835
14	Jackie Madsen		Metropolitan Water District	P.O. Box 38	Parker Dam	CA	92267