



**SAN GABRIEL VALLEY
MOSQUITO & VECTOR CONTROL DISTRICT**

1145 n. Azusa Canyon Road
West Covina, California 91790
(626) 814-9466 • FAX (626) 337-5686
e-mail: district@sgvmosquito.org

Cities of:

Alhambra

Arcadia

Azusa

Bradbury

Claremont

Covina

Duarte

El Monte

Glendora

Industry

Irwindale

La Puente

La Verne

Monrovia

Monterey Park

Pomona

Rosemead

San Dimas

San Gabriel

Sierra Madre

Temple City

Walnut

West Covina

*County of
Los Angeles*

May 23, 2016

State Water Resources Control Board
Water Quality
1001 'I' Street
Sacramento, CA 95814

RE: Application for NPDES Permit to WQ Order 2016-0039-DWQ, CAG990004

Attached is an application to renew the NPDES permit previous under the WQ Order 2011-0002-DWQ, general permit CAG990004 and currently is WQ Order 2016-0039-DWQ. Attached supporting documents included are:

1. Appendix A
2. Appendix B
3. List of pesticides
4. Pesticide application plan
5. 2003 LAFCO map for San Gabriel Valley MVCD (District)
6. Notification to potentially affected parties

We look forward to your review of the attached documents and if additional information is required do not hesitate to let us know.

Sincerely,

J. Wakoli Wekesa, PhD
Scientific Program Manager

cc: MVCAC

RECEIVED
MAY 27 2016
DIVISION OF WATER QUALITY

ATTACHMENT E – NOTICE OF INTENT
WATER QUALITY ORDER 2016-⁰⁰³⁹~~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# _____		

II. DISCHARGER INFORMATION

A. Name: San Gabriel Valley Mosquito & Vector Control District			
B. Mailing Address: 1145 N. Azusa Canyon Road			
C. City: West Covina	D. County: Los Angeles	E. State: CA	F. Zip Code 91790
G. Contact Person: Melvin C. Cook	H. Email address mcook@sgvmosquito.org	I. Title: Operations Manager	J. Phone 626) 814-9466

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: _____
Name of the conveyance system: See Appendix A _____
3. Directly to river, lake, creek, stream, bay, ocean, etc.
Name of water body: San Gabriel River and Tributaries in the District _____

* 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 4

(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 Appendix B

C. Period of Application: Start Date July 1, 2016 _____ End Date Ongoing June 30, 2021

D. Types of Adjuvants Added by the Discharger: Mineral Oil, Water, PBO

VI. PESTICIDES APPLICATION PLAN

A. Has a Pesticides Application Plan been prepared?*

Yes No

If not, when will it be prepared? _____

* A copy of the Pesticides Application Plan shall be included with the NOI.

B. Is the applicator familiar with its contents?

Yes No

VII. NOTIFICATION

Have potentially affected governmental agencies been notified?

Yes No

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

VIII. FEE

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

Yes NO NA

IX. CERTIFICATION

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

A. Printed Name: Melvin C. Cook

B. Signature: 

Date: May 20, 2016

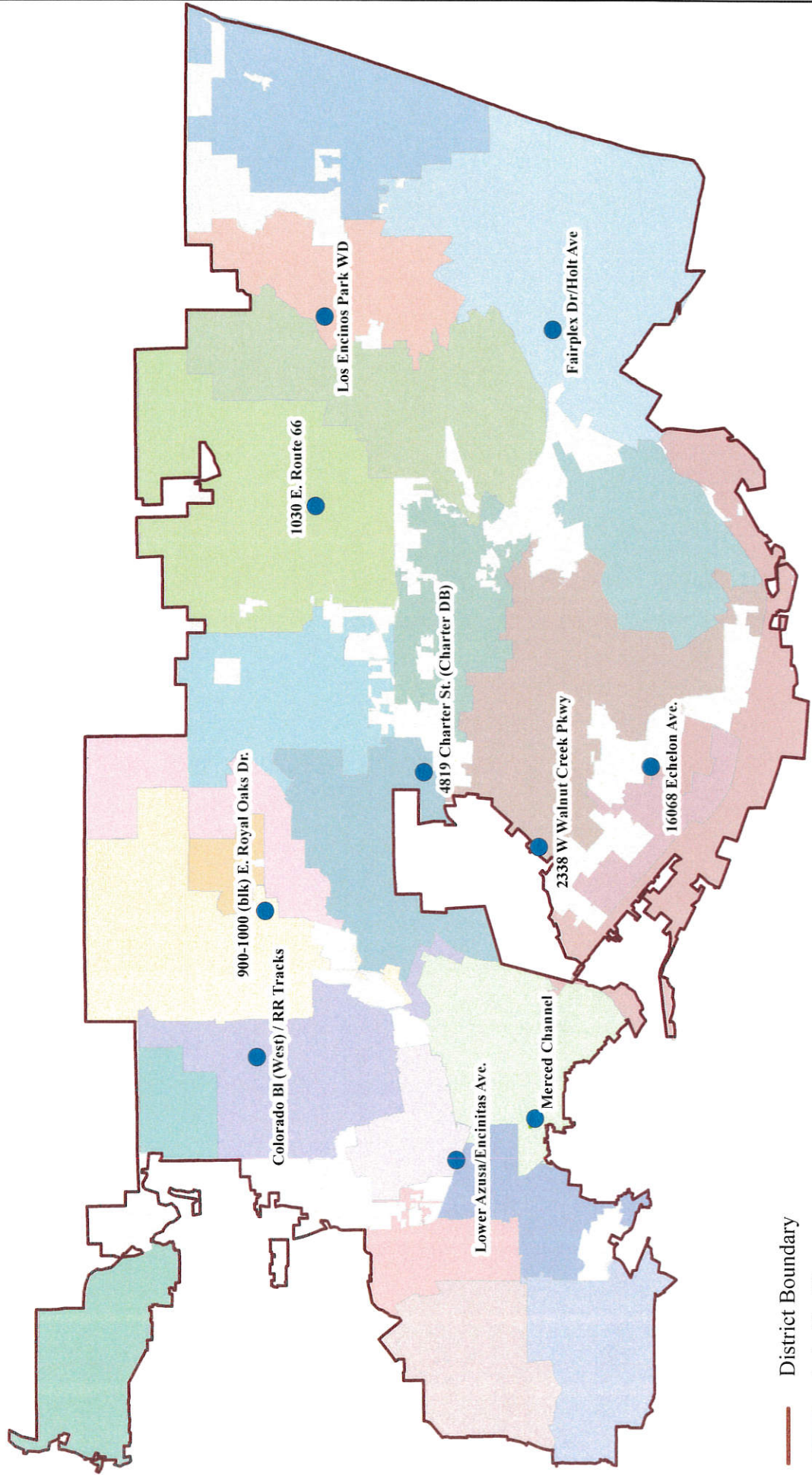
C. Title: Operations Manager

X. FOR STATE WATER BOARD USE ONLY

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

San Gabriel Valley Mosquito and Vector Control District

NPDES Monitoring Sites 2016



- District Boundary
- L.A. Co. Rivers
- NPDES Sites

San Gabriel Valley Mosquito and Vector Control District

Pesticide List

Product	Active Ingredient
Agnique MMF	Poly-a-w-hydroxy 100% (ethoxylated isostearyl alcohol)
Altosid Liquid Larvic.	Methoprene 5 %
Altosid Pellets WSP	Methoprene 4.25%
Altosid XR Briquets	Methoprene 2.1%
CocoBear Larv. Oil	Mineral Oil 10%
Golden Bear 1111	Aliphatic Petroleum Hydrocarbons 98.7%
Kontrol Larv. Oil	Mineral Oil 98%
MetaLarv S-PT	Methoprene 4.25%
Natular G30	Spinosad 2.5%
Natular T30	Spinosad 8.33%
Natular XRT	Spinosad 6.25%
Sustain MBG	Bacillus thuringiensis israelensis 5.71%
VectoBac 12AS	Bacillus thuringiensis israelensis 11.61 %
VectoBac WDG	Bacillus thuringiensis israelensis 37.4 %
VectoLex WDG	Bacillus sphaericus 51.2%
VectoMax FG	Bs 2.7%, Bti 4.5%
VectoMax WSP	Bs 2.7%, Bti 4.5%

The NPDES Permit for the San Gabriel Valley Mosquito and Vector Control District (SGVMVCD) requires a Pesticides Application Plan (PAP) that contains the following elements:

1. Description of **ALL** target areas, if different from the water body of the target area, into 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 Figure 1:
LAFCO Map

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

Please see Best Management Practices for Mosquito Control in California at <http://www.westnile.ca.gov/resources.php>

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;

Please see attached Best Management Practices for Mosquito Control in California at <http://www.westnile.ca.gov/resources.php>

4. Description of **ALL** the application areas* and the target area in the system that are being planned to be applied or may be applied. Provide a map showing these areas;

Please see Figure 1. 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:

Catch Basins
Debris Basins
Flood Control
Gutters
Rivers
Spreading Grounds
Street Drains
Washes/Drains
Swimming pools
Fish ponds
Miscellaneous

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

The District's goal is to eliminate sources of mosquitoes or other vectors. If that is not possible, ways to reduce the risk of vectorborne disease are considered. The most commonly used methods and their limitations are included in the Best Management Practices for Mosquito Control in California. The District's own Best Management Practices follow.

The San Gabriel Valley Mosquito and Vector Control District was formed pursuant to the California Health and Safety Code in 1989 after an epidemic of St. Louis encephalitis occurred in 1984 in Los Angeles County. The District includes 23 cities and unincorporated portions of the County (Figure 1). The SGVMVCD is regulated in part by the Department of Pesticide Regulation (DPR) through a cooperative agreement between the District and the California Department of Public Health (CDPH), (formerly the California Department of Health Services (DHS)).

District personnel who apply pesticides are licensed by the CDPH and pesticide use is reported to the County of Los Angeles Agricultural Commissioner (CAC) according to an annual Memorandum of Understanding among the DPR, CDPH, and CAC, and vector control agencies pursuant to Health and Safety Code Section 116180. The CAC conducts an annual inspection of the District to ensure we are complying with the provisions of the cooperative agreement.

The US Environmental Protection Agency (USEPA) and the DPR require that aquatic pesticides undergo tests for toxicity and meet specific requirements before the pesticide is registered for application to surface waters. The USEPA has found that applying properly registered aquatic pesticides does not threaten people and the environment. The effects of these pesticides on

water quality will be mitigated by complying with the requirements of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), using BMPs, and monitoring.

The SGVMVCD's best management practices are based on integrated vector management (IVM). The components of the programs are:

1. Public education
2. Surveillance of vector populations
3. Disease surveillance
4. Determining thresholds
5. Selecting control method(s)
6. Training and certifying applicators

1. Public Education

District staff uses various techniques to reach residents, gain cooperation, and modify behavior so the risk of mosquito-transmitted disease is reduced. Many behavioral elements, e.g., eliminate standing water, reducing runoff, and preventing trash from accumulating in natural areas reduces the need to apply public health pesticides. Multilingual communications ensure the largest possible audience.

A. Elementary & Secondary School Outreach

Presentations, classroom loan/study materials, curricula, and field trips are available to all public and private school teachers and students.

B. Community Outreach

Information and programs are provided to local civic groups, community service groups, homeowner associations, local businesses, and at community safety/health fairs, senior centers and others.

C. Media Outreach

Residents are informed through local and regional media, e.g., press releases, press conferences, and local and regional media campaigns including public service announcements and paid media advertising.

2. Surveillance of Vector Populations

Surveillance limits pesticide use to areas where mosquito populations may affect public health. The 12 species of mosquitoes known in the District (Table 1) differ in their biology, susceptibility to larvicides, and ability to create nuisances and transmit disease. Information on the species,

density, and stages present is used to select an appropriate control strategy based on integrated vector management.

Table 1: Mosquitoes Present in the San Gabriel Valley Mosquito and Vector Control District

<i>Aedes albopictus</i>	<i>Culex pipiens quinquefasciatus</i>
<i>Aedes notoscriptis</i>	<i>Culex stigmatosoma</i>
<i>Aedes melanimon</i>	<i>Culex restuans</i>
<i>Aedes sierrensis</i>	<i>Culex tarsalis</i>
<i>Aedes squamiger</i>	<i>Culiseta incidens</i>
<i>Anopheles franciscanus</i>	<i>Culiseta inornata</i>
<i>Anopheles hermsi</i>	
<i>Culex erythrothorax</i>	

A. Larval Surveillance

Vector Control Specialist are assigned to zones within the District. They maintain a database of sites which are known to produce mosquitoes and inspect them regularly. They also search continuously for new sources of standing water and mosquitoes. Treatments are based on the abundance, species, and stage of mosquitoes present.

B. Adult Mosquito Surveillance

Identifying all sources of mosquito larvae is impossible. Populations of adult mosquitoes are also sampled by trapping and tested for infections with viruses that can be transmitted to humans. The spatial and seasonal abundance of adult mosquitoes is monitored and compared to historical data. Control operations are concentrated in areas where adult populations are above seasonal averages and/or where disease activity has been identified.

C. Service Requests

Reports of standing water, i.e., neglected pools or mosquitoes from residents allow staff to gauge the success of control efforts and locate new sources of mosquitoes. When requests for service are received, Vector Control Technicians visit the area, interview residents, and search for sources of mosquitoes.

3. Disease Surveillance

- A. Adult mosquitoes, birds, and sentinel chickens are tested regularly for infections with mosquito-borne viruses. Control operations are concentrated in areas where the risk for human disease is elevated.
- B. The SGVMVCD works with the County of Los Angeles Acute Communicable Disease Control Unit to keep abreast of trends in arthropod-borne diseases. We increase control and surveillance activities when the risk or incidence of disease increases in our jurisdiction.

4. Determining Thresholds

Thresholds are established so that only sources which represent threats to public health or quality of life are treated. They are based on the following criteria:

- Species of mosquito present
- Stage of mosquito present
- Nuisance or disease potential
- Abundance
- Flight range
- Proximity to humans
- Size of source
- Presence/absence of natural predators
- Presence of sensitive/endangered species

Current and historic data are compared and control measures are based on whether conditions pose a risk to public health.

The SGVMVCD also uses the California Department of Public Health California's Mosquito-Borne Virus Surveillance and Response Plan as a guide to assess the potential for human illness and determine control strategy: <http://www.westnile.ca.gov/resources.php>. This document is revised annually.

5. Selecting Control Methods

When thresholds are exceeded, a control strategy is selected which minimizes environmental impacts while maximizing efficacy. The method of control is based on threshold criteria and:

- Habitat type

- Water conditions and quality
- Weather conditions
- Cost
- Site accessibility
- Size and number of sites

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

Products are applied according to label specifications as determined by EPA under FIFRA.

Aquatic pesticides used by the SGVMVCD in 2015

Pesticide	
Agnique (Monomolecular film) (gal)	0.3
Altosid Liquid Larvicide (Methoprene) (gal)	0.07
Altosid(Methoprene) pellets (lb)	218.6
Altosid XR (Methoprene) 120 day briquettes (lb)	33.4
Altosid WSP (lb)	22.3
CocoBear (gal)	1
Fourstar Briq (lb)	1.6
GB-1111 (oil) (gal)	25.6
Kontrol (gal)	1.5
MetaLarv S-PT (lb)	63.9
Natular G (30 Day) (lb)	110
Natular T (30 Day) (lb)	5.8
Natular XRT (lb)	38.8
Sustain MBG) (lb)	55.6
Vectobac 12 AS (<i>B. thuringiensis</i>) (gal)	101.8
Vectobac G (<i>B. thuringiensis</i> granules) (lb)	60.7
Vectolex CG (<i>B. sphaericus</i> granules) (lb)	0.6
Vectolex WDG (<i>B. sphaericus</i>) (lb)	36.4
Vectolex WSP (<i>B. sphaericus</i>) (lb)	1.2
VectoMax FG (lb)	122.7
VectoMax WSP (lb)	56.8

6. Representative monitoring locations* and the justification for selecting these monitoring locations

Please see the MVCAC NPDES Coalition Monitoring Plan

7. If applicable, list the gates of control structures and inspection schedule of those gates or control structures to ensure they are not leaking;

Not applicable

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; and

Please see attached:
Best Management Practices for Mosquito Control in California

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

a. Measures to prevent pesticide spill:

District staff ensures equipment used to apply pesticides work properly by inspecting daily. Devices to contain spills are present in all vehicles that carry pesticides and areas where pesticides are stored. Staff is trained annually to prevent and contain spills.

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

Equipment used to apply pesticides is calibrated at least once per year as required by the MOU with the CA Dept. of Public Health.

c. A plan to educate Coalition's or Discharger's staff and pesticide applicator on any adverse effects from the pesticide application;

Applicators must receive training at least annually.

d. Descriptions of specific BMPs for each spray mode, e.g. aerial spray, truck spray, hand spray, etc.; cease and desist order;

District calibrates all equipment used to apply pesticides at least annually. Records of treatments are stored on data base and reviewed daily for accuracy. Ultra Low Volume (ULV) equipment is calibrated to apply

pesticides according to label requirements. Aerial equipment used to apply pesticides will be calibrated by the contractor. Any aircraft that applies pesticides will use the best available system to place the product correctly.

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

Please see attached:
Best Management Practices for Mosquito Control in California

f. Description of specific BMPs for each type of environmental setting (agriculture, urban, and wetlands).

Please see attached:
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 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

District staff identifies and controls sources of mosquitoes that threaten public health or quality of life. Even one mosquito may indicate control measures are needed; however higher thresholds may be applied based on the District's resources, disease activity, or local needs. Treatment thresholds are based on one or more of the following criteria:

- Species of mosquitoes present
- Stages of mosquitoes present
- Potential to be nuisances or transmit disease
- Level of disease
- Abundance of mosquitoes
- Flight range of mosquitoes
- Proximity to populated areas
- Size of source
- Natural enemies or predators present/absent
- Sensitive/endangered species or habitats present/absent

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

Please see attached:

Best Management Practices for Mosquito Control in California
California Mosquito-borne Virus Surveillance and Response Plan

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

According to the Best Management Practices for Mosquito Control in California, any site that holds water for more than 96 hours can produce mosquitoes. Removing sources of standing water is the District's preferred solution, and whenever possible the District works with property owners to implement long-term solutions so continued applications of pesticides are not needed.

- 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.

- 11. Examine of Alternatives. Dischargers should continue to examine alternatives to pesticide use 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 water 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 toxic pesticide necessary to control the target pest.

- b. Applying pesticides only when vectors are present at a level that will constitute a nuisance**

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.

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 proper 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. Specify a website where public notices, required in Section VIII.B may be found www.sgvmosquito.org

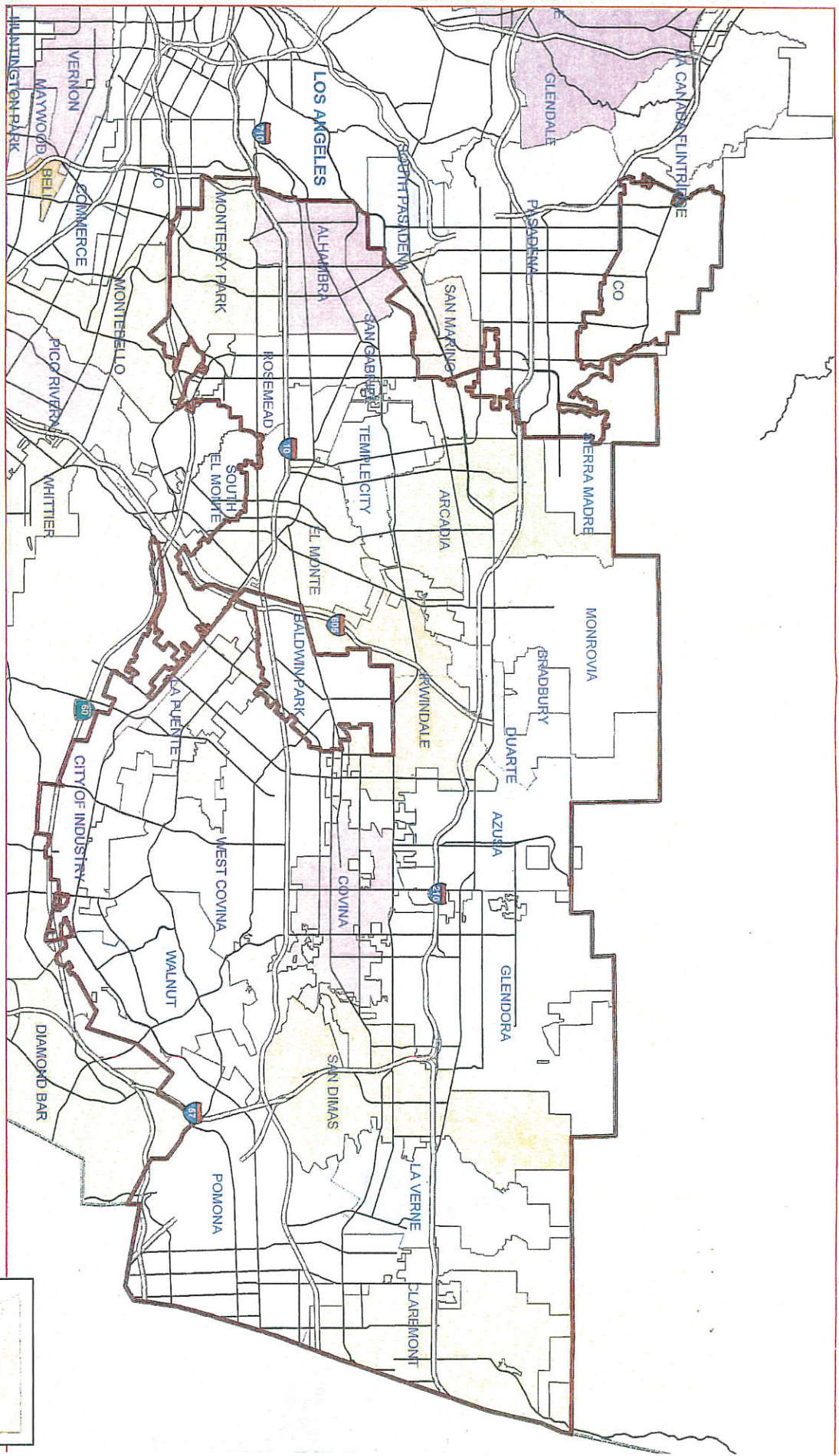
References:

Best Management Practices for Mosquito Control in California. 2012. 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. 2015. [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.

Information is available from URS, the MVCAC Consultant hired to develop Plan and conduct monitoring.



Legend

- Roads, Thomas Bros.
-  San Gabriel Valley Mosquito & Vector Control District
-  Sphere of Influence, Coterminous

San Gabriel Valley Mosquito & Vector Control District

1:136,776



0 1 2 4 Miles


LAFCO
 September 15, 2003





**SAN GABRIEL VALLEY
MOSQUITO & VECTOR CONTROL
DISTRICT**

1145 N. Azusa Canyon Road
West Covina, California 91790
(626) 814-9466 facsimile (626) 337-5686
e-mail: district@sgvmosquito.org

*Kenn K. Fujioka, PhD
District Manager*

Cities of:

Alhambra

May 20, 2016

Arcadia

Azusa

Required NPDES Notification to Potentially Affected Parties

Bradbury

Claremont

The San Gabriel Valley Mosquito and Vector Control District has filed a Notice of Intent with Region 4 of the State Water Resources Control Board for a permit to apply aquatic pesticides to sources of mosquitoes, black flies, and midges which may reach Waters of the United States. A copy of our application is available at the District Monday – Fridays from 8:00 am to 3:30 pm (except holidays).

Covina

Duarte

El Monte

The pesticides we use are regulated by the US Environmental Protection Agency (USEPA) and the Federal Insecticide Fungicide and Rodenticide Act (FIFRA).

Glendora

Industry

Our District has always used education and removing sources of standing water as our primary methods of controlling mosquitoes. Pesticides are applied by trained technicians strictly according to their labels.

Irwindale

La Puente

We will continue to use the least invasive means possible to protect public health in the San Gabriel Valley.

La Verne

Monrovia

Sincerely,

Monterey Park

Pomona

Rosemead

Kenn K. Fujioka PhD
District Manager

San Dimas

San Gabriel

Sierra Madre

Temple City

Walnut

West Covina

*County of
Los Angeles*

