WATER QUALITY ORDER NO. 2011-0002-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# CAG 990004 CI 9518
☐ C. Change of ownership or responsibility: WDID#

II. DISCHARGER INFORMATION

A. Name Greater Los Angeles County Vector Control District			
B. Mailing Address 12545 Florence Avenue			
C. City Santa Fe Springs	D. County Los Angeles	E. State CA	F. Zip Code 90670
G. Contact Person Mark Daniel	H. Email address mdaniel@glacvcd.org	I. Title Dir. of Operations	J. Phone (562) 944-9656

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: _____

3. Directly to river, lake, creek, stream, bay, ocean, etc.
☒ Name of water body: See attachment 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 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: X Vector Larvae X Adult Vector

B. Pesticides Used: List name, active ingredients and, if known, degradation by-products

See attachment C

C. Period of Application: Start Date November 1, 2011 End Date continuous

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 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.

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: Kenneth L. Bayless

B. Signature: _____ Date: May 31, 2011

C. Title: General Manager

X. FOR STATE WATER BOARD USE ONLY

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

Attachment A

Region 4

Los Angeles County

Water Quality Order No.2011-0002-DWQ, NOI

2. The District's activities are conducted within a 1,330 square mile jurisdiction contained within Los Angeles County, California. The areas that will be actually or potentially impacted by District activities include:

1. The incorporated cities of Artesia, Bell, Bellflower, Bell Gardens, Burbank, Carson, Cerritos, Commerce, Cudahy, Diamond Bar, Downey, Gardena, Glendale, Hawaiian Gardens, Huntington Park, Lakewood, La Habra Heights, La Mirada, Long Beach, Los Angeles, Lynwood, Maywood, Montebello, Norwalk, Paramount, Pico Rivera, San Fernando, San Marino, Santa Clarita, Santa Fe Springs, Signal Hill, South Gate, South El Monte and Whittier

2. Certain unincorporated areas of Los Angeles County

3. Contracting city La Canada-Flintridge

4. Los Angeles County Public Works Flood Control and Watershed Management Divisions

5. CalTrans

6. Army Corp of Engineers

7. State Department of Parks and Recreation

Attachment B

3. Receiving waters:

Santa Clara River and its tributaries, San Gabriel River and its tributaries, Los Angeles River and its tributaries, Rio Hondo, Arroyo Seco, Dominguez Channel, LA/LB Harbor, Los Cerritos Channel, Alamitos Bay and the Pacific Ocean

Attachment C

Section V. Pesticides used:

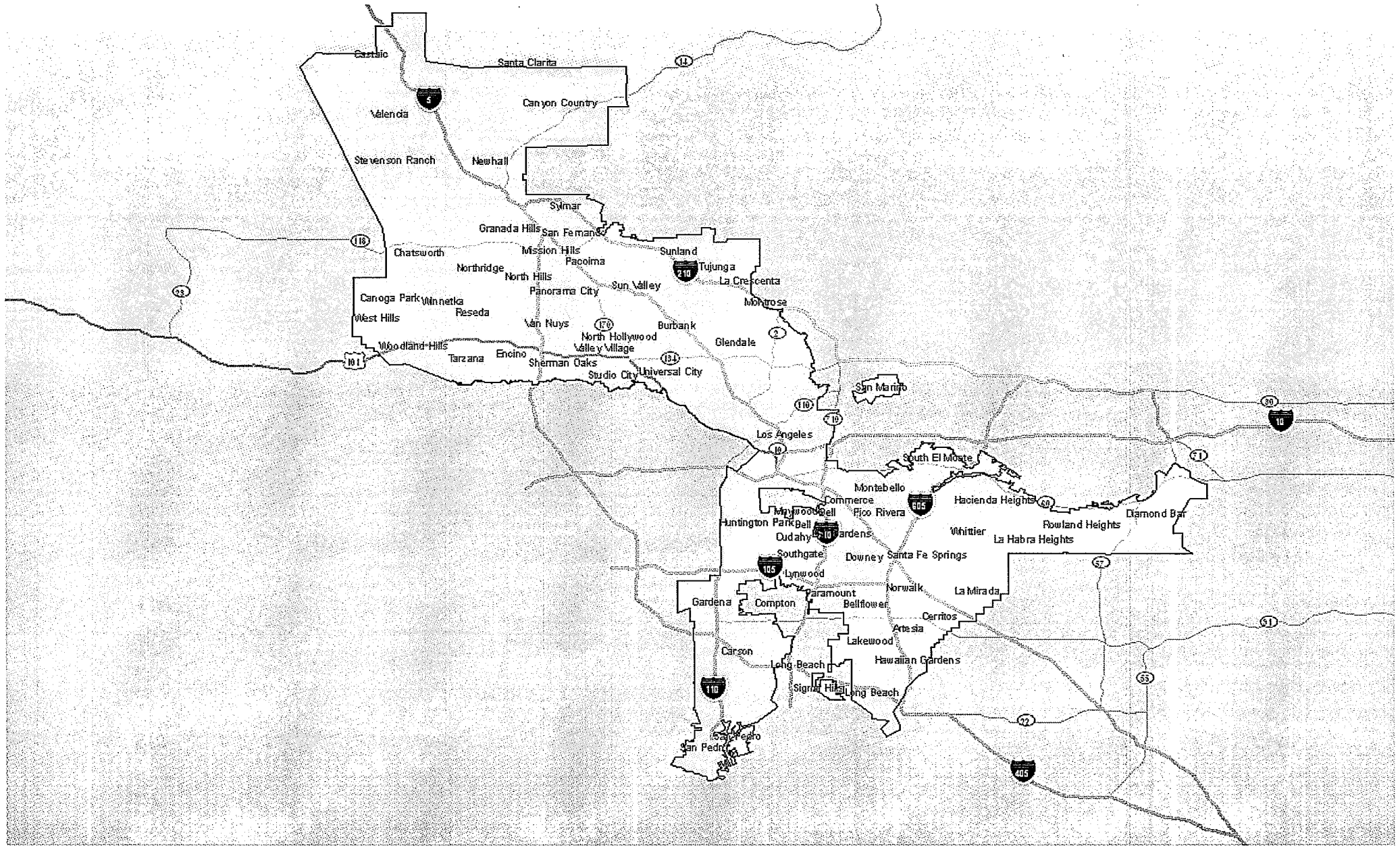
Trade Name	Active Ingredient
Larvicides:	
Agnique MMF	Poly (oxy-1,2-ethanediyl), α-(C_{16-20} branched and linear alklyl)-ω-hydroxy
BVA-2	Highly refined petroleum distillate
GB 1111 (Golden Bear)	Aliphatic petroleum hydrocarbons
Altosid Liquid Larvicide (A.L.L.)	(S)-Methoprene
Altosid Pellets	(S)-Methoprene
Altosid SBG (Granule)	(S)-Methoprene
Altosid 30 (Briquets)	(S)-Methoprene
Altosid XR (Briquets)	(S)-Methoprene
Altosid WSP (Pellets)	(S)-Methoprene
Natular 2EC	Spinosad
Vectobac G (Granule)	*Bacillus thuringiensis*, subsp. *Israelensis*
Vectobac CG (Granule)	*Bacillus thuringiensis*, subsp. *Israelensis*
Vectobac 12AS (Liquid)	*Bacillus thuringiensis*, subsp. *Israelensis*
Vectolex CG (Granule)	*Bacillus sphaericus* Serotype H5a5b, strain 2362
Vectolex WDG (Dried Concentrate)	*Bacillus sphaericus* Serotype H5a5b, strain 2362
Vectomax CG	*Bacillus sphaericus* Serotype H5a5b, strain 2362 and *Bacillus thuringiensis*, subsp. *Israelensis* Serotype H-14 Strain AM65-52
Adulticides:	
Anvil 2+2 ULV	3-Phenoxybenzyl-(1RS, 3RS; 1RS, 3SR)-2,2 dimethyl-3-(2-methylprop-1-enyl) cyclopropanecarboxylate
	Piperonyl Butoxide
Scourge 18/54	Resmithrin
	Piperonyl Butoxide

Greater Los Angeles County Vector Control District

Pesticide Use Report for Year 2010

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec		
Agnique MMF	0.79	2.29	7.10	6.48	8.92	6.07	4.70	4.59	3.49	1.89	2.85	1.54	50.71	Total gallons
	84	177	287	448	446	410	515	451	293	192	296	166	3765	Total Applications
Altosid 30 day Briq	7.09	9.79	9.94	12.07	14.52	18.75	29.18	27.80	14.40	12.31	15.41	8.97	180.23	Total pounds
	94	81	72	114	157	190	243	218	154	135	227	112	1797	Total Applications
Altosid ALL	0.01	0.01	0.25	0.80	4.62	5.13	6.87	8.00	6.13	0.92	0.01	0.00	32.75	Total gallons
	5	1	51	110	472	614	634	668	586	83	2	0	3226	Total Applications
Altosid Pellets	4.06	3.43	18.43	48.33	60.80	53.29	25.88	23.35	16.58	11.20	5.75	3.08	274.18	Total pounds
	29	28	77	182	168	153	141	146	146	107	88	29	1294	Total Applications
Altosid SBG	0.00	0	77.56	435.00	100.13	1561.63	0.84	0.00	0.31	0.00	0.00	0.00	2175.47	Total pounds
	0	0	3	3	4	7	3	0	4	0	0	0	24	Total Applications
Altosid WSP	0.31	0.02	0.12	0.28	0.37	0.37	2.31	1.93	0.86	0.51	0.08	0.18	7.34	Total pounds
	4	1	3	9	5	7	33	22	26	9	4	2	125	Total Applications
Altosid XR Briq	0.14	0.14	0.38	0.56	0.99	0.52	0.42	0.56	0.61	0.14	0.14	0.05	4.65	Total pounds
	2	3	1	10	8	6	9	5	9	2	2	1	58	Total Applications
Anvil 2 + 2	0.00	0.00	0.00	0.00	0.00	2.31	0.00	0.00	0.00	0.00	0.00	0.00	2.31	Total gallons
	0	0	0	0	0	3	0	0	0	0	0	0	3	Total Applications
BVA-2							0.01	0.26	0.21	0.14	0.02	1.03	1.67	Total gallons
							1	26	81	27	52	53	240	Total Applications
Golden Bear 1111	1.76	1.14	1.77	2.36	3.91	4.51	4.50	2.76	4.05	2.03	2.99	0.25	32.03	Total gallons
	154	93	151	214	219	221	193	159	295	207	196	56	2158	Total Applications
Natular 2EC				0.00					0.66	2.72	0.20	0.00	3.58	Total gallons
				0					55	240	29	0	324	Total Applications
Scourge 18/54	0.00	0.00	0.00	0.99	0.00	0.00	0.66	0.48	0.00	0.00	0.00	0.00	2.13	Total gallons
	0	0	0	5	0	0	8	6	0	0	0	0	19	Total Applications
Vectobac 12AS	0.18	0.19	17.04	86.44	116.09	139.22	180.52	191.74	179.65	16.60	3.18	0.57	931.42	Total gallons
	52	38	177	504	1472	2399	2464	2579	2199	632	115	70	12701	Total Applications
Vectobac G	74.60	22.85	421.70	318.16	1128.70	1329.44	1935.06	1315.71	1670.30	770.04	379.97	233.08	9599.61	Total pounds
	17	13	33	78	197	307	447	389	436	184	71	64	2236	Total Applications
Vectobac WDG				0.17	0.00	0.90							1.07	Total pounds
				6	0	7							13	Total Applications
Vectolex CG	14.51	0.40	18.10	70.35	33.31	2103.35	47.53	522.11	194.36	18.42	238.35	20.75	3281.54	Total pounds
	26	3	14	108	67	149	59	117	75	29	131	80	858	Total Applications
Vectolex WDG	2.40	0.50	2.25	3.30	34.95	75.90	79.35	80.50	66.95	23.60	2.85	9.25	381.80	Total pounds
	48	11	44	67	569	1518	1548	1610	1339	472	57	57	7340	Total Applications
Vectomax CG	4.20	10.80	16.51	68.74	267.81	238.31	231.84	829.01	253.72	82.33	223.57	14.86	2241.70	Total pounds
	22	65	83	100	126	249	234	371	354	200	201	53	2058	Total Applications

39,199 Total Applications


Castaic
Santa Clarita
Canyon Country
Valencia
Stevenson Ranch
Newhall
Sylmar
Granada Hills
San Fernando
Chatsworth
Mission Hills
Pacoima
Sunland
Tujunga
Northridge
North Hills
La Crescenta
Panorama City
Sun Valley
Canoga Park
Winnetka
Reseda
Montrose
West Hills
Van Nuys
Burbank
North Hollywood
Glendale
Woodland Hills
Valley Village
Tarzana
Encino
Sherman Oaks
Studio City
Universal City
San Marino
Los Angeles
South El Monte
Montebello
Commerce
Hacienda Heights
Maywood
Bell
Pico Rivera
Diamond Bar
Huntington Park
Bell Gardens
Rowland Heights
Whittier
Cudahy
La Habra Heights
Southgate
Downey
Santa Fe Springs
Lynwood
Norwalk
La Mirada
Paramount
Gardena
Compton
Bellflower
Cerritos
Artesia
Lakewood
Carson
Hawaiian Gardens
Long Beach
Signal Hill
Long Beach
San Pedro
Wilmington

GREATER LOS ANGELES COUNTY VECTOR CONTROL DISTRICT

12545 Florence Avenue, Santa Fe Springs, CA 90670
Office (562) 944-9656 Fax (562) 944-7976
Email: info@glacvcd.org Website: www.glacvcd.org

NOTICE TO POTENTIALLY INTERESTED AGENCIES

The Honorable Gloria Molina
The Honorable Mark Ridley-Thomas
The Honorable Zev Yaroslavsky
The Honorable Don Knabe
The Honorable Michael Antonovich
California Department of Fish & Game, Region 5
Caltrans District # 7
Coastal Commission
Department of Pesticide Regulations
Regional Water Control Board Region 4
San Gabriel and Lower L.A. Rivers & Mtns Conservancy
LA County Agricultural Commissioner
LA City Department of Public Works
LA City Department of Recreation & Parks
LA County Registrar-Recorder/ County Clerk
LA County Department of Water & Power
LA County Public Health Department
LA County Department of Public Works
City of Artesia
City of Bell
City of Bell Gardens
City of Bellflower
City of Burbank
City of Carson
City of Cerritos
City of Commerce
City of Cudahy
City of Diamond Bar
City of Downey
City of Gardena City of Glendale
City of Hawaiian Gardens
City of Huntington Park
City of La Habra Heights
City of La Mirada
City of Lakewood
City of Long Beach
City of Lynwood
City of Montebello
City of Norwalk
City of Paramount
City of Pico Rivera
City of San Marino
City of Santa Clarita
City of Santa Fe Springs
City of Signal Hill
City of South El Monte
City of South Gate
City of Whittier
City of San Fernando
City of Maywood

Subject: **Greater Los Angeles County Vector Control District Notice of Intent to continue to apply Aquatic Larvicides and Adulticides for Vector Control as part of the District's Integrated Vector Management Program.**

Pursuant to the provisions stated in the National Pollutant Discharge Elimination System (NPDES) Permit (Order No. 2011-*****-DWQ) [General Permit No. CAG*****] adopted on March 1, 2011, by the State Water Resources Control Board, notice is hereby given that the Greater Los Angeles County Vector Control District intends to continue to perform larvicide, ultra low volume (ULV) adulticide, as well as barrier adulticide applications as part of its Integrated Vector Management Program.

The District's activities are conducted year-round within a 1,330 square mile area contained within Los Angeles County. The areas that will be actually or potentially impacted by District activities include the following: The incorporated cities of Artesia, Bell, Bellflower, Bell Gardens, Burbank, Carson, Cerritos, Commerce, Cudahy, Diamond Bar, Downey, Gardena, Glendale, Hawaiian Gardens, Huntington Park, Lakewood, La Habra Heights, La Mirada, Long Beach, Los Angeles, Lynwood, Maywood, Montebello, Norwalk, Paramount, Pico Rivera, San Fernando, San Marino, Santa Clarita, Santa Fe Springs, Signal Hill, South Gate, South El Monte and Whittier as well as certain unincorporated areas of Los Angeles County and the contracting city of La Canada-Flintridge. Treated areas my be under the jurisdiction of Los Angeles County Public

Works Flood Control and Watershed Management Divisions, CalTrans, the Army Corp of Engineers and the State Department of Parks and Recreation.

Applications are made in an effort to protect the public's health from vector-borne diseases, are based on key vector and arbovirus surveillance indicators and in strict compliance with pesticide label requirements. The following materials may be used:

Trade Name	Active Ingredient
Larvicides:	
Agnique MMF	Poly (oxy-1,2-ethanediyl), α-(C_{16-20} branched and linear alklyl)-ω-hydroxy
BVA-2	Highly refined petroleum distillate
GB 1111 (Golden Bear)	Aliphatic petroleum hydrocarbons
Altosid Liquid Larvicide (A.L.L.)	(S)-Methoprene
Altosid Pellets	(S)-Methoprene
Altosid SBG (Granule)	(S)-Methoprene
Altosid 30 (Briquets)	(S)-Methoprene
Altosid XR (Briquets)	(S)-Methoprene
Altosid WSP (Pellets)	(S)-Methoprene
Dimilin 25W	Diflubenzuron
Natular 2EC	Spinosad
Vectobac G (Granule)	*Bacillus thuringiensis*, subsp. *Israelensis*
Vectobac CG (Granule)	*Bacillus thuringiensis*, subsp. *Israelensis*
Vectobac 12AS (Liquid)	*Bacillus thuringiensis*, subsp. *Israelensis*
Vectolex CG (Granule)	*Bacillus sphaericus* Serotype H5a5b, strain 2362
Vectolex WDG (Dried Concentrate)	*Bacillus sphaericus* Serotype H5a5b, strain 2362
Vectomax CG	*Bacillus sphaericus* Serotype H5a5b, strain 2362 and *Bacillus thuringiensis*, subsp. *Israelensis* Serotype H-14 Strain AM65-52
Adulticides:	
Anvil 2+2 ULV	3-Phenoxybenzyl-(1RS, 3RS; 1RS, 3SR)-2,2 dimethyl-3-(2-methylprop-1-enyl) cyclopropanecarboxylate Piperonyl Butoxide
Scourge 18/54	Resmithrin Piperonyl Butoxide

If you have any questions regarding this Notice of Intent, please contact District headquarters at 12545 Florence Ave, Santa Fe Springs, CA 90670, (562)944-9656.

Date: March 3, 2011

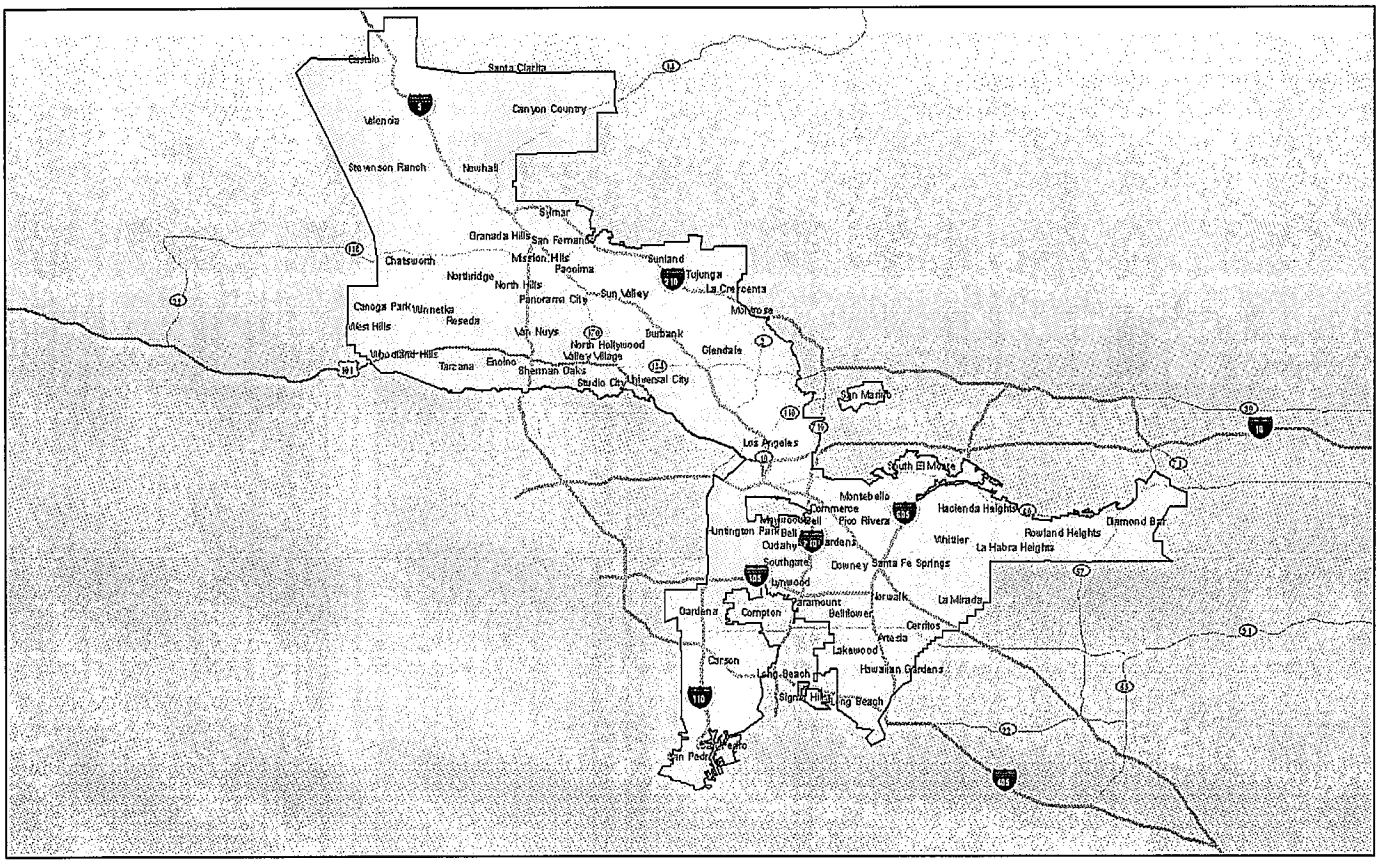
Susanne Kluh
Director of Scientific-Technical Services

Greater Los Angeles County Vector Control District Pesticides Application Plan (PAP)

The Discharger shall develop 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, 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;**

   - The incorporated cities of Artesia, Bell, Bellflower, Bell Gardens, Burbank, Carson, Cerritos, Commerce, Cudahy, Diamond Bar, Downey, Gardena, Glendale, Hawaiian Gardens, Huntington Park, Lakewood, La Habra Heights, La Mirada, Long Beach, Los Angeles, Lynwood, Maywood, Montebello, Norwalk, Paramount, Pico Rivera, San Fernando, San Marino, Santa Clarita, Santa Fe Springs, Signal Hill, South Gate, South El Monte and Whittier
   - Certain unincorporated areas of Los Angeles County
   - Contracting city La Canada-Flintridge
   - Receiving waters: Santa Clara River and its tributaries, San Gabriel River and its tributaries, Los Angeles River and its tributaries, Rio Hondo, Arroyo Seco, Dominguez Channel, LA/LB Harbor, Los Cerritos Channel, Alamitos Bay and the Pacific Ocean



2. **Discussion of the factors influencing the decision to select pesticide applications for mosquito control;**
   Please see the Best Management Practices for Mosquito Control in California.

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 adjuvents and surfactants used;**
   Please see Attachments E and F within NPDES Permit for Biological and Residual Pesticide Discharges to Waters of the U.S. for Vector Control Applications. Products may be applied by hand, truck, backpack, hand can, helicopter, or airplane according to label directions.

4. **Description of ALL the application areas* and the target areas in the system that are being planned to 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 the District's preferred solution, and whenever possible the District works with property owners to affect 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:
   1. Any and all navigable waters in Los Angeles County that breed mosquitoes, black flies and midges.
   2. Flood control channels, basins, freeway drains, storm drains and any other conveyance for water runoff in an urban/suburban area.
   3. Roadside low-spots, backyard ponds and pools.

5. **Other control methods used (alternatives) and their limitations;**
   With any source of mosquitoes or other vectors, 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 potential for vectors. 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.

6. **How much product is needed and how this amounts was determined;**
   The need to apply product is determined by surveillance. Actual use varies annually depending on the mosquito activity. The pesticide amounts presented below were taken from the Greater Los Angeles County Vector Control District's 2010 PUR as an estimate of pesticide use in 2011. Other public health pesticides in addition to those listed below may be used as part of the District's best management practices.

Asterisks indicate terms that are defined in Attachment A of the NPDES Permit for Vector Control

Greater Los Angeles County Vector Control District - Pesticide Use Report for Year 2010

	Jan	Feb	Marc	April	May	June	July	Aug	Sept	Oct	Nov	Dec		
Agnique MMF	0.79	2.29	7.10	6.48	8.92	6.07	4.70	4.59	3.49	1.89	2.85	1.54	50.71	Total gallons
	84	177	287	448	446	410	515	451	293	192	296	166	3765	Total Applications
Altosid 30 day Briq	7.09	9.79	9.94	12.07	14.52	18.75	29.18	27.80	14.40	12.31	15.41	8.97	180.23	Total pounds
	94	81	72	114	157	190	243	218	154	135	227	112	1797	Total Applications
Altosid ALL	0.01	0.01	0.25	0.80	4.62	5.13	6.87	8.00	6.13	0.92	0.01	0.00	32.75	Total gallons
	5	1	51	110	472	614	634	668	586	83	2	0	3226	Total Applications
Altosid Pellets	4.06	3.43	18.43	48.33	60.80	53.29	25.88	23.35	16.58	11.20	5.75	3.08	274.18	Total pounds
	29	28	77	182	168	153	141	146	146	107	88	29	1294	Total Applications
Altosid SBG	0.00	0	77.56	435.00	100.13	1561.6	0.84	0.00	0.31	0.00	0.00	0.00	2175.47	Total pounds
	0	0	3	3	4	7	3	0	4	0	0	0	24	Total Applications
Altosid WSP	0.31	0.02	0.12	0.28	0.37	0.37	2.31	1.93	0.86	0.51	0.08	0.18	7.34	Total pounds
	4	1	3	9	5	7	33	22	26	9	4	2	125	Total Applications
Altosid XR Briq	0.14	0.14	0.38	0.56	0.99	0.52	0.42	0.56	0.61	0.14	0.14	0.05	4.65	Total pounds
	2	3	1	10	8	6	9	5	9	2	2	1	58	Total Applications
Anvil 2 + 2	0.00	0.00	0.00	0.00	0.00	2.31	0.00	0.00	0.00	0.00	0.00	0.00	2.31	Total gallons
	0	0	0	0	0	3	0	0	0	0	0	0	3	Total Applications
BVA-2							0.01	0.26	0.21	0.14	0.02	1.03	1.67	Total gallons
							1	26	81	27	52	53	240	Total Applications
Golden Bear 1111	1.76	1.14	1.77	2.36	3.91	4.51	4.50	2.76	4.05	2.03	2.99	0.25	32.03	Total gallons
	154	93	151	214	219	221	193	159	295	207	196	56	2158	Total Applications
Natular 2EC				0.00					0.66	2.72	0.20	0.00	3.58	Total gallons
				0					55	240	29	0	324	Total Applications
Scourge 18/54	0.00	0.00	0.00	0.99	0.00	0.00	0.66	0.48	0.00	0.00	0.00	0.00	2.13	Total gallons
	0	0	0	5	0	0	8	6	0	0	0	0	19	Total Applications
Vectobac 12AS	0.18	0.19	17.04	86.44	116.09	139.22	180.52	191.74	179.65	16.60	3.18	0.57	931.42	Total gallons
	52	38	177	504	1472	2399	2464	2579	2199	632	115	70	12701	Total Applications
Vectobac G	74.60	22.85	421.70	318.16	1128.7	1329.4	1935.0	1315.7	1670.3	770.04	379.97	233.08	9599.61	Total pounds
	17	13	33	78	197	307	447	389	436	184	71	64	2236	Total Applications
Vectobac WDG				0.17	0.00	0.90							1.07	Total pounds
				6	0	7							13	Total Applications
Vectolex CG	14.51	0.40	18.10	70.35	33.31	2103.3	47.53	522.11	194.36	18.42	238.35	20.75	3281.54	Total pounds
	26	3	14	108	67	149	59	117	75	29	131	80	858	Total Applications
Vectolex WDG	2.40	0.50	2.25	3.30	34.95	75.90	79.35	80.50	66.95	23.60	2.85	9.25	381.80	Total pounds
	48	11	44	67	569	1518	1548	1610	1339	472	57	57	7340	Total Applications
Vectomax CG	4.20	10.80	16.51	68.74	267.81	238.31	231.84	829.01	253.72	82.33	223.57	14.86	2241.70	Total pounds
	22	65	83	100	126	249	234	371	354	200	201	53	2058	Total Applications

7. **Representative monitoring locations* and the justification for selecting these monitoring 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; and**
   Please see the Best Management Practices for Mosquito Control in California

9. **Description of the BMPs to be implemented. The BMPs shall include at a minimum:**
   The District's BMPs are described in the Best Management Practices for Mosquito Control in California and in the California Mosquito-borne Virus Surveillance and Response Plan. Specific elements have been highlighted below under items a-f.

   a. **measures to prevent pesticide spill;**
      All pesticide applicators receive annual spill prevention and response training. District employees ensure daily that application equipment is in proper working order. Spill mitigation devices are placed in all vehicles and pesticide storage areas.

   b. **measures to ensure that only a minimum and consistent amount is used**
      Application equipment is calibrated at least annually as required by the Department of Pesticide Regulations (DPR) and the terms of a cooperative agreement with the California Department of Public Health (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;**
      This will be included in our pesticide applicators annual pesticide application and safety training, continuing education programs, and/or regional NPDES Permit training programs.

   d. **descriptions of specific BMPs for each application mode, e.g. aerial, truck, hand, etc.;**
      The Greater Los Angeles County Vector Control District calibrates truck-mounted and handheld larviciding equipment each year to meet application specifications. Supervisors review application records daily to ensure appropriate amounts of material are being used. Ultra-low volume (ULV) application equipment is calibrated for output and droplet size to meet label requirements. Aerial larviciding equipment is calibrated by the Contractor. Aerial adulticide equipment is calibrated regularly and droplet size will be monitored by the District to ensure droplets meet label requirements. Airplanes used in urban ULV applications and the primary airplane used for rural ULV application is equipped with advanced guidance and drift management equipment to ensure the best available technology is being used to place product in the intended area. If a secondary airplane is used in rural ULV applications it will be equipped with an advanced guidance system.

   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.

   f. **descriptions of specific BMPs for each type of environmental setting (agricultural, urban, and wetland).**
      Please see 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;**

    The Greater Los Angeles County Vector Control District staff only applies pesticides to sources of mosquitoes 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 District's resources, disease activity, or local needs. Treatment thresholds are based on a combination of one or more of the following criteria:

    - Mosquito species present
    - Mosquito stage of development
    - Pest, nuisance, or disease potential
    - Disease activity
    - Mosquito abundance
    - Flight range
    - Proximity to populated areas
    - Size of source
    - Presence/absence of natural enemies or predators
    - Presence of sensitive/endangered species or habitats.

    b. **Identify target vector species to develop species-specific pest management strategies based on developmental and behavioral considerations for each species;**
    Please see the Best Management Practices for Mosquito Control in California and the California Mosquito-borne Virus Surveillance and Response Plan.

    c. **Identify known breeding areas for source reduction, larval control program, and habitat management; and**
    Any site that holds water for more than 96 hours (4 days) can produce mosquitoes. Source reduction is the District's preferred solution, and whenever possible the District works with property owners to implement long-term solutions to reduce or eliminate the need for continued applications as described in Best Management Practices for Mosquito Control in California.

    d. **Analyze existing surveillance data to identify new or unidentified sources of vector problems as well as areas that have recurring vector problems.**
    This is included in the Best Management Practices for Mosquito Control in California and the California Mosquito-borne Virus Surveillance and Response Plan that the Districts uses. The District continually collects adult and larval mosquito surveillance data, dead bird reports, and sentinel chicken test results and uses 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.

    The Greater Los Angeles County Vector Control District's uses the principles and practices of integrated vector management (IVM) as described on pages 26 and 27 of Best Management Practices for Mosquito Control in California. As stated in item #10 above, 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 four days (96 hours) to prevent adult mosquitoes from developing; 3) Control plant growth in ponds, ditches, and shallow wetlands; 4) Design facilities and water conveyance and/or holding structures to minimize the potential for producing mosquitoes; and 5) Use appropriate biological control methods that are available. Additional alternatives to using pesticides for managing mosquitoes are listed on pages 4-19 of the Best Management Practices for Mosquito Control in California.

    Implementing preferred alternatives depends on a variety of factors including availability of agency resources, cooperation with stakeholders, coordination with other regulatory agencies, and the 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 Greater Los Angeles County Vector Control District follows an existing integrated vector management (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 level of vectors may pose a substantial threat to public health. 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 Greater Los Angeles County Vector Control 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. **If applicable, specify a website where public notices, required in Section VIII.B, may be found.**
The District's will post annual notification of pesticide use intend as required in the permit on the agencies web-site at: glacvcd.org

References:

Best Management Practices for Mosquito Control in California. 2010. Available by download from the California Department of Public Health—Vector-Borne Disease Section at http://www.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 Greater Los Angeles County Vector Control District at (562) 944 - 9656.

California Mosquito-borne Virus Surveillance and Response Plan. 2010. [Note: this document is updated annually by CDPH]. . Available by download from the California Department of Public Health—Vector-Borne Disease Section at http://www.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 Greater Los Angeles County Vector Control District at (562) 944 - 9656.

MVCAC NPDES Coalition Monitoring Plan. 2011. [In development at the time of this draft]