ATTACHMENT G - NOTICE OF INTENT

APR 2 0 2012

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 ເ▲A. New Appl	Mark only one item ເ⊗A. New Applicator □B. Change of Information: WDID#		
☐C. Change	☐C. Change of ownership or responsibility: WDID#		
II. DISCHARGER INFORMATION			
A. Name South Fork	Mosquito Aba	tement D	istrict
B. Mailing Address P.O. Box 750			
C. City	D. County	E. State	F. Zip Code
Kernville	Kern	CA	93238
G. Contact Person	H. Email address	I. Title	J. Phone
Ray Gonzales	SFMADOPS Q C+MAIL.COM	Manager	760-
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	

GENERAL NPDES PERMIT FOR BIOLOGICAL AND RESIDUAL PESTICIDE DISCHARGES FROM VECTOR CONTROL APPLICATIONS

ORDER NO. 2011-0002-DWQ NPDES NO. CAG 990004

IV. RECEIVING WATER INFORMATION Biological and residual pesticides discharge to (check all that apply)*: Canals, ditches, or other constructed conveyance facilities owned and controlled by Discharger. ☐ Name of the conveyance system: 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:

3. Directly to river, lake, creek, stream, bay, ocean, etc. Name of water body: Please see PAPfor indirectly affected bodies		
* 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 5		
(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 LarvaeX_Adult Vector		
B. Pesticides Used: List name, active ingredients and, if known, degradation by-products		
Please see Pesticide Application Plan for list.		
C. Period of Application: Start Date 3-15-2012 End Date 12-31-2012		
D. Types of Adjuvants Added by the Discharger: Please see PAP		
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?		
X Yes □ No		

GENERAL NPDES PERMIT FOR BIOLOGICAL AND RESIDUAL PESTICIDE DISCHARGES FROM VECTOR CONTROL APPLICATIONS

ORDER NO. 2011-0002-DWQ NPDES NO. CAG 990004

VII. NOTIFICATION		
Have potentially affected governmental agencies been notified? 区 Yes □ No		
* If yes, a copy of the notifications shall b	ne 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: Ray Gonzales Date: 4-1-2012		
C. Title: District Manager		
X. FOR STATE WATER BOARD USE ONLY		
WDID:	Date NOI Received:	Date NOI Processed:
Case Handler's Initial:	Fee Amount Received:	Check #:

General NPDES Permit For Residual Pesticide Discharge From Vector Control Applications South Fork Mosquito Abatement District P.O. Box 750 Kernville California, 93238 ORDER NO. 2011-0002-DWQ NPDES NO. CAG 990004

IV. RECEIVING WATER INFORMATION—supplemental page

- A. Pesticide Residues Discharge to (check all that apply)*:
 - Directly to river, lake, creek, stream, bay, ocean, etc.
 Name of water body: South Fork of the Kern River & Lake Isabella.

 As specified in the Pesticide Application Plan for the District, see 1, 4, 9d, and references: Best Management Practices for Mosquito Control in California, 2010.

*Notice: Although the South Fork of the Kern River and Lake Isabella water bodies are located within the South Fork Mosquito Abatement District the District does not consider the application of Public Health Pesticides into these water bodies as best management practices for mosquito control. The District does not make applications directly into these water bodies. We find these water bodies are not suitable for mosquitoes to deposit eggs or egg rafts directly onto or in the water. These water bodies are located within the District we find it necessary and appropriate to list them in our application as Waters of the US may be defined. Water is used and rain is deposited and at times collects in spots and areas lying low enough and long enough to be fitting for mosquito and larval activity. It is in these areas and others within the District that our applications are necessary for providing protection from Vectors, while also employing physical control methods etc. as prescribed.

Box number 3 is checked to name the water bodies which <u>indirectly may be</u> <u>affected</u> by mosquito control activities within the district. Additionally the district does not own or use aircraft in applications. As described in the PAP applications are done manually with hand cans or by using mechanical hand held foggers when appropriate and necessary and in strict compliances with published guidelines. Please see references listing published guidelines.

South Fork Mosquito Abatement District Pesticide Application Plan (PAP)

1/1/2012

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 area;

 The South Fork Mosquito Abatement District's service area includes all of the South Fork Mosquito Abatement District's Sphere of Influence (Please see attached Map outlining the boundaries of the District) as Established by Board of Supervisors Resolution No. 69-387 of June 9, 1969 pursuant to Sections 2200 et seq. of the California Health & Safety Code. The district may apply public health pesticides for the control of immature mosquitoes to any site that holds water for more than 96 hours, and may apply adulticides to any location where adult mosquito populations meet treatment thresholds. The District may also be called upon to control mosquitoes outside the boundaries if the mosquito threshold is affecting the District. All applications are within Region 5 of the Regional Water Quality Control Board. Known waterways within the District boundaries include the South Fork of the Kern River. Known water bodies are Lake Isabella. The South Fork Mosquito Abatement District does not apply Public Health Pesticides directly into the Kern River or Lake Isabella.
- 2. Discussion of the factors influencing the decision to select pesticide applications for vector control;

 The decision to use pesticides for the control of mosquitoes is influenced by, but not limited to, the stage of development of the larvae, the inability to manually reduce the source (such as drainage), when the planting of fish is not feasible due to financial restraints or availability, the adult mosquito counts, service requests, virus activity within the District or within close proximity to the District.
- 3. Pesticide products or types expected to be used, and if known, their degradation by-products, the method in which they are applied, and if applicable, the adjuvants and surfactants used; the following list of products may be used by the District for larval or adult control. This list is directly from Attachments E and F of the NPDES Permit for Biological and Residual Pesticide Discharges to Waters of the U.S. for Vector Control Applications. All of these products are used according to label directions and may be applied by ground (hand, truck, ATV, backpack, etc.) or by air (helicopter or fixed wing aircraft).

List of Permitted Larvicide Products

Larvicide Product Name	Registration Number
Vectolex CG Biological Larvicide	73049-20
Vectolex WDG Biological Larvicide	73049-57
Vectolex WSP Biological Larvicide	73049-20
Vectobac Technical Powder	73049-13
Vectobac-12 AS	73049-38
Aquabac 200G	62637-3
Teknar HP-D	73049-404
Vectobac-G Biological Mosquito Larvicide	73049-10
Granules	
Vectomax CG Biological Larvicide	73049-429
Vectomax WSP Biological Larvicide	73049-429
Vectomax G Biological Larvicide/Granules	73949-429
Zoecon Altosid Pellets	2724-448
Zoecon Altosid Briquets	2724-375
Zoecon Altosid Liquid Larvicide Mosquito	2724-392
Growth Regulator	
Zoecon Altosid XR Entended Residual	2724-421
Briquets Zoecon Altosid Liquid Larvicide	
Concentrate	2724-446
Zoecon Altosid XR-G	2724-451
Zoecon Altosid SBG Single Brood Granule	2724-489
Mosquito Larvicide GB-1111	8329-72
BVA 2 Mosquito Larvicide Oil	70589-1
BVA Spray 13	55206-2
Agnique MMF Mosquito Larvicide &	53263-28
Pupicide	JJ20J-20
Agnique MMF G	53263-30
Abate 2-BG	8329-71
5% Skeeter Abate	8329-70
Natular 2EC	8329-82
Natular G	8329-80
Natular XRG	8329-83
Natular XRT	8329-84
FourStar Briquets	83362-3
FourStar SBG	85685-1
Aquabac xt	62637-1
Spheratax SPH (50 G) WSP	84268-2
Spheratax SPH (50 G)	84268-2

List of Permitted Adulticide Products

Adulticide Product Name	Registration
	Number
Pyrocide Mosquito Adulticiding	1021-1570
Concentrate for ULV Fogging 7395	1021-1570
Evergreen Crop Protection EC 60-6	1021-1770
Pyrenone Crop Spray	432-1033
Prentox Pyronyl Crop Spray	655-489
Pyrocide Mosquito Adulticiding	1021-1569
Concentrate for ULV Fogging 7396	1021-1309
Aquahalt Water-Based Adulticide	1021-1803
Pyrocide Mosquito Adulticide 7453	1021-1803
Pyrenone 25-5 Public Health Insecticide	432-1050
Prentox Pyronyl Oil Concentrate #525	655-471
Prentox Pyronyl Oil Concentrate or 3610A	655-501
Permanone 31-66	432-1250
Kontrol 30-30 Concentrate	73748-5
Aqualuer 20-20	769-985
Aqua-Reslin	432-796
Aqua-Kontrol Concentrate	73748-1
Kontrol 4-4	73748-4
Biomist 4+12 ULV	8329-34
Permanone RTU 4%	432-1277
Prentox Perm-X UL 4-4	655-898
Allpro Evoluer 4-4 ULV	769-982
Biomist 4+4	8329-35
Kontrol 2-2	73748-3
Scourge Insecticide with	
Resmethrin/Piperonyl Butoxide 18%+54%	432-667
MF Formula II	
Scourge Insecticide with	
Resmethrin/Piperonyl Butoxide 4%+12%	432-716
MF Formula II	
Anvil 10+10 ULV	1021-1688
AquaANVIL Water-based Adulticide	1021-1807
Duet Dual-Action Adulticide	1021-1795
Anvil 2+2 ULV	1021-1687
Zenivex E20	2724-791
Trumpet EC Insecticide	5481-481
Fyfanon ULV Mosquito	67760-34

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 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 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 and in item number 2 above. (Please see attached Map outlining the boundaries of the District) The typical sources treated by this District include:

- > Irrigated Pastures
- Irrigated Crops
- Riparian Areas
- Wetlands
- Roadside Ditches
- > Abandoned Swimming Pools/ Spas
- Seasonal Ponds and Low Areas
- Ornamental Ponds and Other Water Features

- > Flooded Fields and Pastures
- > Sumps and Drains
- Catch Basins
- ➤ Detention Basins/Retention Basins
- Manmade Depressions
- Natural or Artificial Water-Holding Containers
- Potentially any aquatic site that has standing water for 96 hours or more

Although the Kern River and Lake Isabella water bodies are located within the South Fork Mosquito Abatement District the District does not consider the application of Public Health Pesticides into these water bodies as best management practices for mosquito control.

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

With mosquito vectors, the South Fork Mosquito Abatement District's first goal is to employ Integrated Pest Management (IPM), a system of pest control in which various strategies are used in combination. When surveillance efforts indicate that mosquito control is necessary the District employs a multipronged approach strategy that incorporates a variety of methods to control mosquitoes. These methods include habitat modification, biological predators, and chemical application. When properly implemented, IPM is an effective, environmentally sensitive, and cost-effective approach to mosquito control. Regular internal review ensure that IPM programs meet these objectives while adhering to the highest scientific and safety standards available. The South Fork Mosquito Abatement District first looks to Physical control; the management or alteration of physical features of the environment to control and or manage mosquito breeding. Physical control manages large and small areas of the environment in a way that results in a lowering of mosquito population sizes. Physical control is often applied in agricultural fields, and in the design and construction of structures used for water management. Additionally The South Fork Mosquito Abatement District considers Biological control; the use of colonized or naturally occurring parasites or predators to control pest populations. The definition includes pathogenic microorganisms, since they are also parasites. Fish, predators, beetles. The use of natural enemies to manage mosquito populations. There are several types of biological control including the direct introduction of parasites, pathogens and predators to target mosquitoes. The most commonly used methods and their limitations are included in the Best Management Practices for Mosquito Control in California.

Example of specific methods employed by the District include; stocking mosquito fish (Gambusia affinis) in fixed containers such as stock troughs and ornamental ponds, educating residents on mosquito development, attraction and harborage, encouraging them to eliminate breeding sources by preventing and reducing standing water on their property, working with owners to find long-term water management strategies that meet their needs while minimizing public health pesticide treatments. Larger sources of standing water such as irrigated pastures and crop fields present more of a challenge and are of economic concern. The South Fork Mosquito Abatement District works with property owners to understand ongoing irrigation schedules and practices and learn when and where to expect the movement of water to avoid increases of larvae and adult vectors. When necessary property owners practicing crop irrigation or the like are asked to consider and or change practices as well as improve drainage of irrigated pastures. The District consistently works with residents instructing them in vector species and habitats, differentiation between vector and nuisance mosquito types and personal protection strategies. Outreach includes collaborating with schools, groups, visitor to our Riparian Centers when appropriate and utilizing educational opportunities that arise from answering calls for service.

The District regularly finds itself limited in its' efforts to reduce vector mosquitoes for a variety of reasons. Due to the District's size and budget constraints there are many a time when resources of manpower and funds reduce our ability to manage the increase of vector mosquitoes during the season. Additionally legislation and regulations increasingly draw on available resources and further reduce our ability to manage vector populations creating a greater potential of vector disease and concern for our community. The District is located in an area which is biologically sensitive thereby prohibiting necessary land manipulations by private property owners. Existing waterways are constantly changing due to weather and drought conditions creating blockages that greatly increase mosquito densities where BMPs' are not possible. These issues challenge the District in its efforts to prevent disease outbreak from vector mosquitoes.

6. How much product is needed and how this amount was determined; In 2010, the South Fork Mosquito Abatement District applied the following amounts of public health pesticides:

Public Health Pesticide	EPA Reg. #	Quantity
Bayer Insecticide 4+12	432-716	2.00 gal.
Clark Chem. GB1111	8329-72	1.82 gal.
Cognis Corp. Agnique MMF	53263-28	0.0035 gal.
Cognis Corp. Agnique MMF-G	53263-30	7.7 lbs.
Valent BioSciences	73049-429	0.04 lbs.
Zoecon Altosid Pellets WSP	2724-448	1.27 lbs.

The District records all applications and submits monthly and annual Pesticide Use Reports (PUR) to the Kern County Agricultural Commissioner and the California Department of Pesticide Regulation. The data presented above were taken from the District's 2010 PUR. 2010 data is representative in general of conditions typical for the area of responsibility for the District. The need to apply product is determined by surveillance and activity. Actual use varies annually depending on the mosquito activity. For example in past seasons the District annual Pesticide Use Reports included over 100 gallons of GB1111 Larvicide, 21 pounds of Bactimos Wettable Powder Larvicide, 29 gallons of Scourge 4+12 Adulticide. The agency may apply any pesticide included in Attachments E and F of the Vector Control General Permit.

- 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; and

The South Fork Mosquito Abatement District practices pre and post treatment inspections of larval sources to determine efficacy. As described in item 2 above, this criterion is evaluated carefully prior to a decision to treat with Public Health Pesticides. Adult mosquito control evaluation is based on regular physical surveillance in addition to results of identification and counts from a series of New Jersey Light traps placed strategically throughout the Districts area of responsibility.

When feasible carbon monoxide traps are employed to further evaluate conditions and populations before deciding to employ Public Health Pesticides.

9. Description of the BMPs to be implemented. The BMP's shall include, at the minimum;
The South Fork Mosquito Abatement District's Best Management Practices are described in item 2

The South Fork Mosquito Abatement District's Best Management Practices are described in item 2 above. Specific elements have been highlighted below, see items a thru f;

- a. measures to prevent pesticide spill;
 District technicians and or applicators train annually in spill prevention and response. Agency practice ensures that on a daily basis all application equipment has been calibrated and in proper working order prior to utilization.
- 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 Regulations and the terms of the cooperative agreement with the California Department of Public Health.
- c. a plan to educate Coalition's or Discharger's staff and pesticide applicator on any potential adverse effects from the pesticide application to waters of the U.S. from the pesticide application; This are addressed currently and will continue to 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 spray mode, e.g. aerial spray, truck spray, hand spray, etc.; The South Fork Mosquito Abatement District calibrates larviciding and adulticiding equipment on hand (hand held, backpack and truck mounted) each year to meet application specifications. Application records are reviewed to ensure appropriate amounts of material are being used. Ultralow volume (ULV) application equipment is calibrated for output and droplet size to meet label requirements. No aerial larviciding or adulticiding equipment is available or employed due to the District's budget constraints.

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

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

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

Please see the Best Management Practices for Mosquito Control in California. Specifically: Universally Applicable Mosquito Control BMPs, pg.4, Residential and Landscaped Properties, pg.5, Rural Properties, pg. 6 Wetlands, pg. 9 Wildlands and Undeveloped Areas, pg. 19

Examples of The South Fork Mosquito Abatement Districts Best Management Practices in settings as described above are; educating property owners of the California Health and Safety Code, landowners in California are legally responsible to abate (eliminate the source of) a public nuisance arising from their property, including mosquitoes [H&S Code Sections 2001 - 4(d); 2002; 2060 (b)]. In areas that are within the jurisdictional boundaries of a mosquito control program, landowners should work with staff to address mosquito problems, particularly in areas where irrigation is used for agricultural purposes. The District finds that for the most part landowners involved in agricultural and animal husbandry are familiar with BMPs as it pertains to vector control. Economic sustainability is foremost in their minds and is evident in their practices, responsiveness to Public Health Concerns in their communities and water management due to the ongoing drought conditions in this area. Water management is of great economic concern in the Districts geographical location.

In locations where Districts residents are more densely located such as built-up neighborhoods it is necessary to allocate more time and effort in educating on BMPs such as standing water in containers, ponds, pet watering dishes, pools and lawn irrigation. In these circumstances communicating and educating on Universally Applicable Mosquito Control BMPs such as source reduction, habitat modification and biological control are very effective. Offering mosquito fish for their ornamental ponds or explaining the importance of swimming pool treatments is well received.

Wetlands for the District are generally maintained by Environmental entities that are very involved and astute when it comes to biological concerns and issues. Agreements, planning meetings and programs are very useful in coordinating the reduction of source mosquito populations. Discussions between the District and these entities have been productive and encouraging in regard to vector source reduction. The Districts work is fluid and ever evolving. The challenges are great due to resources, funding, and manpower deficiencies. Recent regulatory add-ons increase costs to vector management programs further reducing capabilities.

- 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;

Only those mosquito sources that District staff determines to represent imminent threats to public health or quality of life are treated. The presence of any mosquito may necessitate treatment, however higher thresholds may be applied depending on the District's resources, disease activity, or local needs. Treatment thresholds are based on a combination of one or more of the following criteria:

- > Mosquito species present
- Mosquito stage of development
- > Pest, nuisance, or disease potential
- Disease activity
- > Mosquito abundance
- > Flight range
- Proximity to populated areas
- Size of source
- > Presence/absence of natural enemies or predators
- Presence of sensitive/endangered species or habitats.
- b. Identify target vector species to develop species-specific pest management strategies based on developmental and behavioral considerations for each species;

Please item 2 above.

Specific species of mosquitoes of major concern found within The South Fork Mosquito Abatement Districts area of responsibility are:

Aedes nigromaculis

Culex tarsalis

Aedes melanimon

Culex quinquefasciatus

Aedes sierrensis

Culex stigmatosoma Culex erythrothorax

Culex restuans

Anopheles freeborni

Culiseta inornata

Anopheles franciscanus

Culiseta incidens

Anopheles punctipennis

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 item 2 above.

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

The procedure used is described in item 2 above. Methods used are 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 South Fork Mosquito Abatement District continually collects adult and larval mosquito surveillance data, and uses these data to guide mosquito control activities.

- 11. Examination of Alternatives. Dischargers shall 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 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.

The South Fork Mosquito Abatement District applies the principles and practices of Integrated Pest Management as described on pages 26 and 27 of Best Management Practices for Mosquito Control in California and is described in item 2 above. 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 available biological control methods. Additional alternatives to using pesticides for managing mosquitoes are listed on pages 4-19 of Best Management Practices for Mosquito Control in California (See previous comment). Implementing preferred alternatives depends on a variety of factors including availability of agency resources, cooperation with stakeholders, coordination with other regulatory agencies, and the anticipated efficacy of the alternative. If a pesticide free alternative does not sufficiently reduce the risk to public health, pesticides are considered, beginning with the least amount necessary to effectively control the target vector.

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

The South Fork Mosquito Abatement District's Integrated Pest Management practices are used to determine need for Public Health Pesticides. Levels of activity within the definition of nuisance as defined in Section 2002(j) of the California Health and Safety Code do not automatically lead to use of pesticides. Often the District reaches out to residents creating or effected by the nuisance finding solutions to both abate and instruct in dealing with adult mosquitoes if found to not be of a vector nature without applying pesticides. Examples are in line with the nature of adult mosquito activity; it is often short-lived, with meteorological conditions regional in nature, early afternoon winds may blow swarms to the east where the atmosphere is harshly dry and unpopulated limiting their lifespan and opportunity to reproduce, educating effected residents on the use of personal protection while promoting eco-friendly principles and water and environmental quality needs. Taking no action is a viable alternative when faced with nuisance levels of mosquitoes. Dealing with (vector) mosquitoes when the public health is at risk is not a matter to be taken lightly and Public Health Pesticides are a viable and correct management tool to be utilized when essential to the welfare of the Public when used appropriately as to material, rate and application method and within the context of our Integrated Pest Management core principles.

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. District staff monitors application equipment on a daily basis to ensure it remains in proper working order. Spray, truck and hand larviciding equipment is calibrated each year to meet application specifications, ULV equipment is calibrated for output to meet label requirements and is a part of the MOU with CDPH. Supervisor reviews spray records daily to ensure appropriate amounts of material are being used. Spill mitigation devices are placed in all spray vehicles and pesticide storage areas to respond to spills. Employees are trained on spill prevention and response annually. All pesticide applicators receive annual safety training in addition to their regular continuing education.

13. Specify a website where public notices, required in Section VIII.B, may be found.

D. PAP Processing, Approval, and Modifications

Upon receipt of a PAP, staff will post it on the State Water Board website for a 30-day public comment period. If no comments are received and staff deems the APAP complete, the Deputy Director will issue an NOA within three (3) working days following closure of the comment period. If comments are received, staff will try to address the comments as expeditiously as possible to allow the Deputy Director to issue an NOA within 10 working days.

Major changes to the PAP shall be submitted to the Deputy Director for approval. Examples of major changes include using a different product other than what is specified in the PAP, changing an application method that may result in different amounts of pesticides being applied, or adding or deleting BMPs.

Since the PAP shall include ALL the water bodies or water body systems in which pesticides are being planned to be applied or may be applied to control vectors and ALL the application areas and the target areas in the system that are being planned to be applied or may be applied, changes in monitoring locations are not considered major changes. However, these changes need to be reported in the annual report.

E. Pesticide Application Log

The Discharger shall maintain a log for each pesticide application. The application log shall contain, at a minimum, the following information, when practical, for larvicide or adulticide applications:

- 1. Date of application;
- 2. Location of the application and target areas (e.g., addresses, crossroads, or map coordinates);
- 3. Name of applicator;
- 4. The names of the water bodies treated (e.g., specific canal, creek, lake, etc.);
- 5. Application details, such as when the application started and stopped, pesticide application rate and concentration, water flow rate of the target area, surface water area, volume of water treated, pesticide(s) and adjuvants used by the Discharger, and volume or mass of each component discharged;
- 6. Visual monitoring assessment; and
- 7. Certification that applicators followed the PAP.

This is an ongoing practice of the District as required to comply with the Department of Pesticide Regulations (DPR) regulations and the California Department of Public Health's (CDPH) Cooperative Agreement.

References:

<u>Best Management Practices for Mosquito Control in California</u>. 2010. Available from the California Department of Public Health—Vector-Borne Disease Section, (916) 552-9730 or by download from http://www.westnile.ca.gov/resources.php under the heading Mosquito Control and Repellent Information.

<u>California Mosquito-borne Virus Surveillance and Response Plan</u>. 2010. [Note: this document is updated annually by CDPH]. Available from the California Department of Public Health—Vector-Borne Disease Section, (916) 552-9730 or by download from http://www.westnile.ca.gov/resources.php under the heading Mosquito Control and Repellent Information.

Mosquito & Vector Control Association of California's NPDES Coalition Monitoring Plan – 2011. Available from the Mosquito & Vector Control Association: http://www.mvcac.org

ATTACHMENT E - LIST OF PERMITTED ADULTICIDE PRODUCTS

Product Name	Registration Number
Pyrocide Mosquito Adulticiding Concentrate for ULV Fogging 7395	1021-1570
Evergreen Crop Protection EC 60-6	1021-1770
Pyrenone Crop Spray	432-1033
Prentox Pyronyl Crop Spray	655-489
Pyrocide Mosquito Adulticiding Concentrate for ULV Fogging 7396	1021-1569
Aquahalt Water-Based Adulticide	1021-1803
Pyrocide Mosquito Adulticide 7453	1021-1803
Pyrenone 25-5 Public Health Insecticide	432-1050
Prentox Pyronyl Oil Concentrate #525	655-471
Prentox Pyronyl Oil Concentrate or 3610A	655-501
Permanone 31-66	432-1250
Kontrol 30-30 Concentrate	73748-5
Aqualuer 20-20	769-985
Aqua-Reslin	432-796
Aqua-Kontrol Concentrate	73748-1
Kontrol 4-4	73748-4
Biomist 4+12 ULV	8329-34
Permanone RTU 4%	432-1277
Prentox Perm-X UL 4-4	655-898
Allpro Evoluer 4-4 ULV	769-982
Biomist 4+4	8329-35
Kontrol 2-2	73748-3
Scourge Insecticide with Resmethrin/Piperonyl Butoxide 18%+54% MF Formula II	432-667
Scourge Insecticide with Resmethrin/Piperonyl Butoxide 4%+12% MF Formula II	432-716
Anvil 10+10 ULV	1021-1688
AquaANVIL Water-based Adulticide	1021-1807
Duet Dual-Action Adulticide	1021-1795
Anvil 2+2 ULV	1021-1687
Zenivex E20	2724-791
Trumpet EC Insecticide	5481-481
Fyfanon ULV Mosquito	67760-34

ATTACHMENT F - LIST OF PERMITTED LARVICIDE PRODUCTS

Product Name	Registration Number
Vectolex CG Biological Larvicide	73049-20
Vectolex WDG Biological Larvicide	73049-57
Vectolex WSP Biological Larvicide	73049-20
Vectobac Technical Powder	73049-13
Vectobac-12 AS	73049-38
Aquabac 200G	62637-3
Teknar HP-D	73049-404
Vectobac-G Biological Mosquito Larvicide Granules	73049-10
Vectomax CG Biological Larvicide	73049-429
Vectomax WSP Biological Larvicide	73049-429
Vectomax G Biological Larvicide/Granules	73949-429
Zoecon Altosid Pellets	2724-448
Zoecon Altosid Pellets	2724-375
Zoecon Altosid Liquid Larvicide Mosquito Growth	2724-392
Regulator	2124-392
Zoecon Altosid XR Entended Residual Briquets	2724-421
Zoecon Altosid Liquid Larvicide Concentrate	2724-446
Zoecon Altosid XR-G	2724-451
Zoecon Altosid SBG Single Brood Granule	2724-489
Mosquito Larvicide GB-1111	8329-72
BVA 2 Mosquito Larvicide Oil	70589-1
BVA Spray 13	55206-2
Agnique MMF Mosquito Larvicide & Pupicide	53263-28
Agnique MMF G	53263-30
Abate 2-BG	8329-71
5% Skeeter Abate	8329-70
Natular 2EC	8329-82
Natular G	8329-80
Natular XRG	8329-83
Natular XRT	8329-84
FourStar Briquets	83362-3
FourStar SBG	85685-1
Aquabac xt	62637-1
Spheratax SPH (50 G) WSP	84268-2
Spheratax SPH (50 G)	84268-2

South Fork Mosquito Abatement District P.O. Box 750 Kernville, CA 93238

Notice to Potentially Effected Governmental Agencies

March 15, 2012

Dear Agency,

The South Fork Mosquito Abatement District (District) has applied for a National Pollutant Discharge Elimination System (NPDES) permit (Permit No. CAG 990004). The Clean Water Act, at section 301(a), prohibits the discharge of any pollutant to waters of the U.S., except in compliance with an NPDES permit. Under the current guidelines of the permit, we are required to notify potentially affected governmental agencies before the first application of aquatic pesticides each calendar year. This notification lets you know that the District may be making public health pesticide applications to waters of the U.S. under your jurisdiction for the purpose of mosquito and mosquito-borne disease reduction or prevention. A map of the District boundaries as well as areas outside the District boundaries that have been treated in past years is included. Attachments E and F provide you with a list of currently permitted materials for Biological and Pesticide Discharge to waters of the U.S for vector control under General Permit NO. CAG990004. Traditionally, the main period of applications occurs between March and November. There are no known water use restrictions or precautions during treatment. Any questions or concerns regarding this notice may be directed to Ray Gonzales, District Manager at (760) 376-4268.

Respectfully,

Ray Gonzales
District Manager
South Fork Mosquito Abatement District
P.O. Box 750
Kernville, CA 93238
Cell: 760-376-4268

Fax: 760-379-2542 sfmadops@gmail.com

South Fork Mosquito Abatement District P.O. Box 750 Kernville, CA 93238

Agency Name	Address
County of Kern	Supervisor McQuiston 1115 Truxtun Avenue, 5th Floor Bakersfield, CA 93301
Kern Co. Dep. of Public Health Matt Constantine	1800 Mt. Vernon Avenue Bakersfield, CA 93306
DFG Director Charlton H. Bonham	1416 Ninth Street , 12th Floor, Sacramento, CA 95814
Bureau of Land Management Tim Smith	Bakersfield Field Office 3801 Pegasus Drive
Field Manager Kern River Ranger District	Bakersfield, CA 93308 105 Whitney Road P.O. Box 9 Kernville, CA 93238
U.S. Army Corps of Engineers	U.S. Army Corps of Engineers Regulatory Division 1325 J St, Room 1350
U.S. Army Corps of Engineers Colonel William J. Leady, District Engineer	1325 J Street Sacramento, CA 95814

Ray Gonzales District Manager South Fork Mosquito Abatement District P.O. Box 750

Kernville, CA 93238 Cell: 760-376-4268

Fax: 760-379-2542 sfmadops@gmail.com

