ATTACHMENT E - NOTICE OF INTENT

WATER QUALITY ORDER 2016-XXXX-DWQ GENERAL PERMIT CAG990004

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

I. NOTICE OF INTENT STATUS (see In	structions)		
Mark only one item ☐ A. New Applicat	or B. Change of Informa	ation: WDID#	
☐ C. Change of ov	wnership or responsibility: WDI	D#	
D. Enrolled und	er Order 2011-0002-DWQ: WI	DID#	10 E
II. DISCHARGER INFORMATION			
A. Name Burney Basin Mosqu B. Mailing Address	ito Abotement	Dist.	
B. Mailing Address			
POBOX 1049			
C. City	D. County Shasta	E. State	F. Zip Code 96013
G. Contact Person		CA	
	H. Email address	I. Title	J. Phone
Rick Dougherty	bbmade frontier	Dist. Mgr.	530-3352133
III. BILLING ADDRESS (Enter Informat	ion <u>only</u> if different from Sec	ction II above)	
A. Name			
	C 1		
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)*: 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: Varvous - See PAP Name of the conveyance system: * 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 (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 Adult Vector A. Target Organisms: Vector Larvae B. Pesticides Used: List name, active ingredients and, if known, degradation by-products See Attachment E&F End Date Dec 31 C. Period of Application: Start Date_______ D. Types of Adjuvants Added by the Discharger: VI. PESTICIDES APPLICATION PLAN A. Has a Pesticides Application Plan been prepared?* X 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?

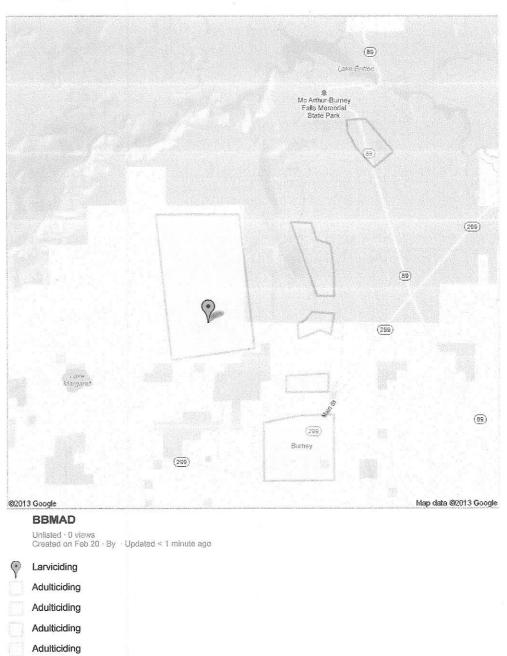
☐ No

X Yes

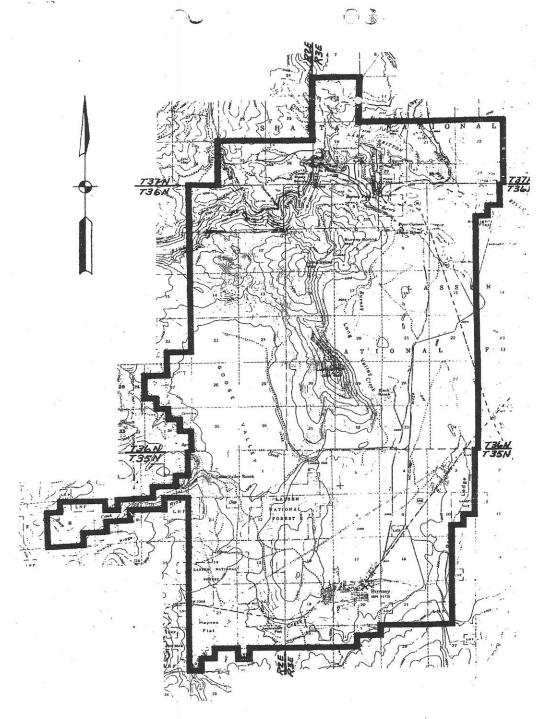
VII. NOTIFICATION Have potentially affected governmental agencies been notified? □ No * If yes, a copy of the notifications shall be attached to the NOI. See attachment VIII. FEE Have you included payment of the filing fee (for first-time enrollees only) with this submittal? Heed an invoice emai ☐ Yes ☐ NA M NO 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: B. Signature: C. Title: DUS FOR STATE WATER BOARD USE ONLY X. Date NOI Processed: Date NOI Received: WDID: Fee Amount Received: Check #: Case Handler's Initial:

Google

Adulticiding Aduliciding ATTACHMENT A



MAP OF THE BURNEY BASIN MOSQUITO ABATEMENT DISTRICT

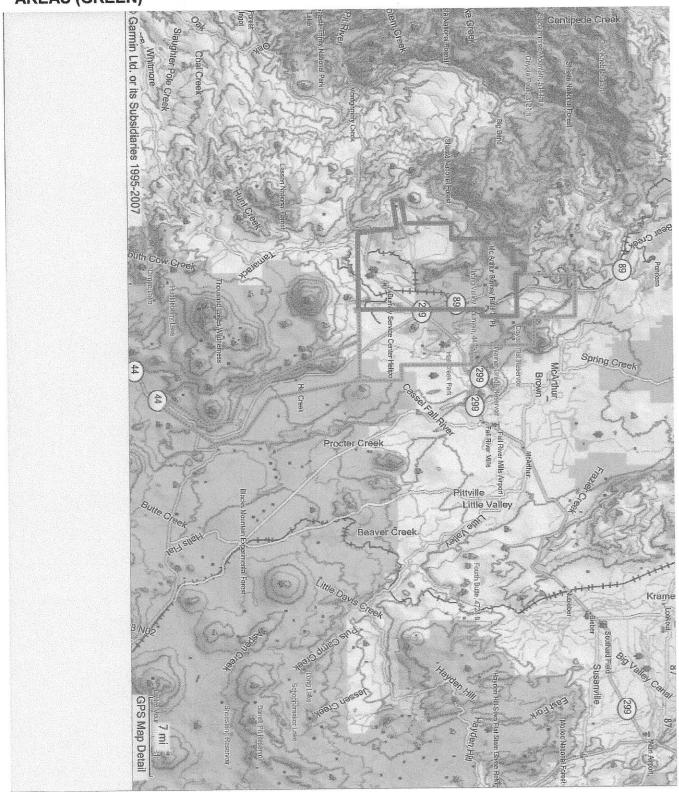


BURNEY BASIN MOSQUITO ABATEMENT DISTRICT

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MAP SHOWING THE APPROXIMATE BOUNDARIES OF THE BURNEY BASIN MOSQUITO ABATEMENT DISTRICT (RED) PLUS HISTORICALLY TREATED AREAS (GREEN)



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
Agualuer 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		
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	
Vectoriax 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 Zoecon Altosid XR Entended Residual Briquets	2724-421	
Zoecon Altosid XX Entended Residual Briquets Zoecon Altosid Liquid Larvicide Concentrate	2724-446	
Zoecon Altosid XR-G	2724-451	
Zoecon Altosid SBG Single Brood Granule	2724-489	
Magnita Louisido GP 1111	8329-72	
Mosquito Larvicide GB-1111	70589-1	
BVA 2 Mosquito Larvicide Oil	55206-2	
BVA Spray 13	53263-28	
Agnique MMF Mosquito Larvicide & Pupicide	53263-30	
Agnique MMF G	8329-71	
Abate 2-BG	8329-70	
5% Skeeter Abate	8329-82	
Natular 2EC	8329-80	
Natular G	8329-83	
Natular XRG	8329-84	
Natular XRT	83362-3	
FourStar Briquets	85685-1	
FourStar SBG	62637-1	
Aquabac xt	84268-2	
Spheratax SPH (50 G) WSP Spheratax SPH (50 G)	84268-2	

Rick Dougherty District Manager PO Box 1049 Burney, CA 96013 (530) 335 - 2133



BURNEY BASIN MOSQUITO ABATEMENT DISTRICT

NOTICE TO POTENTIALLY AFFECTED GOVERNMENTAL AGENCIES

Dear Agency,

The Burney Basin 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 application 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 Rick Dougherty, District Manager at (530) 335-2133 or email at bbmad@frontiernet.net.

Respectfully,

Rick Dougherty District Manager Burney Basin Mosquito

Abatement District PO Box 1049 37506 Main St Burney, CA 96013

(530) 335-2133

List of Agencies to be contacted:

Agency Name	Address
California Department of Transportation	P.O. Box 496073 Redding, CA 96049-6073
California Department of Fish and Game	601 Locust St. Redding, CA 96002
Burney Water District	20222 Hudson St. Burney, CA 96013
US Forest Service, Hat Creek Ranger District	PO Box 220 Fall River Mills, CA 96028
Shasta County Public Health	2650 Breslauer Way, Redding, CA 96001-4246
Shasta County Ag Commissioner	3179 Bechelli Lane, Suite 210 Redding, CA 96002
Shasta County Ag Continuorione:	1450 Court St. Suite 308A Redding, CA 96001

PESTICIDE APPLICATION PLAN (PAP) FOR THE BURNEY BASIN MOSQUITO ABATEMENT DISTRICT

The Discharger shall develop a Pesticides Application Plan (PAP) that contains the following elements:

 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 Burney Basin Mosquito Abatement District covers 75 square miles in Eastern Shasta County. The District may also be called upon to control mosquitoes outside the boundaries if the mosquito threshold is affecting the District. Please see the attached District Boundary maps. The area in red is the approximate district boundaries. The area in green represents areas outside the district boundaries but some mosquito control work has been conducted by the district in the past during arbovirus activity.

All applications are within Region 5 of the Regional Water Quality Control Board. Known waterways within District boundaries include Burney Creek, Goose Creek, Clark Creek, Cayton Creek, Pit River, Lake Britton and associated tributaries that could be affected by the Districts applications.

Should the need arise and areas outside the District boundaries are treated, they may include Hat Creek, Rising River, Baum Lake and Crystal Lake.

2. Discussion of the factors influencing the decision to select pesticide applications for mosquito 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 or within close proximity to the District.

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 Attachment E and F within 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	

Larvicide Product Name	Registration Number	
ectolex CG Biological Larvicide	73049-20	
ectolex WDG Biological Larvicide	73049-57	
ectolex WSP Biological Larvicide	73049-20	
ectobac Technical Powder	73049-13	
/ectobac-12 AS	73049-38	
Aquabac 200G	62637-3	
eknar HP-D	73049-404	
Vectobac-G Biological Mosquito Larvicide	73049-10	
/ectomax CG Biological Larvicide	73049-429	
/ectomax WSP Biological Larvicide	73049-429	
/ectomax G Biological Larvicide/Granules	73949-429	
Opecon Altosid Pellets	2724-448	
Joecon Altosid Pellets	2724-375	
Zoecon Altosid Liquid Larvicide Mosquito	2724-392	
Growth Regulator	2/24 332	
Coecon Altosid XR Entended Residual Briquets	2724-421	
Concentrate	2724-446	
Zoecon Altosid XR-G	2724-451	
oecon 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	
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	
ourStar Briquets	83362-3	
ourStar 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	1021-15/0	
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 1505	
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%	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	

3. 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 Burney Basin Mosquito Abatement District's preferred solution, and whenever possible the agency works with property owners to affect long-term solutions to reduce or eliminate the need for continued applications as described in Item 2 above. Mosquito breeding sources and areas that require adult mosquito control are difficult to predict from year to year based on the weather and variations in local environmental conditions. However, the typical sources treated by this agency include:

Irrigated Crops
Pastures (irrigated and non-irrigated)
Detention Basins/Retention Basins
Wetlands
Abandoned Swimming pools
Wildlife areas
Wooded Areas (Riparian Areas)

Ornamental Ponds
Catch Basins
Riparian Areas
Roadside Ditches
Rice Fields
Sewage Lagoons

Potentially any aquatic site that holds water for more than 96 hours or more.

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

a. Alternatives; With any source of mosquitoes or other vectors, the Burney Basin Mosquito Abatement 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. Mosquito sources can be broken down into three categories based on the size. Small sources, such as tires and buckets. These are generally, but not always, simply emptied without the use of pesticides. Medium sized sources, such as horse troughs and ornamental ponds. Obviously these are meant to hold water so merely empting them is not an option. Traditionally, mosquito fish (*Gambusia affinis*) are planted. Large sources, such as irrigated pastures and rice fields. These present more of a challenge. Control work on these sources is not only of economical concern, but one of feasibility as well. Is it possible to grow rice without standing water? As it stands now, the answer is no. Rice fields have been planted with mosquito fish, but often times availability of fish and the quantity needed is not obtainable. Property owners are asked to consider changing irrigation practices as well as improving drainage of irrigated pastures.

Other specific methods used by the agency include 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. The District annually hosts elementary school children expressing the need for mosquito control and the importance of removing standing water on their property.

b. Limitations; As with any operation, there are limitations to mosquito best management practices. The cost of equipment and personnel time are two examples. Some property owners as well as this District lack the personnel and finances to implement habitat improvement (e.g., re-grading irrigated pastureland to reduce mosquito habitat). Accessibility to some sources due to geography makes it impossible for source reduction. Compliance with permits, monitoring requirements, and paperwork requires more manhours, thus reducing the hours that could be spent inspecting mosquito sources and implementing non-pesticide alternatives.

Legal restrictions and/or regulations to manipulate land, vegetation, or redesign is a significant limitation. Regulations and State and Federal laws prohibiting the necessary land improvements due to the presence of threatened or endangered species is a large limitation that does not allow for proper BMPs to be implemented.

Lastly, biological control such as mosquito fish may not be suitable in all mosquito breeding sources due to poor water quality, mosquito larvae densities, emergent vegetation, possibility of drying up, sensitive species, and/or the source may drain into natural waterways.

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

The need to apply product is determined by surveillance. Actual use varies annually depending on mosquito abundance. The pesticide amounts presented below were taken from the Burney Basin Mosquito Abatement District's 2015 PUR as an estimate of total pesticide use in 2016. Actual application amounts to waters of the US will be less. Other public health pesticides in addition to those listed below may be used as part of the agency's best management practices.

MATERIAL	EPA Reg. #	POUNDS	GALLONS	
Vectobac G	73049-10	4,347		
Vectolex WDG	73049-57	109		
Vectobac 12AS	73049-38		45.50	
Zenivex E20	2724-791		15.85	
Permanone 31-66	432-1250		8.11	
Fyfanon ULV	67760-34		8.32	
Pyrocide 7067 ULV	1021-1199		10.45	

6. Representative monitoring locations and the justification for selecting these monitoring locations Please see the MVCAC NPDES Coalition Monitoring Plan.

- 7. 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 BBMAD routinely inspects larval sources both pre and post treatment. Based upon the criteria described in Item 2 above, the decision for treatment is evaluated. Adult mosquito control is evaluated by utilizing the various adult mosquito traps placed throughout the district. These are monitored both pre and post treatment.
- 8. Description of the BMPs to be implemented. The BMPs shall include at a minimum: The Burney Basin Mosquito Abatement District's BMPs are described in Item 2 above. 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. Agency 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 Burney Basin Mosquito Abatement District calibrates truck-mounted and handheld larviciding equipment each year to meet application specifications. Application records are reviewed 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 agency 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 <u>Item 2 above</u>. Through public education, residents are encouraged to monitor their property for standing water. Those with ornamental ponds are

- 9. 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 Burney Basin Mosquito Abatement District staff only apply 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 agency's resources, disease activity, surveillance data, or local needs. Treatment thresholds are based on a combination of one or more of the following criteria:

- Mosquito species present
- Mosquito stage of development
- Pest, nuisance, or disease potential
- Disease activity
- Mosquito abundance
- Flight range
- Proximity to populated areas
- Size of source
- Presence/absence of natural enemies or predators
- Presence of sensitive/endangered species or habitats.
- b. Identify target vector species to develop species-specific pest management strategies based on developmental and behavioral considerations for each species;
 Please see Item 2 above.

Specific Species of mosquitoes of major concern found within Burney Basin Mosquito Abatement District

Culex pipien
Culex stigmatosoma
Culex tarsalis
Aedes sierrensis

Aedes melanimon Aedes nigromaculis Aedes increpitus Aedes sticticus

Aedes vexans Culiseta incidens Culiseta impatiens Culiseta inornata Anopheles franciscanus Anopheles punctipennis Anopheles freeborni

Additional Species of mosquitoes which may be found within Burney Basin Mosquito Abatement District

Aedes washinoi Aedes ataphylla Aedes fitchii Aedes flavescens

Culex apicaltis Culex territans Aedes hemiteleus Aedes dorsalis

Culex boharti

Aedes tahoensis Aedes hexodontus

Aedes ventrovittis

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 agency's preferred solution, and whenever possible the agency works with property owners to implement long-term solutions to reduce or eliminate the need for continued pesticide 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.

This is provided in the Item 2 above that the agency uses. The Burney Basin Mosquito Abatement District continually collects adult and larval mosquito surveillance data, dead bird reports, and sentinel chicken test results, and monitors regional mosquito-borne disease activity detected in humans, horses, birds, and/or other animals, and uses these data to guide mosquito control activities.

- 10. 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 Burney Basin Mosquito Abatement District's uses the principles and practices of Integrated Vector Management (IVM) as described on pages 26 and 27 of the Best Management Practices for Mosquito Control in California and is discussed 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 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 (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 Burney Basin Mosquito Abatement District follows an existing IVM program which includes practices described in the Item 2 above.

A "nuisance" is specifically defined in California Health and Safety Code (HSC) §2002(j). This definition allows vector control agencies to address situations where even a low number of vectors may pose a substantial threat to public health and quality of life. In practice, the definition of a "nuisance" is generally only part of a decision to apply pesticides to areas covered under this permit. As summarized in the California Mosquito-borne Virus Surveillance and Response Plan, the overall risk to the public when vectors and/or vector-borne disease are present is used to select an available and appropriate material, rate, and application method to address that risk in the context of our IVM program.

11. 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 Burney Basin Mosquito Abatement 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.

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

The Burney Basin Mosquito Abatement District currently does not have a website. Please see the California State Water Resource Control Board's website for public notices.

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 Burney Basin Mosquito Abatement District at (530) 335-2133.
- 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 Burney Basin Mosquito Abatement District at (530) 335-2133.
- MVCAC NPDES Coalition Monitoring Plan. 2011. Available by download from the State Water Resources Control Board at http://www.waterboards.ca.gov/water-issues/programs/npdes/aquatic.shtml. Copies may be requested by calling the Burney Basin Mosquito Abatement District at (530) 335-2133.