

8/23/2011

DAM

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

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

RECEIVED

ATTACHMENT G – NOTICE OF INTENT

JUL 25 2011

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

RWQCB-CVR
FRESNO, CALIF.

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

I. NOTICE OF INTENT STATUS (see Instructions)

Mark only one item - <input checked="" type="checkbox"/> A. New Applicator	<input type="checkbox"/> B. Change of Information: WDID# _____
<input type="checkbox"/> C. Change of ownership or responsibility: WDID# _____	

II. DISCHARGER INFORMATION

A. Name Madera County Mosquito and Vector Control District			
B. Mailing Address 3105 Airport Drive			
C. City Madera	D. County Madera	E. State CA	F. Zip Code 93637
G. Contact Person Leonard Irby	H. Email address leoi_mmvc@sbcbglobal.net	I. Title Manager	J. Phone 559 662-8880

III. BILLING ADDRESS (Enter Information only if different from Section II above)

A. Name			
B. Mailing Address			
C. City	D. County	E. State	F. Zip Code
G. Email address	H. Title	I. Phone	

IV. RECEIVING WATER INFORMATION

A. Biological and residual pesticides discharge to (check all that apply)*:

1. Canals, ditches, or other constructed conveyance facilities owned and controlled by Discharger.
 Name of the conveyance system: _____

2. Canals, ditches, or other constructed conveyance facilities owned and controlled by an entity other than the Discharger.
 Owner's name: _____
Name of the conveyance system: _____

3. Directly to river, lake, creek, stream, bay, ocean, etc.
 Name of water body: Chowchilla, Fresno, San Joaquin River Systems & tributaries

* 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: Vector Larvae Adult Vector

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

Please see attachment "B"

C. Period of Application: Start Date Jan 1, 2011 End Date Dec 31, 2011

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

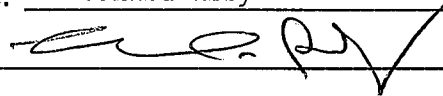
Have you included payment of the filing fee (for first-time enrollees only) with this submittal?

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: Leonard Irby

B. Signature: 

Date: 7/20/2011

C. Title: Manager

X. FOR STATE WATER BOARD USE ONLY

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

Madera County Mosquito & Vector Control District

3105 Airport Drive

Madera CA 93637

www.maderamosq.org

phone(559) 662-8880 fax(559) 662-8883

Pesticides Application Plan

(PAP)

June 2011

This is **Madera County Mosquito & Vector Control's** PAP prepared according to pages 16-18 from WATER QUALITY ORDER NO. 2011-0002-DWQ
GENERAL PERMIT NO. CAG 990004
STATEWIDE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
(NPDES) PERMIT FOR BIOLOGICAL AND RESIDUAL PESTICIDE
DISCHARGES TO WATERS OF THE UNITED STATES
FROM VECTOR CONTROL APPLICATIONS

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;**

We cover approximately 720 square miles of Madera County which is roughly one third of the county. The San Joaquin River completely encompasses our southern and western borders from Fresno County. We are separated by the Chowchilla River from Merced County.

Please see attached map. *Attachment 1*

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 adjuvants 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 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 Madera County Mosquito & Vector Control'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 Best Management Practices for Mosquito Control in California. The typical sources treated by this agency include:

Ash Slough, Berenda Creek & Slough, Cottonwood Creek, Fresno River, San Joaquin River, and Willow Creek are major named bodies of water. Mosquito Fish usually do a great job in these areas, sometimes we have to treat isolated water pockets or treat the "seepage" that these water bodies sometimes create.

We treat a wide variety of agricultural sources including many different types of over watered orchards, pastures, dairy lagoons, tire piles, return systems, and irrigation stand pipes. We also treat the low spots on properties that hold water like alfalfa and Sudan fields.

We treat a wide variety of rural sources that include sewer farms, open septic systems, and large containers that collect rain water. Ornamental ponds, swimming pools, fountains, horse troughs, and animal pens.

We treat a wide variety of urban or domestic sources. These include swimming pools, and spas. Ornamental fountains, storm drains, storm water run off collection ponds, sewer lines, leaky appliances under homes, urban drool, ornamental ponds, tree holes, truck loading docks.

PLEASE SEE * ATTACHMENT 2* FOR OUR LIST OF SOURCES

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

With any source of mosquitoes or other vectors, the Madera County Mosquito & Vector Control 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 agency include stocking mosquito fish (*Gambusia affinis*) everywhere we can. We also believe firmly in public education. We serve at public functions like local fairs and schools and inform people what they can do around the house or farm to help us eliminate the need for us to spray. We encourage the public to call in dead birds and green pools. We work closely 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 mosquito abundance. The pesticide amounts presented below were taken from the Madera County Mosquito & Vector Control'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 agency's best management practices.

PLEASE SEE ATTATCHMENT #3

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 Madera County Mosquito & Vector Control District's 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. 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 Madera County Mosquito & 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 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. (We have not used an airplane in years but would like to keep that option open in case of an emergency)

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 **Madera County Mosquito & Vector Control District's** 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 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 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 the 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 agency uses. The Madera County Mosquito & Vector Control District continually collects adult and larval mosquito surveillance data, dead bird reports, 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.

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 Madera County Mosquito & Vector Control'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. 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 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 Madera County Mosquito & Vector Control's follows an existing 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 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.

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 Madera County Mosquito & Vector Control's, 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.

WWW.maderamosq.org

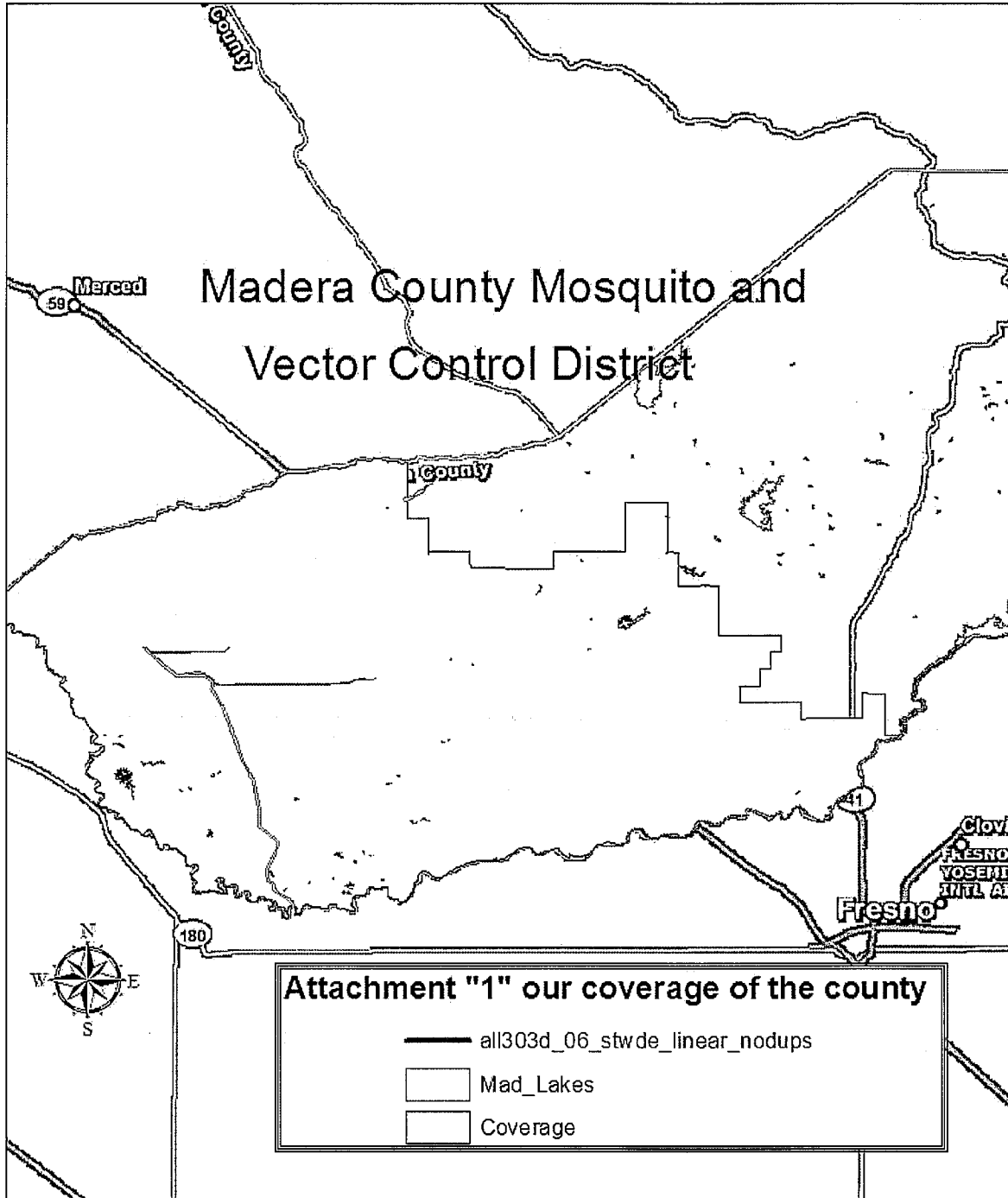
References:

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 Madera County Mosquito & Vector Control District (559) 662-8880 or (559) 662-8881 fax (559) 662-8883.

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 Madera County Mosquito & Vector Control District (559) 662-8880 or (559) 662-8881 fax (559) 662-8883.

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

Attachment 1 DISTRICT MAP



Production Agriculture Monthly Pesticide Use Report

State of California

Department of Pesticide Regulation

Submit to the Agricultural Commissioner within 10 days of the month following application

Operator	Address	City	Zip	Phone #	
Madera County Mosquito and Vector Control District	3105 Airport Drive	Madera	93637	(559) 662-8880	
Permit No.	License Number	County (Where Applied)	County No	Month/ Year	Total Application
20-10-20-VC-034		Madera	20		

	Manufacturer	Chemical	EPA Number	Total	Units	Commodity or site Treated	Code	Acres Treated	Applications
				Product	Product				
826	Syngenta	Demand CS w/ Water	100-1066	667.800	OZ	N/A	50	111.3	44
828	Adapco	Pyrocide F-7395 Fog	1021-1570	3612.550	OZ	N/A	50	10947.1	101
846	Prentiss	Pyronyl Crop Spray w/	655-489	97.995	OZ	N/A	50	196.0	63
852	Clarke	AquaAnvil	1021-1807-8329	7006.273	OZ	N/A	50	12974.6	184
862	Clarke	AquaHalt	1021-1803-8329	1305.847	OZ	N/A	50	1718.2	18
912	Adapco	Vectobac 12 AS Fog	73049-38	512.000	OZ	N/A	50	16.0	1
916	Adapco	Vectobac 12 AS	73049-38	273829.536	OZ	N/A	50	8557.2	4022
917	Adapco	Vectobac 12 AS Other	73049-38	4160.000	OZ	N/A	50	260.0	6
923	Adapco	Vectobac Granules	79049-10	1600.000	LB	N/A	50	78.0	45
924	B&G Chemicals	BVA2	70589-1	1504373.760	OZ	N/A	50	3917.6	2533
954	Clarke	Golden Bear 1111	8329-72	1409.280	OZ	N/A	50	3.7	6
961	Adapco	Altosid 30 day Briquets	2724-375	11922.000	BRK	N/A	50	0.0	294
965	Adapco	Altosid Pellets WSP	2724-448	17146.000	PKG	N/A	50	1.0	440
971	Adapco	Altosid-XR 150 Day Bri	2724-421	1400.000	BRK	N/A	50	0.0	97

Report Prepared By: _____ Date: _____ Reviewed By: _____

Monday, June 20, 2011

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Permit NO.	License Number	County (Where Applied)	County No	Month/ Year	Total Application
20-10-20-VC-034		Madera	20		

	Manufacturer	Chemical	EPA Number	Total	Units	Commodity or site Treated	Code	Acres Treated	Applications
				Product	Product				
976	Univar	Altosid ALL w/ Water	2724-392	1657.160	OZ	N/A	50	414.3	298
983	Adapco	Vectolex CG Granules	73049-20	640.000	LB	N/A	50	28.3	16
986	Adapco	Vectolex WDG	73049-57	32.000	LB	N/A	50	10.7	2

Report Prepared By: _____ Date: _____ Reviewed By: _____

Monday, June 20, 2011

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Permit NO.	License Number	County (Where Applied)	County No	Month/ Year	Total Application
20-10-20-VC-034		Madera	20		

Manufacturer	Chemical	EPA Number	Total	Units	Commodity or site Treated	Code	Acres Treated	Applications
		Product	Product					
Univar	Altosid ALL	2724-392	12,947	Ga		50	414.3	298.0
Clarke	Golden Bear III	8329-72	11,010	Ga		50	3.7	6.0
Adapco	VectoBac12AS	73049-38	2175,793	Ga		50	8833.2	4029.0
Adapco	ECP Evergreen Crop Protection EC-60-6	1021-1770		Ga		50		
Adapco	Pyrocid - 7395	1021-1570	28,223	Ga		50	10947.1	101.0
Adapco	Pyronyl Crop Spray	655-489	0,766	Ga		50	196.0	63.0
Univar	Altosid 30 Day Briquets	2724-375	141,872	lb		50	0.0	294.0
Univar	Altosid 150 Day Briquets	2724-421	112,000	lb		50	0.0	97.0
Univar	Altosid Pellets WSP	2724-448	264,048	lb		50	1.0	440.0
Clarke	Vectobac G Granules	73049-10	1600,000	lb		50	78.0	45.0

Report Prepared By: _____ Date: _____ Reviewed By: _____

Monday, June 20, 2011

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Permit NO.	License Number	County (Where Applied)	County No	Month/Year	Total Application
20-10-20-V/C-034		Madera	20		

Manufacturer	Chemical	EPA Number	Total	Units	Commodity or site Treated	Code	Acres Treated	Applications
			Product	Product				
Adapco	Vectolex CG Granules	73049-20	640.000	lb		50	28.3	16.0
BG Chemicals	BVA2	70589-1	11752.920	Ga		50	3917.6	2533.0
Syngenta	Dentand CS	100-1066	5.175	Ga		50	111.3	44.0
Clarke	AquaHalt	1021-1803-8329	10.202	Ga		50	1718.2	18.0
Clarke	AquaAnvil	1021-1807-8329	54.737	Ga		50	12974.6	184.0
Adapco	Vectolex WDG	73049-57	16.000	lb		50	10.7	2.0

Report Prepared By: _____ Date: _____ Reviewed By: _____

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