



**COUNTY OF NEVADA
COMMUNITY DEVELOPMENT AGENCY
ENVIRONMENTAL HEALTH DEPARTMENT**

950 MAIDU AVENUE, SUITE 170, NEVADA CITY, CA 95959-8617
(530) 265-1222 FAX (530) 265-9853 <http://nevadacounty.com>

March 2, 2016

Ariana Villanueva
Water Resources Control Engineer
Division of Water Quality, NPDES Unit
State Water Resources Control Board
1001 I Street, 15th Floor
Sacramento, CA 98514

RECEIVED

MAR 04 2016

DIVISION OF WATER QUALITY

RE: Nevada County NPDES PAP, NOI and filing fee payment information

Dear Ms. Villanueva,

Enclosed please find the Nevada County Community Development Agency; Environmental Health Department – Vector Control Program NPDES PAP and NOI. The Nevada County Auditor's office was requested to submit a check in the amount of \$241 for the filing fee payment to the Environmental Health Department for submittal with this package.

The Auditor's office was informed incorrectly by the Community Development Agency Finance Department to mail the check to you at the following address: P.O. Box 100, Sacramento, CA 98512-0100. I am unsure if you will receive said payment, however, I have enclosed the 'transaction detail' from the Auditor's office which indicates the invoice type (NPDES), amount and the date it was mailed (February 26, 2016).

In the event that you do not receive the \$241 filing fee payment, please let me know and I will ensure that a check is requested 'rush' from our Auditor's office and delivered to your correct mailing address.

Please feel free to call me at (530) 265-1464 or email me at amy.irani@co.nevada.ca.us if you have any questions or concerns.

Thank you.

Sincerely,

Amy Irani
Environmental Health Director
County of Nevada

Enclosures

Transaction Detail

File Edit Help

Date: 03/01/2016 Period: 9/16

Back

Attachments

Notes

FUND	1123	COMMUNITY DEVELOPMENT AGY	Year	16
ORG CODE	1123401233231000	VECTOR CONTROL	Period	8
Account	522090	SPEC DEPT EXPENSE - OTHER	Transaction Code	21
PCN/TASK	32303570	VC TREATMENT	Transaction Date	02/25/16
PCN/TASK ACCT	522090	SPEC DEPT EXPENSE - OTHER	Date Entered	02/25/16
Cash Account	190010	CASH	Due Date	02/25/16
Vendor	00004968	STATE WATER RESOURCES CON	Invoice Date	02/24/16
Receivable Account			Discount Amount	0.00
Disbursement Fund	9901	DISBURSEMENT CLEARING	Check Number	303603
ENCUMBRANCE	0		Check Date	02/26/16
J E Number			Partial/Final	
Invoice/Receipt	NPDES		1099	
Amount	241.00		Cleared	
Sales/Use Tax	0.00		Void	
Description	NPDES PERMIT		Control Number	CD160491
Entered By	audcolto		Bank Code	
Warrant Number			Notes	N - No

PAYMENT MAILED TO: ARIANA VIVANUEVA @SWRCB; P.O. BOX 100, SACRAMENTO, CA 95812

ATTACHMENT G – NOTICE OF INTENT

**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 <input type="checkbox"/> A. New Applicator <input checked="" type="checkbox"/> B. Change of Information: WDID# <u>5 29AP00022</u>
<input type="checkbox"/> C. Change of ownership or responsibility: WDID#

II. DISCHARGER INFORMATION

A. Name Nevada County Community Development Agency / Mosquito Control Program			
B. Mailing Address 950 Maidu Ave. - Ste 170			
C. City Nevada City	D. County Nevada	E. State CA	F. Zip Code 95959
G. Contact Person Amy Irani	H. Email address amy.irani@co.nevada.ca.us	I. Title Director of EH	J. Phone (530)265-1464

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

A. Name Nevada County Environmental Health Department			
B. Mailing Address 950 Maidu Ave. - Ste 170			
C. City Nevada City	D. County Nevada	E. State CA	F. Zip Code 95959
G. Email address amy.irani@co.nevada.ca.us	H. Title Director of EH	I. Phone (530)265-1464	

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: Nevada Irrigation District
Name of the conveyance system: All NID conveyances

3. Directly to river, lake, creek, stream, bay, ocean, etc.
 Name of water body: South and Middle Yuba Rivers, Bear River, Truckee & Little Truckee River, Deer Creek, Wolf Creek, Squirrel Creek, Clear Creek, Greenhorn Creek
* 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 and 6
(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
Please see program PAP for application specifics

B. Pesticides Used: List name, active ingredients and, if known, degradation by-products
See larvicide and adulticide list included in PAP.

C. Period of Application: Start Date March 1 End Date December 1

D. Types of Adjuvants Added by the Discharger: None

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

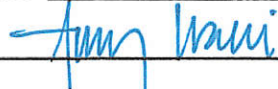
Have you included payment of the filing fee (for first-time enrollees only) with this submittal?

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: Amy Irani

B. Signature: 

Date: 3/1/16

C. Title: Director of Environmental Health Department

X. FOR STATE WATER BOARD USE ONLY

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



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March 1, 2016

The Nevada County Vector Control Program is not a tax-payer funded special district. The program funding enhances the Environmental Health Department which manages the program, provides dead animal surveillance and trained treatment technicians, maintains treatment inventory and supplies, and the Public Health Department provides the program's human case surveillance, public education and outreach. The agency which oversees our mosquito program is the Nevada County Community Development Agency.

NEVADA COUNTY PESTICIDE APPLICATION PLAN

- 1. Description of ALL target areas and adjacent 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:**

Please refer to the Map on page 8 of this application plan showing the major rivers in Nevada County. The Nevada County Vector Control Program (NCVCP) does not perform aerial mosquito insecticide spraying, but may if necessary, during a public health emergency.

The main water bodies in Nevada County are: Wolf Creek, Bear River, Deer Creek, Clear Creek, Squirrel Creek, Greenhorn Creek, South and Middle Yuba Rivers and the Truckee and Little River and all their associated tributaries.

- 2. Discussion of the factors influencing the decision to select pesticide applications for vector control:**

Our treatment application decisions are tiered:

- 1) Manual manipulation of the environment to drain standing water, eliminate vegetation by correct pond designs and educating the land owner to identify and eliminate mosquito breeding sites.
- 2) Evaluating biological solutions by introducing mosquito fish.
- 3) Hand application of insecticide treatment solutions.

We work closely with the owner of the land to educate and instruct how to eliminate standing water by shovel, back hoe, or grading and how to control plant growth in ponds and ditches. If that is unsuccessful, where possible and biologically sound, we provide mosquito fish to permanent water bodies. We apply larvicides as a last resort to temporary or permanent (abandoned pools) water bodies that contain mosquito larvae. ULV fogging of resting adult mosquitoes is rarely performed. Adult resting areas are evaluated after receiving a landowner complaint. All fogging occurs at required distances away from the Waters of the US. All treatment application decisions are accordance with 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:

The NPDES Permit for Biological and Residual Pesticide Discharges to Waters of the U.S. from Vector Control Applications was amended to list the approved active ingredients rather than having specific products named. All pesticide label restrictions and instructions will be followed for pesticides which contain the active ingredients listed below. In addition, pesticides which fall under the "minimum risk" category may be used. The minimum risk pesticides have been exempted from FIFRA requirements. Products may be applied by truck, backpack, hand can and airplane.

Active Ingredients:

<i>Bacillus thuringiensis subsp. israelensis (Bti)</i>
<i>Bacillus sphaericus (Bs) (Lysinibacillus sphaericus)</i>
<i>Methoprene</i>
<i>Monomolecular Films</i>
<i>Petroleum Distillates</i>
<i>Spinosad</i>
<i>Temephos</i>
<i>Deltamethrin</i>
<i>Etofenprox</i>
<i>Lambda-Cyhalothrin</i>
<i>Malathion</i>
<i>Naled</i>
<i>N-octyl bicycloheptene dicarboximide (MGK-264)</i>
<i>Pioeronyl butoxide (PBO)</i>
<i>Permethrin</i>
<i>Prallethrin</i>
<i>Pyrethrin</i>
<i>Resmethrin</i>
<i>Sumithrin</i>
<i>Any minimum risk category pesticides that are FIFRA exempt and registered for use in California and used in a manner specified in 40 C.F.R. section 152.25.</i>

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 NCVCP's preferred solution, and whenever possible the Program works with property owners to affect long-term solutions to reduce or eliminate the need for continued applications as described in Item number 2 above.

The typical sources treated by the Program include:

Larvicide treatment areas: ponds, artificial pools/spas, roadside ditches, catch basins and other storm water conveyances, and potentially any area that holds water for more than 4 days.

Examples of Adult mosquito treatment areas we have treated in the past include sides of structures, barns, bales of hay.

Please see attached Map referenced in response to Question 1 on page 8.

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

With any mosquito source, the NCVCP first goal is to look for ways to eliminate the source, or, if that is not possible, for ways to reduce the vector potential. 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 Program include:

- a. Mechanical or physical methods to eliminate standing water -elimination of standing water may not be feasible when addressing sources that by design hold water such as a catch basin and other water retention structures.
- b. Stocking mosquito fish (*Gambusia a/finis*) to control immature mosquitoes is limited to sources that can support fish and are not waters of the State.
- c. Providing free mosquito service request inspections to help educate residents that mosquitoes develop in standing water and encourage them to remove sources of standing water on their property, and find long-term water management strategies that meet their needs while minimizing the need for public health pesticide applications.

6. How much product is anticipated to be used and how this amount was determined:

The need to apply product is determined by seasonal surveillance and available personnel.

100oz Vectobac G (73049-10) 103oz Altosid pellets (2724-448), 366oz Altosid brix (2724-421).

The above totals represent estimated pesticides applications within the County of Nevada boundaries for 2015. These amounts will change from year to year due to annual variability in required pesticide applications for mosquito control. This data is provided as an example of the products and amounts used in one year.

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:

Using larvicides and applying the treatment by hand as opposed to truck dispersal, has the least impact on the environment and has the least impact on non-target organisms. Hand application is the safest application method in that it is able to be applied to a specific larval site with the least drift and impact to non-target organisms. Vectobac G (biological control agent) and Altosid have low impacts on the environment. We do not employ aerial insect spraying as a routine vector treatment application. This method would only be employed during a public health emergency. The little fogging we do does not occur near the Waters of the US.

9. Description of the BMPs to be implemented:

NCVCP's BMPs are described in Item #2 above. Specific elements have been highlighted below under a -f.

a. measures to prevent pesticide spill:

Treatment applicators are trained annually on spill prevention, clean-up procedures and proper dispersal of material. Treatment storage bags are properly discarded. The treatment storage area has a spill response kit with booms and absorbent material, and brooms and pans for dry product clean up. Spill mitigation devices are placed in all vehicles.

b. measures to ensure that only a minimum and consistent amount is used:

We use graded and marked measuring cups for dry material and the fogging equipment is calibrated each year as required by the California Department of Pesticide Regulations (CDPR) and the Cooperative Agreement with CDPH per manufacturer's specifications. Currently, a ULV fogger is the only equipment requiring calibration.

c. a plan to educate the Discharger's staff and pesticide applicators on any potential adverse effects to waters of the US 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 spray mode, e.g. aerial spray, truck spray, hand spray, etc.:

The only spray mode equipment our program uses is the Ultra-low volume fogger application equipment and is calibrated for output and droplet size to meet label requirements.

e. description of specific BMPs for each pesticide product used:

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. The program typically uses the 5 products shown in the first paragraph of #3

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

Please see Item #2 above and The Agency's BMPs are described in the Best Management Practices for Mosquito Control in California and the California Mosquito-borne Virus Surveillance and Response Plan. We do not treat wetlands, and have no agricultural flooding. Service requests are performed for individual property owners. We perform a county-wide educational campaign each spring with press-releases for the upcoming season.

10. Identification of the problem:

a. If applicable, establish densities for larval and adult vector populations to serve as action threshold(s) for implementing pest management strategies:

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

- Mosquito stage of development
- Mosquito species present
- 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.

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

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

Any site that holds water for more than 96 hours (4 days) can produce mosquitoes. Source reduction is our Program's preferred solution, and whenever possible the Program

works with property owners to effect long-term solutions to reduce or eliminate the need for continued applications as described in item #2 above and #10a.

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 Item #2 above that the Program uses. The MCVCP continually collects adult mosquito surveillance data, larval mosquito surveillance data, dead birds reports, and sentinel chicken test results from 4 flocks 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 through weekly VBDS weekly WNV updates.

11. Examination of Alternatives.

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.

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:

- Eliminate artificial sources of standing water
- Ensure temporary sources of surface water drain within four days (96 hours) to prevent adult mosquitoes from developing
- Control plant growth in ponds, ditches, and shallow wetlands
- Design facilities and water conveyance and/or holding structures to minimize the potential for producing mosquitoes
- Use appropriate biological control methods that are available. Additional using pesticides for managing mosquitoes are listed on pages 4-19 of the Best Management Practices for Mosquito Control in California.

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

The NCVCP uses the principles and practices of Integrated Vector Management (IVM) program as described the Best Management Practices for Mosquito Control in California and as discussed in item # 2 above and #10.

12. Correct Use of Pesticides

Discharger 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 Program, and is required in order to comply with the California Department of Pesticide Regulation's (CDPR) requirements and the terms of our California Department of Public Health (CDPH) Cooperative Agreement. All pesticide applicators receive annual training in: health and Safety, spill prevention and cleanup, and safe application and application alternatives. In addition, managers receive their regular continuing education.

13. Website for the Public:

<http://www.mynevadacounty.com/westnilevirus>

Link includes information on Discharger's mosquito control program and SDS and label specimens of all treatment materials currently used in the county.

References:

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

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

MVCAC NPDES Coalition Monitoring Plan.

