Mosquito and Vector Control
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February 18, 2011

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Sent via e-mail:
commentletters@waterboards.ca.gov

RE: General National Pollutant Discharge Elimination System Permit for Biological and Residual Pesticide Discharges to Waters of the United States from Vector Control Applications (Vector Control Permit).

Dear Ms. Townsend:

The Mosquito and Vector Control Association of California (MVCAC) appreciates the opportunity to provide comments on the recently revised Vector Control Permit. We have provided comments to the Board and staff on numerous occasions during the evolution of this proposed permit. While there have been some significant changes to the proposed Vector Control permit, we believe additional modifications are warranted.

MVCAC is comprised of vector and mosquito control districts and agencies throughout the state whose purpose is to protect public health by defending the population from mosquito-borne disease. This letter will focus on specific changes MVCAC would like implemented. MVCAC has the following comments on the proposed permit up for adoption on March 1st, 2011.

1. **MVCAC requests the SWRCB adopt alternative language in the permit regarding the effective time of the permit coverage.**

Page 6, section II(C); page 19, section VIII(D); page D-15, section II(A)
2. Change the 30-day period to 10 days: The PAP has been posted on the State Water Board's website for a 10-day for comment period[8] and approved by the Deputy Director; and

MVCAC is concerned that the current 30 day proposed timeline requirements will not allow for approved permits before the April 9th deadline. Public health applications by mosquito and vector control agencies are year round activities and any delays in obtaining the permit could slow or even halt these applications. It seems unlikely that 60+ vector control agencies (plus an unknown number of applications from 2 other NPDES permits) can be expediently processed by SWRCB prior to April 9.

2. **MVCAC requests the SWRCB adopt option A for the toxicity requirement.**

The current chemistry monitoring approach under the proposed permit is superior to toxicity testing in terms of addressing potential impacts associated with specific pesticide applications. Toxicity testing is designed to assess water quality in a broad, nonspecific context. It gives a general assessment of the water without initially addressing specific potential toxicants. With toxicity monitoring, once it is

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determined that water quality standards have been exceeded, one still has to conduct Toxicity Identification Evaluations (TIEs) to determine the specific toxicant(s) causing the mortality to the test species. All this has to occur before specific mitigation measures or other restrictions can be developed and implemented. In other words, aquatic toxicity approaches are extremely difficult to apply to the specific actions approved under the NPDES permit. Many water characteristics (e.g. other contaminants, pH, temperature, dissolved oxygen) that are completely unrelated to a vector control pesticide application can affect the health of the test organisms making it extremely difficult to establish a cause-and-effect nexus between a pesticide application and the mortality of lab specimens. Further, inherent in pesticide applications are dilution and degradation and often significant mixing during water storage and delivery. For example, toxicity testing done on samples collected after a pesticide application in flowing water may report toxicity that results not from the pesticide, but from some toxicant(s) upstream of the sampling location. Without knowledge of the presence or absence of the specific pesticide, the erroneous conclusion might be reached that the pesticide was the cause of test organism mortality. Toxicity testing should not be required at this time. If the results of the chemical monitoring indicate the need for toxicity testing, if can be later added by the SWRCB.

3. **MVCAC requests the SWRCB change the language for monitoring of the larvicide, temephos.**

Page C-13, section IV(B).

In the new provision just before Table C-1, "....chemical and toxicity testing" should be "visual, physical, chemical and toxicity testing".

This change is necessary in order to clarify the scope of the monitoring requirements for larvicides. The following is an excerpt from the current Vector Control Permit for Larvicides and states: *The selection of control measures that use non-toxic and less toxic alternatives is an example of an effective BMP. Vector control agencies can select larvicides for vector control in some situations that have very low toxicity and pose very little or no threat to the environment. Specifically, (a) for microbial larvicides (e.g., Bacillus thuringiensis israelensis, Bacillus sphaericus), USEPA has concluded that they do not pose risks to wildlife, non-target species, or the environment; and (b) for methoprene, USEPA has concluded that, as used in vector control programs, it does not pose unreasonable risks to wildlife or the environment. Thin film larvicides (e.g., Agnique) also have low inherent toxicity.*

The SWRCB has already reviewed the larvicides used by vector control Districts and determined that their use is considered a BMP. Temephos has been identified as an active ingredient of concern and the need to collect data on this product is justified. However,the need to collect physical data on the other larvicides that have been reviewed by the SWRCB will provide no environmental benefit and the requirement should be removed.

4. **MVCAC requests the SWRCB change the Minimum Sampling Frequency component for Visual Monitoring listed in Table C-1 and C-2.**

Page C-13, section IV (B) Table C-1 and

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Page C-15, section IV (C) Table C-2
Change the requirement of "All applications at all application areas" to those active ingredients being tested for under the monitoring program.

MVCAC recognizes the need for documentation of visual monitoring and would propose that it be included with the physical, chemical, and potential toxicity testing and not for all applications. The SWRCB has already reviewed the larvicides used by vector control Districts and determined that their use is considered a BMP. Temephos has been identified as an active ingredient of concern and the need to collect data on this product is justified. However, the need to collect physical data on the other larvicides that have been reviewed by the SWRCB will provide no environmental benefit and the requirement should be removed.

These sections indicate that visual monitoring will be completed for "All applications at all application areas". This requirement is infeasible to vector control applications. Districts make numerous applications daily and in acreage that can total up to 60,000 acres in a given event. Pesticides often are applied by truck and aircraft. The requirement to provide visual monitoring on all water bodies within a large block could delay the application event and is not practical for the protection of public health. Districts would need to devote staff time to visit and document the appearance of the waterway before and after an application as currently stated in the permit. The decision to treat large areas of land is made to create a public benefit by reducing the vector population and/or the infection rate of those vectors. Allocating time for staff to comply with this visual monitoring would eliminate other necessary treatments to control nuisance and disease carrying vectors and provides no environmental benefit. Also, at times larvicide applications are ordered on one day and not treated for up to 5 days later based on the availability and environmental conditions present at that time. Requiring personnel to revisit those sources on the day of application is burdensome and takes away time from other necessary activities.

5. MVCAC requests the SWRCB remove the language referencing visual monitoring.

Page 20, section VIII(E6) of the permit reads:

6. Visual monitoring assessment; and.

MVCAC members make applications that can total thousands of acres in a given application by truck or air and requiring visual monitoring on all water bodies within the application area is not feasible.

6. MVCAC requests the SWRCB change the language for the requirement of website posting of applications.

Page 17, section VIII (B) reads:
B. Public Notice Requirements
Every calendar year, prior to the first application of pesticides, the Discharger shall notify potentially affected governmental agencies and if the Discharger maintains a website, post the notification at its website. The notification shall include the following information:

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MVCAC has 62 member districts that range in size from one part time person to 70 fulltime employees. Not all member agencies have the ability, expertise, or funding to develop and maintain a website to be updated whenever applications need to be made.

7. **MVCAC requests the SWRCB change the language regarding posting on a website.**

Page 19, section VIII (C)(14) reads:
14. If the Discharger maintains a website, specify a website where public notices, required in Section VIII.B, may be found.

8. **MVCAC requests the SWRCB change the receiving water limitation for malathion back to a trigger.**

Page 15, section VI (A)
The proposed numeric receiving water limitations for malathion would essentially prohibit any detectable malathion residual in a receiving water. In order to control vector populations, malathion applications are applied at 0.03 lbs of active ingredient/acre and . that may exceed the existing 0.1ug/L numeric receiving water limitation. Due to this potential, malathion will likely not be used by agencies and this further limits vector control arsenal,pro motes development of resistance, and could adversely affect public health. The numeric receiving water limitations for malathion need to be removed or adjusted back to a trigger to account for the application amount needed to achieve effective vector control. Alternatively, an allowance could be made to allow for exceedance of the standard for a limited time after application, similar to allowances made under the weed control permit. According to a recent analysis of pesticide use in California, vector control accounts for less than 1% of reported malathion use. This limitation of product use is not commensurate with the insignificant risk presented by vector control applications.

9. **MVCAC requests the SWRCB modify the language for discharges covered by the permit.**

Page 4, section II(A) of the permit reads:

This General Permit only covers the discharge of larvicides and adulticides that are currently registered in California

Proposed Change: This General Permit only covers the discharge of larvicides and adulticides that are currently listed in the permit.

Federal and state laws generally allow a pesticide owner to use existing pesticide supplies for a period of time even after the product has lost its registration. The SWRCB staff has extensively reviewed all products currently listed in the permit. The current statement raises questions about the ability to use existing inventory should a product lose its state registration, even if already reviewed and approved by SWRCB staff. The loss of the potential use of these products could result in economic loss to MVCAC members through no fault of their own.

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10. MVCAC requests the SWRCB remove the language for product choices made by MVCAC.

Page 19, section VIII(D12a) of the permit reads:

If there are no alternatives to pesticides, dischargers shall use the least toxic pesticide necessary to control the target pest.

Pesticide applications need to be made based on a variety of concerns including scope of public health threat, resistance, environmental conditions, cost, availability, etc. The decision on which product to use and when needs to be at the discretion of the district given the specific circumstances present at the time of application.

11. MVCAC requests the SWRCB include Coalition wherever Discharger is used

Page C-4, section II(A)
Some dischargers will be a part of a coalition; therefore, wherever "Discharger" appears, it should be "Discharger or Coalition".

12. MVCAC requests the SWRCB define "biological pesticides" in Attachment A-Definitions

Biological Pesticides: Certain microorganisms, including bacteria, fungi, viruses, and protozoa that are effective in controlling target pests. These agents usually do not have toxic effects on animals and people and tend not to leave toxic or persistent chemical residues in the environment.

13. MVCAC requests the SWRCB include the following comments for clarification.

Page 18, section VIII(C)(12). Insert "in order to" before "reduce the need".

Page 18, section VIII (C) (8). Delete this line as it does not apply to vector control applications.

Page 19, section VIII(C)(12)(b). Change "vector" to "vectors".

Page 19, section VIII(D). Change "APAP" to "PAP".

Sincerely,

Catherine Smith

Catherine Smith
Executive Director