



California Department of Public Health
MEMORANDUM

3/1/11 Bd Mtg. Item 6
NPDES-Vector Control Permit
Deadline: 2/29/11 by 12 noon

DATE: February 18, 2011

TO: Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
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Sacramento, CA 95814

FROM: Vicki Kramer, Ph.D., Chief
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SUBJECT: Comment Letter - Revised Vector Control Permit



The California Department of Public Health, Vector-Borne Disease Section (VBDS) submits the following comments for the NPDES Revised Vector Control Permit. VBDS appreciates the time and effort the SWRCB has devoted to this effort and remains available for consultation to help implement this permit in a way that can successfully protect California's public health and water quality.

1) Permit Section: II. C. (p. 5):

Permit coverage will be effective when all of the following have occurred:

1. The Discharger has submitted a complete permit application;
2. The PAP has been ~~accepted by posted on~~ the State Water Board's ~~Deputy Director of the Division of Water Quality website~~ for a 30-day for comment period and approved by the Deputy Director; and
3. The ~~State Water Board~~ Deputy Director ~~of the Division of Water Quality~~ has issued a Notice of Applicability (NOA). The NOA will specify the ~~pesticide products or type(s)~~ of pesticides that may be used and any ~~Regional Water Board~~ specific conditions and requirements not stated in this General Permit. Any such ~~Region~~ specific conditions and requirements shall be enforceable. The Discharger is authorized to discharge starting on the date of the NOA.

Comment: Given these added review requirements and delays in permit adoption, VBDS is concerned that public health pesticide applications by vector control agencies will not be appropriately covered by the implementation deadline on April 9, 2011. Early season vector control operations will be underway in many parts of the state by April, and some areas have year-round mosquito control needs. We also note that a survey of permit status in 22 states indicated all states, with the exception of Oregon and Washington, plan to provide immediate or much more rapid coverage under their vector control permits. At least six states, and the national NPDES vector permit draft, have provisions for emergency situations (i.e., no delay for response). We request SWRCB

expedite the initial vector control permit approvals to prevent a lapse in public health pesticide applications and also request additional language to expedite permit processing and coverage during emergency conditions.

2) Permit Section: VIII. B. (p. 17) and C. 14 (p. 19):

B. Public Notice Requirements

Every calendar year, prior to the first application of pesticides, the Discharger shall notify potentially affected governmental agencies **and post the notification at its website.**

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

Comment: Not all vector control agencies maintain websites, particularly small and financially constrained districts. We request these annual requirements be changed to "provide public notice".

3) Permit Section: VIII. C. 8. (p. 17):

8. If applicable, list the gates or control structures and inspection schedule of those gates or control structures to ensure that they are not leaking;

Comment: It is not clear what is meant by "If applicable". We do not believe this requirement is applicable to vector control, nor feasible in many cases such as when agency jurisdiction (i.e., potential treatment area) is large (e.g., county-wide or more). Recommend deleting this requirement.

4) Permit Section: VIII. C. 10. (p. 18):

Description of the BMPs to be implemented. **The BMPs shall include, at the minimum:**

- a. **measures to prevent pesticide spill;**
- b. **measures to ensure that only a minimum and consistent amount is used;**
- c. **a plan to educate Coalition's or Discharger's staff and pesticide applicator on any potential adverse effects from the pesticide application;**

Comment: Specific to item "b.", the requirement is unclear. We assume the statement refers specifically to pesticides, but minimum and consistent are relative terms and not necessarily desirable for effective vector control (see pesticide label requirements) or minimizing total pesticide use. Minimizing pesticide use is inherent in the implementation of BMPs, so the intended effect is redundant and the statement should be deleted. Specific to item "c", this requirement is overly broad and potentially duplicative of CDPR and CDPH responsibilities. It should be revised to read "...on any potential adverse effects *to waters of the U.S.* from the pesticide application."

5) Permit Section: VIII. C. 12. a. (p. 19):

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

Comment: This requirement is ambiguous and potentially problematic for compliance. Least toxic can have multiple meanings. Some pesticides have low mammalian toxicities but high toxicity to fish or invertebrates, and vice versa. Some pesticides are more toxic but break down rapidly, and others may have lower toxicity but remain for longer periods and therefore be less desirable for specific uses. Vector control agencies base pesticide selection on a variety of factors, not the least of which is a consideration of the environment to which the application will be made. Please delete this statement.

6) Permit Section: VIII. E. Pesticide Application Log (p. 20):

4. The names of the water bodies treated (e.g., specific canal, creek, lake, etc.);
5. Application details, such as application started and stopped, pesticide application rate and concentration, flow rate of the target area, surface water area, volume of water treated, pesticide(s) and adjuvants used by the Discharger, and volume or mass of each component discharged;
6. Visual monitoring assessment; and.

Comment: It is not feasible in large application areas, particularly for adulticides, to specifically monitor all waters (e.g., flow rate, volume treated, visual assessment) in which pesticide deposition may occur. This section should clearly list those requirements applicable to (and feasible for) the application of larvicides, adulticides or both.

7) Permit Section: IX. C.1. Reopener Provisions. d. (p. 23):

d. **Receiving Water Limitations.** If monitoring data for residual pesticides show exceedance of monitoring triggers, the Discharger shall conduct additional investigations to determine the cause of exceedance. At a minimum, the Discharger shall evaluate its application methods, BMPs, and the appropriateness of using alternative products. As a result of the evaluation, this General Permit may be re-opened to add numeric Receiving Water Limitations for the residual pesticides exceeding the triggers.

2. Special Studies, Technical Reports, and Additional Monitoring Requirements

Each Discharger must conduct additional investigations when toxicity testing shows toxicity or increased toxicity in the receiving water, or when the chemical monitoring shows exceedance of any monitoring trigger. The additional investigations shall identify corrective actions to eliminate toxicity and or exceedance of monitoring trigger caused by the pesticide application. The investigation should include, but not be limited to, revising and improving the existing BMPs, revising mode of application, using less toxic pesticide products or selecting alternative methods for pest control.

Comment: Regarding subsection "d", we request the references to Discharger be modified to: "the Discharger or Monitoring Coalition". Regarding both subsections (and from our attendance at previous meetings, reviewing written comments, and SWRCB responses to written comments), it appears there have been previous miscommunications and/or misunderstandings regarding the purpose of monitoring triggers and subsequent actions, should exceedances occur. VBDS recommends that

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SWRCB would not re-open the permit to add additional restrictions to public health pesticide applications if monitoring triggers are temporarily exceeded without evidence that such transient exceedances result in water quality degradation.

8) Permit Section: IX. A.2. (p. 20) and IV.D. (p. D-23) and IX. C. (p. G-7):

This General Permit does not authorize the discharge of biological and residual pesticides or their breakdown by-products to waters of the US that are impaired by the pesticide active ingredients included in permitted larvicides and adulticides listed in Attachments E and F. Impaired waters are those waters not meeting quality standards pursuant to Section 303(d) of the CWA.

Comment: This wording implies that no pesticide on the larvicides and adulticides list would be permitted for application to impaired waters. We understood from previous communications that the only pesticides that would be prohibited from application to impaired waters would be those with the same specific active ingredient, or pesticide class, as that which caused the impairment classification. Recommend clarifying these statements with wording such as "pesticides with the same active ingredient as the impairment" or "any pesticide in the same chemical family as the impairment".

9) Section: Table C-1 (p. C-13):

B. Monitoring Requirements for Larvicides

Monitoring locations for larvicides (**temephos**) must include frequent and routine monitoring on a pre-determined schedule, as summarized in the Table C-1. **The active ingredient temephos is the only larvicide that requires chemical and toxicity testing.**

If applying six or more times a year, collect six samples for each environmental setting (urban, agricultural, or wetlands), If applying less than six times a year, collect a sample during each application for each environmental setting (urban, agricultural, or wetlands).

Comment: The table and related text requires physical monitoring (e.g., temperature, pH, turbidity and electrical conductivity) for all larvicides, in addition to temephos chemistry and toxicity requirements. Although it is not stated in the table or text, a SWRCB response to previous draft comments indicated that dissolved oxygen testing is also required for all larvicides. Other than for temephos, it is difficult to ascertain the value (i.e., cost/benefit) of accumulating these physical monitoring data for the larvicides used in vector control. Recommend the physical testing requirements, including dissolved oxygen, should be limited to temephos only.

Thank you for the opportunity to comment on these latest revisions. If you have any questions or concerns related to these issues, please contact Mark Novak, Ph.D., Supervising Public Health Biologist at (916) 552-9730.