November 13, 2012

Tessa Fojut
Environmental Scientist
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95624-6114

Dear Dr. Fojut:

The California Department of Public Health, Vector-Borne Disease Section (VBDS), submits these comments in response to the Central Valley Regional Water Quality Control Board (Regional Water Board) scoping meeting on the “Central Valley Pyrethroid Pesticide Total Maximum Daily Load and Basin Plan Amendment”. VBDS appreciates the Board’s commitment to include all potential stakeholders in this discussion. We understand the important function of the Basin Plan to protect beneficial uses of waters in the Central Valley and remain available for consultation to help refine the Basin Plan amendment in ways that can successfully protect California’s public health and water quality.

VBDS recognizes the complexity of regulating and managing pyrethroid discharges into the Region’s waters. An intended purpose of the scoping meeting was to identify stakeholder issues and concerns with the proposal. In the spirit of starting this discussion, we would like the Regional Water Board to consider the points outlined below.

Mosquitoes and mosquito-borne diseases have been and continue to pose significant public health concerns in the Central Valley Region. A testament to their significance in California is codification in the state Health and Safety Code (Sections 2000-2093) for the establishment of mosquito and vector control districts charged with reducing vector populations and disease transmission. Historically, many districts were formed to control malaria, western equine encephalitis, and St. Louis encephalitis epidemics. While mosquito control practices have dramatically changed over time, mosquito-borne diseases are still a public health threat. Since the introduction of West Nile virus into the state in 2004, more than 3500 human cases have been reported, with more than 400 reported to date in 2012.
More than half (35 of 64) of local mosquito and vector control agencies in the state are wholly or in part included within the Regional Water Board’s boundaries. The ability of these agencies to control adult mosquitoes and disease transmission is critical to public health. Today, adult mosquito control is generally accomplished through ultra-low volume (ULV) applications of pesticides. ULV applications are typically focal and conducted in response to mosquito and mosquito-borne disease surveillance indicators.

Of the six specified priority pyrethroids currently under the Board’s consideration, only permethrin is used for areawide ULV mosquito control. Relative to other uses, public health applications of permethrin are minimal: In 2010, public health use accounted for 0.5% total lbs of permethrin applied in California (source: CDPR Annual Report Summaries for 2010). No public health uses apply this active ingredient directly to water, but significant mosquito populations often exist within riparian areas or near water.

Based upon pesticide use and background water toxicity data provided in the scoping meeting, the Regional Water Board does not appear to be singling out public health as a significant discharger of permethrin. Nonetheless, limiting public health use of pyrethroids may preclude the option of using these products for ULV mosquito control applications.

We recognize that the Regional Water Board has the authority to regulate the discharge of pesticides into the Region’s waters; however, for public health pesticide applications, the incidental deposition of residual pesticides onto surface waters is difficult to avoid in some circumstances. VBDS encourages the Regional Water Board to consider the necessity of pesticide use to protect public health when assessing the feasibility and practically of any proposed monitoring schemes, TMDL allocations, and restrictions on public health pyrethroid applications.

We are available for consultation on development of this proposal in ways that protect the water quality of the Central Valley Region while ensuring the health and safety of the people of California. Thank you for allowing VBDS the opportunity to provide comments. If you have any questions or need additional information, please contact Mark Novak, Ph.D., at 916-686-8414 or mnovak@cdph.ca.gov

Sincerely,

Vicki Kramer, Ph.D., Chief
Vector-Borne Disease Section