



CVCWA

Central Valley Clean Water Association

Representing Over Fifty Wastewater Agencies

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December 2, 2014

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California Water Quality Control Board
Central Valley Region
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SUBJECT: Comments on October 2014 Preliminary Draft Pyrethroid Basin Plan Amendment

Dear Ms. Fojut:

The Central Valley Clean Water Association (CVCWA) appreciates the opportunity to provide early comments on the October 2014 Preliminary Draft Pyrethroid Basin Plan Amendment (Preliminary Draft Amendments). CVCWA is a non-profit association of public agencies located within the Central Valley region that provide wastewater collection, treatment, and water recycling services to millions of Central Valley residents and businesses. We approach these matters with the perspective of balancing environmental and economic interests consistent with state and federal law. In this letter, we provide early comments with respect to the specific language for Municipal and Domestic Wastewater Discharges.

For the past several years, CVCWA has been collaboratively working with other state and regional clean water organizations including the California Association of Sanitation Agencies (CASA), the Bay Area Clean Water Agencies (BACWA), and the Southern California Alliance of POTWs (SCAP) to provide funding for technical assistance to proactively address pesticides, particularly pyrethroids pesticides. Working with other stakeholders, this effort has researched fate and transport through publicly owned treatment works (POTWs), and is currently working to identify sources of pyrethroids pesticides in wastewater, assess bioavailability in effluent and biosolids, track current registration processes at both the California Department of Pesticide

Regulation, and the United States Environmental Protection Agency, and to participate federal and state actions, as appropriate. Through this effort, CVCWA joins CASA in their technical comments (CASA Letter). We, too, are concerned that the proposed water quality objectives are overly conservative and are proposed at a level that is not necessary to ensure reasonable protection of applicable beneficial uses.

As a preliminary matter, POTWs have little ability to control the use of pesticides by consumers. At most, POTWs can control the use of pesticides at their own facilities, and can provide for some education to consumers through outreach efforts. Current treatment processes remove pyrethroid pesticides at varying levels, but building treatment facilities specific for pyrethroid pesticide removal would be exorbitant and impractical. Further, it is imperative that the Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff remember that the size and available resources for Central Valley POTWs vary significantly, and many very small POTWs have little to no resources available for education and outreach, or for additional monitoring costs. In light of these considerations, CVCWA is concerned that the proposed implementation language applicable to municipal and domestic discharges is overly burdensome and needs significant revision. CVCWA also has significant technical concerns with the water quality objectives proposed in the Preliminary Draft Amendments. Our comments on these issues are provided here.

I. Comments on Implementation Language

With respect to the implementation language that pertains directly to municipal and domestic wastewater, CVCWA provides some recommended approaches, and requests additional time to work with Central Valley Water Board staff to further develop an appropriate implementation program for POTWs. CVCWA reserves the right to provide additional edits as the Preliminary Draft Amendments move forward through the formal public process.

- To the extent that wastewater has reasonable potential to exceed adopted water quality objectives for these pesticides, the implementation language must recognize that POTWs are unable to control the level of pesticides entering the wastewater system and that it is therefore infeasible to meet numeric water quality-based effluent limitations.
- Rather than imposing numeric water quality-based effluent limits at the outset, the implementation program should be phased, include provisions for interim performance-based effluent limits, and allow POTWs to implement best management practices to control or abate discharges of pesticides. (See 40 C.F.R. § 122.44(k)(3).)
- POTWs should be given significant discretion to determine which best management practices are appropriate for their service area. Specifically, as currently proposed, there is a list of nine specific requirements, which collectively would be an extreme and costly burden on POTWs. Rather than dictating specific practices, we recommend that the language be changed to state that these are suggested practices and that POTWs retain the discretion to develop appropriate practices as part of their pollution prevention plan. Moreover, education and outreach programs should not be required of every POTW that becomes subject to these provisions due to reasonable potential. Rather, POTWs should be allowed to coordinate with state and regional associations (i.e., CASA and CVCWA) to satisfy this requirement.
- With respect to specific language, we recommend the following changes:

- Page 13, b. Best Management Practices: “The following general ~~requirements~~ best management practices shall be considered by domestic or municipal discharges and may be implemented as part of a through Pollution Prevention Plan. In considering these best management practices, a domestic or municipal discharger has the discretion to implement any of the below practices, or may identify others that are not included here.: NPDES permits issued or reissued for wastewater discharges:
- Page 13, Education and Outreach Requirements: This list of four practices should be included in the list above, and again, the list should be practices for consideration, but not specifically mandated.
- Pages 13-14, Regulatory Requirements: This list of requirements should be deleted as they are not appropriate requirements for POTWs in an NPDES permit.
- The introductory paragraph of the Surveillance and Monitoring Language, beginning on page 18, needs further edits to recognize that different water matrices may require different monitoring methods. We recommend that that the second sentence of this paragraph be revised as follows:
 - “If reliable commercial methods are available with limits of quantitation (reporting limits) at or below the pyrethroid pesticides water quality objectives concentrations (and if those methods are applicable to the water matrix being monitored), those methods shall be considered by dischargers for monitoring of pyrethroid pesticides.”
- The Surveillance and Monitoring Language needs to be revised to remove requirement 2) on page 19. POTWs should not be required to determine if alternatives to pyrethroids are being discharged at levels that exceed applicable water quality standards. POTWs are not responsible for the use of pesticides and have no control over the registration of uses.
- The Surveillance and Monitoring Language applicable to Municipal and Domestic Wastewater, on page 20, should be further amended as follows:
 - “Routine monitoring for pyrethroid pesticides and alternatives can be discontinued upon a discharger showing that the specific pesticide is not found in the effluent at concentrations with the potential to cause or contribute to exceedances of applicable water quality objectives; ~~however, except~~ however, except the requirement to monitor for pyrethroid pesticides ~~once per permit cycle every 5 years as part of the Report of Waste Discharge~~ will continue to be required, at least as long as pyrethroid pesticides specified in Table III-2A are registered for use in the collection service area source area.”

CVCWA is also concerned with the proposed “surgical” edits to the programmatic pesticide language currently contained in the Basin Plan. The programmatic language as it currently exists is outdated and needs significant review and discussion by CVCWA, Central Valley Water Board staff, and other interested stakeholders. CVCWA is prepared and willing to participate in such discussions. However, to the extent that the Central Valley Water Board staff has decided not to undertake this necessary endeavor at this time, CVCWA opposes the Central Valley Water Board staff’s proposed approach of providing only limited edits. Rather than proposing limited edits, CVCWA would recommend that the language be deleted in its entirety until a rigorous discussion and process can occur with respect to the programmatic language.

II. Comments on Technical Issues

With regard to the technical basis for the proposed objectives, CVCWA supports the comments provided by CASA in its letter dated December 1, 2014. Specifically, CVCWA highlights the following technical issues pertaining to the proposed objectives and Basin Plan amendment:

Proposed Additivity Equations – It is CVCWA's position that the proposed equations should not be adopted as an element of the proposed water quality objectives for pyrethroids. The Central Valley Water Board has not provided data or references to validate the use of these equations at the ambient concentrations of the proposed objectives. "Additivity," as a toxicological characteristic, is dependent on the concentrations of the chemicals in question. Similarly, antagonistic or synergistic effects are dependent on chemical concentration. The Central Valley Water Board has not provided data or an appropriate analysis to justify the use of the proposed equations in the manner described. Therefore, there is no scientific demonstration to support the assumption that additive toxicity will occur in test organisms subjected to a mixture of pyrethroids at the extremely low ambient concentrations of the proposed acute or chronic water quality objectives. Lacking this essential information, the proposed equations should be eliminated from the proposed objectives.

Proposed Chronic Objectives – It is CVCWA's position that inadequate data exist to support the proposed chronic objectives. The proposed chronic objectives are derived using an "acute-to-chronic ratio" (ACR) because insufficient chronic toxicity data exist to directly calculate the proposed chronic pyrethroid objectives. Some of the toxicity data used to calculate the ACR, which in turn was used in the derivation of the proposed chronic objectives, include toxicity data for organochlorine and orthophosphate pesticides. This approach was used due to a lack of suitable data for the pyrethroids in question. The resulting proposed chronic pyrethroid objectives, which are extremely low values and typically well below the analytical limits of detection, are unacceptable from both a technical and policy perspective. Additional data of suitable quality is needed to resolve this issue.

Bioavailability Considerations – It is commonly accepted that the bioavailable fraction of pyrethroids is the toxic fraction. It is also well known that pyrethroids are hydrophobic chemicals, which, in natural waters, tend to bind with particulates and become less bioavailable. It is therefore appropriate that measurements taken to interpret compliance with the proposed objectives should reflect the bioavailable fraction of pyrethroids in ambient waters and should not be based on total concentrations. CVCWA supports the position contained in the CASA Letter, which advocates for the use of any of several suitable methods for the determination of the bioavailable concentration of pyrethroids in ambient waters.

Additionally, the toxicity tests used to derive the proposed water quality objectives are typically performed in clean laboratory water with very low levels of particulate material. As such, the concentrations that test organisms see in the test containers are bioavailable. This furthers the argument that the proposed objectives should be expressed as bioavailable pyrethroids and that various methods of measuring the bioavailable fraction should be considered for use in the determination of compliance with the proposed objectives in ambient waters.

Toxicity Tests Using Field Collected Organisms – CVCWA supports expansion of the data set used in the derivation of the proposed objectives to include toxicity data from tests performed on field collected organisms. Given the stated data deficiencies in the derivation of the proposed objectives, all available data should be utilized to improve the robustness of the information considered and to reduce unnecessary uncertainties. CVCWA believes that this issue needs greater consideration and discussion within the stakeholder process prior to completion of the staff report and initiation of the peer review process. CVCWA will work with Central Valley Water Board staff to identify, obtain, and utilize toxicity data for field collected organisms.

Peer Review of Proposed Objectives – CVCWA places significant importance on the quality and content of the independent peer review process for the proposed objectives and joins CASA and other stakeholders in requesting that specific technical questions be addressed in the charge to the peer reviewers. CVCWA supports the inclusion of each of the questions contained in the CASA Letter as part of the charge to the peer reviewers. CVCWA also requests that efforts be made to ensure that the independent peer reviewers are selected with appropriate experience for the technical issues at hand, including expertise in water quality criteria development, pesticide toxicity, and ecological effects of contaminants.

Policy Ramifications of Lack of Analytical Methods to Detect Pyrethroids Concentrations in Ambient Waters at Proposed Objectives – The fact that available analytical methods cannot reliably detect ambient concentrations of pyrethroids at the proposed water quality objective levels creates policy ramifications for the water quality objectives adoption process. Water Code sections 13241 and 13242 require that certain actions be taken by the State in the adoption of water quality objectives. Such actions include the requirement to describe actions that would need to be taken to comply with proposed objectives, consideration of economics, etc. The inability to detect pyrethroids at the proposed objectives creates practical difficulties in communicating the impact of the proposed objectives on various sectors of the economy and in evaluating measures and associated costs that would be needed to comply with the objectives.

Stakeholder Input on Technical, Policy, and Implementation Issues – Given the significant potential impact of the proposed objectives, the quality and content of the stakeholder process conducted by the Central Valley Water Board associated with the Basin Plan amendment process is of great importance. The process for receiving and considering stakeholder input on technical, policy, and implementation issues should maximize transparency and clarity on the key issues. Other recent processes used by the Central Valley Water Board on complicated issues (e.g. the Mercury TMDL, Drinking Water Policy, CV-SALTS, etc.) should be considered in terms of their potential use in this important, and potentially controversial, pyrethroid Basin Planning effort. CVCWA pledges to work with Central Valley Water Board staff to promote and implement an efficient and effective process.

The above comments represent an overview of some of the technical and related policy issues that exist with the proposed objectives and Basin Plan amendment. CVCWA requests additional time to work together with other stakeholders and Central Valley Water Board staff to further consider and resolve these issues as part of the Basin Planning process.

Tessa Fojut

Re: CVCWA Comments on October 2014 Preliminary Draft Pyrethroid Basin Plan Amendment
December 2, 2014

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Again, CVCWA appreciates the opportunity for early comment on the proposed objectives and Basin Plan language. We are available to answer any questions or to provide support as part of the stakeholder process.

Sincerely,



Debbie Webster,
Executive Officer