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## County of Sacramento

February 18, 2014

Mr. Daniel McClure  
Central Valley Regional Water Quality Control Board  
11020 Sun Center Drive, #200  
Rancho Cordova, CA 95670  
Sent via email: [dmcclure@waterboards.ca.gov](mailto:dmcclure@waterboards.ca.gov)

### **Subject: Amendments to the Water Quality Control Plan for the Sacramento and San Joaquin River Basins for the Control of Diazinon and Chlorpyrifos Discharges**

Dear Mr. McClure:

Thank you for providing stakeholders with the opportunity to comment on the development of the subject Basin Plan Amendment. The County of Sacramento, Department of Water Resources is a member of the Sacramento Stormwater Quality Partnership, and has since 1991 been a co-permittee on the Sacramento municipal stormwater NPDES Permit.

The County supports the Water Board's efforts to share information and foster open dialogue on the development of this Basin Plan Amendment. The stakeholder process has been useful and informative, and the County appreciates the time and effort that has gone into the public engagement process throughout the development of the amendment.

The County also supports the Water Board's decision to craft the Basin Plan Amendment without creating a "total maximum daily load" (TMDL) regulation, as we agree that the beneficial use impairments can be addressed through other means and measures.

The County appreciates and supports the Central Valley Water Board's stated intent to continue to coordinate with the CA Department of Pesticide Regulation (DPR), the United States Environmental Protection Agency (USEPA) and the County Agricultural Commissioners on appropriate pesticide registration and use requirements for the protection of water quality.

#### **Primary Issue – Responsibility for Receiving Water Monitoring and Assessment**

The County appreciates the Water Board's stated intent to allow flexibility in terms of the specific monitoring requirements. However, the Basin Plan Amendment places an undue burden on municipal stormwater agencies to evaluate receiving water quality.

Local agencies do not have regulatory authority over the uses of pesticides that may be present in urban runoff. Regulation of pesticide uses occurs at the federal and state – not local – level. This severely limits the capability of municipal stormwater agencies to control discharges of pesticides to receiving waters.

*"Managing Tomorrow's Water Today"*

## Comment Letter on Diazinon/Chlorpyrifos Basin Plan Amendment – County of Sacramento

For many years municipal stormwater agencies and the California Stormwater Quality Association (CASQA) have collaborated with the Water Boards in the Urban Pesticides Pollution Prevention Project (“UP3 Project”) and related efforts to address urban pesticides water pollution. In recent years, collaborative working of CASQA and Water Board staff with the California Department of Pesticide Regulation (DPR) resulted in significant changes in pesticide regulation when DPR adopted surface water quality protection regulations in 2012, specifically to address receiving water impacts from registered uses of pyrethroid pesticides in California’s urban watersheds (DPR, 2012<sup>1</sup>).

DPR has committed to continued collaboration with Water Boards and CASQA to solve pesticide water pollution problems in urban areas. Based on this commitment, and DPR’s recognition that state law prevents municipal regulation of pesticide use, we expect that DPR will continue to take the lead for addressing future urban pesticide water pollution, as it has already been doing for pyrethroids.

The implementation strategy for the TMDL for Diazinon and Pesticide-Related Toxicity in Bay Area Urban Creeks, produced by the San Francisco Bay Regional Water Quality Control Board, contains specific implementation actions relating to both USEPA and DPR (Attachment A). These implementation actions reflect the cooperative strategy in which dischargers and Water Board staff work together to help improve state and federal regulation of pesticide uses and water quality impacts.

As described in the staff report for the proposed Basin Plan Amendment, the 1997 Management Agency Agreement (MAA) between the State Water Resources Control Board and DPR also provides a process for protection of water quality.

CASQA has been actively engaged with the Water Boards and DPR to encourage the implementation of a coordinated, statewide approach to monitoring and assessment of pesticide impacts upon receiving water quality. CASQA’s recommendations and suggested approach are outlined in a recent letter to state and regional Water Board staff (Attachment B).

The County of Sacramento requests that the proposed Basin Plan Amendment and the associated staff report incorporate the following elements:

1. A statement acknowledging that for urban water bodies, full implementation of pesticide regulators’ authorities should be the primary mechanism for addressing pesticide-caused water quality impairments.
2. Acknowledgement within the Basin Plan Amendment and associated staff report that the implementation strategy will include actions relating to DPR and USEPA pesticide regulation authorities.
3. Acknowledgement that region-wide requirements for pesticide monitoring by individual discharges is not necessary, and that DPR and Water Board monitoring programs should be the primary mechanism for assessing pesticide issues in urban receiving waters and the effectiveness of DPR’s surface water protection efforts.

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<sup>1</sup> DPR. 2012. Pesticide Contamination Prevention Regulations. California Department of Pesticide Regulations (DPR). Sacramento, CA. July 2012

[http://www.cdpr.ca.gov/docs/legbills/rulepkgs/11-004/text\\_final.pdf](http://www.cdpr.ca.gov/docs/legbills/rulepkgs/11-004/text_final.pdf)

## Comment Letter on Diazinon/Chlorpyrifos Basin Plan Amendment – County of Sacramento

### Specific Comments

The following specific comments are identified with respect to the proposed Basin Plan Amendment:

- Re: new section for “Diazinon and Chlorpyrifos Discharges” under “Pesticide Discharges” (per staff report, p. C-4, Proposed Basin Plan Amendment): item 1.a should refer to discharges that cause or contribute to exceedances of water quality objectives.
- In same section, item 3 (staff report, p. C-5): change “comply” to “ensure compliance”, and refer to discharges that cause or contribute to exceedances of water quality objectives.
- These two sentences under “Changes to Chapter 5” (staff report, p. C-8) are vague and should be clarified or deleted:  
“The Central Valley Water Board will ensure that there will be a focused monitoring effort to monitor pesticide discharges in the Sacramento and San Joaquin River Basins. The Board will require those that discharge diazinon and chlorpyrifos to provide information to the Board.”
- Under the Municipal Monitoring section (staff report, p. C-9), item 3 is too broadly stated, and could represent enormous requirements for municipal agencies. Per the comments above this responsibility should not be imposed on municipal dischargers, but should be shared by DPR and Water Board programs. Among other issues, there is the ongoing question of the technical capabilities of commercial laboratories to perform analyses for new pesticides at environmentally-relevant levels.

Thank you for considering these comments. We look forward to continuing to work with your staff to more effectively prevent future urban pesticides water pollution.

Sincerely,



Dana Booth, Program Manager  
Sacramento County Stormwater Quality Program

### Attachments:

- Attachment A: Implementation Strategies for the TMDL for Diazinon and Pesticide-Related Toxicity in Bay Area Urban Creeks
- Attachment B: CASQA Comments – Coordinated Pesticides Monitoring in Urban Watersheds

cc: Geoff Brosseau, Executive Director, California Stormwater Quality Association

## ATTACHMENT A

### Implementation Strategies for the TMDL for Diazinon and Pesticide-Related Toxicity in Bay Area Urban Creeks

In addition to MS4 NPDES permit requirements, the TMDL for Diazinon and Pesticide-Related Toxicity in Bay Area Urban Creeks features the following implementation measures, as described on the SF Bay Regional Water Quality Control Board's web site:

[http://www.waterboards.ca.gov/sanfranciscobay/water\\_issues/programs/TMDLs/urbancrksdiazinontmdl.shtml](http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/urbancrksdiazinontmdl.shtml)

*From the web site:*

To address pesticide-related toxicity in urban water bodies, the TMDL contains a comprehensive implementation strategy. Federal, State, and local agencies, and others, are called on to take actions to reduce the potential for pesticides to runoff into waterways. Implementation actions focus on three areas:

**1) Regulatory programs:** Use regulatory tools to ensure that pesticides are not applied in a manner that results in discharges that threaten urban creek beneficial uses.

Water Board staff, as well as wastewater and stormwater discharger groups, work with the California Department of Pesticide Regulation (DPR) and the USEPA to bring the potential threats to water quality to the forefront during pesticide evaluation and registration processes. Some of the ways we interact with these two agencies are outlined in these links:

- Municipal stormwater Permittees' (see Municipal Regional Permit below) work collectively through the Bay Area Stormwater Management Agencies Association (BASMAA) on these issues, and summarize their efforts in annual reports. The latest (FY 11-12) outcomes of this important work are described in [this table](#).
- DPR has adopted [regulations](#) to protect surface water from urban uses of certain pyrethroid pesticides. Further information on DPR's actions to mitigate surface water contamination from pesticide use can be found [here](#) and [here](#).
- USEPA is developing a [framework for assessing impacts to aquatic organisms](#) that will be used consistently in ecological assessments of chemicals done under both Clean Water Act (water quality work) and Federal Insecticide, Fungicide, and Rodenticide Act (pesticide evaluations) mandates. This important effort could lead to improved assessments of the impacts that pesticides may have on water quality.

**2) Education and outreach programs:** Focus on decreasing demand for pesticides that threaten water quality, while increasing awareness of alternatives that pose less risk to water quality.

Research done during development of the TMDL found that pesticides applied around homes according to label instructions can and do lead to toxicity in local water bodies. Education and outreach initiatives funded by State grants and by wastewater and stormwater dischargers promote the behavior change necessary to reduce this threat of pesticide-related toxicity in our creeks. These initiatives include:

- [Our Water - Our World](#) provides materials, including fact sheets displayed at Bay Area hardware stores, developed to assist consumers in managing home and garden pests in a way that helps protect water quality.
- [EcoWise Certified](#) is an independent, third-party certification program that distinguishes knowledgeable, leading-edge licensed pest management professionals who practice prevention-based pest control.
- [BayWise.org](#), hosted by Wastewater and Stormwater Dischargers, provides useful information on

preventing all types of pollution where we live, work, and play, including how to find a certified pest control professional near you.

→ [IPM seminars](#) are offered in the Bay Area by the Pesticide Applicators Professional Association (PAPA), a non-profit corporation dedicated to providing Continuing Education and to the implementation of safe and effective pest control techniques. This year the seminars will be:

- July 29, 2014 in Concord
- November 6, 2014 in Petaluma
- December 9, 2014 in San Jose
- See [www.papaseminars.com](http://www.papaseminars.com) for more details as the dates approach

→ [Bay-Friendly Landscaping and Gardening](#) is an approach to gardening and landscaping that works to maintain the natural conditions of the San Francisco Bay Watershed by fostering soil health, water conservation, waste reduction, and pollution prevention.

→ The [Santa Clara Valley Urban Runoff Pollution Prevention Program](#) created two-minute videos, one promotes [IPM certifications](#) and the other highlights its [green gardening](#) program.

**3) Research:** Fill information gaps and monitor to measure implementation progress. Some research and monitoring information is summarized below.

The [Urban Pesticides Committee](#) addresses pesticides and water quality in urban settings, with a focus on regulatory activity as well as science and monitoring.

[SWAMP Toxicity Report](#) – November, 2010. Summarizes nine years of toxicity testing data collected by the State Water Board's Surface Water Ambient Monitoring Program (SWAMP) and partner programs.

[Detections of Pyrethroid Insecticides in Surface Waters from Urban Areas of California, 1993-2010](#), Xuyang Zhang, Ph.D., California Department of Pesticide Regulation, Environmental Monitoring Branch. December 3, 2010. Summarizes seven years of pesticide monitoring data collected by the Department of Pesticide Regulation.

**ATTACHMENT B**

**CASQA Letter to Water Board Staff re: Coordinated Pesticides Monitoring**



## California Stormwater Quality Association®

*Dedicated to the Advancement of Stormwater Quality Management, Science and Regulation*

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February 27, 2013

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State Water Resources Control Board  
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Thomas Mumley  
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Regional Water Quality Control Board  
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**Subject: Coordinated Pesticides Monitoring in Urban Watersheds**

Dear Rich and Tom:

On behalf of the California Stormwater Quality Association (CASQA<sup>1</sup>), I write to express our interest in working with State and Regional Water Boards and the California Department of Pesticide Regulation (DPR) toward establishment of a coordinated statewide pesticides monitoring program for California's urban watersheds.

We understand that the State and Regional Water Boards have been in conversation with DPR about the potential to establish a coordinated, joint effort to monitor the effectiveness of recently adopted regulations to reduce pyrethroid insecticides and pyrethroid-related toxicity in California's urban watersheds. CASQA seeks to be part of the conversation in the development of this effort, both to bring our experience with urban watershed monitoring to the table and to explore how to make more effective use of state and local pesticide monitoring expenditures. Along these lines, we are interested in exploring the potential to expand the conversation to consider the potential for long-term cooperation to address the state's urban watershed pesticide monitoring needs.

Through NPDES permit requirements, in recent years, CASQA member organizations have been required to spend hundreds of thousands of dollars annually on pesticides monitoring. Pesticide monitoring has been scientifically challenging for NPDES permittees, particularly because commercial labs either do not offer analytical services for the latest pesticides, or existing methods do not allow for analysis at environmentally-relevant levels, which are often quite low. Over the past 20 years, as researchers have identified impacts – first from organophosphate pesticides, then pyrethroids, and now fipronil and other pyrethroid replacements, we have had to push our contract laboratories to develop new chemical analysis and toxicity identification evaluation approaches.

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<sup>1</sup> CASQA is comprised of stormwater quality management organizations and individuals, including cities, counties, special districts, industries, and consulting firms throughout California. Our membership provides stormwater quality management services to more than 22 million people in California.

## CASQA comments on Coordinated Pesticides Monitoring in Urban Watersheds

Despite these significant expenditures, the municipal pesticide monitoring data have been of limited value. These data generally have not been used by DPR in its regulatory actions to address pesticide water pollution, nor have they identified any new pesticide water pollution problems. A key problem with municipal pesticide monitoring requirements is that they are not designed to gather information necessary to support effective pesticide regulation. Local pesticide monitoring requirements are greatly hampered by the relatively non-adaptive nature of permit-required monitoring programs (inherent to long permit cycles) and the lack of commercially viable environmental analytical methods for most pesticides. As a result, traditional permit-based monitoring programs are not good mechanisms for obtaining the data necessary to examine the potential for pesticides to impact water quality in the rapidly changing urban pesticide marketplace.

In addition, data collected across all California urban areas by DPR, SWAMP, municipalities, and other scientists tell a consistent story about pesticide water pollution.<sup>2</sup> An important lesson learned by Federal, state, and local officials, through addressing problems with urban use pesticides such as diazinon, chlorpyrifos, pyrethroids, and fipronil, is that pesticide use patterns that cause water quality problems are predictably similar in urban areas throughout the state.<sup>3</sup> Given this situation, a coordinated, state-led pesticide monitoring effort, designed to be representative of urban areas, could be much more effective at gathering useful data and make much more efficient use of public resources than the current, uncoordinated, permit-required local monitoring.

From CASQA's perspective, an effective monitoring program would:

- (1) Provide the data necessary for DPR to use its regulatory authorities to eliminate pesticide-related water pollution, including pesticide-related aquatic toxicity, from waters and sediments of surface waters receiving urban runoff discharges.
- (2) Be designed and overseen by professionals with detailed knowledge and experience in pesticide water quality monitoring.
- (3) Be question-driven, in accordance with the SWAMP Assessment Framework<sup>4</sup>, and have a watershed focus.
- (4) Be of well documented and of high scientific quality, so that all stakeholders, including U.S. EPA and pesticide manufacturers, will trust the data.
- (5) Serve as a replacement for the varied pesticide monitoring requirements in current stormwater NPDES permits (including the Phase II Small MS4 permit).

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<sup>2</sup> Armand Ruby Consulting (in preparation). *Review of Pyrethroid and Fipronil Monitoring Data from California Urban Watersheds, 2013*. Prepared for CASQA.

<sup>3</sup> Holmes, R. W., B. S. Anderson, et al. (2008). "Statewide investigation of the role of pyrethroid pesticides in sediment toxicity in California's urban waterways." *Environmental Science & Technology* 42(18): 7003-7009; TDC Environmental, LLC. *Pesticides in Urban Runoff, Wastewater, and Surface Water: Annual Review of New Scientific Findings 2010*; prepared for the San Francisco Estuary Partnership; San Mateo, CA, 2010.

<sup>4</sup> Bernstein, 2010. SWAMP Assessment Framework.

[http://www.waterboards.ca.gov/water\\_issues/programs/swamp/docs/reports/app\\_c\\_assess\\_frmwrk.pdf](http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/reports/app_c_assess_frmwrk.pdf)

CASQA comments on Coordinated Pesticides Monitoring in Urban Watersheds

As matter of public policy, we believe that pesticide registrants should fund all pesticide monitoring. Recognizing that this may not currently be possible, we believe that monitoring should be funded, to the extent feasible, through existing permittee SWAMP fees and fees paid by pesticide registrants to DPR. Stormwater permittee costs should be minimized. It is inconsistent and sets up untenable situations to require local agencies to fund and conduct monitoring for pesticides, while at the same time – by State law – prohibiting local agencies from regulating pesticides. Pesticides regulated on a statewide basis, should be monitored on a statewide basis.

Thank you for initiating the statewide dialog with DPR about pesticide monitoring. We look forward to working with you and DPR to discuss development of a statewide pesticide monitoring strategy. Dave Tamayo, CASQA Pesticides Subcommittee Co-Chair, at (916) 874-8024 or [tamayod@SacCounty.net](mailto:tamayod@SacCounty.net), or CASQA Executive Director Geoff Brosseau at (650) 365-8620 will be giving you a call to follow up on this letter.

Sincerely,



Richard Boon, Chair  
California Stormwater Quality Association

cc: Vicky Whitney, California State Water Resources Control Board  
Rik Rasmussen, California State Water Resources Control Board  
Matthias St. John, California Regional Water Quality Control Board, North Coast Region  
Bruce Wolfe, California Regional Water Quality Control Board, San Francisco Bay Region  
Kenneth Harris, California Regional Water Quality Control Board, Central Coast Region  
Samuel Unger, California Regional Water Quality Control Board, Los Angeles Region  
Pamela Creedon, California Regional Water Quality Control Board, Central Valley Region  
Patty Kouyoumdjian, California Regional Water Quality Control Board, Lahontan Region  
Robert Perdue, California Regional Water Quality Control Board, Colorado River Region  
Kurt Berchtold, California Regional Water Quality Control Board, Santa Ana Region  
David Gibson, California Regional Water Quality Control Board, San Diego Region  
Janet O'Hara, California Regional Water Quality Control Board, San Francisco Bay Region  
Daniel McClure, California Regional Water Quality Control Board, Central Valley Region  
Tessa Fojut, California Regional Water Quality Control Board, Central Valley Region  
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David Duncan, California Department of Pesticide Regulation  
Sheryl Gill, California Department of Pesticide Regulation  
Nan Singhasemanon, California Department of Pesticide Regulation  
CASQA Board of Directors, Executive Program Committee, and Pesticides Subcommittee