



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street (WTR-3)
San Francisco, CA 94105

Adam Laputz
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive. #200
Rancho Cordova, CA 95670-6114

Dear Mr. Laputz

Thank you for the opportunity to provide comments on the Waste Discharge Requirements (WDR) for Growers in the Eastern San Joaquin River Watershed. EPA strongly supports the Regional Board's efforts to improve its Irrigated Lands Regulatory Program through issuing WDRs to further protect and restore surface and groundwater water quality in the San Joaquin River watershed. The Water Boards are recognized as national innovators in utilizing State regulatory authorities to address agriculture-related water quality issues, consistent with California's federally approved nonpoint source management program under Clean Water Act Section 319. In particular the farm management performance standards listed below, including the minimization of waste discharges to both surface and groundwater, are appropriate.

- a. minimize waste discharge offsite in surface water,*
- b. minimize or eliminate the discharge of sediment above natural background levels,*
- c. minimize percolation of waste to groundwater,*
- d. minimize excess nutrient application relative to predicted crop need,*
- e. prevent pollution and nuisance*
- f. achieve and maintain water quality objectives and beneficial uses,*
- g. protect wellheads from surface water intrusion. (p.29 of Attachment A)*

EPA recommends adding the prevention of toxicity into the performance standards. This change would be consistent with the protection of beneficial uses and water quality objectives in the Basin Plan. Bullet "e" would then read "e. prevent pollution, toxicity and nuisance".

EPA supports the WDR's approach to control nonpoint source pollution of nutrients to surface and groundwater with the development of Nitrogen Budgets. Reductions in nutrients discharges can be expected from growers taking a closer look at the nutrient requirements of their crops and the overall budgets of nitrogen applied. Reporting the Nitrogen Budget and Farm Evaluation information, at the 1 square mile scale to the Regional Board will help the Regional Board evaluate the effectiveness of practices and identify nitrogen hot spots for targeted enforcement.

EPA also supports the Regional Board's intent to reduce waste discharges to groundwater through the implementation of this WDR. EPA recommends focusing on the implementation of

practices to reduce percolation of wastes to groundwater in the high vulnerability areas as a complement to its current emphasis on monitoring groundwater quality. In general, any incentives the Regional Board can put in place for growers to reduce discharges to surface and groundwater such as implementing tailwater recovery systems, are likely to result in more immediate water quality improvements.

This WDR will lead to the establishment of new Nitrogen Budget, Farm Evaluation, and Sediment and Erosion Control Plan reporting templates after the adoption of the WDR. It is anticipated that these will be required elements of the many upcoming WDRs for irrigated agriculture in the Central Valley Region. EPA recommends that the Regional Board develop one consistent set of templates for all of the irrigated agriculture WDRs to ensure consistency and fairness to growers in different areas. This would also reduce the administrative burden of conducting a public process for each set of templates. Similarly, required monitoring parameters and the overall approach for monitoring should be consistent between WDRs. EPA supports having the Regional Board (rather than third parties) establish the trigger limits for pollutants without numeric water quality objectives as it is a step in the right direction towards consistency between WDRs.

EPA has concerns that chronic toxicity testing of surface water is not required by this WDR. Acute toxicity tests measure the adverse effect (usually mortality) on a group of test organisms during a short-term exposure (e.g. 24, 48, or 96 hours). Chronic tests have a sublethal endpoint and are usually conducted for a longer period. A pollutant can have a significant impact on an aquatic community without producing short term mortality, such as by reducing growth or reproductive ability. The exposure of organisms in the creeks and rivers of the Eastern San Joaquin Watershed is chronic and thus chronic toxicity testing is the most appropriate to assess the impact of irrigated agriculture discharges to aquatic life. Additionally, including chronic toxicity testing in this WDR would be consistent with the Los Angeles and Central Coast Regions' Conditional Waivers for irrigated agriculture which both include chronic toxicity testing as well as the draft Delta Regional Monitoring Program's focus on toxicity assessment. The draft statewide Policy for Toxicity Assessment and Control (Toxicity Policy) has the following recommendation for Channelized Dischargers, a category which includes irrigated agriculture:

3.2.9 Channelized Dischargers

Under the Policy, channelized dischargers subject to existing toxicity monitoring requirements under a conditional waiver or nonpoint source WDR will be required to analyze toxicity data using the TST [Test of Significant Toxicity] approach and to report results as a "pass" or "fail." In addition, the policy recommends, but does not require, the implementation of chronic toxicity monitoring programs for these channelized dischargers not currently required to do so. The recommended program consists of four single-concentration toxicity tests conducted each quarter. Remediation is recommended if these dischargers "fail" a test. (pp 3-5 of the Staff Report)

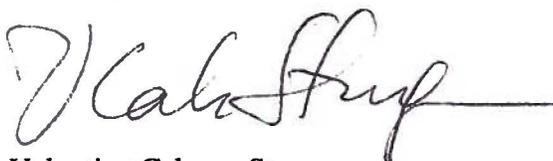
Acute toxicity testing is appropriate for short term exposures. At this time the monitoring plan for the conditional waiver does not monitor for toxicity at the times expected to be the worst during the year based on pesticide and fertilizer use patterns or other information. If the toxicity

anticipated during acute monitoring events were expected to be the worst in a 24 hrs or 48 hr period for the season, acute testing would be appropriate. EPA urges the Regional Board to include a requirement for chronic toxicity testing in the WDR.

The Regional Board's approach for addressing impairments in this WDR is appropriate. The development and implementation of Surface Water Quality Management Plans by the third party appears to be an effective mechanism to address impairments and implement TMDLs, as long as the management plans are coupled with a mechanism to demonstrate progress toward achieving water quality standards. National experience indicates that nonpoint source pollution can be more effectively addressed when implementation of management practices is informed by TMDLs and watershed plans. Where TMDLs are available, or are newly developed, EPA recommends applying any TMDL loading information and/or management practice recommendations in the development of Surface Water Quality Management Plans and include recommendations to growers for management practice implementation at the farm scale. The combination of good data, local stewardship and accountability can help direct investments and activities to maintain beneficial uses. We encourage the Regional Board to coordinate regulatory actions with technical and financial assistance programs so as to improve water quality in a manner that enhances the long-term viability of the agricultural sector.

If you would like to discuss these comments further, please contact me at (415) 972-3434. EPA appreciates the opportunity to review and comment on this important action to help improve water quality.

Sincerely,

A handwritten signature in black ink, appearing to read 'Valentina Stagno', with a long horizontal line extending to the right.

Valentina Cabrera Stagno,
Agricultural Water Quality Specialist

References

California Regional Water Quality Control Board Central Coast Region, Order No. R3-2012-0011, *Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands*

http://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/docs/ag_order/final_agorder_atta_032612.pdf

California Regional Water Quality Control Board Los Angeles Region, Order No. R4-2010-0186, *Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands within the Los Angeles Region*

http://www.waterboards.ca.gov/losangeles/water_issues/programs/tmdl/waivers/11_22_10/Order%20R4-2010-0186_signed.pdf

State Water Resources Control Board 2012, *Policy for Toxicity Assessment and Control, Public Review Draft, June 2012*

http://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/draft_toxic_policy_0612.pdf

State Water Resources Control Board 2012, *Policy for Toxicity Assessment and Control: Draft Staff Report and Environmental Checklist, Public Review Draft, June 2012*

http://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/draft_toxic_staff_report_0612.pdf

State Water Resources Control Board 2004, *Policy for the Implementation and Enforcement of the Nonpoint Source Pollution Control Program*

http://www.waterboards.ca.gov/water_issues/programs/nps/docs/oalfinalcopy052604.pdf