

May 24, 2003

Mr. Bill Croyle and Members of the Board
California Regional Water Quality Control Board
Central Valley Region
3443 Routier Road, Suite A
Sacramento, CA 95827-3003

To Members of the Board:

I have reviewed the proposed Monitoring and Reporting Program for the *Conditional Waiver of Waste Discharge Requirements of Discharges from Irrigated Lands* prepared for the April 24, 2003 Regional Board hearing. These comments are submitted on behalf of Pesticide Action Network (PAN). I apologize for the tardiness of this letter; however, I was in the field early in the week and unable to access the RWQCB web site on Friday, May 23 to find the fax number to submit the letter.

My review is based on my extensive technical and policy background in the area of organic and inorganic environmental pollutants, in particular pesticides. A copy of my most recent curriculum vitae and elaboration of my experience in monitoring and evaluating environmental pollutants and pesticide use were provided in my letter of November 21, 2002 to Mr. Pinkos and the Board, and are incorporated by reference here.

Let me begin by noting that Board Staff have done an excellent job of clearly delineating monitoring protocols and clarifying QA/QC procedures. The use of chemical analyses, toxicity tests, bioassessments, discharge measurements and comprehensive basin descriptions is essential to obtain an overview of practices contributing to impaired water quality in Central Valley water bodies.

This letter specifically addresses the following:

- Size and focus of watershed groups
- Method of data reporting
- Legacy pesticides and other constituents
- No guarantee of pollution reduction

Size and focus of watershed groups

The use of watershed groups as the major means of implementing the monitoring program is a good idea, but the plan needs significant changes to be effective in reducing the impacts of agriculture on water quality.

First, the size of the proposed watershed groups (four to five groups for the entire Central Valley) is far too large to be workable. As written, the MRP requires only a single sampling point for 5,000 acres, an area that is likely to contain many different crops, livestock, and other land uses which contribute substantially different pollutants to surface waters. Smaller watershed groups focused on a particular

tributary would be much more effective in targeting specific pollutants and their sources. A greater focus on these smaller tributaries is appropriate for several reasons: 1) the law applies to all water bodies in the state, not just the larger waterways, 2) little information has been collected on the adverse effects of agricultural discharges on the smaller tributaries, 3) high water quality in the smaller tributaries is critical for the reproductive success of fish and other aquatic species, because these areas serve as spawning grounds and nurseries for these organisms, and 4) the volume and flow of these waterways is lower than that of the major waterways such as the main stem of the Sacramento, Feather, or San Joaquin Rivers, thus discharges are likely to have a greater impact on the stream biota because they will not be diluted sufficiently to reduce toxicity.

Second, identification of individual dischargers and their points of discharge to waters of the state is necessary to effectively characterize pollutant loading. Sampling must be conducted at each point of discharge to determine the initial scope of the problem and identify the pollutants released, and to assess the effectiveness of Best Management Practices (BMPs) that will be implemented. A more workable strategy than the present proposed plan would be for each individual discharger to file a monitoring plan and a farm management plan with the watershed group. The watershed group could then handle the logistics of sampling, QA/QC and analysis. A framework such as this would reduce the technical workload for individual dischargers, yet still require their involvement in the monitoring process and in the planning required to reduce discharges. A tiered fee structure based on the size of the operation and the quantity of inputs used would be appropriate.

Method of data reporting

The data that will be acquired through this monitoring program will provide an overview of water quality in the Central Valley. In order to best utilize these data for evaluating and improving water quality, electronic data reporting should be required, either in a spreadsheet application such as Excel or in some accessible database format that will easily interface to existing water quality data systems such as US EPA's STORET, the state's SWAMP and DPR's Surface Water Database. Board Staff needs to explicitly state requirements and formats for such data submissions to ensure consistency between reports.

Legacy pesticides and other constituents

Monitoring should include legacy pesticides—the organochlorines—to determine all sources of toxicity. Although these pesticides were banned many years ago, they are still present and can cause significant water and sediment quality impairments. For example, in 1995 a large storm flooded agricultural lands near the Pajaro River, carrying sediment from fields into Elkhorn Slough, a breeding ground for the Caspian tern.¹ That year, only five Caspian tern chicks survived out of 273 eggs laid, a 2% reproductive success rate, compared to a 48% survival rate the previous

¹ State of California Department of Fish and Game Pesticide Laboratory Report on Caspian Tern Eggs and Nest Cup Sediments from Elkhorn Slough, Lab No. P-1743, E.P. No. L-284-95, November 1995.

year. Analysis of unhatched eggs and dead chicks showed extremely high concentrations of DDE and toxaphene, two organochlorines that were heavily used in the Pajaro and Salinas valleys in the 1960s and 1970s. Prevention of sediment transport from agricultural land should be a priority to protect water, sediments, and the wildlife that depends on them from further contamination with these long-lived pesticides. In addition, it will also be important to track other constituents that may be created or mobilized by agricultural activities, including pathogens, total organic carbon, selenium, boron, and salts. Monitoring for these constituents will provide a baseline measure of the extent of contamination and a gauge of the effectiveness of sediment-control BMPs.

No guarantee of pollution reduction

While the monitoring plan presented by Staff is quite comprehensive, knowledge of pollutant loading by itself will not reduce discharges. Changes in pest management and nutrient disposal practices are necessary to improve water quality. And yet, the present plan has no framework for requiring reductions in pollutant discharges, no timeline for reduction of pollutant loading, and no accountability for dischargers who continue to pollute. There are no examples of which I am aware where large watershed groups have been successful at reducing pollution in the absence of a regulatory framework that constructs a timeline for reducing discharges and includes penalties for water quality violations.

Quantifiable pollutant reductions should be the primary goal of any best management practices, with the most direct pathway being reductions in the quantities of inputs—in this case, pesticides and fertilizers. Use-reduction targets should be a required part of all plans, and these reductions should be tracked and correlated with monitoring data.

As discussed at length in my letter to the Board of November 21, 2002 (incorporated by reference here), without such accountability in the form of mandatory pollution reduction, Staff's proposal would in no way guarantee a reduction in pollutant loading to Central Valley waterways. Indeed, implementation of a waiver without an enforceable mandate of pollution reduction is equally likely to result in *greater* pollution from agricultural sources, and would thus remain in violation of the California Environmental Quality Act.

Respectfully submitted,

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