



September 4, 2007

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**Re: Comment Letter – September 13, 2007 Irrigated Lands Program Joint Workshop**

Dear State and Regional Water Board Members:

Thank you for the opportunity to provide public comments on the Central Valley's Conditional Waiver program for Irrigated Agriculture. The Community Water Center is a non-profit organization based in Visalia, California, that works to ensure that all communities can have access to safe, clean and affordable drinking water. On behalf of the Community Water Center the AGUA Coalition, and the many communities and organizations with which we work, we call on you to act now to protect and restore the quality of our region's water from this major source of pollution.

Specifically, we ask you to either 1) require owners and operators of irrigated lands that discharge into groundwater to submit Reports of Waste Discharge and issue individual or general WDRs to these dischargers, as required by CWC §§13260 & 13263, or 2) amend the current Conditional Waiver for Irrigated Lands to include groundwater dischargers or issue a separate conditional waiver to cover these groundwater dischargers, as per CWC §13269.

Studies indicate that **fertilizer from irrigated agriculture is the primary source of nitrate contamination of drinking water wells.**<sup>1</sup> Additionally, pesticides, salts, and other on-site contaminants are discharged into our groundwater aquifers due to irrigated agriculture.<sup>2</sup>

<sup>1</sup> Lawrence Livermore National Laboratory. (2005) *California GAMA Program: Sources and transport of nitrate in shallow groundwater in the Llagas Basin of Santa Clara County, California*. UCRL-TR-213705. pp.3, 22, 24; Burow et al. (2006) *Temporal trends in concentrations of DBCP and nitrate in groundwater in the eastern San Joaquin Valley, California, USA* Hydrogeology Journal. DOI 10.1007/s10040-006-0148-7; Lawrence Livermore National Laboratory (2005) *Sources and transport of nitrate in groundwater in the Livermore Valley Basin, California*. p.22; Burow et al., *Occurrence of nitrate and pesticides in ground water beneath three agricultural land-use settings in the Eastern San Joaquin Valley, California, 1993-1995* U.S. GEOLOGICAL SURVEY Water-Resources Investigations Report 97-4284, available at <http://cawater.usgs.gov/sanj/pub/usgs/wri97-4284/wri97-4284.pdf>.

<sup>2</sup> Spurluck, F. 2000. *Effect of irrigation scheduling on movement of pesticides to ground water in coarse soils*, available at <http://www.cdpr.ca.gov/docs/empmt/pubs/ehareps/eh0001.pdf>; Zarkin, F., M. Wilkerson, and R.J. Oshima. 1984. *Pesticide movement to ground water volume II: Pesticide contamination in the soil profile at DBCP, EDB, simazine, and carbofuran application sites*, available at

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However, the Central Valley Regional Water Quality Control Board ("Regional Board") continues to exempt these sources from any requirements for monitoring, treatment, or best management practices.<sup>3</sup> As a result, groundwater in the region is no longer suitable for many beneficial uses. Public drinking water systems are faced with millions of dollars in costs and private well owners must invest in expensive treatment options or find new sources. Our State's poorest families, those least able to buy alternative water sources, are given contaminated water in their homes.<sup>4</sup> This reality is the Regional and State Boards' failure.

Nitrate is an acute contaminant, meaning that it can cause death in infants in a matter of days of exposure. The State and Regional Boards cannot continue to look at groundwater protection as part of an eventual, "long-term program." You must act now before more families are exposed to dangerous contaminants, and before your actions directly result in the death of a child.

Specifically, we request that you do the following:

- 1) Order staff to revise the current Irrigated Lands Conditional Waiver Program to include groundwater dischargers and present an interim order for adoption by the Regional Board by the end of the year.
  - a. Staff should solicit public comments on a draft and ultimately present a revised interim order, which incorporates groundwater dischargers and is consistent with the State's Non-Point Source Policy, for a public hearing and Board adoption by December 2007.

<http://www.cdpr.ca.gov/docs/emp/pubs/ehareps/eh8403.pdf>; Barbash et al. (1999) *Distribution of Major Herbicides in Ground Water of the United States* U.S. GEOLOGICAL SURVEY Water-Resources Investigations Report 98-4245; Burow et al. *Evaluation of Processes Affecting 1,2-Dibromo-3-Chloropropane (DBCP) Concentrations in Ground Water in the Eastern San Joaquin Valley, California: Analysis of Chemical Data and Ground-Water Flow and Transport Simulations Prepared in cooperation with the UNIVERSITY OF CALIFORNIA, DAVIS*, U.S. Geological Survey Water-Resources Investigations Report 99-4059, available at <http://cawater.usgs.gov/sanj/pub/usgs/wrir99-4059/wrir99-4059.pdf>; The Quality of Our Nation's Waters Nutrients and Pesticides, U.S. Geological Survey Circular 1225; Shoups et al. (2005) *Sustainability of irrigated agriculture in the San Joaquin Valley, California* available at <http://www.swrcb.ca.gov/nwqcb/5/cv-salts/committees/sec/sec-29jun07-shoups-et-al.pdf>.

<sup>3</sup> Regional Board Order No. R5-2006-0053 only applies to dischargers from irrigated lands into surface waters (See Attachment A, p. 4). The ONLY requirements on irrigated agriculture for groundwater protection are through the Department of Pesticide Regulation's Groundwater Program. However, these requirements are limited to legal pesticide application in only a few vulnerable geologic environments, meaning that many irrigation practices that result in discharging pesticides into groundwater are not covered. For example, DBCP and other banned pesticides that are found in the soil continue to be transported into groundwater by irrigation practices. Additionally, illegal use, such as misuse, over-application or spills by irrigators, is not covered by DPR regulations. Most importantly, NO regulatory program exists for fertilizer application, even in vulnerable geologic environments.

<sup>4</sup> We have testified before the Regional Board many times over the past two years on the urgency of the drinking water problem due to groundwater contamination, particularly from nitrate. Over 20 percent of all community systems in Tulare County cannot meet basic safe drinking water laws, almost entirely due to nitrate contamination of groundwater sources, and over 40% of private wells tested by the State Board's GAMA program had nitrate over the Maximum Contaminant Level (MCL). Tulare County has the highest poverty rates in the State and the most number of systems that cannot meet MCLs.



- b. The revised order should include the following:
- i. Reports of Waste Discharge (or equivalent reporting) by all surface and groundwater dischargers.
  - ii. A timeline for enrollment of all new groundwater dischargers.
  - iii. Penalties for failure to enroll.
  - iv. A Groundwater Monitoring and Reporting Program with a timeline for implementation by all groundwater dischargers.
    1. The program should include shallow groundwater monitoring for groundwater contaminants found on-site to determine whether they occur in excess of water quality objectives.
    2. The timeline for implementation should prioritize groundwater dischargers in vulnerable geologic environments where water quality objectives are not being met.
  - v. A timeline for development of Best Management Practices (BMPs) and implementation requirements for all surface *and groundwater* dischargers.<sup>5</sup> Requirements must include:
    1. A means of verification that BMPs are being implemented;
    2. A means of quantifying BMP effectiveness;
    3. A means of incorporating feedback from monitoring results into BMP requirements.
  - vi. Milestones for the Program to meet surface *and groundwater* water quality objectives.
  - vii. Penalties for dischargers that fail to implement requirements and meet surface *and groundwater* quality objectives.
- 2) **Prepare an Environmental Impact Report (EIR)** for a final regulatory program for irrigated agriculture that fully examines the alternatives for best management and treatment technologies for surface *and groundwater*. This should include the use of *individual and general WDRs*, as well as conditional waivers for the regulatory program. The EIR should be completed within the next year, given the years and millions of dollars that the Board has already put into developing an EIR for the current program.<sup>6</sup>

<sup>5</sup> Many of the BMPs identified by DPR for legal pesticide use may be applicable to this program. See <http://www.cdpr.ca.gov/docs/gwp/chem.htm>; Groundwater Mitigation Measures (3CCR sections 6487.1 - 6487.5); general restricted material permit regulations (3CCR sections 6400 - 6444); bentazon (3CCR section 6457); and aldicarb (3CCR section 6458) - <http://www.cdpr.ca.gov/docs/in house/cal code/3c/crcovr.htm>.

<sup>6</sup> The Board is currently working on an existing conditions report for the EIR. The following is a list of data that should be included in that report:

- 1). The Department of Public Health (DPH) (formerly the Department of Health Services)'s drinking water program's chemical database of all public water systems well monitoring data
- 2) The Department of Pesticide Regulation (DPR)'s groundwater program's Annual Well Inventory, which includes many other agencies' data as well as their own testing.
- 3). USGS data sources, many of which go back decades.



Additionally, we request that the State Board set appropriate fees, request sufficient funds through its budget requests, and identify other sources of funding that can be used to implement an expanded program as outlined above.

#### Conclusion

Irrigation water run-off from fields contain a toxic mix of fertilizers and pesticides, which ultimately flow into our waterways and seep into our aquifers. As a result, our local drinking water sources are the worst polluted in the State.<sup>7</sup> More than 40,000 people in Central Valley communities each year are exposed to unsafe and illegal levels of contaminants in their drinking water due to groundwater contamination.<sup>8</sup>

Currently the Central Valley Regional Water Board continues to allow water with highly concentrated levels of fertilizers and pesticides to contaminate community drinking water sources without ANY regulatory requirements. The California Water Code requires that the Regional Board either waive or adopt general or individual WDRs for existing and new dischargers. We ask the Regional Board today to uphold these requirements of state law and effectively control discharges from irrigated lands to groundwater.

While irrigators are allowed to pollute, small, rural communities have to pay for bottled water and the cost for drilling new wells or treatment technology. Because these sources of contaminants have remained unregulated, residents in the Central Valley have to pay some of the highest proportional water rates in the state for undrinkable water. Lack of groundwater protections has gone on too long at the expense of community health. We urgently ask you to act today and issue permits to irrigated agriculture that are truly protective of our drinking water sources and other beneficial uses.

Sincerely,

Laurel Firestone  
Co-Executive Director & Attorney at Law

- 4) The State Board GAMA program's well testing data, which includes public supply wells, private domestic wells and monitoring wells.
- 5) The Regional Board's data from individual dischargers, which are required or voluntarily report groundwater monitoring data through regulatory programs, such as dairies and food processing facilities.

All of these sources should be easily integrated to determine where water quality objective exceedances occur.

<sup>7</sup> See Department of Health Services Annual Violations Report (2004 & 2005).

<sup>8</sup> Id.