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**RE: Comment Letter – General Order WDRs for Recycled Water Use and/or Negative Declaration and Initial Study**

26 May 2014

Recycled Water Decision Makers:

I am writing to express my serious concerns about some currently approved uses of recycled wastewater. These approved uses, which include agricultural irrigation of some food crops, including livestock forage and feed, with secondary-level treated wastewater, have apparently not been fully vetted by the State of California for risks associated with chemical contamination, including both surface contamination of the produce and systemic contamination that could occur within the body of food crops, and in livestock fed with those crops.

Municipal wastewater does not just comprise domestic wastewater from homes (significant sources of pharmaceuticals and personal care products, which have been found to vary in concentration in wastewater with the time of day.) Municipal wastewater is also generated by businesses, industries, medical facilities, universities, etc, and can also include surface runoff. Despite pre-treatment programs, significant chemical contamination can remain in secondary-treated wastewater, and even in tertiary-treated wastewater. This fact has been downplayed in state reports I've seen related to recycled water, even though State Water Board data from wastewater plants around the state confirm the contamination exists. **A growing body of research shows that some agricultural crops are capable of taking up chemicals, including carcinogens, endocrine disruptors and other compounds of emerging concern, from recycled wastewater, under field conditions. Research also shows that soils can be negatively impacted by some combinations of chemicals over time. Nevertheless, the General Order specifically mentions that compounds of emerging concern (CECs) will not be monitored (General Order, #14). I request that a specific plan for addressing compounds of emerging concern in recycled water used for agricultural purposes, including a crop testing program, be included in the General Order.**

Un-disinfected secondary recycled wastewater, which is permitted for some uses, also may contain harmful, undetected pathogens that may cause serious illnesses that may be difficult to trace back to the source. If the general public knew that wastewater of this quality was being used to irrigate any food-related crops, the majority would likely be outraged.

All in all, the General Order and current laws seem to take a lax attitude toward some important health concerns related to wastewater recycling for agricultural uses in favor of making maximal

use of recycled water. Admittedly, recycled water regulation in California is a moving target and difficult for a layperson to track, but due diligence does not appear to have been applied to ensure that harmful substances from recycled water are being kept out of the food supply or prevented from accumulating on agricultural land.

The State of California should take care to make more judicious choices from now on about how our wastewater resources are managed, before our state's reputation in this area becomes tarnished. How can the public expect proper vetting of recycled wastewater for human consumption and recharge of our aquifers when regulators and legislation have so far ignored crucial, basic health considerations for agricultural irrigation? Compounds of emerging concern, heavy metals, and other contaminants in wastewater are “inconvenient truths” that must be dealt with head-on by California legislators and regulators. Despite the drought, you cannot ignore such basic health concerns. People depend on you to protect their health and their families' health, and if they realize you've let them down they won't soon forget. “California Grown” should always be a good thing.

I also have to question whether complete self-monitoring is still appropriate for wastewater dischargers once they become water purveyors, as the General Order allows. **The state should reserve the option to do its own monitoring (at purveyor's expense) in place of self-monitoring to ensure compliance.**

Above all, a CEQA review on current recycled wastewater laws really must be done, regardless of the drought, and the concerns described above must be addressed as part of this review. Some uses of recycled wastewater treated to less-than-tertiary standard should be re-evaluated immediately.

Thank you for considering my very brief comments on this expansive topic.

/s/ Deb Wirkman