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# CVCWA

## Central Valley Clean Water Association

Representing Over Fifty Wastewater Agencies

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Selica Potter  
California State Water Resources Control Board  
1001 I Street  
Sacramento, CA 95814

**Subject: Comments to Supplement Testimony at the Climate Change and Water Resources Public Meeting of the State Water Resources Control Board and Department of Water Resources Held on August 23, 2007**

Dear Ms. Potter,

The State Water Resources Control Board and the Department of Water Resources should be commended for conducting the public workshop on climate change on August 23, 2007. The topic is timely, and the discussion with an outstanding series of panels was excellent.

The Central Valley Clean Water Association (CVCWA) would like to take this opportunity to supplement verbal comments made at the workshop from the perspective of the regulated wastewater community. CVCWA is a nonprofit association of over 50 public agencies providing wastewater collection, treatment, and water recycling in the Central Valley from Tulare to Redding.

As we move forward in addressing climate change is essential that wastewater issues get framed in broad terms, and we must make sure that regulatory actions are addressing the right questions. Following are three possible questions that we might ask ourselves as we proceed.

1. What is best for our water resources?
2. What is best for our environment?
3. What is best for society taking into account social, environmental, and economic factors?

Question 1 leads us on a quest for removing as many contaminants from the water as possible. From the publicly owned treatment plant (POTW) perspective, this is the path that has been given to us, and in the last decade the pressure in this direction has been intense. It is leading us to higher levels of treatment and fewer pollutants in the water. However, many of the actions directed at removing more contaminants require more power. Examples of more energy intensive directions include:

- Pumping energy for regionalization of facilities.

- Power used to manufacture, transport, and apply chemicals that are used in wastewater treatment.
- Power to run tertiary treatment facilities such as sand filters and membrane treatment processes.
- Power to produce class A biosolids and to transport the biosolids long distances to areas where it is more accepted.
- Power for disinfectants like ultraviolet light and ozone.

To put this in perspective let's consider the potential power demands if the Sacramento Regional Wastewater Treatment Plant (SRWTP) were required to go to reverse osmosis treatment. It is estimated that it would take 11,000 kilowatt hours for every million gallons treated. For the SRWTP, with an average daily flow of about 180 million gallons per day, this would equate to enough power to meet all the power consumed by about 100,000 homes 365 days per year.

If we pursue the path of Question 2, it leads us with a broader perspective and a more difficult quest to do the best we can for the larger environment. Now we must deal with cross media impacts through our regulations and balance our actions across air, land, water, and climate. From the POTW perspective, currently we are not going down the path of taking the best actions for the larger environment. We are getting fewer pollutants in the water environment but many of our actions to get cleaner water are at the expense of a greater environmental footprint.

In the case of reverse osmosis treatment, we will remove more pollutants from our wastewater effluents. However, this will be contradicted by the impacts of the power consumption, and the brine disposal either through deep well injection or trucking it for disposal.

If we take our perspective a further and address the third question; "what is best for society taking into account social, environmental, and economic factors," our balancing tests and priorities get even more difficult. However, our resulting actions will contain even more merit.

POTWs can play an important role in climate change, if their action is channeled in the right directions through voluntary actions, reasonable regulations, funding and incentive programs. Following are several things that might be done:

1. Encourage water conservation.
2. Encourage water recycling.
3. Encourage conjunctive use of our water resources.
4. Encourage energy efficient treatment technologies.
5. Encourage green energy such as solar and wind power. In many cases, wastewater agencies have open space to place such facilities and operation and maintenance skills to maintain such facilities.
6. Reuse digester gas as an energy source.
7. Incorporate other wastes in digester feedstock such as dairy waste, food waste and fats oils and grease to take advantage of excess digester capacity that is sometimes available at treatment plants.
8. Encourage the hook up of septic tanks where it is economical and feasible. Using EPA methodology, Los Angeles County Sanitation District recently estimated nationwide methane emissions from all wastewater sources, and concluded that 75% on the methane emissions come from septic tanks.
9. Research and evaluate the benefits of biosolids to fuel processes.

10. Promote a mind set in our society that all of the products from POTWs are products that really help the environment. These include recycled water, methane, and biosolids. Work to clear away public misconceptions about these products and thrust these recycling activities into pillars of innovation that make us proud.

In pursuing the 10 items listed above, caution must be exercised to prevent placing mandatory requirements on POTWs without first alleviating road blocks and making sure that the actions are compatible with the capabilities of the POTWs. Particular attention must be paid to the capabilities of smaller utilities. For example, using digester gas to generate electricity can bring a significant regulatory burden which smaller POTWs cannot afford. Another example of a hurdle that must be overcome is the ability to implement water recycling in light of the "one molecule rule" and the potential for salt and groundwater issues that might make water recycling infeasible.

CVCWA appreciates the efforts put forth by the State to frame the climate change issues and seek input and solutions. As we move forward, tough regulatory decisions are going to be needed that recognize the benefits and costs of our actions from a cross media impact perspective. No matter how difficult the path before us we must find a way to think in broad and creative terms and establish regulations and funding programs that drive us in the right directions.

If you have any questions please do not hesitate to call myself at (916) 875-9101, or CVCWA's Executive Officer, Debbie Webster at (530) 268-1338.

Sincerely,

Stan Dean  
CVCWA Chair of the Board