Sent: Thursday, October 09, 2014 10:13 AM
To: Madigan, John@Waterboards
Subject: Public Comment on Regional Water Quality Controls tentative Cease and Desist Order against Calistoga Dunaweal Waste Water Treatment Plant

Categories: Important

John H. Madigan, P.E.
Water Resources Control Engineer
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 9412

Dear Mr. Madigan,

I appreciate the opportunity to comment on the issues concerning the City of Calistoga's wastewater treatment plant that have come to the attention of the BARWQCB. While historically there has been runoff from geothermal sources into the Napa River system, the concentration of geothermal derived compounds has been elevated by the practice of local spas discharging to the wastewater plant. A 2001 agreement between the City and many of the spas was to lead to metering of the volume of their discharge. This presumably was to in turn lead to a fee structure based on these metrics. If this revenue stream had been established, perhaps by now a solution would have been financed for removal of these compounds. It has been all too convenient to simply flush them to the Napa River when faced with full storage ponds.

Millions of dollars have been invested in restoration of the Napa River. Fisheries have been recovering, though hampered by recent low flow conditions due to the recent drought. Discharging to the river under low flow conditions undermines these efforts. When spray fields adjacent to the river are allowed to become over-saturated such that there is runoff into the river, surely aquatic life is threatened. Perhaps this is exasperated when local mosquito abatement personnel spray growth inhibitors on these spray fields. This runoff, along with seepage from unlined ponds adjacent to the river, can combine to result in significant effects to the river. In January of this year, prior to rainfall that came later, I walked in the riverbed from a point upstream of the spray field runoff and pond seepage down to Dunaweal Lane. Above the discharge point and the leaking ponds the river ran clear. Downstream of the ponds and discharge point there were white bubbles on the surface, and the volume of the river more than doubled due to these discharges. One would hope that the Department of Fish and Wildlife would be concerned about this. I took samples of the discharges that were analyzed by a certified lab at private expense. The results showed that this discharge was high in boron and other compounds that would make it unsuitable for use in irrigating vineyards.

Besides concerns for effect on aquatic life, I wonder what the effects are on human health. The northwesterly winds that commonly come up in the afternoon often would result in spray from the saturated fields drifting over the adjacent path used for hiking and biking. The drift can often be felt on ones face while using the path, and during one such drift event I observed

parents pushing infants in strollers and young children pedaling bikes. I hope these conditions are monitored by local health authorities for toxins such as antimony and metals.

Recycling of treated wastewater for irrigation usage has been successful in other communities, but here the boron levels make this unfeasible for vineyards. Watering grass at local schools, sport fields, and parks is apparently insufficient to prevent discharge to the river under low flow conditions, even though large volumes are apparently used at these sites (I recently heard the lawns at the elementary school were so saturated it was difficult for the children to play on them—I hope this in not an unhealthy condition for the children).

We do not know if climate change will result in more frequent conditions of low river flow. I don't think increasing the pumping capacity to allow a greater rate of discharge, or extending the seasonal interval during which discharge is allowed are good solutions to the lack of storage capacity. Ultimately there needs to be a solution that allows removal of toxic compounds, and this solution needs to include dealing with increased volumes that will accompany the development that is taking place.

Regards,

Bill Dyer