Russian River Watershed Protection Committee

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Catherine Kuhlman: Executive Officer
North Coast Regional Board
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Sent via EMAIL on
Oct. 26, 2009

Dear Ms. Kuhlman:

This letter contains RRWPC comments on the current Cease and Desist Order R1-2009-0107 for Russian River County Sanitation District (RRCSD).

The Public Hearing Notice contained contradictory times for comment deadline. The opening paragraph stated that the deadline was Oct. 19, 2009, and the bottom paragraph noted Oct. 26, 2009, as the time when documents had to be turned in. The latter date is reiterated on the second page (3rd paragraph), so we assume that our comments will be accepted before 5 pm October 26th.

As you know, Russian River Watershed Protection Committee (RRWPC) has indicated support for the planned new disinfection facility. We have long believed that the project is essential for protection of the Russian River. The Russian River County Sanitation District (RRCSD) has been in violation of coliform and/or DCBM limits during every significant rainfall year since 1995. Nevertheless, we have a few concerns about this Cease and Desist Order that is intended to remedy the problem.

We are concerned that the intent of the California Toxics Rule is not being met by replacing numerical limits and stringent time lines for meeting copper limits with vaguely defined goals and lengthy timelines that may or may not be ultimately realized, but which greatly extend the time during which harmful impacts to endangered Coho salmonids can occur.

Is Lack of Funding Really a Result of SCWA Dragging its Heals?....

Furthermore, it is our impression that SCWA/RRCSD has been dragging its heals on the Disinfection Project. Since 2003, the District noted 48 samples of excessive amounts of DCBM, a toxin that is extremely harmful to fish and humans as well (I believe that it is a confirmed carcinogen.). As early as June, '06, the Agency committed to building the disinfection project and three years later, does not even have the funding lined up yet. In fact, in June, 2008, an ACL enforcement action resulted from numerous coliform

violations. At that time, the Agency offered to build a project partially in lieu of paying a stiff mandatory penalty. The original schedule for fully meeting DCBM standards was Nov. 5, 2008, and this latest time extension is the second one allowed.

So now we have a situation where the DCBM impacts will continue for at least another twenty-five months before the new facility is constructed. The travesty is that serious negative impacts will continue all that time. How many fish are expected to die from additional DCBMs during that period? Exactly what environmental damage will occur as a result of this action? In fact, can you estimate what has occurred since the original deadline? What is the fate of the toxin in the summer when recreational use is high (i.e., risk of exposure to humans)?

Every year since SCWA took over management of the system, ratepayers have had significant rate increases to bring us to one of the highest rates in the County and State ($1036 this year plus varied bond assessment on tax bill). Why is it that SCWA has not yet come up with the money for this project? Why is there no mention of the fiscal situation in this Order, other than a loan and a grant may be pending? Where is ratepayer money going, if not for critical and timely improvements to our system? (There is reference to a Sept. 9, 2009, progress report by the discharger, but we have not seen that. It is not on the website and was not attached to the notice. How is one to keep track of important attachments to these actions if they are not readily available?)

Have fiscal circumstances been closely examined and considered, as you allow more time for meeting CTR perimeters? Do you have any evidence that the grant opportunity is realistic? Have you checked with funding sources to ascertain the likelihood of grant awards and time at which that will happen? Have you considered the possibility of heavy competition for these grants? IN ANY CASE, RRCSD RATEPAYERS WOULD LIKE TO KNOW HOW THE DISTRICT IS SPENDING OUR MONEY AND WHY THEY DON'T HAVE THE FUNDS LINED UP TO START THE PROJECT NOW?

This situation is unfortunately reminiscent of the one in Occidental, where several projects have fallen by the wayside over the last ten years because of the Agency's funding acquisition failures. What guarantees are in place to assure that the same thing won't happen with RRCSD?

Copper Compliance Limits….

The Chart at the top of page 3 doesn't really mention specific hardness limits for assessing copper; it just says they are hardness dependent. Between January, 2004, and April, 2009 there were 46 samples taken at hardness levels between 50 to 128 mg/L and effluent levels from 1.8 to 34 ug/L. According to the Chart at the top of page 11, for the next five years, SCWA/RRCSD will be allowed to discharge copper at a rate of up to 34 ug/L.

I am submitting reference to and summaries of two scientific articles about the critical impacts of very low levels of copper on salmonids. Based on the information in these studies, the interim compliance limit is much too high and the compliance period is much too long.

NOAA Technical Memorandum NMFS-NWFSC-83: "*An Overview of Sensory Effects on Juvenile Salmonids Exposed to Dissolved Copper: Applying a Benchmark Concentration Approach to Evaluate Sublethal Neurobehavioral Toxicity*", by Scott A. Hecht, David H. Baldwin, Christopher A. Mebane, Tony Hawkes, Sean J. Gross, and Nathaniel L. Scholz, October, 2007

The last paragraph of the summary states: "*Point and nonpoint source discharges from anthropogenic activities frequently exceed these thresholds by one, two, and sometimes three orders of magnitude, and can occur for hours to days. The U.S.G.S. ambient monitoring results for dCu representing 811 sites across the U.S. detected concentrations ranging 1-51 un/L, with a median of 1.2 ug/L. Additionally, typical dCu concentrations originating from road runoff from a Californian study presented herein indicates that impairment of sensory functions important to survival of juvenile salmonids is likely to be widespread in many freshwater aquatic habitats. Impairment of these essential behaviors may manifest within minutes and continue for hours to days depending on concentration and exposure duration. Therefore, dCu has the potential to limit the productivity and intrinsic growth potential of wild salmon populations by reducing the survival and lifetime reproductive success of individual salmonids.*"

The other study was earlier and involved some of the same scientists. "*Sublethal Effects of Copper on Coho Salmon: Impacts on Non-overlapping Receptor Pathways in the Peripheral Olfactory Nervous System*", by David H. Baldwin, Jason F. Sandahl, Jana S. Labenia, Nathaniel L. Scholz, September, 2002

The Study concluded that, "*Increases in copper impaired the neurological response to all odorants within 10 minutes of exposure. The inhibitory effects of copper (1.0-20.o ug/L) were dose-dependent and they were not influenced by water hardness. Toxicity thresholds for the different receptor pathways were determined by using the benchmark dose method and found to be similar (a 2.3-3.0 ug/L increase in total dissolved copper over background). Collectively, examination of these data indicates that copper is broadly toxic to the salmon olfactory nervous system. Consequently, short-term influxes of copper to surface waters may interfere with olfactory-mediated behaviors that are critical for the survival and migratory success of wild salmonids.*"

Conclusion….

- RRWPC asks that you make fiscal information available to demonstrate that SCWA is serious about (i.e., truly capable) putting a disinfection system on line by the deadlines established in this action. Heavy fines should ensue if they don't make the deadlines for a third time. Planning for this project has been going on far too long.

- RRWPC requests that you address the issues raised in the scientific studies about the impact of copper and that you revise this Order accordingly.

- It is our view that the time line should be greatly shortened and the interim limit reduced. We know next to nothing about plumbing materials, but at a minimum there should be public education about the problem. Alternative materials

should be promoted/required for new development and housing upgrades where a permit is required for structural additions. Also, people who are upgrading plumbing should be aware of the problem as well and educated about alternatives. (Since copper is so expensive, it may be easy to persuade people to use alternatives.)

Thank you for consideration of these issues.

Sincerely,

Brenda Adelman: Chair
Russian River Watershed Protection Committee

2 Attachments (2 scientific articles sited in letter)

CC. John Short