June 15, 2012

Ms. Jeanine Townsend  
Clerk to the Board  
State Water Resources Control Board  
P.O. Box 100  
Sacramento, CA 95812-0100

Subject: Comments on the State Water Resources Control Board’s Draft Order Regarding the NPDES Permit for the Sacramento Regional Wastewater Treatment Plant SWRCB Files A-2144(a) and A-2144(b)

Dear State Water Board Members:

The Sacramento Regional County Sanitation District (SRCSD or District) hereby transmits comments on the State Water Resources Control Board’s (State Board) Draft Order released on May 14, 2012, pertaining to the NPDES permit that was issued for the Sacramento Regional Wastewater Treatment Plant (SRWTP) in December 2010 (Permit). The District’s comments identify very significant and fundamental problems with the Permit as issued by the Central Valley Regional Water Quality Control Board (Regional Board) and bring to light some new, significant, and fundamental problems that are introduced by the Draft Order. While all the technical, regulatory, and legal issues merit thorough consideration, the following summarizes and highlights some of the most significant issues in the comments.

Effects on the Sacramento Region

The Permit would impose a major economic burden on the Sacramento region. It is both disappointing and a great concern that the Draft Order does not even acknowledge the impacts on the many individuals and businesses served by the District, or the effect on economic development.

Pathogen Reduction – Tertiary Filtration

With or without discharges from the SRWTP, persons who ingest water directly from the Sacramento River – such as in swimming – have some risk of acquiring a gastrointestinal illness. Briefly stated, the issue is whether the SRWTP’s previously applicable permit disinfection limitations, summarily identified as “23 MPN” total coliform (and associated requirements) should remain in effect (the District’s position) or, as required by the new Permit, the SRWTP should be required to meet a “2.2 MPN” limitation (and associated requirements). This would require tertiary filtration and this issue alone has cost implications estimated to be in the range of one billion dollars in capital costs plus additional annual operation and maintenance costs of around $40 million. Meanwhile, there is no evidence that the SRWTP’s operation under a “23 MPN” permit has had any actual adverse impacts to the public.
As to this issue, our more detailed comments include the following:

- The Draft Order would conclude that the Regional Board was not required to consider economic impacts to the region or other issues and factors specified in state law that are intended to produce reasonable and balanced decisions. As explained in our detailed attached comments, the logic for not needing to consider these factors fully is simply invalid.

- The Draft Order justifies the filtration and disinfection requirements on the basis that it implements existing narrative water quality objectives. But no such water quality objectives are actually identified in the Draft Order.

- Under the ordinary practice of the Regional Board, when municipal wastewater discharges occur to water bodies that provide dilution of 20:1 or more, the 23 MPN is required (2.2 MPN is not). Here, the Regional Board found that dilution of SRWTP effluent is approximately 50:1, yet did not follow its standard approach in such situations and instead imposed the very costly tertiary filtration and disinfection, 2.2 MPN requirement.

- Ultimately under the Permit, much of the basis for the 2.2 MPN filtration and disinfection requirement hinged on whether the SWRTP discharge at 23 MPN results in a change of risk to recreation users of more than 1 in 10,000. The District does not agree that this is an appropriate basis for regulation for many reasons, and it is vastly more stringent than U.S. EPA regulatory criteria that have been applied elsewhere. But, setting aside this disagreement, there is still a big problem. The Draft Order states that a risk analysis, prepared by an expert, shows change in risk that is very close to this very conservative threshold of 1 in 10,000, but not quite there, leading to the conclusion that the District must incur massive costs. However, the Draft Order, like the Permit itself, inexplicably ignores evidence from the very same expert that is undisputed in the record and explains that the threshold is currently met. In fact the actual calculated change in risk is closer to 1 in 100,000.

**Ammonia Reduction**

The discharge of ammonia from the SRWTP has been the subject of considerable attention and advocacy in the recent past, including in the development of the Permit. Ultimately, the technical issues have to do with whether concentrations of ammonia much lower than what U.S. EPA has identified as levels protective of aquatic life (U.S. EPA criteria), have adverse effects in the river or in far downstream areas. The District maintains the answer is no, and to the District’s knowledge no permit has ever been written before or since in the Bay-Delta watershed that reaches a different answer. Essentially, the Permit and Draft Order have perpetuated the logic that because of far field impacts (that are still disputed), largely in Suisun Bay, a small mixing zone at the SRWTP outfall will not be allowed and the EPA criteria will be applied “end of pipe”.

Setting aside scientific disagreements, problems with the regulatory logic are clear.

- There is failure to apply established regulatory protocols and misapplication of applicable permitting procedures. Also, in some cases, the Draft Order’s characterization of what the Regional Board did is directly at odds with the Regional Board’s own characterization. The extent of the mistakes is major and is documented in detail in our attached comments.
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There is obvious confusion about alleged effects downstream and appropriate application of regulatory mechanisms for establishing a mixing zone around the outfall. For example, the Draft Order links far field effects with denial of a mixing zone based on a principle in U.S. EPA’s Technical Support Document for Water Quality-Based Toxics Control (TSD). However, this TSD principle (or guidance) is directly applicable to bioaccumulative pollutants, and ammonia is not a bioaccumulative pollutant.

Finally, the Draft Order does not recognize that the District itself has indicated that ammonia concentrations should be reduced by about one-half as compared to current concentrations. Granted, the District believes this is appropriate in order to ensure future and long-term compliance with dissolved oxygen standards rather than toxicity. But the key point is that the actual effluent limitations need not be those specified in the Permit. There are viable alternatives to take an adaptive management approach to addressing Delta issues.

The District is in Precarious Position

The items above are just some of the problems and concerns with the Permit and Draft Order. We believe all the material we have provided is important. We also emphasize here that the District has been seeking review of the Permit for approximately 17 months. It has in the meanwhile taken significant steps and spent large amounts of money based on a very aggressive schedule to implement the Permit. In the meantime, if it were adopted as proposed, the Draft Order would change at least two of the assumptions that have been the basis for planning to date (i.e., the specific ammonia limitations and limitation for nitrate or nutrients). Meanwhile, basic disputed issues would remain unresolved. The District cannot proceed without certainty in what it must do, and with the Draft Order it lacks such certainty. Resources could be spent on a project that may not be required, or on the wrong project. These resources cannot be recovered later. For these reasons, the State Board should recognize and support the District’s legitimate need for modification or stay of schedule deadlines until long-outstanding issues are resolved.

In closing, we urge the State board to give full and adequate consideration to the comments and materials submitted by the District.

Sincerely,

Stan Dean
District Engineer
Sacramento Regional County Sanitation District