

California Regional Water Quality Control Board,  
San Francisco Region  
1515 Clay Street, Suite 1400  
Oakland, CA 94590  
Fax (NPDES): (510) 622-2481

12 July 2006

Re: Proposed Reissuance of NPDES Permit for  
Vallejo Sanitation and Flood Control District  
NPDES Permit No. CA0037699

Dear Members of the Board,

Thank you for the opportunity to review and comment on the proposed reissuance of NPDES Permit No. CA0037699 for the Vallejo Sanitation and Flood Control District (“Vallejo Permit”). We write this letter on behalf of the San Francisco Baykeeper (“Baykeeper”) regarding the proposed Vallejo Permit’s compliance with the Clean Water Act (“CWA”) at the Vallejo Sanitation and Flood Control District Wastewater Treatment Plant (“Vallejo WWTP”). These written comments are being submitted separately though contemporaneously with Baykeeper’s written comments on four other NPDES permit renewals listed on the San Francisco Regional Water Quality Control Board (“Regional Board”)’s website for public hearing on August 9, 2006. Baykeeper requests that the Regional Board acknowledge the confusion created by having different written comment deadlines for each of these NPDES Permit applications, and on this basis Baykeeper requests that its written comments regarding the Vallejo Permit be accepted for review even though submitted three working days after the 7 July 2006 submission deadline.

In brief, Baykeeper has reviewed the proposed Vallejo Permit and found that the proposed Vallejo Permit is inconsistent with provisions of federal law related to Blending and also fails to properly and adequately address collection system issues.

## **I. Vallejo’s Blending Provisions are Inconsistent with Federal Law**

### **A. “Blending” Poses Serious Public Health and Environmental Risks**

Sewage is filled with pollutants that make people sick, close shellfish beds, make beachwaters unsafe, contaminate drinking water sources, damage coral reefs, feed toxic

algal blooms, and rob the water of oxygen that fish need to breathe. Secondary treatment removes the bulk of these pollutants from sewage -- bacteria, viruses, parasites, toxic organics, metals, oxygen-depleting substances, solids. Primary treatment is not sufficient-- all that it does is settle out the larger particles through gravity. No transformation of the sewage takes place to remove pathogens and other organic pollutants. Discharging effluent that has not received secondary treatment does not protect public health or the economy from the adverse effects of sewage pollution -- waterborne illness, shellfish contamination, beach closures, etc.

Disinfection of blended effluent is also less effective because it is only effective on the outer surface of the globules. It is very difficult to disinfect the cloudy effluent that blending produces due to the size of the suspended particles in the effluent. Those particles of fecal matter remain in the blended effluent, and after release into the receiving waters, they break down, releasing bacteria and other pathogenic materials into the environment. This poses an increased risk to human health and aquatic life. Even effluent that is diluted to secondary standards, and is disinfected, contains harmful disease causing pathogens for which no water quality standards currently exist, including viruses and parasites such as cryptosporidium and giardia. Examples of such diseases to which the public might be exposed include meningitis, cryptosporidiosis, giardiasis and infectious hepatitis. Dr. Joan Rose of Michigan State University examined monitoring data from post-chlorination blended effluent that showed significantly increased levels of E. coli bacteria and giardia cysts in blended effluent as compare to fully treated effluent from the same plant. She estimated a human health risk level 1000 times greater from exposure to partially treated “blended” effluents over fully treated wastes. The increase in public health risk is especially threatening to small children, the elderly, cancer patients, and others with impaired immune systems.

### **B. Blending Provision of this Proposed Permit is Illegal.**

Paragraph IIIC. of the draft permit references the bypass provisions of the federal regulations, 40 CFR 122.41(m), the provisions of which are applicable to this permittee. However, that paragraph of the draft permit purports to authorize bypasses that fail to meet the requirements of that regulation. “Wastewater that has been diverted around biological treatment units or advanced treatment units” whether or not that wastewater has been subsequently blended with fully treated wastewater is a “bypass” as defined in 40 CFR 122.41(m)(1). Clearly the biological treatment units and advanced treatment units are portions of a treatment facility, and the diversion must be intentional if approval for it is sought in advance in the context of a permit proceeding. Thus, the bypass regulation applies to such diversions. EPA has recognized the applicability of the bypass regulation to such diversions in its proposed “blending” policy.<sup>1</sup>

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<sup>1</sup> National Pollutant Discharge Elimination System Permit Requirements for Peak Wet Weather Discharges from Publicly Owned Treatment Works Treatment Plants Serving Separate Sanitary Sewer Collection Systems, 70 Fed Reg. 76013, 76015 (Dec. 22, 2005).

EPA's regulations prohibit bypasses and authorize enforcement action against a permittee for a bypass unless specific criteria would allow the blending bypasses to be approved by the state. None of those criteria appears to be met here. The bypass is not for essential maintenance to assure efficient operation, 40 CFR 122.41(m)(2); it is not unavoidable to prevent loss of life, personal injury or severe property damage, 40 CFR 122.41(m)(4)(i)(A); no determination has been made that there are no feasible alternatives to the bypass, 40 CFR 122.41(m)(4)(i)(B); and the permittee is not even required to submit advanced notice of its intention to bypass, as required by 40 CFR 122.41(m)(3). Instead, the draft permit would authorize a bypass in any type of wet weather merely upon a showing of compliance with final effluent limitations at the end of the pipe. This is grossly insufficient. This permittee does not even have effluent limitations for many of the pollutants found in blended effluent, such as cryptosporidium, giardia, and a host of viruses, and is not required to provide treatment effective for removing those pollutants. The draft permit does not even indicate any intention to monitor for pollutants of concern that may be found in greater concentrations in blended as opposed to fully treated effluent. In fact, the "blending study plan" in the draft permit is described as an evaluation of whether one parameter, TSS, can be used as an indicator of compliance for other effluent limitations during blending events (draft permit, p. 13). Instead of narrowing the parameters evaluated during blending bypasses, the permittee should be required to sample all blended effluent for a broad range of pollutants found in sewage to ensure that public health and the environment will not be adversely affected by the discharge of the blended effluent. In addition, the permittee should be required to make immediate, public notification of the fact that a blending bypass is occurring that may increase risks for downstream users of the waterways.

Furthermore, the permittee is not required to take any additional steps to eliminate or even reduce the need for blending bypasses. It is merely required to optimize use of storage, equalization, and treatment units. It may be feasible to reduce blending bypasses further through discovering and removing illicit connections system wide, maximizing use of the collection system, increasing use of flow equalization, implementing a program for preventing excessive stormwater from entering the system, enhanced infiltration and inflow controls, implementing deep bed filtration, increasing capacity of the biological treatment units, or other changes to reduce the volume of wet weather flow or increase the amount of such flow that can receive full secondary treatment. Furthermore, there may be additional treatment steps that could be applied to blended effluent to reduce the human or ecological health risks associated with it. None of these approaches is required by the permit nor determined to be infeasible. A system-wide evaluation of alternatives to blending bypasses and a schedule for implementing them is necessary. All facilities that engage in blending bypasses should also have an industrial pretreatment program that is current and requires end-of-pipe standards for chemicals discharged by their industrial users that are not based on an assumption of full secondary treatment for sewage at all times if it will not in fact be provided. The permit does not appear to establish or define a storm event or any other limitation to define the wet

weather under which blending would be allowable, such as a limit on the number of bypasses per year, percentage of the time, or volume of effluent allowed to be bypassed. Specific limitations and steps to upgrade treatment and phase out blending bypasses are necessary to ensure that blending does not become a routine operating procedure for a wastewater treatment facility.

## **II. The Permit Fails to Address Collection System Issues**

While the Vallejo Permit regulated the DSRSD collection system, the permit fails to address collection system issues. For example, the permit fails to address the impact the recently adopted General Waste Discharge Requirements for Sanitary Sewer Systems, Order No. 2006-2003-DWQ will have on the Vallejo program. The new collection system permit sets minimum reporting and program requirements for all collection systems, and may conflict with or at least make confusing the requirements of the Vallejo Permit. At a minimum, the elements of the Collection System Permit should be incorporated into the Vallejo Permit, and the program elements and deadlines made consistent.

The reporting requirements of the Vallejo Permit do not address Sewer System Overflow reporting, do not incorporate or reference the monitoring requirements of the Statewide WDR, and may well perpetuate the confused and inconsistent SSO reporting that has plagued efforts to compare and evaluate collection system performance in California. Some permittees, for example, do not believe that reporting is required for SSO of less than 1000 gallons, while others do not believe that reporting is required unless the discharge or SSO impacts surface waters or flows to a storm drain. The Vallejo Permit does nothing to clarify any of these issues, and also does not evaluate current collection system performance, including the current SSO rate. Thus, the Permit fails completely to examine, let alone address, any shortcomings in the collection system.

## **III. The Regional Board Should Provide an Extension of Time to Submit Written Public Comments**

Baykeeper wishes to submit additional comments concerning the complex issues surrounding reissuance of these NPDES permits. We therefore request an extension of time to submit additional written comments. Providing an extension to the public comment period would serve the interests of the public and would also serve the interests of the Regional Board staff, as this would provide staff with ample opportunity to respond to Baykeeper's comments in writing before the Public Hearing date.

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Sincerely yours,

Daniel Cooper  
Lawyers for Clean Water  
Attorneys for  
San Francisco Baykeeper

Cc: Sejal Choksi, Baykeeper