

Defending Our Waters-from the High Sierra to the Golden Gate

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

12 July 2006

Re: Proposed Reissuance of NPDES Permit for East Bay Dischargers Authority (EBDA) NPDES Permit No. CA 0037869.

Dear Members of the Board,

Thank you for the opportunity to review and comment on the proposed reissuance of NPDES Permit No. CA 0037869 for the EBDA and its various member agencies ("EBDA Permit"). We write this letter on behalf of San Francisco Baykeeper ("Baykeeper") regarding the proposed EBDA Permit's compliance with the Clean Water Act ("CWA"). These comments are submitted separately yet contemporaneously with comments on four other proposed NPDES permit renewals scheduled for public hearings on August 9, 2006.

The proposed EBDA Permit, like three of the four other NPDES permits now under consideration, includes compliance schedules and interim effluent limitations for certain Priority Pollutants that are contrary to the California Toxics Rule ("CTR") and the CWA. Pursuant to 40 C.F.R. 131.38(e)(8) of the CTR, compliance schedules and interim effluent limitations for CTR-listed toxic pollutants cannot be issued after May 18, 2005. Therefore, the proposed compliance schedules and interim effluent limitations for CTRlisted pollutants contained in the Proposed Order and NPDES Permit reissuance for the EBDA members' discharge facilities are unlawful and must be dropped from the EBDA Permit.

The EBDA Permit, like the Vallejo Permit, also provides for blending of partially and completely treated sewage for discharge during certain conditions—specifically during high flow periods during rain events. Discharging sewage that has been treated to less than full secondary levels is inconsistent with the requirements of the CWA, and is illegal. Further, even assuming that blending can be considered in certain circumstances, such as those set out in the recent draft US EPA Blending guidance document, the Permit Comments on EBDA Permit 12 July 2006 Page 2 of 9

fails to conduct the analysis required by that document. Thus, blending must be prohibited in the EBDA permit.

The EBDA Permit also provides confusing language as to the meaning of Minimum Levels and how compliance is determined. As stated in *Waterkeepers v. State Water Resources Control Board*, 102 Cal. App. 4th 1448, MLs are to be used at most as part of enforcement discretion on the part of the Regional Board, and cannot replace the requirement for strict compliance with WQBELs. The EBDA Permit must clearly state the limited role of MLs.

Finally, the EBDA Permit fails to address collection system issues. For example, the permit fails to address the impact of the recently adopted General Waste Discharge Requirements for Sanitary Sewer Systems will have on the EBDA program, or to integrate the requirements of the permit into the requirements of the proposed EBDA Permit. The reporting requirements of the EBDA 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. The EBDA Permit also does not evaluate current collection system performance, including the current SSO rate. Thus, the proposed EBDA Permit fails completely to examine, let alone address, any shortcomings in the system.

For all these reasons, Baykeeper requests that the EBDA Permit be returned to staff to address these issues and present a draft Permit to the Board that is both legal and protective of the environment.

I. The Compliance Schedule and Interim Limits in the Permit are Inconsistent with Federal Law

A. The CTR Imposes a May 2005 Expiration Date for All Compliance Schedules

CTR section (e)(3) states:

Where an existing discharger reasonably believes that it will be infeasible to promptly comply with a new or more restrictive [water quality based effluent limitation ("WQBEL")] based on the water quality criteria set forth in this section, the discharger may request approval from the permit issuing authority for a schedule of compliance. 40 C.F.R. 131.38(e)(3).

Section (e)(5) states:

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If the schedule of compliance exceeds one year from the date of permit issuance, reissuance or modification, the schedule shall set forth interim requirements and dates for their achievement. 40 C.F.R. 131.38(e)(5).

Thus, a discharger may request that the Regional Board approve a compliance schedule, by which the discharger is allowed to gradually come into compliance with water quality-based effluent limitations for CTR-listed pollutants over a period of time, with interim effluent requirements if the compliance schedule exceeds one year.

However, section (e)(8) of the CTR states:

The provisions in this paragraph (e), Schedules of compliance, shall expire on May 18, 2005. 40 C.F.R. 131.38(e)(8).

Therefore, because the CTR provisions allowing for compliance schedules and interim effluent limitations expired on May 18, 2005, it is illegal to issue a permit that contains compliance schedules or interim effluent limitations for Priority Pollutants after that date.

B. The Proposed EBDA Permit Proposes a Compliance Schedule and Interim Effluent Limitations to Reduce the Discharge of CTR-listed Priority Pollutants

The Proposed EBDA Permit sets out interim effluent limitations for several toxic pollutants including Mercury, Cyanide and Heptachlor. Each of these pollutants is designated as a "Priority Toxic Pollutant" by the CTR. 40 C.F.R. 131.38(b).

Section IV.4 of the Proposed EBDA Permit sets out a compliance schedule to reduce discharges of Mercury, Cyanide, and Heptachlor from the EBDA Wastewater Treatment Plant. The schedule covers provides a four-year period during which interim effluent limitations will be in effect, or until the Regional Water Board amends the limitation based on additional information or approved ML. These interim effluent requirements limit the discharge of Mercury to .087 ug/L monthly average, cyanide to 21 ug/L maximum daily, and Heptachlor to .01 ug/L monthly average until the final effluent limitations in the permit become effective on April 27, 2010 (for Mercury and Cyanide) and on April 27, 2010 (for Heptachlor), or until they are superceded by either: the Regional Board's adoption of a site-specific objective for cyanide; the Regional Board's adoption of a TMDL-based effluent limitation for mercury; or the amendment of the heptachlor interim limitation based upon additional information or improved Minimum Levels (ML).

Yet, these proposed compliance schedules and interim effluent limitations contained in the proposed EBDA Permit are inconsistent with the CTR. Not only do the

durations for the concentration limits in the proposed EBDA Permit differ from the durations set forth in the CTR, rendering comparison rather difficult, but the concentrations set forth in the interim limits allow for situations in which the permittee may freely exceed the CTR levels while remaining within the interim effluent limits of the proposed EBDA Permit. For example, the maximum monthly concentration for heptachlor is under the interim limits is inconsistent with and potentially less stringent than the limitation set forth in the CTR. The Proposed EBDA Permit's interim limits allow the permittees to discharge Heptachlor within a monthly average of .01 ug/L, even though the CTR require that there be no greater than a .0038 ug/L Criterion Continuous Concentration (CCC) in any 4-day period and no greater than a .52 ug/L Criterion Maximum Concentration (CMC) at any time. Under these interim limitations, many situations could arise in which the 4-day CCC average or the short-term CMC limitation would be exceeded, even though the permittees might remain just within the .01 ug/L monthly concentration allowed by the Proposed EBDA Permit. These interim effluent limitations therefore provide potential for numerous exceedances of the CTR during the 4-year period that the interim limitations would be in effect; thus, the proposed EBDA Permit's interim limitations are inconsistent with the CTR and the Clean Water Act. ¹

Further, section 40 C.F.R. 131.38(e)(8) of the CTR expressly states that all of the provisions in section (e), including the provisions allowing for compliance schedules and interim effluent limitations, shall expire on May 18, 2005. Because the Regional Water Board is now proposing these compliance schedules and interim limitations for a 2006 permit renewal date, the proposed compliance schedules and interim effluent limitations under the proposed EBDA Permit are unlawful.

C. The Regional Board's Application of the SIP to the EBDA Permit is Inconsistent with the CTR

Section 2.1 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California ("State Implementation Plan" or "SIP") states:

In no case... shall a compliance schedule for [dischargers of CTR-listed pollutants] exceed, from the effective date of this Policy: (a) 10 years to establish and comply with CTR criterion-based effluent limitations.

¹ The daily maximum concentration limit for Cyanide of 21 ug/L in the EBDA Permit interim effluent limitations could also come into conflict with the National Toxic Rule (NTR) Criterion Continuous Concentration limit for San Francisco Bay of 5.2 ug/L over a 4-day period. Thus, to be consistent with CTR and the NTR, any interim effluent limitation would have to have both a maximum daily limit and a Criterion Continuous Concentration limit, similar to that required by the CTR and NTR for San Francisco Bay.

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Because the effective date of the SIP was in 2000, the SIP requires that no compliance schedule shall extend past 2010.

As explained in Section I above, the CTR provides that it is illegal to issue a permit that contains compliance schedules or interim effluent limitations after May 18, 2005, 40 C.F.R. 131.38(e)(8), and that compliance schedules and interim effluent limitations may last no longer than five years, 40 C.F.R. 131.38(e)(6).

Thus, the SIP can be interpreted to be consistent with the CTR. The last five-year compliance schedule could begin in 2005 and end in 2010, consistent with the provisions of both the SIP and the CTR.

However, the Regional Board staff's application of the SIP to the EBDA Permit is inconsistent with the CTR. Pursuant to 40 C.F.R. 131.38(e)(8) of the CTR, no permit containing compliance schedules or interim effluent limitations may be issued after May 18, 2005. Therefore, the proposed compliance schedules and interim effluent limitations must be dropped from the EBDA Permit.

D. Regional Board Staff May Provide Additional Time for Compliance in a Time Schedule Order

Pursuant to Section 13300 of the California Water Code, in the event that the Regional Board finds a discharge of waste is taking place that violates requirements prescribed by the Board, the Board may approve a "detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements."

While compliance schedules for priority pollutants are now prohibited, to the extent that Regional Board staff finds that compliance with the three CTR based effluent limitations at issue is infeasible for the City of EBDA, staff can recommend a Time Schedule Order pursuant to section 13300, with a timeline similar to that contained in the proposed compliance schedule in the Proposed EBDA Permit. Using this section of the Water Code, the RWQCB can exercise its enforcement discretion while still issuing a permit that meets the requirements of the Clean Water Act.

II. EBDA'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.²

² 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).

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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.

III. Minimum Levels are Used for Agency Enforcement Discretion Only, Not Compliance Determinations

Attachment E, Monitoring and Reporting Program, paragraph D, sets out the Minimum Levels for the pollutants with the reasonable potential to violate Water Quality Standards. The language of this section is confusing as to the purpose of the MLs, and at least implies that MLs are to be used for compliance determinations. While not the clear "safe harbor" for discharges below MLs but above WQBELs set out in some permits, such as Richmond's, the language of the EBDA Permit created confusion as to the enforceability of WQSs.

The Court of Appeal, First Division (the controlling Division for San Francisco) has rejected the application of MLs in the manner suggested by the EBDA Permit. The Court held that "...ML's (are used) only for purposes of reporting and administrative enforcement..." and specifically cannot be used in place of WQBELs. *Waterkeepers v. State Board*, 102 Cal App 4th 1449, 1460-61.

The EBDA Permit must include clear language setting out the specific use and limits of MLs and their role in the permit.

IV. The Permit Fails to Address Collection System Issues

While the EBDA Permit regulated the EBDA 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 EBDA 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 EBDA Permit. At a minimum, the elements of the Collection System Permit should be incorporated into the EBDA Permit, and the program elements and deadlines made consistent.

The reporting requirements of the EBDA 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 permitees, for example, do not report because they do not believe reporting is required for SSO of less than 1000 gallons, while others do not believe that reporting is required unless the SSO impacts surface waters or flows to a storm drain.

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The EBDA 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 EBDA Permit fails completely to examine, let alone address, any shortcomings in the collection system.

Thank you for your consideration of our comments and concerns.

Sincerely yours,

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