

November 1, 2010

Vincent Christian
San Francisco Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94590

Via electronic mail to vchristian@waterboards.ca.gov

Re: Tentative Order for the City of Petaluma, Ellis Creek Water Recycling Facility, 3890 Cypress Drive, Petaluma, Marin County, NPDES Permit No. CA0037810

Dear Mr. Christian:

Thank you for considering the following comments, which are submitted on behalf of San Francisco Baykeeper (“Baykeeper”) and our 1,500 members. We are writing to express our concerns over the proposed Tentative Order for the City of Petaluma, Ellis Creek Water Recycling Facility (“Facility”), 3890 Cypress Drive, Petaluma, Marin County, NPDES Permit No. CA0037810 (“Draft Permit”). Many of the concerns we raise below have been raised repeatedly in our formal comments to other Regional Board permits. These concerns must be addressed to ensure that the permit incorporates all federal and state requirements and adequately protects water quality.

A. The Bypass/Blending Provisions Are Unlawful and Fail To Protect the Environment.

a. The Draft Permit Allows Blending in Violation of Federal Law.

The discharge of blended wastewater constitutes a bypass pursuant to federal regulations. 40 C.F.R. § 122.44(m)(1); *see* NPDES Permit Requirements for Peak Wet Weather Discharges from POTWs Serving SSOs. 70 Fed. Reg. 76013, 76015 (Dec. 22, 2005). Bypasses are illegal except in very narrowly defined circumstances, including when unavoidable to prevent substantial damage to life or property or when necessary for essential maintenance. 40 C.F.R. § 122.41(m). In contrast, the Draft Permit allows blending as a matter of course, and only requires that any bypass events, including blending, be identified and recorded. This seemingly unrestricted blending is contrary to federal law and must be amended.

b. The Draft Permit Fails to Demonstrate No Feasible Alternatives.

The Draft Permit does not comply with federal regulations regarding bypass. According to 40 CFR 122.41(m)(4)(i), bypass is prohibited unless, among other things,

There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of

equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance

The Draft Permit provides insufficient information to meet this requirement. The Draft Permit does not demonstrate that no feasible alternatives to bypass exist. If the Regional Board determined that no feasible alternatives exist, the Board must demonstrate how it made that determination. If the required analysis is not included in the Permit, the determination of no feasible alternatives is unsupported and arbitrary. The Board must conduct the proper analysis and include it in the Permit.

c. Enhanced Monitoring Should Be Required During Any Blending Discharges.

The Draft Permit allows bypasses in certain situations provided that effluent limitations and receiving water limitations are achieved. *See* ¶ III-B, referencing Attachment D, subsections I.G.2 and I.G.4. However, the Draft Permit fails to specify and require the sufficiently detailed monitoring that the City would need to perform to ensure that its blending discharges do not cause exceedance of effluent limitations and receiving water limitations. Standard provisions contained in Attachment D (¶ I-G.2) provide:

The Discharger may allow any bypass to occur which does not cause exceedance of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)

This vague provision suggests that a bypass event, which typically represents a significant volume of discharge, is permissible and no reporting and requirements are necessary in the event of a bypass discharges to receiving waters. This section of the Draft Permit should be revised to include explicit sampling and reporting requirements for all bypass events.

The Draft Permit must be amended to require the City to sample any blending discharges at least daily and to analyze the blended effluent samples for all pollutant parameters for which there are permit effluent limitations. The Draft Permit must further be amended to require the City to sample receiving waters at the edge of the discharge zone of initial dilution at least daily during any blending discharges and to analyze the receiving water samples for all pollutant parameters for which there are permit effluent limitations.

B. The Monitoring and Reporting Program Lacks Statistically Significant Monitoring Intervals to Demonstrate Permit Compliance.

Minimum sampling frequencies for some constituents in treated process wastewater, as described in Table E-3 of Attachment E, ¶ IV of the Draft Permit are insufficient to determine compliance with the Draft Permit. Effluent limitations for toxic substances are provided on an average monthly and maximum daily basis in Table 7, p. 11 of the Draft Permit. This includes stringent dioxin-TEQ standards that the Regional Board and Baykeeper have worked to strengthen over

the last decade. However, the Monitoring and Reporting Program (“MRP”) includes lengthy monitoring intervals for several highly toxic constituents, which makes permit compliance difficult, and potentially impossible, to determine. For example, the minimum sampling frequency for dioxin-TEQ is only once per year. Monitoring frequencies of this duration makes determination of compliance with average monthly and maximum daily effluent limitations statistically impossible.

For the Regional Board to determine compliance with average monthly and maximum daily limitations monitoring frequencies should be designed to establish a data set that permits calculation of statistically significant effluent concentrations. The Regional Board should provide evidence that the monitoring program has been designed appropriately and that data collected through the MRP can be used to calculate statistically relevant effluent concentrations to determine permit compliance.

C. The Draft Permit Fails to Meet CWA Antidegradation Requirements.

The CWA’s antidegradation policy under § 303(d) is designed to both ensure that no activity will lower water quality to support existing uses, and to maintain and protect high quality waters. The Draft Permit does not meet the CWA’s antidegradation policy requirements. *See* Attachment F, ¶ III-C.6, page F-10. The Permit claims that the City’s “permitted discharge is consistent with the antidegradation provisions” because the level of discharge in the new Draft Permit is the same as allowed under the City’s current Permit. However, just because the amount of discharge does not change does not prove that water quality will be maintained. For example, the amount of discharge could stay the same while the pollutant load increased, which would decrease water quality. The pollutant load could increase if there are new pollutant sources to the receiving water or to the Facility, or if the efficiency of pollutant removal by the Facility decreases over time. The background level of pollution in the receiving water must be considered in the antidegradation analysis. In addition, the Draft Permit fails to consider any cumulative impacts to water quality. Rather than comparing the proposed effluent limitations to the prior effluent limitations, a true antidegradation analysis requires comparison of the proposed effluent limitations to the existing environmental conditions.

The Draft Permit also states that antidegradation requirements are met “because they hold the Discharger to performance levels that will neither cause nor contribute to water quality impairment, nor further water quality degradation.” Again, this is a conclusory statement that does not show that existing water quality will actually be maintained.

The Draft Permit continues its antidegradation analysis with the following:

Because antidegradation requirements are met, there will be no lowering of water quality beyond the current level authorized in the previous Orders, which is the baseline by which to measure whether degradation will occur. Therefore, further analysis in this permit is unnecessary, and findings authorizing degradation are thus unnecessary.

First, the Draft Permit claims that antidegradation requirements are met because the permit has not changed, so water quality will not change. Then, the Permit claims that because the

antidegradation requirements are met, water quality will not change. This is a completely circular analysis that does not show consistency with the CWA's antidegradation policy. The Draft Permit must actually show that water quality will not be lowered. A more thorough analysis of water quality in the receiving water is required.

D. The Draft Permit's Cyanide Action Plan is Inadequate.

Under the Draft Permit's Cyanide Action Plan the City "shall implement pretreatment, source control, and pollution prevention for [cyanide]..." See ¶ VII-C.6.b. Task 1 of the Plan requires the City to submit an inventory of potential sources of cyanide to the treatment plant, such as metal plate operators, hazardous waste recycling, etc. However, if the City does not identify any contributors, the City is not required to implement any program for minimizing cyanide discharges unless the City receives a request to discharge detectable levels of cyanide to its treatment plant. The plan fails to provide any specific guidance on how to identify contributors. In addition, there is no review or standard for the identification process. Thus, the City could potentially avoid the entire Action Plan if it fails to identify potential cyanide sources. The Draft Permit must be amended to provide tighter protocols for determining whether the City's cyanide source identification is adequate.

E. The Draft Permit's Modification Provisions Lack Transparency.

Provisions of the Draft Permit state that the discharger may request a permit modification, based on several criteria. See ¶ VII-C.1, p. 15. The range of criteria listed are sufficient enough to warrant public review. This section should expressly state that any such permit modifications must first undergo public review and comment before approval.

F. The Draft Permit's SSO Prohibition Is Inadequate.

While Baykeeper agrees that Discharge Prohibition ¶ III-D should at least prohibit SSOs to waters of the United States, the Permit should further expressly prohibit: (a) all SSOs to waters of the State and (b) all SSOs from the City's sewage collection system.

The City's sewage collection system constitutes a Publicly Owned Treatment Works ("POTW") as that term is defined by the CWA and accompanying U.S. EPA regulations. CWA § 212(2)(A), 33 U.S.C. § 1292(2)(A); 40 C.F.R. § 403.3. Specifically, a POTW includes all sewers, pipes and other conveyances that convey wastewater to a POTW's WWTP. EPA regulations require that POTWs subject to CWA regulation be properly operated and maintained. 40 C.F.R. § 122.41(e). As sewage collection systems are part of the system/appurtenances used to collect and treat sewage to meet CWA requirements and as proper operation and maintenance of such systems would preclude SSOs, NPDES permits must prohibit SSOs. Furthermore, SSOs that do not directly reach waters, but overflow into public streets and other public places and back up into people's homes and businesses, pose nuisance public health threats that the State Board properly must regulate and seek to curtail.

Notably, past NPDES permits issued by various California Regional Boards and permits issued by EPA have included such blanket prohibitions on SSOs.¹ To protect the public health and welfare from the grave health risks and frequent potential property damage caused by SSOs to public streets, parks, residences and businesses, the Permit must follow the example of past NPDES permits and include a blanket prohibition on all SSOs. The Regional Board may not condone the spilling of raw sewage into people's homes, places of business, public streets, and other areas accessible to the public.

In addition, the Permit must include a separate and express prohibition on SSOs to waters of the State to comply with the Porter Cologne Act/California Water Code. The Permit is not only an NPDES permit, it also serves as Waste Discharge Requirements (WDR) pursuant to California Water Code (CWC) article 4, chapter 4, division 7 (beginning with section 13260). The CWC precludes the discharge of raw sewage to waters of the State, and the Permit must reflect this. CWC § 13264.

In addition to not complying with applicable law, the SSO prohibition in the Draft Permit is insufficient for effective SSO enforcement. The SSO reporting information in the State Board's California Integrated Water Quality System Project (CIWQS) database posted on the State Board's website makes obvious that there is an endemic problem with accurate reporting of SSOs.² Many spill reports from sewage system operators indicate large volume SSOs, with little to none of the spilled sewage recovered and yet the reports still indicate that none of the spills reached waters. It is extremely unlikely that large volume SSOs that are not recovered have not flowed into waters. The SSO prohibition as drafted gives sewage systems incentive to slant their reporting as not showing that spills reached waters of the United States, given the potential escape from liability if spills are not reported as reaching waters of the United States.

An additional problem with the prohibition is the lack of clear definition in current case law of the term "waters of the United States." The U.S. Supreme Court's recent fractured decision in

¹ An example is NPDES Permit No. CA010991 issued by the Los Angeles Regional Board to the City of Los Angeles' Hyperion wastewater treatment plant and appurtenant collection system. Regional Board Order No. 94-021 ("the Hyperion Permit"). Condition IV.2 of the Hyperion Permit provides "Any discharge of wastes at any point other than specifically described in this order and permit is prohibited, and constitutes a violation thereof." The Hyperion NPDES permit describes the discharge of treated sewage from the ocean outfall downstream of the Hyperion treatment plant. Standard Provision B.7. further provides: "Any "overflow" or "bypass" of facilities, including the "waste" collection system, is prohibited. . . ." The Hyperion Permit further defines an "overflow" to mean "the intentional or unintentional diversion of flow from the collection and transport systems, including pumping facilities." Hyperion Permit Standard Provision A.31. Together, these provisions made it clear that *all* SSOs from the Hyperion system are prohibited.

Another example is the EPA-issued NPDES Permit (NPDES Permit No. HI0020877) to the City and County of Honolulu for the Honouliuli WWTP and related collection system. The Honouliuli NPDES permit contains express provisions prohibiting all unauthorized overflows of sewage, regardless of whether the spills reach waters of the United States. See Honouliuli Permit, Standard Provisions and Reporting Requirements ¶¶ B.7, C.2, and C.4.

² The CIWQS database 2 is published on the State Board's website at:
http://www.swrcb.ca.gov/water_issues/programs/ciwqs/publicreports.shtml

Rapanos v. United States, 547 U.S. 715 (2006) leaves highly uncertain what is a water of the United States.³

Notably, California Water Code sections 13260(a)(1) and 13263 provide the Regional Board with authority to regulate all SSOs, not just those that reach waters of the United States or waters of the State. Section 13260(a)(1) mandates that “Any person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state” must file a report of waste discharge with the appropriate Regional Board (emphasis added). Any SSO has the potential to adversely affect quality of waters of the State. As the SSO reports in the CIWQS database show, many SSOs flow directly into State waters. Even when SSOs do not flow directly into waters, SSOs tend to leave sewage residue on streets or in storm drains that are eventually flushed into waters when it rains. Accordingly, sewage system operators must report all SSOs to the Regional Board to comply with California Water Code section 13260(a)(1). Section 13263, in turn, provides the Regional Board with broad authority to impose conditions regulating reported waste discharges, including conditions necessary to avoid public nuisance or indirect harm to waters.

G. The Draft Permit’s Inappropriate “False Positives” Provision Should Be Deleted.

The Draft Permit inappropriately provides that the City may seek to refute its own monitoring reports by claiming that chlorine residual exceedances are “false positives.” See ¶ IV-A.1. (Table 6, footnote 1). This is contrary to Congress’ intent and case law holdings that the Clean Water Act creates a simple enforcement scheme based on a discharger’s obligations to self-monitor and conclusively report its effluent limit violations. See *Sierra Club v. Union Oil Co. of California*, 813 F.2d 1480, 1490-91 (9th Cir. 1987). This provision should be deleted.

This provision is detrimental to effective enforcement because it provides no deadlines for the City to make a claim to the Regional Board that the City’s chlorine residual exceedances are false positives. This would allow the City to raise a false positive affirmative defense years after a reported exceedance when the relevant information will be stale and inherently harder to evaluate. This is contrary to the approach, for example, in EPA’s bypass regulation, which puts a strict time limit on making a claim that a bypass meets the requirements for an allowable bypass. 40 C.F.R. § 122.44(m)(3). If the Regional Board is going to leave a false positives affirmative defense provision in the Permit, it should at least specify a short deadline for the City to assert that a result is a false positive.

H. The Acute Toxicity Limitations and Assay Procedures are Inadequate.

The limitations for acute toxicity in ¶ IV-C.1, p. 11, do not appear to be based on scientific reasoning, and appropriate assay procedures have not been specified to the discharger. The Regional Board should, at a minimum, provide evidence that 90% survival has been determined

³ Justice Kennedy’s concurring opinion provided the fifth justice needed for a majority in *Rapanos*. With respect to wetlands, Justice Kennedy opined that only wetlands with a “significant nexus” to a navigable-in-fact water body constitute waters of the United States. As the case dealt only with wetlands, whether Justice Kennedy’s test extends to other surface waters, such as streams, arroyos, and artificial channels is not clear. Moreover, Justice Kennedy’s test itself is highly ambiguous and subject to varying interpretation.

to be a statistically significant toxicity level, either by resource agencies or within scientific literature.

Also, the Draft Permit should cite the currently approved bioassay protocols that should be followed in ¶ IV-C.1(c) of the Draft Permit, in order to avoid confusion. In addition, this subsection should cite standards the Executive Officer must consider and review prior to granting exceptions to bioassay testing.^{4,5}

I. The Draft Permit Includes Vague Best Management Practices and Pollution Minimization Requirements.

The Draft Permit's section on Best Management Practices (BMPs) and Pollution Minimization Program (PMP) is too vague. For example, requirements include that a PMP report must "periodically" determine which pollutants are "a problem," and which may become "a problem." These vague requirements are unenforceable and do not place appropriate regulatory oversight within the hands of the Regional Board. See ¶ VII-C.3(b), p. 18. The permit should define the period of this assessment, and should define, or provide meaningful guidance, as to what pollutants may cause degradation of receiving waters.

Further, the permit states that when a priority pollutant exceeds effluent limitations, the PMP shall include a control strategy "designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutants in the effluent at or below the effluent limitation." See ¶ VII-C.3(d), p. 20. This must be strengthened to require the PMP to attain and maintain, as quickly as possible, compliance with the effluent limitation. A control strategy that is "designed to proceed toward the goal" of attainment will not necessarily reach attainment. In addition, the PMP must require implementation of the best available technology economically achievable, not merely "appropriate cost-effective control measures," as the permit currently requires.

J. The Draft Permit's Provisions Regarding Minimum Levels and Reporting Levels Inappropriately Relax the Permit's WQBELs.

The Permit should be amended to clarify that minimum levels/reporting levels ("RLs") are to be used only for purposes of reporting and administrative enforcement, but not to effectively alter the Permit's water quality-based effluent limitations ("WQBELs"). CWA section 301(b)(1)(B) requires NPDES permits to include WQBELs based upon water quality standards ("WQS"), i.e., that are sufficiently stringent to ensure attainment of WQS. The Draft Permit effectively specifies that the Permit's RLs for pollutant parameters rather than the Permit's actual WQBELs are the City's enforceable limits. Specifically, the Draft Permit specifies that the City shall be deemed out of compliance with the Permit's WQBELs only if the concentration of a given pollutant exceeds both the WQBELs *and* the RL for that constituent. See ¶ VII. The RL is the minimum level of the pollutant that Regional Board 2 indicates the laboratory must be able to detect when sampling the discharger's effluent. These RLs are typically higher than the Permit's

⁴ *Env'tl. Def. Ctr. v. EPA*, 344 F.3d 832 (9th Cir. 2003)

⁵ Cal. Water Code § 13223(a)

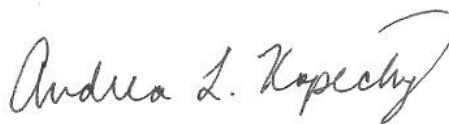
WQBELs, effectively changing EBMUD's applicable effluent limitation from the duly set WQBEL to the RL, instead.

This RLs approach is unlawful. In *Waterkeepers N. California v. State Water Resources Control Board*, the First Division of the California Court of Appeal held that, while the State Board may provide enforcement guidelines for the Regional Boards, it lacks authority to "frame effluent requirements to reflect the technological limits for detection in discharge samples." *Waterkeepers*, 102 Cal.App.4th 1448, 1461 (2002). To prevent RLs from essentially supplanting WQBELs in situations where the RL is equal to or greater than applicable WQBEL, RLs must be used only to determine compliance for purposes of reporting and the exercise of enforcement discretion.

Moreover, at least some of the RLs have been set higher than at least some laboratories' true technological capability of detecting the levels of pollutants in an effluent. This is reflected by dischargers region-wide often reporting in their required Discharge Monitoring Reports to Regional Board 2 lower levels of pollutants than the RL levels, but levels that exceed applicable WQBELs—demonstrating that laboratories are often capable of reliably measuring pollutant levels less than the RL but higher than the WQBEL. Indeed, many Regional Board 2 permits have expressly acknowledged that laboratories can, at least on occasion, detect pollutants in effluents at levels below the RLs, i.e., at levels equal to the laboratory's "Method Detection Level" (MDL). This underscores that the Regional Board's approach to MLs is rendering NPDES permits, such as the EBMUD Permit, unduly lenient and therefore not appropriately protective of the environment.

Thank you for considering these comments. Please contact me at (415) 856-0444 x 110 if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Andrea L. Kopecky".

Andrea L. Kopecky
Legal Associate
San Francisco Baykeeper