



CITY OF PETALUMA

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November 1, 2010

Mr. Vincent Christian
San Francisco Bay Regional Water Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

**Subject: Comments Regarding Tentative Order Reissuing the City of
Petaluma Ellis Creek Water Recycling Facility's NPDES Permit
(CA0037810)**

Dear Mr. Christian:

Thank you for the opportunity to comment on the Tentative Order for the reissuance of the Ellis Creek Water Recycling Facility's NPDES Permit. We would particularly like to thank you and your staff for your diligence and care in preparing this document. Our comments can be found in the attached document.

We would like to call your attention especially to our concern about the proposed requirement for construction of a flow-through acute toxicity testing facility within the next year. We are very concerned about this requirement because the City recently spent approximately \$155 million on the new Ellis Creek Water Recycling Facility to replace a severely aging treatment plant, and, due to the economic downturn and local sentiment for rollback measures in the near future, the City does not have funding to construct these facilities.

Thank you for consideration of these comments. Please let me know if you have any questions or would like additional information.

Sincerely,

Pamela Tuft, Interim Director

Department of Water Resources and Conservation

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**City of Petaluma
Ellis Creek Water Recycling Facility**

Comments on Tentative NPDES Permit

October 26, 2010

The City of Petaluma (City) appreciates the opportunity to submit the following comments on the Tentative Order (TO) reissuing the National Pollutant Discharge Elimination System (NPDES) permit for the discharge of treated wastewater to the Petaluma River.

1. The City requests that acute toxicity testing requirements allow for continued used of static-renewal methods for the term of the permit.

(Page E-5)

The City does not currently have the facilities to conduct flow-through bioassays. Although a previous deadline of November 1, 2011 was set for the City to begin flow-through acute toxicity testing by the 2011-2012 discharge season, the City requests that static-renewal methods continue to be allowed for the term of the proposed permit for the following reasons:

- The City has recently spent approximately \$155 million on the new Ellis Creek Water Recycling Facility to replace a severely aging treatment plant. Due to the economic downturn and local sentiment for rollback measures for sewer rates in the near future, the City does not have funding to construct these facilities.
- The new Ellis Creek Water Recycling Facility is achieving significantly improved effluent quality for many constituents, as measured in the required comprehensive monitoring program, in comparison to the previous facilities.
- Under the best conditions, designing, bidding, constructing, and obtaining ELAP certification for the facility would require more than the 12 months currently available.
- To access the dechlorinated effluent for use in the flow-through bioassay, the facilities must be constructed at the southwestern edge of the wetland treatment cells (near the chlorine contact chamber). This area is close to known habitat of various endangered species¹. Environmental permitting for construction of the flow-through testing facility in this area is expected to be time-consuming and expensive.
- The analytical method for acute toxicity testing, EPA's 5th Edition Acute Toxicity Testing Method (EPA-821-R-02-012), allows testing using the static renewal approach.

¹ City of Petaluma Water Recycling Facility Sonoma County, California Corps File #2617N. *Proposed Biological Assessment*. Parsons and Merritt Smith Consulting, September 1, 2004.

2. **The City requests that Fact Sheet language relating to updated copper translators be revised to indicate that copper limits may be amended if the updated translators are either more *or* less stringent from those in the Final Order.**

(Page F-17)

The City will be providing new information for the development of copper translators in 2011. Since the Regional Water Board has yet to consider the existing copper translators as final (see the Regional Water Board staff's CWC 13267 letter of May 20, 2010 requesting additional data collection and recalculation of the copper translators), anti-backsliding requirements do not apply, and any new effluent limits based on revised copper translators should be computed without regard to relative stringency. The suggested revision is shown below:

This Order may be reopened to amend the copper limits if the new translators are ~~more stringent than~~ different from those in this Order.

Comments 3 and 4 pertain to inconsistencies identified in the Tentative Order; revisions are requested for clarity.

3. *Revisions to Page E-5 and Page F-31:*

Toxicity testing requirements are not described consistently between Attachment E, the Monitoring and Reporting Program, and Attachment F, the Fact Sheet. More specifically, Table E-3 lists the required sample type as a 24-hour composite (C-24) for acute toxicity (consistent with static-renewal testing), while section V.A.1 of the Monitoring and Reporting Program requires flow-through monitoring beginning November 1, 2011. Also, Table E-3 indicates that acute and chronic toxicity testing must be conducted monthly and quarterly, respectively, while the fact sheet indicates that these tests are to be conducted quarterly and annually.

In addition, the City understands that monitoring frequency requirements for acute and chronic toxicity testing were intended to be monthly and quarterly, respectively. The suggested revisions are shown below:

(Page E-5)

Compliance with the acute toxicity effluent limitations of this Order shall be evaluated by measuring survival of test organisms exposed to ~~flow-through bioassays starting November 1, 2011, as indicated in a letter from the Regional Water Board to the Discharger dated October 28, 2009. Static-renewal bioassays are permitted prior to November 1, 2011, to allow time for plants in the treatment wetlands to mature.~~

(Page F-31)

Acute Toxicity. ~~Quarterly~~ Monthly 96-hour bioassay testing is required to demonstrate compliance with the effluent limitation for acute toxicity. The MRP requires the use of fathead minnow as the bioassay test species.

Chronic Toxicity. This Order requires the Discharger to conduct ~~annual~~quarterly chronic toxicity testing. The Discharger conducted an effluent toxicity screening study during the previous Orders' term that indicated that *Americamysis bahia* is the most sensitive species for chronic toxicity testing. The Discharger is required to re-screen in accordance with Appendix E-1 of the MRP (Attachment E) after any significant change in the nature of the effluent or prior to 180 days prior to the expiration of this Order.

4. Revision to Page F-12:

The first sentence of the fourth paragraph of section IV.B in the Fact Sheet, describing justification for an exception to Basin Plan Discharge Prohibition 1, indicates that the exception being granted applies to the wet season. As currently written, the second sentence appears that it is also intended to refer to this wet season exception, but then includes reference to an emergency discharge condition that is only applicable during the dry season. The suggested revision is shown below:

The Regional Water Board historically has granted an exception to Prohibition 1 from October 21 through April 30 each year for discharges to the Petaluma River. This Order continues ~~theis~~ exception ~~when inflow exceeds the recycled water system capacity~~ based on the inordinate burden that would be placed on the Discharger relative to the beneficial uses protected if the exception were not granted and the equivalent level of water quality protection the Discharger achieves through alternate means. Moreover, the Discharger implements a recycled water program, which allows the Discharger to refrain from discharging during the dry months (the Discharger does not typically discharge to receiving waters between May 1 and October 20 of each year).

Comments 5 and 6 include revisions that are requested to maintain consistency within the permit, and with current industry standards.

5. Revision to Page 5:

~~**Wastewater-Recycled Water**~~ **Activities.** The Discharger recycled about 780 million gallons (2,400 acre-feet) of its wastewater in 2009. This represents about 48% of the wastewater it treated. Most of this recycled water was secondary-treated and was used for irrigation (522 million gallons for 782 acres of pastures, 194 million gallons for 220 acres at golf courses, and 1.25 million gallons for 47 acres of vineyards).

6. Revision to Page F-4:

~~**Reclamation-Recycled Water**~~ **Activities.** The Discharger recycled about 780 million gallons (2,400 acre-feet) of its wastewater in 2009. This represents about 48% of the wastewater it treated. Most of this recycled water was secondary-treated and was used for irrigation (522 million gallons for 782 acres of pastures, 194 million gallons for 220 acres at golf courses, and 1.25 million gallons for 47 acres of vineyards).

In addition to the secondary-treated recycled water reused for irrigation, the Discharger recently installed a tertiary treatment system capable of treating 5.3 MGD.

Comments 8 and 9 pertain to typographical errors contained in the Tentative Order.

7. *Revision to Page F-7:*

The Discharger plans to increase its ability to produce and use recycled water, pending acquisition of federal funds. The planned upgrades potentially include installation of additional recycled water distribution pipelines and connection of new users, improvements to older recycled water pump stations, and expansion of the Facility's tertiary treatment system.

8. *Revision to Page F-31:*

The pretreatment monitoring requirements for influent, effluent, and biosolids are retained from the previous Orders and are required to assess compliance with the Discharger's USEPA-approved pretreatment program. Biosolids monitoring is required pursuant to 40 CFR Part 503.