



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

**75 Hawthorne Street
San Francisco, CA 94105-3901**

Lila Tang, Chief
NPDES Permits Division
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

July 12, 2006

Dear Ms. Tang:

Thank you for the opportunity to comment on the tentative order for the proposed NPDES permit reissuance for the City of Livermore (permit number CA0038008). The purpose of this letter is to present EPA's comments on the draft permit; EPA has three major comments. First, we believe some of the language that seems to approve bypass (blending) is inconsistent with Federal regulation. Second, we are concerned that the permit contains limits for copper that are significantly less stringent than the limits that would be developed under the proposed site-specific objective; we believe more stringent limits should be required to ensure protection of water quality and beneficial uses. Lastly, we have concerns that the fecal coliform limits in the permit are not derived from the applicable numeric water quality objectives. In addition to these three main points, this letter contains additional comments concerning the flow increase approval and mercury monitoring.

Bypass/Blending Provisions

The bypass language contained in the second paragraph of discharge prohibition III.B. inappropriately allows bypasses in the form of wet weather blending at the treatment plant. The permit must be changed to make the blending (bypasses) subject to 40 CFR 122.41(m)(4). Please see the attached detailed comments on compliance, blending, collection systems, and wet weather for specific suggestions. Please consider the attached comments in addition to this letter as EPA's formal comment submittal.

Copper Limits

The permit includes water quality-based effluent limits for copper of 71 ug/l (average monthly) and 100 ug/l (maximum daily). The permit also contains alternative limits for copper based on a proposed site-specific objective; these alternative limits are 53 ug/l (monthly average) and 78 ug/l (maximum daily). The existing permit contains an interim limit of 23 ug/l as a daily maximum. Thus, the new permit limits are much less stringent than either the existing interim limits or the effluent limits calculated using the proposed site-specific objective.

The copper limits proposed in this permit are much less stringent than previous limits for two reasons. First, they are calculated with site-specific total/dissolved metals translators rather than the more conservative CTR translators. Second, a site-specific water effects ratio of 2.5 was used, rather the CTR default of 1.0. The limits are much less stringent than limits calculated under the draft SSO because the species recalculation that results in a more stringent water quality standard was not included.

EPA is not opposed to the use of a WER to calculate permit limits, as allowed by the CTR. However, copper loading to the Bay has been a significant problem historically, and scientific evidence is available to support a more stringent approach than proposed in this draft permit. We do not agree with the Board staff draft approach to calculate permit limits that are less stringent than the proposed limits under the draft SSO. EPA's WER Guidance published in 1994 specifically states that if a recalculation procedure is to be used, it should be performed prior to the development of a WER. In this case, the recalculation procedure has been conducted, but Board staff is proposing to choose a WER that will result in much less stringent limits than anticipated under the SSO.

Board staff can easily remedy this problem by using a more conservative WER in advance of the approval of the SSO. Appendix A of the draft SSO document (Larry Walker Associates, 2004) shows a range of WERs presented as "...copper objective alternatives that are directly sanctioned by the CTR." The EPA WER guidance presents several scenarios in which the most conservative WERs calculated should be selected as final WERs. We urge the Board to select a more conservative WER that will result in permit limits equal to or more conservative than those that will be calculated if the draft SSO is adopted.

Bacteriological Indicator Limits

The draft permit contains fecal coliform limits of 500 MPN/100 ml as a five day geometric mean, and a ninetieth percentile value of 1,100 MPN/100 ml to protect bacteriological quality. These numbers appear to be based on a performance-based interim limit carried over from the 1980s. The draft permit considers these limits protective (see page F-24) based on a monitoring study submitted to the Regional Board by the discharger in 1995. The fact sheet states that the "receiving water was generally less than 2.0 MPN/100 ml when the effluent was discharged with a fecal coliform density of 500 MPN/100 ml." Upon EPA review of the study, it appears that the ambient data for fecal coliform was collected from 4 monitoring stations near the outfall on a monthly basis through the study period (July 1994 to June 1995). Thus, 12 data points were collected from each station over a period of one year, for a total of 48 grab samples. Although the fact sheet language states that more recent data has been collected to confirm the results from the early 1990s, we cannot find a description of this data in the fact sheet, and the permit does not require ambient monitoring.

The calculation of the fecal coliform limits in this draft permit differs from SIP procedures used to calculate water quality-based effluent limits. The SIP procedures

calculate limits directly from the appropriate water quality objectives, taking into account dilution credits if appropriate. Instead, a performance based number was chosen, and Board staff asserts that the number is protective based on ambient monitoring data. The fecal coliform limits contained in the permit are substantially less stringent than the Basin Plan objectives applicable to this discharge for shellfish harvesting and water contact recreation.

EPA does not support this approach to setting bacteriological limits, because dilution and other physical factors have not been directly identified and applied to the water quality objectives. However, if the Regional Board decides to continue the use of this approach, the permit should, at a minimum, require ambient monitoring at a number of stations near the outfall for both fecal coliform and enterococcus or E. coli. Some of the dissipation of the fecal coliform organisms may be due to factors that change over time, such as sunlight intensity. It is unclear whether data collected 15 years ago is at all relevant to current conditions. To show that the discharge is not causing water quality objectives to be exceeded in the ambient waters, ambient monitoring needs to be conducted on a regular basis. Additionally, if more recent data has been collected as stated in the fact sheet, this data should be described and summarized in the text of the fact sheet.

Flow Increase Approval/Antidegradation

Section VI.C.2.c. of the draft permit gives a conditional approval of an increase in permitted average dry weather flows from 8.5 MGD to 11.1 MGD. Because the anti-degradation analysis was not available as an attachment to this draft, we were unable to comment on its adequacy. At a minimum, however, the Regional Board should ensure that Livermore is treating flows at secondary, and that any necessary plant upgrades are completed prior to final approval of the increase. Additionally, as a condition of the allowed increase, we recommend that the Regional Board require Livermore to cooperate with EBDA to submit a yearly loadings summary for constituents of concern such as copper. With an increase in flow and the addition of the brine line, we believe it is important to understand how loadings to the Bay increase over time.

Mercury Monitoring

We recommend either deleting the second sentence of footnote [b] on page E-3 of the monitoring and reporting program, or changing the sentence to read, "The discharger may only use alternative methods if the method has an ML of 2 ng/L or less, and approval is obtained from the Executive Officer prior to conducting the monitoring." At this time, method 1631 is the standard for monitoring mercury, and it is unclear why any discharger would not wish to use that method. At a minimum, an alternative method should be reviewed and approved in advance by the Executive Officer.

Thank you for your consideration of these comments. We appreciate your efforts to reissue this permit, however, we are compelled to notify you, in accordance with 40 CFR 123.44(b) and the 1989 NPDES Memorandum of Agreement, that the EPA may

object to the final permit, if necessary, based on EPA's concerns described in these comments (including attachment). If you have any questions, please contact me or Nancy Yoshikawa at (415) 972-3535.

Sincerely,

A handwritten signature in blue ink, appearing to read "John T. Eberhardt".

7/12/06

Douglas E. Eberhardt, Chief
CWA Standards and Permits Office

**Attachment: US EPA Comments on Livermore Tentative Order July 12, 2006
Detailed Comments on Compliance, Blending, Collection System, and Wet Weather
Issues**

Provision III.A - Change this prohibition to delete the word “treated” in the first and second sentence so the prohibition reads: “Discharge of wastewater at a location or in a manner different from that described in this Order is prohibited. Discharge at any point at which wastewater does not receive an initial dilution of at least 10:1 is prohibited.” This change is necessary so it is clear that discharges of raw sewage from the collection system are prohibited by the permit.

Provision III.B, 2nd paragraph - This provision inappropriately allows bypasses in the form of wet weather blending at the treatment plant. Blending as practiced by the City of Livermore is a bypass subject to the bypass prohibition in 40 CFR 122.41(m)(4) and Standard Provision A.13 of the permit. The bypass prohibition at 40 CFR 122.41(m)(4) does not provide for authorization of or allowance of bypasses. The regulation does, however, provide that the Board may “approve” an anticipated bypass if the provisions of 40 CFR 122.41(m)(4)(i)(A), (B) and (C) are met (the bypass is unavoidable, there were no feasible alternatives, and the discharger submits proper notice). Approval of an anticipated bypass does not authorize the bypass, but would have the affect of barring the Board from taking enforcement against the discharger for the approved bypass.

The permit must be changed to make the blending (bypasses) subject to 40 CFR 122.41(m)(4). This can be accomplished simply by deleting the second paragraph of provision III.B.

The Board may consider the planned blending at the City of Livermore treatment plant as an anticipated bypass, however, to do this, the Board must evaluate the planned blending (bypass) and determine if it meets the conditions at 40 CFR 122.41(m)(4)(i)(A), (B) and (C). This evaluation should include an analysis of feasible alternatives. If the Board decides to pursue a feasibility analysis as part of this permit decision, the conclusions of such an evaluation should be stated in the permit findings along with a determination as to whether or not the blending is an approved bypass. The Board may only approve an anticipated bypass for flows that exceed the secondary treatment unit capacities after full implementation of feasible alternatives. If the Board approves the bypasses, the permit must include the specific conditions under which the bypass would be approved, including specific minimum wet weather flow rates. (The tentative order allows blending “during wet weather”. This provision is too general.) If Livermore has not yet fully implemented all feasible alternatives for controlling bypasses, the Board may consider including an implementation schedule in the permit for completion of the feasible alternatives.

Section III. – To be consistent with other permits adopted by the Board, we suggest adding a prohibition against discharges that create a nuisance.

Provision IV.2. – Clarify that the CBOD and TSS % removal limits should be calculated using values for influent and effluent pollutant loadings (lbs/day) rather than concentration.

Section IV., Table 4 – Delete footnote (1)(a) (“Compliance with these limitations is intended...”) The permittees are obligated to pursue whatever means necessary to comply with the effluent limits. Footnote (1)(a) could be interpreted to inappropriately restrict the control options pursued by the dischargers or provide an excuse for noncompliance with the effluent limits.

Provision VI.C.6.c - This provision describes conditions in NPDES permit that apply to its collection system. This paragraph appropriately defines the permitted facility to include Livermore’s collection system. There are several other locations in the permit, however, where it must be made clear that the NPDES permitted facility includes both the treatment plant and Livermore’s collection system. Please modify the following to describe the facility as treatment plant and collection system:

- Cover sheet, Name of Facility;
- Paragraph I., Name of Facility;
- Finding II.B.1, Facility Description – This paragraph should describe the permitted facility as including the Livermore collection system and wastewater treatment facility. We suggest that the description also include a brief description of the collection system (miles of pipe, number of pump stations, etc.)
- Fact Sheet descriptions of the permitted facility.

We also request that the Board delete the following sentence in Provision VI.C.6.c: “Compliance with these requirements will also satisfy the federal NPDES requirements specified in this Order.” Although the Board anticipates that compliance with the General WDR will also meet the NPDES Permit requirements, it is inappropriate to make such a sweeping statement, especially without knowing the factual context in which a specific compliance issue may arise.

Monitoring and Reporting Program, Paragraph IX.2 - We agree with the requirements of MRP paragraph IX.2.h.i which require monitoring of blended/bypassed discharges. We recommend that the Board clarify the sentence stipulating that “if CBOD or TSS *values exceed* the weekly average effluent limits....” Does this mean that if any single sample result exceeds the limit or the average of all samples collected during a seven day period? The reference to the blending allowance in the 3rd paragraph of this section should be deleted. Finally, we suggest that MRP Paragraphs IV.A. and B and Tables E-4 and E-5 make a cross-reference to the monitoring requirements in Paragraph IX.2.