## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

## Response to Written Comments Item No. 12

NPDES Permit Reissuance

for

City of Calistoga, Dunaweal Wastewater Treatment Facility, Napa County

The Regional Water Board received timely written comments from the following:

- City of Calistoga (City or Calistoga), dated July 13, 2006
- U.S. Environmental Protection Agency (USEPA), dated July 12, 2006
- San Francisco Baykeeper, dated July 17, 2006

This Response to Comments begins with the comments (in *italics*) quoted where possible, or paraphrased for brevity. Responses follow each comment.

**Calistoga Comment 1:** The City requests, if the new permit is adopted for a 5 year term, to make changes regarding the issues of dilution ratios and dilution credits. This includes Discharger Prohibition III.A., alternate effluent limitations in IV.A.6, and Provision VII.C.2.d. The City also requests to make changes to the Fact Sheet to be consistent with any changes made.

**Response:** We propose to set the permit expiration date to February 28, 2010. Therefore, alternate effluent limits based on a dilution credit are not necessary for this permit reissuance (see Response to Calistoga Comment 2 below). Therefore, we deleted the discussions regarding the alternate effluent limits and river-to-effluent discharge ratio in both the Order and the Fact Sheet, where appropriate. Only some discussions on how future dilution credit and river-to-discharge ratio will be determined are kept in the Fact Sheet as information for next permit reissuance.

We also revised Section (2) of Provision VII.C.2.d. as suggested.

**Calistoga Comment 2:** "As an alternative approach to resolve the technical and administrative complications of integrating future unknown dilution credits and dilution ratios into the new permit, the City requests that the permit be written to expire on February 1, 2010, at which time the actual dilution credit and an appropriate dilution ratio will be known, and firm WQBELs can be calculated by the Water Board."

**Response:** The City will perform either a diffuser study or a mixing zone study to determine an appropriate dilution credit for calculating water quality-based effluent limits (WQBELs), associated with an appropriate river-to-wastewater discharge ratio. In the T.O. circulated for public comments, we included alternate effluent limits based on a 10:1 dilution credit (with a demonstrated dilution credit of greater than or equal to 10:1) and a

5:1 dilution credit (with a demonstrated dilution credit of 5:1 to 9:1). However, since the State Implementation Plan (SIP) allows the actual dilution credit to be used in calculating WQBELs, there is possibility that the City can only demonstrate a dilution of less than 5:1, and the permit would have to be reopened to establish WQBELs based on the actual dilution credit. Otherwise, the City would have difficulty complying with the WQBELs with zero dilution credit when the compliance schedule ends (before the permit expiration date with a five year term). The special studies to demonstrate a dilution credit will not be available until 2009; if the permit has to be reopened, there would be only a little more than about 1 year of permit life left. Considering the staff resources available, and the permit reissuance tasks at the time the permit would need to be reissued, we agree that a shorter permit life is a better way to resolve this issue. In addition, this will simplify permit language and make the permit easier to implement. Therefore, in the revised T.O., the permit expires on February 28, 2010. When the permit is reissued, it will include final WQBELs based on a dilution credit based on actual dilution.

With a shorter permit term, the alternate effluent limits need not be included in the permit. We deleted discussions of alternate effluent limits from the revised T.O. Other appropriate changes have also been made to reflect this change.

**Calistoga Comment 3:** The City requests to change the BOD and TSS effluent limits for secondary discharge from 002 to be the same as those in the previous permit (for secondary effluent, 40 CFR 122.41(1)(1)]. "The City believes it is inappropriate for the Water Board to now impose enforceable tertiary effluent limits on E-2 for a plant for which the SWRCB SRF loan staff and Small Community Grant Program staff approved only secondary level unit processes for E-2." "In addition, the E-2 outfall is used minimally during the discharge season (30 to 50 days out of a total of 227 days), and usually at dilution ratios far in excess of 50:1 and, as such, could not be a significant contributor to dissolved oxygen conditions in the Napa River."

**Response:** We have revised the T.O. to include secondary level technology-based effluent limits for BOD and TSS for Outfall 002 (E-2). We have confidence that this change is protective of water quality because the City will continue to operate and maintain the treatment plant in the manner it currently does, which has generally resulted in better than secondary quality effluent at E-2 for BOD and TSS. In addition, the revised T.O. includes a provision, based on the City's proposal, that the City will perform a special study to determine the impact on the receiving water if effluent from E-2 exceeds the BOD and TSS effluent limits for tertiary discharge for certain amount of time. If negative impacts are identified, the next permit will include more stringent effluent limits for BOD and TSS.

**Calistoga Comment 4:** "If the Water Board decides to arbitrarily upgrade enforceable technology-based effluent limits for BOD and TSS at E-2 from the current secondary level to the higher tertiary level, then the City requests that other portions of the permit

and Fact Sheet be modified to accurately characterize this significant change from the current permit."

**Response:** See our response to Comment 3 above.

**Calistoga Comment 5:** *"The City requests that the following standard language used in other adopted Bay Area permits be added to the Effluent Limitations and Discharge Specifications IV.A.5:* 

"The effluent shall not contain a residual chlorine concentration greater than 0.0 mg/L at any time. This concentration limit is defined as below the limit of detection in standard test methods defined in the latest USEPA approved edition of Standard Methods for the Examination of Water and Wastewater. <u>The discharger may elect to use a continuous</u> on-line monitoring system(s) for measuring flows, chlorine and sodium bisulfate dosage (which could be interpolated), and concentrations to prove that chlorine residual exceedances are false positives. If convincing evidence is provided, Regional Water Board staff may conclude that these false positive chlorine residual exceedances are not violation of this permit limitation."

**Response:** We have revised the T.O. as suggested.

**Calistoga Comment 6:** *"The City requests correction of the miscalculated average monthly effluent limits (AMELs) for cyanide included in the Effluent Limitations and Discharge Specifications IV.A.6."* 

**Response:** We have modified the AMEL for cyanide (in the Fact Sheet) based on the corrected calculation.

**Calistoga Comment 7:** "The City wishes to use a single species (fathead minnow) to conduct its monthly Acute Toxicity bioassays. Compliance testing has been performed using fathead minnows and stickleback over the past 5+ years and there have been no violations of the acute toxicity limitations. A letter from the City was submitted to the Water Board on June 16, 2003 requesting use of fathead minnows only, but no response or approval was received."

**Response:** We did not change the T.O based on this comment. The T.O. allows the City to use either fathead minnow <u>or</u> rainbow trout for acute toxicity testing. Therefore, the City is in compliance with the permit if it chooses to use fathead minnow only for its compliance monitoring.

**Calistoga Comment 8:** *"The City requests that the permit effective date be established as 50 days after the adoption date."* 

**Response:** If the proposed permit is adopted by the Board on August 9, 2006, the effective date of the permit would be October 1, 2006, which is more than 50 days after adoption.

**Calistoga Comment 9:** *"The City is supportive of the Bay Area Clean Water Agencies" permit template comments and requests that any changes made due to these comments be incorporated into the City's permit."* 

**Response:** Our changes to this T.O. are consistent with our response to BACWA's comments on the East Bay Dischargers Authority (EBDA) permit reissuance, also part of the August Board meeting agenda. Please refer to our response to BACWA's comments on the EBDA permit reissuance for details.

**Calistoga Comment 10:** *"The City requests that Receiving Water Limitation A.1.c be modified to clarify that temperature alteration is prohibited to the extent that it adversely affects beneficial uses. The following wording is suggested:* 

*"c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels which cause nuisance or adversely affect beneficial uses;"* 

**Response:** We have changed the T.O. as suggested.

**Calistoga Comment 11:** *"The City requests that Receiving Water Limitation V.A.2.a be set at 5 mg/L as stated in the City's current permit."* 

**Response:** We have not made this change because the 5 mg/L in the previous permit was an error. The Basin Plan's dissolved oxygen water quality objective for cold fresh water habitat is 7 mg/L. Therefore, 7 mg/L is the correct number that should be included in the permit.

**Calistoga Comment 12:** *"The City requests that clarifying wording be added to Special Provision VII.C.2.c. [Diffuser Study]* 

"The City requests that the following sentence be added at the beginning of this provision:

*"If the Discharger agrees to complete a dilution credit determination study under Provision VII.C.2.d, the following requirements shall not apply."* 

**Response:** We have changed the T.O. as suggested.

**Calistoga Comment 13:** *"The City requests that clarifying wording be added to Special Provision VII.C.2.d. [Dilution Credit Determination Study]* 

*"The City requests that the following sentence be added at the beginning of paragraph (1):* 

*"If the Discharger agrees to install a diffuser under Provision VII.C.2.c, the following requirements shall not apply."* 

**Response:** We have changed the T.O. as suggested.

**Calistoga Comment 14:** "The City requests that the following changes be made to the special provision VII.C.4 text starting on page 24 to clarify which constituents are being granted interim limits; to correct the numbering system [new 2a and 2b are the same study, and new 3a and 3b are the same study]; to clarify that the study referred to in new 3a is necessary if WQBELs continue to be exceeded for dichlorobromomethane and chlorodibromomethane; and to adjust the due date for the later submittal [new number 4] to a reasonable timeframe. Regarding the latter point, annual reports for new 3a cannot begin until February 2009 if the new 3a workplan submittal is not until September 2008 [per new 3a]. The deadline for all reporting cannot be until 12/31/09 in order to allow time for the 3a study to be conducted [it does not start until fall 2008]."

**Response:** Comment noted. We have changed the T.O. as suggested. The revised T.O. also includes some different schedules based on the shorter permit term. This is to ensure that the study will be completed in time to be considered during next permit reissuance.

**Calistoga Comment 15:** *"The City requests removal of the sludge monitoring section in Attachment E Section IX.C."* 

**Response:** Comment noted. We have changed the T.O. as suggested.

**Calistoga Comment 16:** *"The City requests that the Discharge Monitoring Reports (DMRs) option cited in Attachment E Section X.D. be removed."* 

**Response:** Comment noted. We have deleted the requirement. DMR submittal is not required for minor dischargers like Calistoga.

**Calistoga Comment 17:** *"The City submits the following editorial changes for consideration:"* 

**Response:** We revised the T.O. as suggested.

**Calistoga Comment 18:** *"The City requests that any changes made to the TO based on comments from the City be reflected in the Fact Sheet, so there are not conflicting bases or explanations for the Permit's requirements. Additionally, the following editorial comments are submitted on the Fact Sheet."* 

**Response:** We changed the Fact Sheet to be consistent with the permit requirements.

USEPA's submitted several comments on the Calistoga T.O. that are nearly identical to its comments on the EBDA Tentative Order. Because the Regional Water Board is hearing these permit reissuances at the same meeting, to avoid repetition (and save paper), please refer to the Board Agenda package for the EBDA permit reissuance for responses to the common comments. This revised T.O. reflects changes discussed in our response to the USEPA's comments on the EBDA permit.

**USEPA Comment 1:** "The bypass language contained in the second paragraph of discharge prohibition III.C. 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."

**Response:** Since the City's treatment Facility does not blend during wet season, we deleted the second paragraph from the revised T.O.

**USEPA Comment 2:** *"To be consistent with other permits adopted by the Board, we suggest adding a prohibition against discharges that create a nuisance in Section III."* 

Response: See response to USEPA Comment 7 on EBDA's permit.

**USEPA Comment 3:** USEPA points out that there are several locations in the permit where it must be made clear that the NPDES permitted facility includes both member agencies' treatment plants, and their collection systems. Therefore, USEPA requests that the following describe the permitted facility as treatment plants and collection systems: (a) cover sheet, name of facility, (b) Paragraph I, name of facility, (c) facility description, and (d) Fact Sheet, facility description.

**Response:** We revised the T.O. to include the information suggested.

**USEPA Comment 4.** USEPA requests that the Water 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." This is because USEPA believes such a blanket statement is inappropriate without knowing the context of specific compliance issues.

Response: See response to USEPA Comment 10 on EBDA's permit.

**USEPA Comment 5:** "We agree with the requirements of MRP paragraph IX.2.h.i which require monitoring of blended discharges. ...We recommend that the Board clarify the sentence stipulating that 'if CBOD or TSS values exceed the weekly average effluent limits....'"

Response: See response to USEPA Comment 11 on EBDA's permit.

**USEPA Comment 6:** "We recommend either deleting the second sentence of footnote [b] on page E-2 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. This change should also be made to footnote [10] on page E-6."

Response: See response to USEPA Comment 12 on EBDA's permit.

**USEPA Comment 7:** "On page F-7, under D, the fact sheet states that there was one exceedence of the zinc effluent limit during the recent permit term. If this is the case, please explain why zinc limits are not included in this draft permit."

**Response:** The one sample exceeding the previous zinc permit limit of 60.5  $\mu$ g/L had a value of 65  $\mu$ g/L. With the 2005 Basin Plan amendment, the zinc water quality objectives are now much higher. The most stringent applicable zinc WQO for this discharge is 83  $\mu$ g/L based on a hardness value of 65 mg/L as CaCO<sub>3</sub>. Therefore, there is no reasonable potential for zinc for this permit reissuance, and no effluent limits are needed for zinc.

**USEPA Comment 8:** "We recommend that you review page F-40, the first paragraph under (5), as the discussion about matrix interferences and analytical artifacts appears to be out-dated."

**Response:** We revised the T.O. as suggested.

SF Baykeeper's comments on the Calistoga T.O. are nearly identical to its comments on the EBDA T.O. (relating to interim limits and compliance schedule, meaning of minimum level, and collection system issues, except blending language). Because the Regional Water Board is hearing these permit reissuances at the same meeting, to avoid repetition (and save paper), please refer to the Board Agenda package for the EBDA permit reissuance for Regional Water Board staff's responses to these comments. All these responses are hereby incorporated by reference.