

**Regional Water Quality Control Board
Central Valley Region
Board Meeting – 24/25 January 2008**

**Response to Written Comments for
The City of Brentwood Wastewater Treatment Plant
Tentative Waste Discharge Requirements**

At a public hearing scheduled for 24/25 January 2008, the Regional Water Quality Control Board, Central Valley Region (Regional Water Board) will consider adoption of a renewed National Pollutant Discharge Elimination System (NPDES) permit and a Cease and Desist Order for the City of Brentwood Wastewater Treatment Plant. The tentative orders were issued on 17 October 2007. This document contains responses to written comments received from the City of Brentwood (hereinafter Discharger) in response to the proposed Orders. Written comments from interested persons were required to be received by the Regional Water Board by 19 November 2007 in order to be included in the record. Comments were received by the deadline from only the Discharger.

Written comments from the Discharger are summarized below, followed by Regional Water Board staff responses.

DISCHARGER’S COMMENTS

CEASE AND DESIST ORDER COMMENT # 1: Page 1, Item 3 - Copper Limits. The Discharger contends that the Regional Water Board inappropriately utilizes the copper objective from the Sacramento-San Joaquin Basin Plan, Table III-1, in the derivation of proposed effluent limitations instead of implementing criteria for toxic priority pollutants contained in the California Toxics Rule.

RESPONSE: The Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California (State Implementation Policy or SIP) in the fourth footnote on Page 1 states, *“If a water quality objective and a CTR criterion are in effect for the same priority pollutant, the more stringent of the two applies.”* This is consistent with guidance supplied by Kathleen Goforth, Water Quality Standards Coordinator for USEPA, Region 9. In an email reply to an inquiry from Regional Water Board basin planning staff, dated 24 August 2004, Ms. Goforth states, *“Where there are both State and federally promulgated criteria, if the State criteria are more stringent than the federal criteria, the State's more stringent criteria apply. This is explicitly stated in both the NTR [40 CFR 131.36(c)(1)] and CTR [40 CFR 131.38(c)(1)]. Conversely, if the federal criteria are more stringent than the State criteria, then the federal criteria apply.”* Federal regulations in 40 CFR 131.38(c)(1) state, *“The criteria in paragraph (b) of this section apply to the State’s designated uses cited in paragraph (d) of this section and apply concurrently with any criteria adopted by the State, except when State regulations contain criteria which are more stringent for a particular parameter and use, or except as provided in footnotes p, q, and x to the table in paragraph (b)(1) of this section.”*

Neither this federal regulation nor the SIP specify that the State's objective be a site-specific objective, merely that the State's objective be in effect. The numerical copper objective in Table III-1 of the Basin Plan was legally adopted by the Regional Water Board, approved by the State Water Board and USEPA, and is therefore in effect until modified or withdrawn by a subsequent formal rulemaking (e.g., a Basin Plan amendment). According to Sections 13263 and 13377 of the California Water Code, the Regional Water Board is required to implement the Basin Plan, including water quality objectives contained therein, when adopting waste discharge requirements and NPDES permits. Therefore, effluent limitations for copper based on the Delta site-specific objective are appropriate.

If the copper limit is not changed, the City requests that at least a reopener provision be included in the proposed Order to allow the permit to be reopened to amend the final limit based on a Water Effects Ratio (WER) adjustment. Pursuant to the SIP, using a WER to develop a new effluent limitation in the development of an NPDES permit is only allowed in the application of CTR criteria. The Delta objective for copper was developed specifically for the Delta. The City could possibly use a WER to develop a site-specific water quality objective for copper, which would require adoption via a Basin Plan amendment. However, considering that the Delta is currently experiencing a significant pelagic organism decline, modifying the Delta objective for copper may not be a simple task.

CEASE AND DESIST ORDER COMMENT #2: Page 4/5, Item 4 – Temperature.

The Discharger believes that based on current effluent and receiving water temperature data, the Facility may not be able to immediately comply with the proposed temperature effluent limit and a time schedule should be allowed under the Cease and Desist Order.

RESPONSE: Staff agrees and has modified the proposed Cease and Desist Order to include a time schedule for compliance with the temperature effluent limitation.

WASTE DISCHARGE REQUIREMENTS COMMENT # 3: Page 2.G. Water Quality-Based Effluent Limitations (WQBEL).

The Discharger believes that the Regional Water Board staff has not considered adequately the factors listed in CWC Section 13241 and the Staff's findings from the assessment of these factors are not disclosed in the permit.

RESPONSE: The Regional Water Board is not required to consider the Section 13241 factors in establishing WQBELs or other limits that are necessary to comply with the Clean Water Act. (*City of Burbank v. State Water Res. Control Board* (2005) 35 Cal.4th 613, 625-627. Finding G on page 2 does not state that

the Regional Water Board considered the Section 13241 factors in establishing WQBELs. Staff has modified the finding in the proposed Order that stated tertiary treatment is more stringent than the Clean Water Act requires. Tertiary treatment is necessary to protect the designated uses of contact and non-contact recreation, which are designated uses and part of the water quality standard. Permit requirements to protect those uses are therefore required by the Clean Water Act. "A water quality standard (WQS) defines the water quality goals of a water body, or portion thereof, *by designating the use or uses to be made of the water* and by setting criteria necessary to protect the uses. States and EPA adopt WQS to protect public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act (CWA). Serve the purposes of Act (as defined in sections 101(a)(2) and 303(c) of the Act) means that WQS should, wherever attainable, provide water quality for the protection and propagation of fish, shellfish and wildlife and for recreation in and on the water and take into consideration their use and value for public water supplies, propagation of fish, shellfish, wildlife, *recreation in and on the water*, and agricultural, industrial and other purposes including navigation. Such standards serve the dual purposes of establishing the water quality goals for a specific water body *and serving as the regulatory basis for establishment of water quality-based treatment controls and strategies beyond the technology-based level of treatment required by sections 301(b) and 306 of the Act. ...*" (40 CFR § 130.3, emphasis added.)

The proposed Order requires a Title 22 tertiary level of treatment, or equivalent, which is necessary to protect the beneficial uses of the receiving water. The limitations based on tertiary treatment are therefore required by the Clean Water Act even though they are more stringent than the technology-based secondary treatment standards. In addition, the Discharger already has tertiary treatment facilities and has been operating them for some time. Even assuming the Regional Water Board was required to consider the Section 13241 factors when it first required tertiary treatment or equivalent, it need not reconsider those factors now. However, the factors to be considered under Section 13241 have been discussed in the Fact Sheet of the proposed Order.

WASTE DISCHARGE REQUIREMENTS COMMENT # 4: Page 6.M. Stringency of Requirements for Individual Pollutants. The Discharger believes that the limitations for coliform bacteria included in the permit are more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.

RESPONSE: Finding II.M. has been corrected to reflect that the total coliform organisms and turbidity effluent limits are Title 22 tertiary or equivalent treatment limits. Regarding CWA requirements, see Response to Comment #3.

WASTE DISCHARGE REQUIREMENTS COMMENT # 5: Page 7.Q. Standard and Special Provisions. The Discharger indicates that Finding II.Q. incorrectly states that a Pollution Prevention Plan is required for Iron.

RESPONSE: Staff concurs. Finding II.Q. has been corrected.

WASTE DISCHARGE REQUIREMENTS COMMENT # 6. Page 9-10, Table 6 – Effluent Limitations and Interim Limitations. The Discharger requests that “persistent chlorinated hydrocarbon pesticides” be deleted from Table 6 and be replaced with alpha endosulfan and gamma-BHC, which are the compounds that have shown reasonable potential. The Discharger further requests that both final and interim effluent limitations for 4,4'-DDT be deleted since 4,4'-DDT has not been detected in the effluent for over 3 years. This argument is based on the court case between City of Woodland vs. RWQCB and SWRCB (*Order Granting Writ of Mandamus*).

RESPONSE: The proposed permit has been modified to reflect the deletion of the final effluent limitations for “persistent chlorinated hydrocarbon pesticides” and replaced with the individual pesticides that showed reasonable potential (i.e. alpha endosulfan, 4,4'-DDT, and gamma-BHC). The Discharger comments that there is no reasonable potential for 4,4'-DDT, because there have been no detections in the past 3 years. The reasonable potential analysis was performed based on data collected between September 2002 and June 2006. If we were to use the last three years of data to conduct the reasonable potential analysis for 4,4'-DDT, we would be changing the period for just this particular constituent. It is not appropriate to pick and choose the sampling period in order to show there is no reasonable potential for a particular constituent. The sampling period used for the reasonable potential analysis is appropriate, therefore, the effluent limits for 4,4'-DDT will remain in the proposed permit.

WASTE DISCHARGE REQUIREMENTS COMMENT # 7: Page 9, VI.A.1.g. Average Daily Discharge Flow. The Discharger believes that the flow limitation should be based on average dry weather flow (ADWF), consistent with other permits issued by Central Valley RWQCB.

RESPONSE: Section VII.D. (page 29) of the tentative permit describes in detail the meaning of Average Daily Discharge Flow, which in essence, is the same as ADWF and hence, no change is considered necessary.

WASTE DISCHARGE REQUIREMENTS COMMENT # 8: Page 10, VI.A.2.a. Interim Effluent Limitations for Selenium, Footnote #2. The Discharger requests that footnote #2, regarding the effluent limitations for selenium, should explain that the Discharger provided justification for a compliance schedule beyond 18 May 2010, and that the Discharger will request a future enforcement order to provide a compliance schedule until 5 years following the effective date of the proposed NPDES permit.

RESPONSE: Staff agrees that the infeasibility analysis provided by the Discharger indicates that a 5 yr compliance schedule is needed for selenium. Modifications to the Fact Sheet have been made to adequately explain this, therefore, it is not necessary to include additional explanation in the Limitations and Discharge Specifications section of the permit.

WASTE DISCHARGE REQUIREMENTS COMMENT # 9: Page 10, 2.b. Chloride. The Discharger requests modification of the proposed interim effluent limitation for chloride from 436 mg/l to 455 mg/l, based on most recent sampling data.

RESPONSE: Staff concurs. The interim effluent limitation for chloride has been modified based on the most recent data.

WASTE DISCHARGE REQUIREMENTS COMMENT # 10: Page 12, A.1. Bacteria. The Discharger contends that the receiving water limitation for fecal coliform bacteria of 200/400 MPN/100ml is unnecessary when the effluent limitation for total coliform is already much lower at 2.2/23/240 MPN/100ml. Thus, the effluent could never cause an exceedance of the receiving water limitation.

RESPONSE: Staff disagrees. The proposed fecal coliform limitations are part of the Basin Plan requirement (page III.3) for all receiving waters that are designated for contact recreation.

WASTE DISCHARGE REQUIREMENTS COMMENT # 11: Page 14, V.B. Groundwater Limitations. The Discharger requests the following modifications (strikeout/underlined) to be consistent with the anti-degradation policy and other permits issued by the Regional Water Board:

1. *Release of waste constituents from any storage, treatment, or disposal component associated with the Facility, in combination with other sources, shall not cause the underlying groundwater to contain waste constituents in concentrations greater than background water quality, ~~not violate~~ or water quality objectives, whichever is greater. The discharge shall not cause the groundwater to exceed water quality objectives, unreasonably impact beneficial uses, or cause pollution or nuisance.*

2. *Release of waste constituents from any storage, treatment, or disposal component associated with the Facility shall not, in combination with other sources of the waste constituents, cause groundwater within influence of the Facility to exceed a total coliform organisms median of 2.2 MPN/100 mL over any 7-day period, or exceed background water quality, whichever is greater.*

RESPONSE: Staff concurs. The proposed Order has been modified accordingly.

WASTE DISCHARGE REQUIREMENTS COMMENT # 12: Page 22, VI.C.2.b. Groundwater Monitoring Workplan. The Discharger contends that there is insufficient justification for requiring additional groundwater monitoring, because the Discharger has been monitoring the groundwater for several years. In addition, due to budget constraints, requests that the timeline for the submittal of a Work Plan be modified from four months to twelve months following adoption of the permit.

RESPONSE: If there is sufficient groundwater monitoring data to complete a groundwater water quality characterization study in accordance with Section VI.2.c., then additional groundwater monitoring wells and additional monitoring may not be needed. The proposed permit has been clarified accordingly. If additional groundwater monitoring wells are needed, it will be necessary to submit a work plan to describe the Discharger's plan of action and schedule for completion. Four months is a reasonable timeframe to prepare the work plan.

WASTE DISCHARGE REQUIREMENTS COMMENT # 13: Page 22, VI.C.2.d. Best Practical Treatment or Control. The Discharger requests that the first sentence be modified as follows (underline/strikeout): "*If the groundwater monitoring results show that the discharge of waste is threatening to cause or has caused ~~groundwater to contain waste constituents in concentrations statistically greater than background water quality~~ exceedance of the groundwater Limitations (Section V.B), the*"

RESPONSE: Staff disagrees. This requirement is necessary for compliance with Resolution 68-16. If a discharge causes a reduction in water quality from the ambient background, it is necessary to evaluate whether the Discharger is meeting best practicable treatment or control of the discharge.

WASTE DISCHARGE REQUIREMENTS COMMENT # 14: Page 27, VI.C.7.a.i. Compliance Schedules. The Discharger, to be consistent with the Comment # 8 above, regarding interim effluent limitation for selenium, requests the following statement be added to this paragraph.

“The Discharger’s Infeasibility Analysis provides justification for a time schedule to comply with the new effluent limitation for selenium in five years from the effective date of this Order. Allowance of an additional compliance schedule beyond May 18, 2010 may be granted in a subsequent enforcement order, as the Regional Water Board deems necessary”

RESPONSE: See response to Comment #8.

WASTE DISCHARGE REQUIREMENTS COMMENT # 15: Page 27, VI.C.7.a.ii.

Pollution Prevention Plan. The Discharger, due to budget constraints, requests an extension to the time line set forth in the permit for the submittal of Pollution Prevention Workplan (from 6 months to 9 months following the effective date of the permit).

RESPONSE: Staff agrees. The permit has been modified to reflect the requested change in time line for the submittal of the Pollution Prevention Workplan. This results in no change to the final compliance date.

WASTE DISCHARGE REQUIREMENTS COMMENT # 16: Page 27, VI.C.7.a.iii.

Treatment Feasibility Study. The Discharger, due to budget constraints, requests an extension to the time line set forth in the permit for the submittal of Treatment Feasibility Study Workplan (from 6 months to 9 months following the effective date of the permit).

RESPONSE: Staff agrees. The permit has been modified to reflect the requested change in time line for the submittal of the Treatment Feasibility Study Workplan. This results in no change to the final compliance date.

WASTE DISCHARGE REQUIREMENTS COMMENT # 17: Page 29, VII. Compliance

Determination. In order to be consistent with Section 2.4.5, Item # 1 of SIP, the Discharger requests that the permit should include a new item “F” within Section VII, as follows, and re-letter the subsequent items in Section VII of the permit.

F. Discharger shall be deemed out of compliance with an effluent limitation if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the RL.

RESPONSE: See response to Comment #18, below.

WASTE DISCHARGE REQUIREMENTS COMMENT # 18: Page 29, VII.F.

Compliance Determination for Chlorinated Pesticides. Based on the comment above (Comment # 17), the Discharger believes the following edits are necessary for the existing Section VII.F. text to ensure that the City’s compliance with the “Non Detect” final effluent limitation for chlorinated pesticides is properly assessed.

The non-detectable (ND) instantaneous maximum effluent limitation for persistent chlorinated hydrocarbon pesticides applies to each individual pesticide. No individual pesticide may be present in the discharge at detectable concentrations. The Discharger shall use USEPA standard analytical techniques with a maximum acceptable detection level of 0.05 µg/L. If the analytical result of a single effluent grab sample ~~is detected~~ for any persistent chlorinated hydrocarbon pesticide exceeds its respective RL, a violation will be flagged and the discharger will be considered out of compliance for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed ~~the instantaneous maximum effluent limitation~~ their respective RLs would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

RESPONSE: Staff agrees. The permit has been modified to reflect the requested changes to the text.

MONITORING AND REPORTING PROGRAM COMMENT # 19: Page E-2, Table E-1.

The Discharger believes the receiving monitoring location RSW-004 downstream of the effluent discharge outfall is a redundant and unnecessary location to the RSW-003 monitoring and hence, requests that monitoring requirements at RSW-004 be eliminated.

RESPONSE: Staff concurs. Monitoring location RSW-004 has been removed from the proposed permit.

MONITORING AND REPORTING PROGRAM COMMENT # 20: Page E-4, Table E-3.

The Discharger requests that since there are no effluent limitations for lead, thallium, diazinon, or chlorpyrifos, requiring continued monitoring for these constituents is unnecessary and this requirement should be deleted from the Monitoring and reporting Program. Monitoring data collected over the past 4 years for lead, thallium, diazinon and chlorpyrifos did not demonstrate reasonable potential to exceed water quality objective/criteria. Therefore, these constituents should be required to be monitored quarterly during the 3rd year term of the permit like rest of the priority pollutants monitoring requirements.

RESPONSE: Staff concurs. The quarterly monitoring requirements for lead, thallium, chlorpyrifos, and diazinon have been removed from the permit.

MONITORING AND REPORTING PROGRAM COMMENT # 21: Page E-6, Item V.B.8.b. Chronic Toxicity Testing, Test Failure. The Discharger believes there is a factual error in the reference made at the end of this section. The text should refer to section "...a.iii" as shown below (underline/shaded), rather than section "...a.ii".

The percent minimum significant difference (PMSD) measured for the test exceeds the upper PMSD bound variability criterion in Table 6 on page 52 of the Method Manual. (A retest is only required in this case if the test results do not exceed the monitoring trigger specified in Special Provisions VI. C.2.a.iii.).

RESPONSE: Staff concurs. The proposed permit has been corrected.

MONITORING AND REPORTING PROGRAM COMMENT # 22: Page E-8, Table E-5.

The Discharger believes that Footnote 4 for Table E-5, which states that flow shall be measured separately to each pond is contradictory to the current monitoring system in which the flow is measured at a single location (LND-001) for all three ponds.

RESPONSE: Staff disagrees. In order to determine compliance the flow limitations to the ponds, the Discharger shall monitor the flow to each pond separately.

MONITORING AND REPORTING PROGRAM COMMENT # 23: Page E-8, Table E-7,

Receiving Water Monitoring. The Discharger requests that the monitoring location RSW-004 be eliminated based on the findings under Comment # 19 above.

RESPONSE: Staff concurs for the reasons explained under Comment #19 above.

MONITORING AND REPORTING PROGRAM COMMENT # 24: Page E-9, Section VII.C. Groundwater Monitoring Program.

The Discharger believes the reference to Table E-10 in the last sentence of the first paragraph is an error and instead it should refer to Table E-8.

RESPONSE: Staff agrees. The error in table reference has been corrected in the permit.

MONITORING AND REPORTING PROGRAM COMMENT # 25: Page E-9, Table E-8,

Groundwater Monitoring. The Discharger believes that requirements for quarterly groundwater sample analyses for nitrate, total Kjeldhal nitrogen, total coliform bacteria, and standard minerals is excessive. The WWTP is a relatively new and upgraded facility that meets tertiary treatment standards and provides full nitrification and denitrification. Annual sample analyses for these constituents should be sufficient to characterize groundwater concentrations and changes from background wells over time.

RESPONSE: Staff agrees that the requirement to monitor the groundwater quarterly for standard minerals is excessive and not necessary. Therefore, the sampling frequency has been reduced to once per year. However, quarterly

groundwater sampling analyses for nitrate, total Kjeldhal nitrogen, and total coliform bacteria is considered necessary.

MONITORING AND REPORTING PROGRAM COMMENT # 26: Page E-12, X.A.5.b and X.A.5.c. Reporting Protocols. The Discharger believes that the reporting protocols identified in Attachment E, Section X.A.5., are not appropriate for the “ND” objective for persistent chlorinated hydrocarbons pesticides. Its implementation for persistent chlorinated hydrocarbons pesticides fails to define the narrative objective in a quantitative manner for regulatory compliance purposes, and would result in a limitation that would continuously change over time. As a consequence, the Discharger requests that the following edit (strikeout/underline) to both 5.a. and 5.b.:

5.b. *“With the exception of persistent chlorinated hydrocarbon pesticide, sample results less than the RL, but greater than or equal to the laboratory’s MDL, shall be reported as “Detected, but Not Quantified,” or DNQ.”*

5.c. *“With the exception of persistent chlorinated hydrocarbon pesticides, sample results less than the laboratory’s MDL shall be reported as “Not Detected,” or ND. For persistent chlorinated hydrocarbon pesticides, sample results less than the minimum levels published in Appendix 4 of the SIP shall be reported as ND. For persistent chlorinated hydrocarbon pesticides for which minimum levels are not included in the SIP, results less than the laboratory’s Reporting Limit (RL) shall be reported as ND.”*

RESPONSE: Staff disagrees. The issue related to compliance determination with the ND effluent limits for the persistent chlorinated hydrocarbon pesticides has been addressed by modifying the compliance determination language in Section VII. of the Limitations and Discharge Specifications. See response to Comment #18.

FACT SHEET COMMENT # 27: Page F-4, II Facility Description, 2nd sentence. The Discharger requests for addition of an acronym “ADWF” at the end of 2nd sentence.

RESPONSE: Staff disagrees. No change is necessary for the reasons explained under Comment # 7, above.

FACT SHEET COMMENT # 28: Page F-7, II.D. Compliance Summary. The Discharger believes the discharge has been in compliance with the permitted capacity of 4.5 mgd ADWF, as the reported exceedances in this paragraph were collected during wet weather months. This paragraph should be deleted.

RESPONSE: Staff concurs. The referenced paragraph has been deleted from the permit.

FACT SHEET COMMENT # 29: Page F-14, Section IV.B.2.a. BOD₅ and Page F-15 (Table F-5). The Discharger contends that Item 2a which states that the 30-day average BOD₅ limitation has been revised to 10 mg/l is incorrect. Because the 30-day average BOD₅ limitation shown in Table 6 (page 8) is 7 mg/l. In addition, the BOD limitation is water quality-based, not technology-based and, as such, the derivation of the BOD limitation should be omitted from Section IV.B.2.a and Table F-5.

RESPONSE: The section of the Fact Sheet in question discusses the applicable technology-based requirements. The discussion in this section is accurate. However, a footnote to Table F-5, *Summary of Technology-based Effluent Limitations*, has been added to clarify that WQBELs for BOD₅ are more stringent and have been required in the permit.

FACT SHEET COMMENT # 30: Page F-19, Section IV.C.3.e. Aluminum. The Discharger contends that the permit incorrectly states that aluminum in the discharge has a reasonable potential to cause or contribute to an in-stream excursion above the Basin Plan's narrative toxicity objective based on a criteria of 87 µg/L and 750 µg/L. Furthermore, the 2005 amendments to the SIP eliminated the reasonable potential trigger for situations where ambient background pollutant concentrations are greater than a priority pollutant objective or criterion and therefore, should be removed from the fact sheet.

RESPONSE: Staff disagrees. The 2005 amendments to the SIP did not eliminate the reasonable potential trigger for situations where ambient background pollutant concentrations are greater than a priority pollutant objective or criterion when there are detections of the pollutant in the effluent (Section 1.3, Step 6, page 6). Therefore, no change to the permit is necessary.

FACT SHEET COMMENT # 31: Page F-21, Section IV.C.3.h. Chloride. Based on the comments presented, for the chloride interim limitations, under Comment # 9 above, the Discharger requests modifications to the 4th sentence of the paragraph as follows: "*The MEC for chloride was 400 430 mg/l, based on 14-19 samples collected from 2 September 2002 through ~~5 June 2006~~ September 2007,.....*".

RESPONSE: Staff concurs for the reasons explained under Comment # 9 above.

FACT SHEET COMMENT # 32: Page F-26, Section IV.C.3.m. Chlorinated Pesticides. The Discharger requests that the 2nd sentence of the 2nd paragraph should be modified (underline) as follows: "*Final effluent limitations for these persistent chlorinated hydrocarbons pesticides.*"

RESPONSE: Staff concurs. Requested modification has been made to the permit.

FACT SHEET COMMENT # 33: Page F-27, Section IV.C.3.n. Pathogens. The Discharger requests the following factual corrections (underline/strikeout) to the 1st paragraph: *"The beneficial uses of the receiving water include ~~municipal and domestic supply and~~ water contact recreation, and there is less than 20:1 dilution of the Facility effluent provided by Marsh Creek. To protect these water contact recreation beneficial uses,....."*

RESPONSE: Staff concurs. The proposed permit has been modified accordingly.

FACT SHEET COMMENT # 34: Page F-31, Section IV.C.3.q. Selenium. Based on comments made under Comment # 14 above, the Discharger requests that the following text be added to the end of 3rd paragraph of this section: *"The Discharger's Infeasibility Analysis provides justification for a time schedule to comply with the new effluent limitation for selenium in five years from the effective date of this Order. Allowance of an additional compliance schedule beyond May 18, 2010 may be granted in a subsequent enforcement order, as the Regional Water Board deems necessary"*.

RESPONSE. Staff concurs for the reasons explained under Comment #8 above.

FACT SHEET COMMENT # 35: Page F-32, Section IV.C.4.c. Effluent Limitation Calculations. The Discharger believes that the presentation of the equations for the effluent for the effluent concentration allowance (ECA) is incorrect. ECA_{acute} and $ECA_{chronic}$ are shown as being directly equal to the CMC and CCC, respectively, whereas the ECA_{HH} equation is shown to have a dilution credits allowance. Furthermore, the sentence above the ECA_{HH} equation implies that dilution credit is only applicable to "human health, agriculture, or other long-term criterion/objective." Dilution credit may be applied to aquatic life criteria-based ECAs, as provided for in the general equation for calculating ECAs on page 8 of the SIP: $ECA = C + D(C-B)$. Therefore, the text and equations for the ECA_{acute} and $ECA_{chronic}$ should be modified as follows:

"C. Effluent Limitation Calculations. In calculating maximum effluent limitations, ~~the effluent concentration allowances were set equal to the criteria/standard/objectives.~~ the ECA is calculated as follows:

$$ECA_{acute} = CMC + D(CMC-B); \text{ and}$$
$$ECA_{chronic} = CCC + D(CCC-B)$$

For the human health, agriculture, or other long-term criterion/objective, ~~a dilution credit can be applied.~~ the ECA is calculated as follows:

RESPONSE: Staff concurs. The permit has been modified to reflect the requested changes.

FACT SHEET COMMENT # 36: Page F-33, Table F-6, WQBEL Calculations for Aluminum. The Discharger believes that there are mathematical errors in determining the LTAs and MDELs. Table F-6 should be revised and the effluent limitations be revised where cited throughout the permit as follows:

Table F-6. WQBEL Calculations for Aluminum

	Acute	Chronic
Criteria ($\mu\text{g/L}$) ⁽¹⁾	750	87
Dilution Credit	No Dilution	No Dilution
ECA	750	87
ECA Multiplier	0.46	0.66
LTA	345	57.4
AMEL Multiplier (95 th %)	⁽²⁾	1.34
AMEL ($\mu\text{g/L}$)	⁽²⁾	76.9
MDEL Multiplier (99 th %)	⁽²⁾	2.20
MDEL ($\mu\text{g/L}$)	⁽²⁾	169

⁽¹⁾ USEPA Ambient Water Quality Criteria

⁽²⁾ Limitations based on chronic LTA (Chronic LTA < Acute LTA)

RESPONSE: Staff agrees partially. The LTA has been changed from 57.1 to 57.4, which results in no change in the AMEL and MDEL at the significant figures used for the limitations. The Discharger's calculation of the MDEL is incorrect, so that change has not been made to the permit. The MDEL is calculated by multiplying the LTA by the MDEL multiplier, as explained in the SIP, Section 1.4, Step 5. The Discharger calculated the MDEL by multiplying the AMEL by the MDEL multiplier.

FACT SHEET COMMENT # 37: Page F-34, Table F-8, WQBEL Calculations for Selenium. The Discharger contends that the ECA multiplier used to calculate the selenium effluent limitation corresponds to the default coefficient of variation (C_v) of 0.6, rather than the actual C_v of the September 2002-June 2006 data set, which should have been used. In addition, there are mathematical errors in determining the MDEL. The C_v of the selenium data is 0.4 (mean = 4.54, standard deviation = 1.73). Table F-8 should be revised and the effluent limitations revised where cited throughout the permit as follows:

Table F-8. WQBEL Calculations for Selenium

	Acute	Chronic
Criteria (µg/L) ⁽¹⁾	20	5
Dilution Credit	No Dilution	No Dilution
ECA	20	5
ECA Multiplier	0.440	0.643
LTA	8.8	3.2
AMEL Multiplier (95 th %)	⁽²⁾	1.36
AMEL (µg/L)	⁽²⁾	4.4
MDEL Multiplier (99 th %)	⁽²⁾	2.27
MDEL (µg/L)	⁽²⁾	10.0

⁽¹⁾ California Department of Fish and Game Water Quality Criteria

⁽²⁾ Limitations based on acute LTA (Acute LTA > Chronic LTA)

RESPONSE : Staff agrees partially. The ECA multiplier has been recalculated using C_v of 0.4, resulting in minor changes to the ECA Multiplier, LTA, and the MDEL as shown below. As discussed, in the response to Comment #36, the Discharger incorrectly calculated the MDEL.

Table F-8. Revised WQBEL Calculations for Selenium

	Acute	Chronic
Criteria (µg/L) ⁽¹⁾	20	5
Dilution Credit	No Dilution	No Dilution
ECA	20	5
ECA Multiplier	0.440	0.643 <u>0.272</u>
LTA	8.8	2.643 <u>2.2</u>
AMEL Multiplier (95 th %)	⁽²⁾	1.36 <u>1.36</u>
AMEL (µg/L)	⁽²⁾	4.4
MDEL Multiplier (99 th %)	⁽²⁾	2.27 <u>2.27</u>
MDEL (µg/L)	⁽²⁾	7.32

⁽¹⁾ California Department of Fish and Game Water Quality Criteria

⁽²⁾ Limitations based on acute LTA (Acute LTA > Chronic LTA)

FACT SHEET COMMENT # 38: Page F-36, Section IV.D.1. Mass-based Effluent Limitations. Consistent with the comment made under Comment # 7 above, the Discharger requests that the 2nd paragraph should be modified as follows (underline/strikeout): “ Mass-based effluent limitations for conventional pollutants were calculated based upon the ~~designed daily discharge flow~~ permitted design capacity of 5 mgd ADWF allowed in Section IV.A.1.1g of the Limitations and Discharge Requirements.”

RESPONSE: Staff disagrees for the reasons explained under the response to Comment # 7, above.

FACT SHEET COMMENT # 39: Page F-50, Section IV.B. Effluent Monitoring.

Consistent with the comment made under Comment # 20, above, the Discharger believes the requirement for continued quarterly monitoring of lead, thallium, chlorpyrifos, and diazinon in effluent samples is unnecessary.

RESPONSE: Staff agrees for the reasons explained under the response to Comment #20.

FACT SHEET COMMENT # 40: Page F-61, Section VII.6.a. Other Special provisions.

The Discharger believes the last sentence of Section VII.6.a. of the Attachment F incorrectly refers to "AGR beneficial uses". AGR is not applicable to the receiving water and the reference to AGR must be deleted from this sentence.

RESPONSE: Staff concurs. The permit has been modified to reflect the correction.

FACT SHEET COMMENT # 41: Page F-62, Section VII.7.a. Compliance Schedules.

Consistent with the comments made under Comments #8 and #14, the Discharger requests the following statement be included in this paragraph:

"The Discharger's Infeasibility Analysis provides justification for a time schedule to comply with the new effluent limitation for selenium in five years from the effective date of this Order. Allowance of an additional compliance schedule beyond May 18, 2010 may be granted in a subsequent enforcement order, as the Regional Water Board deems necessary"

RESPONSE: Staff agrees for the reasons explained under the response to Comment #8, above..

ATTACHMENT 'G' – SUMMARY OF REASONABLE POTENTIAL ANALYSIS

COMMENT # 42: Chloride. Consistent with the comment made under Comment # 9, the Discharger requests modifications to the interim effluent limitation for chloride and presentation of data through September 2007, the MEC for chloride should be 430 mg/l.

RESPONSE: Staff agrees for the reasons explained under the response to Comment #9, above..