

REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION
BOARD MEETING – 3/4 MAY 2007
ITEM #6

RESPONSE TO COMMENTS
(Dated 1 May 2007)

CITY OF ANGELS
CITY OF ANGELS WASTEWATER TREATMENT PLANT
CALAVERAS COUNTY

TENTATIVE WASTE DISCHARGE REQUIREMENTS
WDR NO. R5-2007-XXX
NPDES NO. CA00XXXX

CENTRAL VALLEY REGIONAL WATER QUALITY
CONTROL BOARD
11020 Sun Center Drive # 200
SACRAMENTO, CA 95670

CITY OF ANGELS WASTEWATER TREATMENT PLANT
COMMENTS RECEIVED FROM THE INTERESTED PARTIES

The Tentative NPDES Permit (Order) and associated Reporting and Monitoring Program, and Fact Sheet for the City of Angels (Discharger) prepared by the Central Valley Regional Water Quality Control Board (RWQCB) staff were issued for public review on 6 March 2007. The deadline for comments submittal was 6 April 2007. Central Sierra Environmental Resource Center, California Sport Fishing Protection Alliance, Environmental Law Foundation, Calaveras County Water District, and the Discharger submitted comments by the deadline. This document contains responses to written comments received from these interested parties in response to the Order.

The following responses correspond to the comments submitted by individual stakeholder.

Comments Received from Central Sierra Environmental Resource Center (CSERC):

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| Comment | CSERC requested that public warning signs be posted in the local newspapers and in areas commonly used for public access along the Angels Creek if and when discharge exceeds the effluent limitations contained in the proposed Order. |
| Response | CSERC's request has been communicated to the Discharger and the Discharger has agreed to comply with the request. |

Comments Received from California Sport Fishing Protection Alliance (CSPA)

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| Comment 1. | Finding No. N and Fact Sheet Section III.C.2 incorrectly concludes that the proposed discharge is consistent with the antidegradation provisions of 40CFR section 131.2 and the State Board Resolution 68-16. The proposed permit cannot be adopted until the Discharger provides and the permit requires BPTC in accordance with CWC section 13377 and Federal Regulations, 40CFR 122.4 (a), (d) and (g). The commenter also asserts that the order would allow an increase in mass loading of salinity that is not allowed by the two policies and allow degradation without making appropriate findings. Facility design flow during surface water discharge needs clarification. |
| Response | Response: The proposed discharge complies with the anti-degradation provisions of 40 CFR 131.12 and State Water Board Resolution 68-16. |

The State Board established California's anti-degradation policy in State Water Board Resolution 68-16. Resolution 68-16 incorporates the federal anti-degradation policy (40 CFR 131.12) where the federal policy applies under federal law.

Resolution 68-16 requires in part:

1) High quality waters be maintained until it has been demonstrated that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies; and

2) Any activity, which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.

The proposed discharge will result in some minimal degradation of waters of the State and navigable waters of the United States, but in this case, such degradation is consistent with the maximum benefit to the people of the state. Limited degradation that does not cause exceedance of water quality objectives is warranted to allow for the economic benefit stemming from local growth. In this case, the City of Angels is growing and continued treatment of wastewater is necessary to protect water quality and accommodate growth. The Regional Water Board does not have the jurisdiction to control growth in the City of Angels, but is required to assure that the discharge is adequately treated. The proposed order allows the wastewater utility service necessary to accommodate housing and economic expansion in the area and is considered to be a benefit to the people of the State. The Fact Sheet contains detailed information about each constituent of concern in the waste discharge and what changes in the discharge may occur for each constituent. The effluent concentrations for all constituents are based on water quality objectives and an increase in mass for some constituents, if any, will be insignificant. The accommodation of the development justifies lowering of receiving water quality. In this case, however, the proposed order would authorize, very minimal, if any lowering of receiving water quality given the

increased level of treatment required by the order.

Consistent with the federal and state antidegradation policies, the proposed order would require the discharger to meet requirements that will result in best practicable treatment or control. Currently, the effluent storage capacity of the Facility is not adequate to contain the amount of total water entering the system during a 100-year rainfall year. Due to this lack of adequate storage capacity, the Discharger nearly experienced unauthorized overflows from its storage pond in March and April 2005. The Discharger has documented through a feasibility study report titled, *Feasibility Study for Achieving Compliance with Wastewater Permit Requirements* (August 2002) that additional storage is not economically feasible and requested a seasonal surface water discharge during the wet months. The proposed order requires compliance with applicable federal technology based standards and contains more stringent water quality based effluent limitations, where required. The proposed order includes additional requirements for treatment and control that, in some cases, exceed federal standards. The proposed order requires the discharge to be fully oxidized, coagulated, filtered, and adequately disinfected pursuant to DHS CCR Title 22 reclamation criteria (i.e., "tertiary" treatment) or equivalent, which is in excess of federal technology based standards. It also requires the discharge to be UV disinfected, to occur only during non-irrigation season, and to occur only when receiving water can provide a flow ratio of at least 20:1 (Angels Creek: effluent). In addition, the discharge is not granted any credit for dilution and the discharge is prohibited when the storage reservoir has more than 20 million gallons of unused effluent storage capacity.

The proposed order also includes a control program to minimize salinity. Based on the relatively low reported salinity in the effluent, the discharge does not have reasonable potential to cause or contribute to an in-stream excursion of water quality objectives for salinity. Thus, under the federal regulations, no effluent limitation is specifically required. However, since the receiving water is tributary to the Sacramento-San Joaquin Delta, of additional concern is the salt contribution to Delta waters. Therefore, the proposed order includes a performance-based effluent limitation of 510 umhos/cm for EC as a monthly average to limit the discharge to current performance, which is significantly lower than the recommended MCL level of 900 umhos/cm and the agricultural water quality goal of 700 umhos/cm for unrestricted use on sensitive crops.

These requirements to implement best practicable treatment or control will assure that a pollution or nuisance will not occur and that the highest water quality consistent with maximum benefit to the people of the State will be maintained. Due to high level of treatment requirements and several control measures to prevent discharge to surface water, the proposed order will result in maintenance of existing in-stream uses. In performing the “reasonable potential” analysis, the Regional Water Board considered the discharge’s effects on water quality on a pollutant-by-pollutant basis. The proposed order includes that analysis. Discharge Prohibition III.c of the proposed order prohibits the wastewater treatment and discharge from causing a nuisance as defined by the California Water Code. It is also worth pointing out that the receiving water in this case has not been identified by the State as an outstanding national resource water.

The commenter suggests that the Regional Water Board must consider the possibility of future violations under the anti-degradation policies because other similarly sized dischargers have experienced compliance problems. The Regional Water Board is required to implement the Clean Water Act and the Porter-Cologne Water Quality Control Act in NPDES permits and to enforce those laws. The proposed order properly implements those laws and the Regional Water Board will enforce the proposed order. The possibility of violations is not a basis for making a permit more stringent.

The commentor states that mass limits in the proposed Order must be based on the average dry weather flow and that the additional mass loadings by allowing mass limits on a higher design flow were not considered in the antidegradation analysis. Federal regulations at 40 CFR 122.45(b)(2)(i) require that effluent limitations shall be calculated based on design flow. The mass limitations in the proposed Order are based on the design flow of the tertiary treatment facility, not the average dry weather flow design of the secondary treatment facility. The City of Angels Wastewater Treatment Plant is two separate facilities; (1) a secondary treatment plant that provides necessary treatment for pasture irrigation, and (2) a tertiary treatment plant for disposal on Greenhorn Creek Golf Course and/or a surface water discharge to Angels Creek. Therefore, the design flow of the tertiary treatment plant was used for setting the mass limitations in the proposed Order.

Late revisions are proposed to modify Sections II.C. and IV.D.4 of the Fact Sheet to clarify the Anti-degradation Analysis in response to the comments.

Comment 2. CSPA believes that the proposed permit is either based on an incomplete RWD or the Fact Sheet is incomplete, which is in violation of Federal Regulations and the CWC.

Response The Discharger has submitted a complete permit application for their NPDES permit in compliance with all State and Federal requirements (Cal EPA Form 200, U.S. EPA NPDES Form 1 and Form 2C). As stated in 40 CFR § 122.21(e)(1), "The Director shall not issue a permit before receiving a complete application for a permit except for NPDES general permits. An application for a permit is complete when the Director receives an application form and any supplemental information which are completed to his or her satisfaction. The completeness of any application for a permit shall be judged independently of the status of any other permit application or permit for the same facility or activity." 40 CFR § 124.3(a)(2) states, "The Director shall not begin the processing of a permit until the applicant has fully complied with the application requirements for that permit. See §§270.10, 270.13 (RCRA), 144.31 (UIC), 40 CFR 52.21 (PSD), and 122.21 (NPDES)." Accordingly, staff has concluded a complete NPDES permit application was submitted by the Discharger and the wastewater has been adequately characterized in compliance with the regulations cited above.

The data used in assessing and reviewing past performance by the Discharger is complete and representative in accordance with all regulatory requirements. The Fact Sheet has been modified to clarify that the Discharger has submitted a RWD.

Comment 3. Finding No. K states that based on "new interpretation of the Basin Plan" the proposed permit may contain compliance schedules. But the Regional fails to provide any explanation or definition of the "new interpretation" of the Basin Plan.

Response The proposed Order does not contain any time schedules for meeting final effluent limitations. The Discharger must comply immediately.

Comment 4. The proposed Permit fails to include mass based effluent limitations for total residual chlorine, bis(2-chloroethyl)ether, dichlorobromomethane, copper, lead, and zinc in violation of

Federal Regulations 40 CFR 122.45 (f) and U.S. EPA technical advise and fails to base mass limits for biochemical oxygen demand (BOD), total suspended solids (TSS), and ammonia on appropriate design flows

Response

The proposed Order includes effluent limitations expressed in terms of both mass and concentration for some constituents. In addition, pursuant to the exceptions to mass limitations provided in 40 CFR 122.45(f)(1), some effluent limitations are not expressed in terms of mass, such as pH and temperature, and when the applicable standards are expressed in terms of concentration (e.g. CTR criteria and MCLs) and mass limitations are not necessary to protect the beneficial uses of the receiving water.

Mass limitations are necessary for some constituents to ensure protection of the beneficial uses of the receiving water and/or to ensure the proper operations of the treatment facilities. Therefore, in the proposed Order, effluent limitations for oxygen-demanding substances and bioaccumulative constituents have limitations in terms of mass. Furthermore, 40 CFR § 122.45(f)(1)(ii) states that mass limitations are not required when applicable standards are expressed in terms of other units of measurement. All pollutants with numerical effluent limitations in this tentative permit are based on water quality standards and objectives. These are expressed in terms of concentration. Pursuant to 40 CFR § 122.45(f)(1)(ii), expressing the effluent limitations in terms of concentration is expressly allowed and is in no way contrary to Federal Regulations.

Comment 5.

The proposed permit incorrectly limits the flow from the facility.

Response

Federal regulations at 40 CFR 122.45(b)(2)(i) require that effluent limitations shall be calculated based on design flow. The flow limitations in the proposed Order are based on the design flow of the tertiary treatment facility, not the average dry weather flow design of the secondary treatment facility. The City of Angels Wastewater Treatment Plant is two separate facilities; (1) a secondary treatment plant that provides necessary treatment for pasture irrigation, and (2) a tertiary treatment plant for disposal on Greenhorn Creek Golf Course and/or a surface water discharge to Angels Creek. Therefore, the design flow of the tertiary treatment plant was used for setting the flow limitations in the proposed Order.

Comment 6. The proposed permit incorrectly imposes Receiving Water Limitation for un-ionized ammonia based on the Tulare lake Basin Plan.

Response The proposed permit has been modified to remove the surface water limitation for un-ionized ammonia.

Comment 7. The proposed Permit does not contain protective Effluent Limitations for ammonia in violation of Federal Regulations 40 CFR 122.44 and California Water Code, Section 13377

Response The effluent limitations for ammonia in the proposed Order are based on USEPA's *Ambient Water Quality Criteria for the Protection of Freshwater Aquatic Life*, for total ammonia, and were appropriately developed in accordance with the SIP and TSD. Furthermore, although the proposed Order requires a 20:1 flow ratio (Angels Creek: effluent) the effluent limitations were developed without any allowance for dilution. The effluent limitations are fully protective of the beneficial uses.

Comment 8. The proposed Permit does not contain an Effluent Limitation for nitrate and nitrite in violation of Federal Regulations 40 CFR 122.44 and California Water Code, Section 13377.

Response Staff agrees with the commentor and both effluent limitations and monitoring requirements for nitrate and nitrite have been added to the proposed Order based on the primary MCLs for these constituents.

Comment 9. The Tentative Permit includes an interim effluent mass limitation, or cap, for total mercury. Inexplicably, it ignores methylmercury; the bioaccumulative and biodamaging form of mercury. Regional Board TMDL staff has consistently maintained that the pending Delta Mercury TMDL will require substantial reductions in the mass loading of methylmercury from wastewater treatment plants. The Tentative Permit must include an interim cap on methylmercury loading.

Response The proposed permit does not include an interim effluent limitation for total mercury. The discharge does not have a reasonable potential to cause or contribute to an in-stream excursion of applicable water quality objectives for total mercury. The TMDL CSPA refers to is for the Sacramento-San Joaquin Delta. The proposed Delta methyl mercury TMDL would apply to POTWs that discharge to surface waters within the Delta and those that

discharge to tributaries of the Delta below major dams. The proposed discharge is to Angels Creek, which is not within the Delta and is upstream of New Melones Reservoir. Therefore, the discharge would not be subject to the Delta methyl mercury TMDL.

Comment 10. The proposed permit fails to appropriately limit chlorine and fails to require adequate monitoring of total residual chlorine in the discharge.

Response The Discharger will be using UV disinfection when discharging to surface water. Chlorine will only be used at the facility to control odors at the headworks and when backwashing the tertiary filters, which is returned to the headworks. Therefore, there is a very small likelihood that chlorine residual could be discharged. The requirements in the proposed Order are appropriate.

Comment 11. The proposed permit fails to require reporting of mass loading of total residual chlorine, bis(2-chloroethyl)ether, chloroform, dichlorobromethane, copper, lead, mercury, and zinc

Response The proposed Order includes effluent limitations expressed in terms of both mass and concentration for some constituents. In addition, pursuant to the exceptions to mass limitations provided in 40 CFR 122.45(f)(1), some effluent limitations are not expressed in terms of mass, such as pH and temperature, and when the applicable standards are expressed in terms of concentration (e.g. CTR criteria and MCLs) and mass limitations are not necessary to protect the beneficial uses of the receiving water.

Mass limitations are necessary for some constituents to ensure protection of the beneficial uses of the receiving water and/or to ensure the proper operations of the treatment facilities. Therefore, in the proposed Order, effluent limitations for oxygen-demanding substances and bioaccumulative constituents have limitations in terms of mass. However, for total residual chlorine, bis(2-chloroethyl)ether, chloroform, dichlorobromethane, copper, lead, mercury, and zinc there are no water quality benefit for limiting the mass, thus, only limitations in terms of concentration were included in the proposed Order in accordance with the federal regulations.

Comment 12. The proposed permit fails to require the use of ultra-clean technique for sampling and analysis of mercury.

Response The proposed Order has been modified to require EPA Method 1631 for total mercury, which is an ultra-clean technique.

Comment 13. The proposed Permit contains a flawed Reasonable Potential Analysis for chloroform and fails to contain an Effluent Limitation in accordance with Federal Regulations 40 CFR 122.44 and California Water Code, Section 13377.

Response MUN is a designated beneficial use of the receiving water. However, there are no known drinking water intakes in Angels Creek for several miles downstream of the discharge, chloroform is a non-conservative pollutant, and the discharge may only occur only during high stream flows. Additionally, the existing chlorine disinfection facilities are the primary source of chloroform and they are required to be replaced with UV disinfection system prior to discharge to Angeles Creek. Therefore, the Regional Water Board finds that, in this specific circumstance that the application of the USEPA MCL for total THMs for the effluent is appropriate, as long as the receiving water does not exceed the OEHHA cancer potency factor's equivalent receiving water concentration at a reasonable distance from the outfall.

Comment 14. The proposed Permit contains an inadequate reasonable potential analysis by using incorrect statistical multipliers.

Response Until adoption of the SIP by the State Water Board, USEPA's Technical Support Document for Water Quality-based Toxics Control (TSD) was the normal protocol followed for permit development for all constituents. The SIP is required only for California Toxics Rule (CTR) and National Toxics Rule (NTR) constituents and prescribes a different protocol when conducting a Reasonable Potential Analysis (RPA), but is identical when developing water quality-based effluent limitations (WQBELs). For some time after SIP adoption, SIP protocols were used for CTR/NTR constituents, and TSD protocols were used for non-CTR/NTR constituents. While neither protocol is necessarily better or worse in every case, using both protocols in the same permit has led to confusion by dischargers and the public, and greater complexity in writing permits. Currently there is no State or Regional Water Board Policy that establishes a recommended or required approach to conduct an RPA or establish WQBELs for non-CTR/NTR constituents. However, the State Water Board has held that the Regional Water Board may use the SIP as guidance for water quality-based toxics control. The SIP states in the introduction "The goal of this Policy is to establish a standardized

approach for permitting discharges of toxic pollutants to non-ocean surface waters in a manner that promotes statewide consistency.” Therefore, for consistency in the development of NPDES permits, we have begun to use the RPA procedures from the SIP to evaluate reasonable potential for both CTR/NTR and non-CTR/NTR constituents.

Comment 15. The proposed Permit contains an Effluent Limitation for acute toxicity that allows mortality that exceeds the Basin Plan water quality objective and does not comply with Federal regulations, at 40 CFR 122.44 (d)(1)(i).

Response The proposed Order contains several mechanisms to ensure that effluent discharges do not cause acute or chronic toxicity in the receiving water. Receiving water limits proscribe the discharge from causing toxicity in the receiving water. The proposed Order includes end-of-pipe effluent limits for all toxic pollutants with reasonable potential to cause or contribute to an exceedence of water quality objectives in the receiving water. Where appropriate, these limits are developed based on aquatic life toxicity criteria. Furthermore, the proposed Order requires whole effluent chronic toxicity testing, which identifies both acute and chronic effluent toxicity. If this testing shows that the discharge causes, has the reasonable potential to cause, or contributes to an in stream excursion of the water quality objective for toxicity, the proposed Order requires the Discharger to investigate the causes of, and identify corrective actions to eliminate the toxicity.

The acute whole effluent toxicity limits establish additional thresholds to control acute toxicity in the effluent: survival in one test no less than 70% and a median of no less than 90% survival in three consecutive tests. Some in-test mortality can occur by chance. To account for this, the acute toxicity test acceptability criteria allow ten percent mortality (requires 90% survival) in the control. Thus, the acute toxicity limits allow for some test variability, but impose ceilings for exceptional events (i.e., 30% mortality or more), and for repeat events (i.e., median of three events exceeding mortality of 10%). These effluent limitations are consistent with U.S. EPA guidance. In its document titled "Guidance for NPDES Permit Issuance", dated February 1994, it states the following:

"In the absence of specific numeric water quality objectives for acute and chronic toxicity, the narrative criterion 'no toxics in toxic amounts' applies. Achievement of the narrative criterion, as applied

herein, means that ambient waters shall not demonstrate for acute toxicity: 1) less than 90% survival, 50% of the time, based on the monthly median, or 2) less than 70% survival, 10% of the time, based on any monthly median. For chronic toxicity, ambient waters shall not demonstrate a test result of greater than 1 TUc."

The proposed Order protects aquatic life beneficial uses by implementing numerous measures to control individual toxic pollutants and whole effluent toxicity. Both the acute limits and receiving water limits are consistent with numerous NPDES permits issued by the Regional Water Board and throughout the State and are appropriate

Comment 16. The proposed Permit does not contain Effluent Limitations for chronic toxicity and therefore does not comply with Federal regulations, at 40 CFR 122.44 (d)(1)(i).

Response The Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP) contains implementation gaps regarding the appropriate form and implementation of chronic toxicity limits. This has resulted in the petitioning of a NPDES permit in the Los Angeles Region¹ that contained numeric chronic toxicity effluent limitations. As a result of this petition, the State Water Board adopted WQO 2003-012 directing its staff to revise the toxicity control provisions in the SIP. The State Water Board states the following in WQO 2003-012, *"In reviewing this petition and receiving comments from numerous interested persons on the propriety of including numeric effluent limitations for chronic toxicity in NPDES permits for publicly-owned treatment works that discharge to inland waters, we have determined that this issue should be considered in a regulatory setting, in order to allow for full public discussion and deliberation. We intend to modify the SIP to specifically address the issue. We anticipate that review will occur within the next year. We therefore decline to make a determination here regarding the propriety of the final numeric effluent limitations for chronic toxicity contained in these permits."* The process to revise the SIP is currently underway. Proposed changes include clarifying the appropriate

¹ In the Matter of the Review of Own Motion of Waste Discharge Requirements Order Nos. R4-2002-0121 [NPDES No. CA0054011] and R4-2002-0123 [NPDES NO. CA0055119] and Time Schedule Order Nos. R4-2002-0122 and R4-2002-0124 for Los Coyotes and Long Beach Wastewater Reclamation Plants Issued by the California Regional Water Quality Control Board, Los Angeles Region SWRCB/OCC FILES A-1496 AND 1496(a)

form of effluent toxicity limits in NPDES permits and general expansion and standardization of toxicity control implementation related to the NPDES permitting process.

Since the toxicity control provisions in the SIP are under revision it is infeasible to develop numeric effluent limitations for chronic toxicity. Therefore, the proposed Order requires that the Discharger meet best management practices for compliance with the Basin Plan's narrative toxicity objective, as allowed under 40 C.F.R. 122.44(k).

Comment 17. The Basin Plan, Implementation, Page IV-24-00, prohibits the discharge of wastewater to low flow streams as a permanent means of disposal and requires the evaluation of land disposal alternatives, Implementation, Page IV-15.00, Policies and Plans (2) Wastewater Reuse Policy

Response The Basin Plan does not explicitly prohibit discharges to low flow streams. However, the Basin Plans Water Reuse Policy encourages the reuse of wastewater. The proposed Order includes several control measures to prevent discharge to surface water during low flow conditions and to ensure the Discharger maximizes disposal to land. Such measures include; 1) the discharge may only occur during wet winters when stream flows are high; 2) the discharge may only occur when receiving water can provide a flow ratio of at least 20:1; and 3) the discharge is prohibited when the storage reservoir has more than 20 MG of unused storage capacity;

The Discharger has documented through a feasibility study report titled, *Feasibility Study for Achieving Compliance with Wastewater Permit Requirements* (August 2002) that currently, the effluent disposal capacity of the Facility is not adequate to contain the amount of total water entering the system during a 100-year rainfall year. A significant portion of the acreage (174 acres) available at the current land disposal site is excluded from further consideration as a potential disposal area, due to setback requirements, watercourses, and access roads etc., this acreage is considered not suitable for pasture irrigation. Due to this lack of adequate storage capacity, the Discharger has requested approval of a surface water discharge.

Comment 18. The proposed Permit is either based on an incomplete RWD contrary to Federal Regulations and the CWC or the Fact Sheet is incomplete in accordance with federal regulations.

Response See response to Comment No. 2, above.

Comments Received from Environmental Law Foundation:

Comment: Tentative Order does not comply with State Water Board Resolution 68-16 (“Statement of Policy with Respect to Maintaining High Quality of Waters in California”) and the federal antidegradation policy (40 C.F.R. 131.12). The commenter also asserts that the CEQA document is outdated and analyses in the document are based on different baseline than antidegradation analyses. The proposed Order would allow mass loadings of certain constituents without making appropriate findings on potential degradation.

Response: See response to CSPA’s Comment No. 1

Comments Received from Calaveras County water District:

Comment: Calaveras County Water District supports the proposed permit that is responsible and provides creative solution for reuse, and protection of downstream beneficial uses of the receiving water by discharging only Title 22 water into Angels Creek with a 20:1 dilution.

Response: No response needed.

Comments Received from the City of Angels:

Comment 1. Section II.B. - Discharger requests the phrase “during wet years” be deleted from the sentence. Discharger would like the flexibility to discharge seasonally even during dry years, under design flow conditions.

Response The proposed Order has been modified as requested.

Comment 2. Section III.E. - The Discharger requests that the language under this section be changed to read as follows : “The discharge of tertiary treated wastewater at Discharge Point - 001 is prohibited except from November 15 *through* May 15, when Angels Creek

flows provide a *downstream* flow ratio greater than or equal to 20:1 (Angels Creek flow : effluent) as a daily average.”

Response The proposed Order has been modified to incorporate the recommended language (as noted in italics).

Comment 3. Section III.F. - The Discharger recommends that the words “of unused” be added after the words “20 MG” in the sentence for clarity.

Response The proposed Order has been modified to include the words “of unused” as requested.

Comment 4. Section IV.A.1.a. - Effluent limitations for ammonia, bis (2-chloroethyl) ether, dichlorobromomethane, copper, lead, and zinc do not reflect the 19 parts creek water to 1 part effluent minimum dilution requirement specified in the RWD. A minimum level of effluent dilution, and therefore a dilution ratio and credit under the SIP, is an important part of the City’s compliance strategy. The City believes it has submitted the information needed for the RWQCB to make a determination, now, on allowing a mixing zone and dilution credit. That determination should be made, and the Order should require demonstration of completely-mixed discharge conditions via dye studies before any effluent discharge is allowed. This approach is protective, and avoids the staff time and expense of reopening the Order.

Response Additional information is necessary to determine if dilution credits can be allowed and, if allowed, to calculate the credits. Simply conducting a dye study to demonstrate the discharge is completely mixed may not be sufficient. Furthermore, allowing dilution credits may not be in accordance with the mitigated negative declaration adopted by the City for compliance with the California Environmental Quality Act. The mitigated negative declaration includes mitigation measures to make the findings of no significant impacts to water quality. The mitigation measures include providing Title 22 tertiary treatment and only discharging during high stream flows. By allowing dilution credits, the mitigation measure of discharging only during high stream flows is negated to some degree. Therefore, allowing a dilution credit based on the flow ratio, as described in the SIP for completely mixed discharges, is not appropriate. The agenda version of the proposed Order was modified to clarify this concern in the Section VII.B.1.f. of the Fact Sheet, which includes the rationale for the Mixing Zone Study reopener provision.

Comment 5. Section V.A.1. – The Discharger would like to know the source of receiving water limit of 0.025 mg/l for un-ionized ammonia.

Response The limitation for un-ionized ammonia is erroneously listed and it has been deleted from the proposed Order.

Comment 6. Section V.A.6.b. – The Discharger would like clarification on receiving water DO percent saturation data.

Response Receiving water limitations for DO are based on water quality objectives contained in the Basin Plan and are a required part of this proposed Order. The discharge shall not cause the following in Angels Creek:

- a. The monthly median of the mean daily dissolved oxygen concentration to fall below 85 percent of saturation in the main water mass;
- b. The 95 percentile dissolved oxygen concentration to fall below 75 percent of saturation; nor
- c. The dissolved oxygen concentration to be reduced below 7.0 mg/L at any time.

Comment 7. Section VI.C.1.f. – Mixing Zone Study requirements will need to be revised per the recommendations under Comment 4 above.

Response See response to Discharger's Comment 4, above.

Comment 8. Section VI.C.2.a.iii. – The Discharger requests for revision in the Numeric Toxicity Monitoring Trigger language. The language as written is not consistent with the reality of the situation and other Regional Water Board policy.

Response As no dilution credits are allowed in the permit, the numeric toxicity monitoring trigger of 1TUc is considered appropriate and necessary to protect the beneficial uses of the receiving water. The numeric trigger for accelerated monitoring, with no dilution, is consistent with numerous NPDES permits issued for surface water discharges by the Central Valley Regional water Board.

Comment 9. Section VI.C.4.a.1. – Replace the word “preclude with “discouraged”.

Response The proposed Order has been modified to include the word “discouraged” in place of “preclude”.

Comment 10. Section VI.C.4.b. – The Discharger requests that an additional requirement be added under this section saying “*A mixing zone study shall be completed demonstrating that the discharge is completely-mixed into the receiving water.*”

Response The change is unnecessary, because no dilution credits have been allowed in the proposed Order.

Comment 11. Attachment E.III.A.1 - Daily monitoring of influent BOD and TSS for a minor discharge is excessive.

Response The proposed Order has been modified to reflect this change from daily to weekly monitoring.

Comment 12. Attachment E. IV.A.1. - Daily monitoring of effluent BOD and TSS and continuous monitoring of Temperature, pH, DO, and turbidity for a minor discharge is excessive.

Response Effluent monitoring requirements as specified in the proposed Order are consistent with numerous NPDES permits issued for minor discharges by the Central Valley Regional Water Board and are considered necessary to protect the beneficial uses of the receiving water.

Comment 13. Attachment E.V.B.7. - The reference for Chronic Toxicity Dilution Series should be to Table E-4 and not E-5.

Response The proposed Order has been modified to include the correct Table reference number.

Comment 14. Attachment E.VIII.A.1. – The opening sentence needs to specify that receiving water monitoring is required only when a discharge to Angels Creek is occurring. Additionally, electrical conductivity monitoring should be eliminated as being a poor indicator of salinity; and the TDS test should be specified to be more accurate TDS (fixed) test for salinity.

Response The proposed Order has been modified to clarify the timing for receiving water monitoring requirement. However, in order to be consistent with effluent monitoring requirements, electrical

conductivity monitoring will remain and the monitoring requirement for TDS has been added.

Comment 15. Attachment E.IX.B.1 – Electrical Conductivity monitoring of municipal water supply should be eliminated; and TDS testing should be specified as TDS (fixed) testing.

Response The proposed Order has been modified to replace EC testing for municipal water supply with TDS (fixed) testing.

Comment 16. Attachment F – Effluent limitations for metals with hardness-based water quality objectives should be calculated via the procedure developed by Dr. Robert W. Emerick and presented to both the State Board and Regional Boards if Ken Landau has agreed to implement the procedure under SIP.

Response Although Dr. Robert W. Emerick presented a different procedure for calculating effluent limitations for metals with hardness-based water quality objectives, the implementation of this procedure is still under consideration by the staff and has not yet been adopted by the Regional Water Board. However, the proposed Order will be modified to contain a reopener provision to include effluent limitations for hardness-based metals upon implementation of this new procedure.

Comments Received from Central Valley Clean Water Association:

Comment 1. Regional Board's application of the agricultural water quality goals from the *Water Quality for Agricultural, Food and Agriculture Organization of United Nations* (UN Report) without the consideration of site-specific conditions is inappropriate.

Response Reference of UN Report in the proposed Order was simply mentioned as a guideline for water quality goals that are protective of the agricultural uses. The effluent limitation for electrical conductivity in the proposed Order is not based on the on the UN Report instead, it is based on the performance of the wastewater treatment plant.