

Central Valley Regional Water Quality Control Board
4/5 December 2008 Board Meeting

Response to Comments for the City of Grass Valley
Wastewater Treatment Plant
Tentative Waste Discharge Requirements

The following are Regional Water Quality Control Board, Central Valley Region (Regional Water Board) staff responses to comments submitted by interested parties regarding the tentative Waste Discharge Requirements (NPDES Permit renewal) for the City of Grass Valley Wastewater Treatment Plant (WWTP). Public comments regarding the proposed Orders were required to be submitted to the Regional Water Board by 5:00 p.m. on 24 October 2008 in order to receive full consideration.

The Regional Water Board received comments regarding the proposed NPDES Permit renewal by the due date from the City of Grass Valley (City or Discharger), the California Sportfishing Protection Alliance (CSPA), Newmont USA Limited, and Mr. Ken Berry (California Citizens for Environmental Justice). The submitted comments were accepted into the record, and are summarized below, followed by Regional Water Board staff responses.

CITY OF GRASS VALLEY COMMENTS

General Discharger Comments - The Discharger made numerous minor, non-substantive wording changes in their comment letter. Changes have been accepted and incorporated into the NPDES permit.

Discharger Comment No. 1. Ammonia Effluent Limit - The tentative permit has an instantaneous maximum effluent pH limitation of 8.5, which is the basis for the ammonia effluent limitations. The City's effluent pH is consistently less than 8.0. Therefore, the City requests the instantaneous maximum pH limit be lowered to 8.0 and the ammonia effluent limitations, which are pH and temperature dependant, be adjusted accordingly.

RESPONSE: Regional Water Board staff agrees that the City can comply with an instantaneous pH effluent limit of 8.0. Therefore, the permit has been adjusted with an instantaneous maximum pH limit of 8.0 standard units. The ammonia effluent limitation has also been adjusted based on the new effluent limit for pH. Therefore the revised ammonia effluent limitations are an average monthly effluent limit of 1.6 mg/L and a maximum daily effluent limit of 5.5 mg/L. The ammonia limits in the tentative permit were an average monthly effluent limit of 0.6 mg/L and a maximum daily effluent limit of 2.1 mg/L.

Discharger Comment No. 2. Water Effect Ratio and Translator Studies - The Discharger has requested a reassessment of the decision not to include site specific translators for copper, lead, and zinc and Water Effect Ratio (WER) values for copper and zinc. There has been correspondence between the City and Regional Water Board staff. The City has provided additional data and information that the City believes will address questions/issues raised during Regional Water Board staff review of the

studies. It is recommended that the site specific translators and WER values be used in the permit process and that the permit and the Cease and Desist Order be adjusted accordingly.

RESPONSE: Regional Water Board staff has reviewed the additional data and information supplied by the City and its technical consultants. Concerns that were mentioned in the tentative permit and detailed in correspondence with the City have been satisfactorily addressed. Therefore, the site specific translators and WER values will be utilized in the reasonable potential analysis for copper and zinc (lead has no reasonable potential and thus no effluent limit in the proposed permit). Regional Water Board staff intends to proceed with the hearing on the NPDES permit at the December Board Meeting. Once the permit is modified, those portions that have been revised (including the copper and zinc effluent limitations) will be recirculated for public comment.

Discharger Comment No. 3. Harmonic Mean Dilution for Human Health-Based Constituents - The City has collected data on the flow rate in Wolf Creek. Analysis of the data collected over a four year period (August 2004 to August 2008) indicates a harmonic mean flow in the receiving water of 11.1 million gallons per day (mgd). This would provide a dilution credit of 4.0 at the Discharger's average dry weather design flow of 2.78 mgd. The Discharger requests that the dilution credit be applied to chlorodibromomethane and dichlorobromomethane and the proposed permit and proposed Cease and Desist Order be adjusted accordingly. The Discharger also requests that the Regional Water Board consider adoption of effluent limitations for nitrate and nitrite based on the harmonic mean dilution. The Discharger requests that reopener language be placed in the permit to allow for the revision of effluent limitations for nitrate and nitrite once adequate upstream ambient data is collected.

RESPONSE: Regional Water Board staff recognizes the Discharger has collected flow data in the receiving water (Wolf Creek) as required in Order R5-2003-0089. If assimilative capacity and flow in the receiving water are available, dilution credits can be granted in the calculation of effluent limitations. However, the Discharger has only briefly summarized its analysis in the comments submitted for the proposed permit. Therefore, no changes are being proposed at this time to the effluent limitations for chlorodibromomethane and dichlorobromomethane. Once the Discharger has submitted a comprehensive mixing zone study with the supporting data and analysis to the Regional Water Board, the NPDES permit may be reopened and modified accordingly. A new reopener provision has been added to the proposed Order to address the Discharger's concern.

If a human health dilution credit is allowed in the future, it will not be appropriate to use the human health dilution credit for nitrate and nitrite, because adverse human health effects caused by high nitrate and nitrite concentrations can be felt over a short-term (e.g. one dose). The human health dilution credit is intended

for CTR human health criteria where adverse human health effects occur over the long-term consumption of the water (i.e. 2 liters per day for 70 years).

Discharger Comment No. 4. Findings Regarding Drew Tunnel Discharge to the City's Treatment System - The City requests that language in the proposed permit be revised to indicate that the Drew Tunnel discharge creates difficulties for the City. The City states that the discharge from the Drew Tunnel: (a) provides a significant loading of aluminum and manganese to the treatment system and, (b) creates performance problems for the Discharger's biological treatment system due to the large volume and cool temperatures of the Drew Tunnel mine drainage discharge. The City requests the finding state that the City's occasional compliance difficulties in meeting effluent limits for nitrate and nitrite are directly attributable to the Drew Tunnel mine drainage flow. The City also requests that language be added stating that the City's ability to comply with the 1 March 2010 compliance date for manganese is wholly dependent on timely resolution of the Drew Tunnel matter. Lastly, the City also requests that information regarding the Drew Tunnel flows be added to the proposed permit.

Response: The Permit already indicates that the Drew Tunnel discharge is a cause of compliance problems for the City. Additional detail is not needed. Language indicating that the Drew Tunnel discharge 'surfaces' has been removed. The finding regarding peak flow of the Drew Tunnel discharge has also been increased from 0.3-1.0 mgd to 0.5-1.5 mgd.

CALIFORNIA SPORTFISHING PROTECTION ALLIANCE COMMENTS

Comment No. 1. The proposed Permit contains an inadequate antidegradation analysis that does not comply with the requirements of Section 101(a) of the Clean Water Act, Federal Regulations 40 CFR §131.12, the State Board's Antidegradation Policy (Resolution 68-16) and California Water Code (CWC) Sections 13146 and 13247 –

Response: Regional Water Board staff disagrees; Water Codes Section 13146 and 13247 require other state agencies to comply with water quality control plans when those agencies are discharging waste. Although these sections are not relevant here, Regional Water Board staff concurs that the Regional Water Board must comply with state and federal antidegradation policies when issuing NPDES permits. However, the Permit complies with those policies.

The Permit is for an existing discharge with no increase in capacity or permitted flow. State Water Board and US EPA guidelines do not require a new antidegradation analysis. (Memo to the Regional Board Executive Officers from William Attwater (10/7/87), p.5; APU 90-004, pp. 2-3; *EPA Water Quality Handbook 2d*, § 4.5.) Nevertheless, the Fact Sheet within the proposed Order evaluates pollutant by pollutant the impact to waters of the state and

demonstrates that such discharges will not unreasonably degrade the waters of the state. No antidegradation analysis is required when the Regional Water Board reasonably concludes that degradation will not occur. (Attwater memo p. 3.)

Comment No. 2. The Proposed Permit Fails to Include [Pathogen] Limitations that are Protective of the Municipal and Domestic Beneficial Uses of the Receiving Stream Contrary to Federal Regulations 40 CFR 122.4, 122.44(d) and the California Water Code, Section 13377 –

Response: Regional Water Board staff disagrees. The proposed permit is fully protective of the municipal and domestic water supply (MUN) beneficial use of the receiving water. The commenter claims that for pathogens, the most sensitive beneficial is MUN, due to the direct ingestion of the water, and the proposed permit only discusses protection of the contact recreation (REC-1) and agricultural water supply (AGR) beneficial uses with respect to pathogens.

There are no numeric water quality objectives applicable to the receiving water for pathogens for the protection of MUN. The only water quality objective that applies to surface waters is the bacteria objective in the Basin Plan, which states, *“In waters designated for contact recreation (REC-1), the fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200/100 ml, nor shall more than ten percent of the total number of samples taken during any 30-day period exceed 400/100 ml.”* The proposed Order includes effluent limitations for pathogens based on recommendations by DPH for protection of REC-1 and AGR. These effluent limitations are also fully protective of the MUN use.

In 1987, the Department of Health Services (DHS) (now the Department of Public Health, or DPH) issued the “Uniform Guidelines for the Disinfection of Wastewater” (Uniform Guidelines), which included recommendations to the Regional Water Board regarding the appropriate level of disinfection for wastewater discharges to surface waters. The DHS provided a letter dated 1 July 2003 that included clarification of the recommendations. The letter states, *“A filtered and disinfected effluent should be required in situations where critical beneficial uses (i.e. food crop irrigation or body contact recreation) are made of the receiving waters unless a 20:1 dilution ration (DR) is available. In these circumstances, a secondary, 23 MPN discharge is acceptable.”* DHS considers such discharges to be essentially pathogen-free. (Letter from David P. Spath to Gary Carlton (16 September 1999) p. 3 and Enclosure to same, p. 6.) The proposed Order is consistent with these recommendations, considering site-specific factors. Title 22 is not directly applicable to surface waters; however, the Regional Water Board has found that it is appropriate to apply an equivalent level

of treatment to that required by DPH's reclamation criteria when there is less than 20:1 dilution (receiving water:effluent) because the receiving water may be used for irrigation of agricultural land (AGR) and/or for contact recreation (REC-1) purposes.

In site-specific situations¹ where a discharge is occurring to a stream with a nearby water intake used as a domestic water supply without treatment, the DPH has recommended the same Title 22 tertiary treatment requirements for the protection of MUN, as well as protecting REC-1 and AGR. However, DPH has recommended a 20:1 dilution ratio in addition to the Title 22 tertiary treatment requirement to protect the domestic water supply only where there are existing users of raw water near the treatment plant outfall. In this case, there are no such known uses in the vicinity of the discharge, so tertiary treatment plus 20:1 dilution is not necessary to protect the MUN, REC-1 or AGR uses.

The chemical constituents narrative objective states, "Waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses." The narrative toxicity objective states, "All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life." When necessary, the Regional Water Board adopts numeric effluent limitations to implement these objectives. The *Policy for Application of Water Quality Objectives* states, "To evaluate compliance with the narrative water quality objectives, the Regional Water Board considers, on a case-by-case basis, direct evidence of beneficial use impacts, all material and relevant information submitted by the discharger and other interested parties, and relevant numerical criteria and guidelines developed and/or published by other agencies and organizations (e.g., State Water Board, California Department of Health Services, California Office of Environmental Health Hazard Assessment, California Department of Toxic Substances Control, University of California Cooperative Extension, California Department of Fish and Game, USEPA, U.S. Food and Drug Administration, National Academy of Sciences, U.S. Fish and Wildlife Service, Food and Agricultural Organization of the United Nations). In considering such criteria, the Board evaluates whether the specific numerical criteria, which are available through these sources and through other information supplied to the Board, are relevant and appropriate to the situation at hand and, therefore, should be used in determining compliance with the narrative objective."

In this case, however, there are no known users of raw water (i.e., existing uses of untreated domestic water) in the vicinity of the discharge, and there is no direct evidence of beneficial use impacts. For public water supplies, wastewater

¹ For example, see Waste Discharge Requirements Order No. R5-2007-0133 (NPDES No. CA0079391) for the City of Jackson Wastewater Treatment Plant, Amador County.

discharges do not require drinking water treatment plants to add any additional treatment, since state and federal law require residual chlorine and/or ultraviolet disinfection of surface water. (See, e.g., Surface Water Treatment Rule, 40 C.F.R. Part 141, Subpart H; Cal. Code of Regs. Title 22, section 64447.) Wastewater discharges do not interfere with such treatment processes. In this case, moreover, there are no public drinking water intakes near the treatment plant outfall. Thus, a 20:1 requirement is not required. When 20:1 dilution is unavailable, treating pathogens to a level more stringent than tertiary treatment would produce a chlorine residual in the effluent that would be toxic to aquatic life in the receiving water. Pathogens are not bio-accumulative, so discharges at the permitted levels do not threaten any potential uses of the receiving water for untreated domestic use. Therefore, the requirement to implement tertiary treatment only when 20:1 dilution is not available adequately protects beneficial uses and is appropriate for this site under the case-by-case approach described in the *Policy for Application of Water Quality Objectives*.

The State Water Board has already determined that tertiary treatment is not necessary when dilution exceeds 20:1. (Order WQ 2004-0010 (City of Woodland).) The City of Woodland order addressed REC-1 and not MUN, which was not an existing use of the receiving water. However, the State Water Board has twice concluded that it is appropriate for the Regional Water Board to rely on DHS (now DPH) guidance in determining the level of treatment necessary to protect human health. (*Id.*, p. 11; Order WQ 2002-0016 (City of Turlock), p. 11.)

In summary, there are no numeric water quality objectives for pathogens for the protection of MUN. Therefore, the Regional Water Board, when developing NPDES permits, implements recommendations by DPH for the appropriate disinfection requirements for the protection of MUN, as well as REC-1 and AGR. The disinfection requirements in the proposed Order implement the DPH recommendations and are fully protective of the beneficial uses of the receiving water.

Finally, the commenter is incorrect in characterizing the Basin Plan language regarding discharges to ephemeral streams as a prohibition. The Basin Plan expresses a strong policy against using ephemeral streams as a permanent discharge location where alternatives are available. However, such discharges are not prohibited unless the Regional Water Board adopts a site-specific or water-body-specific prohibition. The discharge is consistent with all applicable provisions of the Basin Plan.

Comment No. 3. The proposed Permit establishes Effluent Limitations for metals based on the hardness of the effluent as opposed to the ambient upstream

receiving water hardness as required by Federal Regulations, the California Toxics Rule (CTR, 40 CFR 131.38(c)(4)) –

Response: The proposed Order has established the criteria for hardness-dependent metals based on the reasonable worst-case estimated ambient hardness as required by the SIP, the CTR and Order No. WQO 2008-0008 (City of Davis). Effluent limitations for the discharge must be set to protect the beneficial uses of the receiving water for all discharge conditions. In the absence of the option of including condition-dependent, “floating” effluent limitations that are reflective of actual conditions at the time of discharge, effluent limitations must be set using a reasonable worst-case condition in order to protect beneficial uses for all discharge conditions. The SIP does not address how to determine hardness for application to the equations for the protection of aquatic life when using hardness-dependent metals criteria. It simply states, in Section 1.2, that the criteria shall be properly adjusted for hardness using the hardness of the receiving water. The CTR requires that, for waters with a hardness of 400 mg/L (as CaCO₃), or less, the actual ambient hardness of the surface water must be used. It further requires that the hardness values used must be consistent with the design discharge conditions for design flows and mixing zones. The CTR does not define whether the term “ambient,” as applied in the regulations, necessarily requires the consideration of upstream as opposed to downstream hardness conditions. The Regional Water Board thus has considerable discretion in determining ambient hardness. (Order WQ 2008-0008 (City of Davis), p.10.) The City of Davis order allows the use of “downstream receiving water mixed hardness data” where reliable, representative data are available. (Id., p. 11.)

The point in the receiving water affected by the discharge is downstream of the discharge. As the effluent mixes with the receiving water, the hardness of the receiving water can change. Therefore, it is appropriate to use the ambient hardness downstream of the discharge that is a mixture of the effluent and receiving water for the determination of the CTR hardness-dependent metals criteria. Recent studies² indicate that the previously used approach of using the upstream receiving water lowest hardness for establishing water quality criteria is not always the most protective for the receiving water (e.g. when the effluent hardness is less than the receiving water hardness). The studies evaluated the relationships between hardness and the CTR metals criterion that is calculated using the CTR metals equation. The Regional Water Board has evaluated these studies and concurs that to establish effluent limits that are protective of beneficial uses for some parameters the ambient hardness can best be estimated using the lowest hardness value of the effluent, while for other parameters, the use of both the lowest (or highest) hardness value of the

² “Developing Protective Hardness-Based Metal Effluent Limitations”, Robert W. Emerick, Ph.D., P.E. and John E. Pedri, P.E.

receiving water and the lowest hardness value of the effluent best estimates the ambient conditions. This approach was used to establish water quality-based effluent limitations for hardness-dependent metals in the proposed Order and adequately protects the beneficial uses of the water body that receives the treated wastewater.

Comment No. 4. The proposed permit contains an inadequate reasonable potential analysis by using incorrect statistical multipliers – The commenter states that the reasonable potential analyses failed to consider the statistical variability of data and laboratory analyses as required by Federal regulations. Federal regulations, 40 CFR § 122.44(d)(1)(ii), state “when determining whether a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative or numeric criteria within a State water quality standard, the permitting authority shall use procedures which account for existing controls on point and nonpoint sources of pollution, **the variability of the pollutant or pollutant parameter in the effluent**, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and where appropriate, the dilution of the effluent in the receiving water.” Emphasis added.

The reasonable potential analysis fails to consider the statistical variability of data and laboratory analyses as explicitly required by the federal regulations. The commenter further contends that the fact that the SIP illegally ignores this fundamental requirement does not exempt the Regional Board from its obligation to consider statistical variability in compliance with federal regulations.

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 No. 5. The proposed Permit fails to contain an Effluent Limitation for aluminum in accordance with Federal Regulations 40 CFR 122.44, US EPA's interpretation of the regulation, and California Water Code, Section 13377 – The commenter states that aluminum concentrations in the effluent has a reasonable potential to cause or contribute to an in-stream excursion above a level necessary to protect aquatic life, and, therefore to violate the Basin Plan's narrative toxicity and chemical constituents water quality objectives.

RESPONSE: CSPA argues that the chronic criterion (87 µg/L) recommend by the USEPA Ambient Water Quality Criteria (NAWQC) for Aluminum should be applied for this discharge. Regional Water Board staff disagrees. The chronic criterion is based on studies conducted on waters with low pH (6.5 to 6.8 pH units) and hardness (<10 mg/L as CaCO₃), which are conditions not commonly observed in Central Valley receiving waters like Wolf Creek. Consequently, the criterion is likely overly protective for this application. For similar reasons, the Utah Department of Environmental Quality (Department) only applies the 87 µg/L chronic criterion for aluminum where the pH is less than 7.0 and the hardness is less than 50 mg/L as CaCO₃ in the receiving water after mixing. For conditions where the pH equals or exceeds 7.0 and the hardness is equal to or exceeds 50 mg/L as CaCO₃, the Department regulates aluminum based on the 750 µg/L acute criterion.

Comment No. 6. The proposed Permit does not contain Effluent Limitations for oil and grease in violation of Federal Regulations 40 CFR 122.44 and California Water Code, Section 13377 –

Response: The previous permit, Order R5-2003-0089, did not contain an effluent limitation for oil and grease. Based on information received, the discharge does not have a reasonable potential to cause or contribute to an in-stream excursion above the Basin Plan's narrative objectives for oil and grease and floating material. Oil and grease used to be a problem at many POTWs and was a necessary effluent limit to protect receiving waters, but implementation of fats oils and grease (FOG) pretreatment programs in conjunction with improved levels of treatment have resulted in an overall reduction of oil and grease in wastewater treatment plant effluent.

The proposed Order is adequately protective. It contains a narrative receiving water limitations for oil and grease and floating materials, and requires weekly effluent monitoring for oil and grease.

Comment No. 7. The proposed Permit fails to include an Effluent Limit for Carbon Tetrachloride as required by Federal Regulation 40 CFR 122.44 and the permit

should not be adopted in accordance with California Water Code Section 13377 –

The commenter states that Federal Regulations, 40 CFR 122.44(d), requires that limits must be included in permits where pollutants will cause, have reasonable potential to cause, or contribute to an exceedance of the State's water quality standards. The commenter states that the criterion value for carbon tetrachloride is 0.25 µg/L. The commenter reported the MEC for lead was 0.8 µg/L (J flagged). Therefore, an effluent limitation is required to be placed in the permit.

RESPONSE: The analytical result in question was the only detected value. As stated in the fact sheet:

The CTR includes standards for the protection of human health based on a one-in-a-million cancer risk for carbon tetrachloride. Municipal and domestic supply is a beneficial use of the receiving stream. The standard for waters from which both water and organisms are consumed is 0.25 µg/L. The maximum observed effluent carbon tetrachloride concentration was detected once out of four samples at a concentration of 0.8 µg/L (J-value) collected on 6 July 2007. The observed MEC is greater than the water quality criteria, but is an estimated value. Three other samples are all non-detectable.

Instead of limitations, additional monitoring has been established for carbon tetrachloride with a reopener provision should monitoring results indicate that the discharge has the reasonable potential to cause or contribute to an exceedance of a water quality standard.

The one detected value was an estimated value. Based on the limited number of samples, with all but one non-detectable and the one an estimated value, Regional Water Board staff concluded that it was questionable as to whether reasonable potential existed. In accordance with Section 1.2 of the SIP Regional Water Board staff shall have discretion to consider if any data are inappropriate or insufficient for use in implementing the policy. Where Regional Board staff have found the data are insufficient to determine reasonable potential, Section 1.3 of the SIP allows the Board to implement monitoring for the parameter of concern. Therefore additional monitoring is being required to be able to conclusively determine if effluent limitations for carbon tetrachloride are required. If the monitoring results indicate that carbon tetrachloride does have reasonable potential to exceed the CTR criterion, the permit may be reopened and appropriate effluent limitations placed in the permit.

Comment No. 8. The proposed Permit fails to include an Effluent Limit for Heptachlor Epoxide as required by Federal Regulation 40 CFR 122.44 and the permit should not be adopted in accordance with California Water Code Section 13377 – The commenter states that Federal Regulations, 40 CFR 122.44(d), requires that limits must be included in permits where pollutants will cause, have reasonable potential to cause, or contribute to an exceedance of the State's water quality

standards. The commenter states the maximum one-hour average concentration and 4-day average heptachlor epoxide concentrations of 0.0038 µg/L and 0.00010 µg/L, respectively, for the protection of freshwater aquatic life. The commenter reported the MEC for heptachlor epoxide was 0.014 µg/L. Therefore, an effluent limitation is required to be placed in the permit.

RESPONSE: The analytical result in question was the only detected value. As stated in the fact sheet:

The CTR includes maximum one-hour average concentration and 4-day average heptachlor epoxide concentrations of 0.0038 µg/L and 0.00010 µg/L, respectively, for the protection of freshwater aquatic life. The maximum observed effluent heptachlor epoxide concentration was detected once out of three samples at a concentration of 0.014 µg/L collected on 26 February 2004. The observed MEC is greater than the water quality criteria, but two other samples are non-detectable.

Instead of limitations, additional monitoring has been established for heptachlor epoxide with a reopener provision should monitoring results indicate that the discharge has the reasonable potential to cause or contribute to an exceedance of a water quality standard.

All other monitoring events for persistent chlorinated hydrocarbon pesticides resulted in non-detect values. Based on the limited number of samples, with all but one non-detectable, Regional Water Board staff concluded that there was insufficient data to determine reasonable potential for heptachlor epoxide. Therefore, in accordance with Section 1.3 of the SIP, additional monitoring is being required to be able to conclusively determine if effluent limitations for heptachlor epoxide are required. If the monitoring results indicate that heptachlor epoxide does have reasonable potential to exceed the CTR criteria, the permit may be reopened and appropriate effluent limitations placed in the permit.

Comment No. 9. 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) and the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP)* –

Response: This was an issue addressed in State Water Resources Control Board's Water Quality Order for the City of Davis (WQO 2008-0008) adopted on 2 September 2008. With regard to the need for a numeric chronic toxicity effluent limit, WQO 2008-0008 states, "We have already addressed this issue in a prior order and, once again, we conclude that a numeric effluent limitation for chronic toxicity is not appropriate at this time." However, the Order goes on to state, "Our review of the Permit, however, concludes that it does not include an appropriate narrative effluent limitation for chronic toxicity and that one must be

added.” Based on this recent Water Quality Order, the proposed Order has been modified to include the following narrative chronic toxicity effluent limitation in section IV.A.1., and the following compliance determination language in section VII.:

Section IV.A.1.

“Chronic Whole Effluent Toxicity. There shall be no chronic toxicity in the effluent discharge.”

Section VII.

“Chronic Whole Effluent Toxicity Effluent Limitation. Compliance with the accelerated monitoring and TRE/TIE provisions of Provision VI.C.2.a shall constitute compliance with effluent limitation IV.A.1.k for chronic whole effluent toxicity.”

The commenter also contends that the Chronic Toxicity Testing Dilution Series in the proposed Order should bracket the actual dilution at the time of discharge, not use default values that are not relevant to the discharge. Regional Water Board staff disagrees. The proposed Order does not allow a dilution credit for chronic aquatic life criteria. Thus, the dilution series is appropriate and relevant to the discharge.

Comment No. 10. Effluent Limitations for manganese are improperly regulated as an annual average contrary to Federal Regulations 40 CFR 122.45(d)(2) and common sense – The commenter states that 40 CFR 122.45(d)(2) requires that permits for POTWs establish effluent limitations as average weekly and average monthly unless impracticable.

Response: Regional Water Board staff disagrees. The manganese effluent limitation is based on secondary maximum contaminant levels which address aesthetics such as taste and odor and not on aquatic life criterion. Regional Water Board staff has determined that an averaging period similar to what is used by the Department of Public Health for those parameters regulated by secondary MCLs is appropriate, and that using shorter averaging periods is impracticable because it sets more stringent limits than necessary.

Comment No. 11. The proposed Permit contains an Effluent Limitation which will cause violation of the Receiving Water Limitation for temperature – The commenter states that the proposed Permit contains an effluent limitation for temperature which would result in a violation of the receiving water limitation for temperature.

Response: The effluent limitation for temperature was an error and has been removed.

Comment No. 12. The proposed Permit replaces Effluent Limitations for turbidity and eliminates Effluent Limitations for iron, MTBE, settleable solids, and nitrite which are present in the existing NPDES permit contrary to the Antibacksliding requirements of the Clean Water Act and Federal Regulations, 40 CFR 122.44(l)(1)

Response: The commenter contends that the removal of effluent limitations in the proposed permit for iron, MTBE, settleable solids, and nitrite constitutes backsliding. Regional Water Board staff would like to point out that the effluent limitation for nitrite is in the proposed permit. The fact sheet mentions the removal of nitrite and this has been corrected. As for the other constituents, Regional Water Board staff disagrees. The Fact Sheet within the proposed Order discusses the rationale for removing the effluent limitations for iron and MTBE. The proposed Order was modified to add a discussion of Regional Water Board staff's analysis for settleable solids. Regional Water Board staff analyzed the Discharger's self-monitoring effluent data and considered the nature of the Facility's operations to determine if the discharge demonstrates reasonable potential to exceed applicable water quality criteria or objectives. All monitoring results for settleable solids were non-detect. Regional Water Board staff concluded that the discharge does not demonstrate a reasonable potential to cause or contribute to an in-stream excursion above a water quality standard. The proposed Order removes the effluent limitations based on new information consistent with anti-backsliding requirements of CWA sections 303(d)(4) and 402(o)(2)(B), and 40 CFR 122.44(l)(2)(i)(B)(1).

Regional Water Board staff disagrees with the comment regarding turbidity. The prior turbidity limit was not based on the water quality objective for turbidity or the need to regulate turbidity in the receiving water. As stated in the Fact Sheet, turbidity testing is a quick way to determine the effectiveness of the treatment filter performance, and to signal the Discharger to implement operational procedures to correct deficiencies in the filter performance. Yet, higher effluent turbidity measurements do not necessarily indicate that the effluent discharge exceeds the water quality criteria/objectives for pathogens (i.e. bacteria, parasites, and viruses), which are the principal infectious agents that may be present in raw sewage. Therefore, operational requirements for turbidity are appropriately included as a Provision in the proposed Order rather than effluent limitations. On the other hand, total coliform organisms are intended as an indicator of the effectiveness of the entire treatment train and the effectiveness of removing pathogens. Therefore, effluent limitations for total coliform organisms are necessary and have been included in the proposed Order. The previous Order included effluent limitations for turbidity. The operational turbidity requirements in the proposed Order are an equivalent limitation that is not less stringent than the turbidity effluent limitations required in the previous Order No. R5-2003-0089. Therefore, the removal of the turbidity effluent limitations does

not constitute backsliding. The revision in the turbidity limitation is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Resources Control Board Resolution 68-16 because this Order imposes equivalent requirements to the prior permit and therefore does not allow degradation. Therefore, even if changing the limit from an effluent limitation to a provision did constitute backsliding from a water-quality based effluent limitation, it would be allowed under CWA sections 303(d)(4) and 402(o).

The discharge does not have reasonable potential to cause or contribute to an exceedance of any turbidity objective, so water quality based turbidity effluent limitations are not required. The proposed Order nevertheless includes receiving water limitations based on the Basin Plan's site specific turbidity objectives.

NEWMONT USA LIMITED COMMENTS

Comment No. 1. Newmont USA Limited (Newmont) requests modification to language found in the proposed permit – Newmont requests that changes be made to the description of the Drew Tunnel and the statement of ownership of the abandoned mine portal. The commenter also objects to the language contained regard to the Discharger's ability to comply with final effluent limitations for manganese.

Response: It is recognized that ownership and responsibility for flows from Drew Tunnel are a matter of dispute and litigation. It is not necessary for the Regional Water Board to determine who owns the Drew Tunnel for purposes of the proposed Order. Therefore references to Newmont as "owner" of Drew Tunnel have been removed. Regarding the City's contention that the ability to comply with final effluent limitations for manganese, the Order has been modified to clarify that it is the City's contention, and not a technical finding by the Board.

KEN BERRY (CALIFORNIA CITIZENS FOR ENVIRONMENTAL JUSTICE) COMMENTS

Comment No. 1. The Cease and Desist Order (CDO) is not exempt from the California Environmental Quality Act (CEQA) under CWC section 13389.

Response: The Court of Appeal disagrees. (*Pacific Water Conditioning Ass'n, Inc. v. City Council of City of Riverside* (1977) 140 Cal.Rptr. 812, 73 Cal.App.3d 546, 555-556.)

Comment No. 2. CEQA's categorical exemptions do not apply to a revised CDO.

Staff disagrees. The Cortese List law specified in Government Code section 65962.5(c)(3), which requires the State Water Resources Control Board to compile a list of “[a]ll cease and desist orders issued after January 1, 1986, pursuant to Section 13301 of the Water Code..., that concern the discharge of wastes that are hazardous materials,” was not intended to apply to the discharge of domestic sewage from publicly owned wastewater treatment facilities. Instead, the intent of the law was to provide notice to land use developers regarding the presence of hazardous materials that had been released on the property proposed for development.

This legislative intent is shown in part by where the Legislature placed section 65962.5 in the Government Code: Title 7 (Planning and Land Use), Division 1 (Planning and Zoning), Chapter 4.5 (Review and Approval of Development Projects), and Article 6 (Development Permits for Classes of Projects). All of these sections of the Government Code concern planning and land use development.

Further evidence of this legislative intent is also provided by subdivision (f) of section 65962.5. Subdivision (f) states in relevant part:

“Before a lead agency accepts as complete an application for any development project which will be used by any person, the applicant shall consult the lists ... and shall submit a signed statement to the local agency indicating whether the project and any alternatives are located on a site that is included on any of the lists compiled pursuant to this section [65962.5] and shall specify any list. If the site is included on a list, and the list is not specified on the statement, the lead agency shall notify the applicant The statement shall read as follows:

“HAZARDOUS WASTE AND SUBSTANCES STATEMENT

“The development project and any alternatives proposed in this application are contained on the lists compiled pursuant to section 65962.5 of the Government Code. Accordingly, the project applicant is required to submit a signed statement that contains the following information... Specify any list pursuant to Section 65962.5 of the Government Code....”

Moreover, additional legislative intent is shown in section 65963.1(a) of the Government Code, the statutory section that immediately follows section 65962.5. It states, in relevant part:

“[T]his chapter applies to the making of a land use decision or the issuance of a permit for a hazardous waste facility project by a public agency..., including, but not limited to, all of the following actions:

(a) The approval of land use permits and conditional use permits, the granting of variances, the subdivision of property, and the modification of existing property lines....”

These statutory provisions make clear that the Cortese List law was part of a comprehensive scheme relating to planning and land use development, and that its purpose was to provide information to developers regarding the presence of hazardous materials on the property considered for development. It was not intended to apply to waste discharges from WWTPs regulated by the State and Regional Water Boards.

Nor does it make any sense that the *first* CDO issued for a site could be subject to a categorical exemption, but any modifications to that same CDO would require the Regional Water Board to undertake a CEQA analysis that, in the commenter’s view, would have to include the original, clearly exempt CDO. The Legislature is presumed not to have intended absurd results. In addition to ignoring the CEQA baseline, this illogical result supports the conclusion that the Legislature did not intend the Cortese List exception to apply in this situation.

Comment No. 3. Revising the CDO is a “project” under CEQA because the Discharger’s selected method of complying with the CDO may have adverse environmental consequences.

Response: This contention is incorrect for the reasons stated in the proposed CDO findings. Even assuming for the sake of argument that the Discharger selects a compliance option that has adverse consequences, those consequences are not the result of the modified CDO.

Comment No. 4. The Regional Water Board must consider project alternatives that have not been determined. The Discharger’s failure to consider all compliance projects in the mitigated negative declaration (MND) for the treatment plant prevents the Regional Water Board from relying on the MND.

Response: The first part of this comment is incorrect. Environmental documentation is not required for a project that is speculative. In addition, as stated in the CDO findings, the construction of any compliance project is the result of the NPDES permit, which is exempt from CEQA, and not a result of the CDO. The second part of this comment appears to be a belated attack on the adequacy of the MND. As a responsible agency, the Regional Water Board is bound by the Discharger’s decision to prepare a negative declaration.