

**Regional Water Quality Control Board
Central Valley Region
Board Meeting – 3/4 May 2007
Item #17**

**Response to Written Comments for City of Tracy Wastewater Treatment Plant
Tentative NPDES Permit and Tentative Waste Discharge Requirements**

At a public hearing scheduled for 3/4 May 2007, the Regional Water Quality Control Board, Central Valley Region (Regional Water Board) will consider adoption of three items: 1) issuance of a renewed National Pollutant Discharge Elimination System (NPDES) permit to regulate the surface water discharge from the City of Tracy Wastewater Treatment Plant, 2) a Time Schedule Order (TSO) that accompanies the proposed NPDES permit, and 3) issuance of separate waste discharge requirements (WDRs) to regulate the land discharge units from the City of Tracy Wastewater Treatment Plant. The tentative orders were issued on 6 March 2007 and 14 February 2007, respectively. This document contains responses to written comments received from interested parties in response to the proposed Orders. Written comments from interested parties were required to be received by the Regional Water Board by 16 March 2007 for the tentative WDRs and 6 April 2007 for the tentative NPDES permit and TSO in order to receive full consideration. Comments were received by the deadline from the following:

Tentative NPDES Permit and TSO

City of Tracy (City or Discharger)
California Sportfishing Protection Alliance (CSPA)
Central Valley Clean Water Association (CVCWA)
South Delta Water Agency (SDWA)
State Water Contractors (SWC)
Metropolitan Water District (MWD)
Environmental Law Foundation (ELF)

Tentative WDRs

City of Tracy (City or Discharger)
Leprino Foods Company (Leprino)

Written comments from the above interested parties are summarized below, followed by the response of the Regional Water Board.

CITY OF TRACY COMMENTS

CITY OF TRACY – NPDES COMMENT #1: Finding I. The Facility contact and phone number should be changed to reflect that Steve Bayley is the Deputy Director of Public Works and his number is (209) 831-4434.

RESPONSE: The contact information has been updated in the agenda version of the proposed Order.

CITY OF TRACY - NPDES COMMENT #2: Finding II.F. The tentative permit inaccurately added language stating that the discharge must meet “Best Professional Judgment (BPJ) in accordance with Part 125, section 125.3.” Section 125.3. The quoted part of this sentence should be removed as the imposition of effluent limits using BPJ is no longer allowed under the regulations cited.

Request: Remove the phrase, which says: “and Best Professional Judgment (BPJ) in accordance with 40 CFR §125.3.”

RESPONSE: The Regional Water Board agrees that 40 C.F.R. §125.3(a)(2)(i)(B) does not apply to POTWS and will proposed to delete that phrase from the permit as a late revision.

CITY OF TRACY - NPDES COMMENT #3: Finding M. Alaska Rule. The text included is not wholly accurate and should be amended to read:

On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal water quality standards (WQS) become effective for CWA purposes (40 CFR 131.21, 65 FR 24641, April 27, 2000, effective date of May 30, 2000). . . . The final rule also provides that standards already in effect under State law and submitted to USEPA for approval by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA unless or until USEPA has promulgated a more stringent water quality standard. However, if the State standards submitted before May 30, 2000 were disapproved by USEPA prior to May 30, 2000, as was the case with portions of the 1994 Basin Plan, the Alaska Rule did not apply to grandfather in these disapproved standards.

RESPONSE: The Finding clearly sets forth the Alaska Rule and no changes are being made in the Finding.

CITY OF TRACY - NPDES COMMENT #4: Finding P. Antibacksliding. This finding should include language stating that effluent limitations can be removed upon new information, including a determination of no reasonable potential. See *accord* SWRCB Order No. 2003-0009 at pg. 9 (“the antibacksliding exception for new information applies where new monitoring data indicate that the discharge of a pollutant does not have reasonable potential to cause or contribute to a water quality standards violation”).

Request: Amend the finding to address allowable removal of effluent limits based on new information.

RESPONSE: The tentative Order contains Provision VI.C.1.a. that allows the permit to be reopened and modified in the event new information becomes available. Therefore, it is not necessary to add this language to Finding P.

CITY OF TRACY - NPDES COMMENT #5: Finding Q. Monitoring Requirements.

The second sentence in this finding is incomplete and should be amended.

Request: Amend the second sentence as follows: “Sections 13225(c), 13267(b), and 13383 of the CWC authorize the Regional Water Boards to require technical and monitoring reports after the requisite burden analysis is performed.”

RESPONSE: It is not necessary to make the change.

CITY OF TRACY - NPDES COMMENT #6: Provision III.A. Discharge Prohibitions.

This provision should be clarified that it only covers treated wastewater. This prohibition should no longer cover untreated wastewater upstream of the headworks as that is now covered by the Sanitary Sewer Overflow waste discharge requirements and should not be duplicatively addressed here.

Request: Insert the word “treated” so Provision III.A. only applies to the “Discharge of treated wastewater.”

RESPONSE: The tentative Order prohibits discharges from the sewer collection system upstream of the headworks of the wastewater treatment plant. Therefore, a change to Provision III.A. is unnecessary. Regardless of the coverage obtained under the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Order 2006 0003), the Discharger’s collection system is part of the treatment system that is subject to the tentative Order. As such, pursuant to federal regulations and as covered by the tentative Order, the Discharger must properly operate and maintain its collection system [40 CFR section 122.41(e)], report any non-compliance [40 CFR section 122.41(l)(6) and (7)], and mitigate any discharge from the collection system in violation of this Order [40 CFR. section 122.41(d)].

CITY OF TRACY - NPDES COMMENT #7: Provision III.B. This provision should only cover the by-pass and overflow of partially treated wastewater, not untreated as that is now covered by the Sanitary Sewer Overflow waste discharge requirements. It should also make clear that taking portions of process units out of service and partial bypassing of treatment processes performed in accordance with provisions of an Operational Plan submitted by the Discharger and approved by the Executive Officer shall not be considered “bypasses” or violations of this Order.

Request: Replace the word “untreated” with “partially treated.” Add the following language at the end of this section: “Taking portions of process units out of service and partial bypassing of treatment processes performed in accordance with provisions of an Operational Plan submitted by the

Discharger and approved by the Executive Officer shall not be considered "bypasses" or violations of this Order."

RESPONSE: A change to Provision III.B. is unnecessary. See response to CITY OF TRACY – NPDES COMMENT #6.

CITY OF TRACY - NPDES COMMENT #8: Section IV.A.1.a.- i. Final Effluent Limits. The use of the language "effective immediately" is confusing since some of the final limits are *not* effective immediately because interim limits apply.

Request: Amend the language in Provision IV.A.1. to read: "Effective immediately, the discharge of treated wastewater shall maintain compliance with the following final effluent limitations, or interim effluent limitations as applicable, at Discharge Point 001..." This will help avoid confusion over applicable limits and be consistent with footnote 5 on pg. 10.

RESPONSE: Footnotes are included in the tentative Order to clarify there are interim effluent limitations for copper, BOD₅, TSS, turbidity, and total coliform organisms. Therefore, the proposed change is unnecessary.

CITY OF TRACY - NPDES COMMENT #9: Section IV.A.1.a. Oil and Grease/Settleable Solids Limits. The Oil and Grease and Settleable Solids limits were imposed with no valid justification or statistical reasonable potential analysis for either constituent. There is no demonstrated reasonable potential to exceed the narrative objectives for these constituents because there is no evidence that these constituents are causing nuisance, visible film or coating (for oil and grease), or adversely affecting beneficial uses.

Request: Remove the Oil and Grease and Settleable Solids limits.

RESPONSE: Regional Water Board staff agrees that the record does not include sufficient information to impose effluent limits for these constituents. Therefore, a late revision is proposed to remove these effluent limitations. The proposed Order contains receiving water limits and monitoring. If further information demonstrates the need for effluent limits, the Order may be reopened to add effluent limits for these constituents.

CITY OF TRACY - NPDES COMMENT #10: Section IV.A.1.a., Table 4, and Pages E-4 and E-6. pH Limits. The City contends that continuous monitoring of pH is necessary and requests that monitoring be changed to a daily grab sample as is currently done. However, if the need for continuous monitoring is adequately justified, then the City requests the following language be added to a footnote to the limits for pH:

“(1) If the Discharger monitors pH continuously, pursuant to 40 CFR §401.17, for pH effluent limitations under continuous monitoring, the Discharger shall be in compliance with the pH limitation specified herein, provided that both of the following conditions are satisfied: (i) the total time during which the pH values are outside the required range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and (ii) no individual excursion from the range of pH values shall exceed 60 minutes.”

Request: Add the requested language related to compliance with the pH Limits.

RESPONSE: Continuous pH monitoring is widely used by POTWs and is necessary to ensure proper operation of the Facility. Furthermore, the proposed Order includes instantaneous maximum and minimum effluent limitations for pH, which require continuous monitoring for compliance determination.

The proposed compliance determination language is not appropriate for the City's discharge. The effluent limitations for pH in the proposed Permit are water quality-based effluent limitations necessary to protect the beneficial uses of the receiving water. The regulations cited in the City's comment are not applicable to the discharge. These regulations are for effluent limitations that have been set in accordance with effluent limitation guidelines (ELGs). ELGs are technology-based effluent limitations and are used for setting effluent limitations for non-municipal dischargers.

CITY OF TRACY - NPDES COMMENT #11: Section IV.A.1.a., Table 4, Aluminum Limits. The City asserts that the reasonable potential analysis for aluminum was conducted incorrectly using a *Projected* Maximum Effluent Concentration (MEC) of 140 µg/L under the TSD instead of the actual MEC of 74 µg/L as required under the SIP. The City also asserts that the US EPA chronic guidance criteria for aluminum of 750 µg/L (CMC) and 87 µg/L (CCC) used in the reasonable potential analysis is inappropriate and should be replaced by the secondary MCL values of 1000 and 200 µg/L.

Request: Redo Reasonable Potential Analysis using the actual MEC instead of a calculated, projected MEC. If an effluent limit is retained, impose limits no more stringent than 1.0 mg/L as a monthly average and 0.2 mg/L as a weekly average, which represent the MCL values. If this were done, the permit would contain a WQBEL for aluminum, but a compliance schedule and interim limits would no longer be necessary.

RESPONSE: The actual maximum effluent concentration (MEC) for aluminum was 140 µg/L from a sample collected on September 1, 2005. Both the MEC and the maximum receiving water concentration for aluminum exceeds the water quality objective. Therefore, aluminum in the discharge has a reasonable

potential to cause or contribute to an in-stream excursion above a level necessary to protect aquatic life. The agenda version of the proposed Order was corrected to show the RPA using the actual MEC rather than the projected MEC to be consistent with the RPA procedures required by the SIP.

The aluminum effluent limitations are not more stringent than required under federal law. The calculation of the aluminum effluent limitations are based on the procedures set forth in Section 5.4.1 of TSD for aquatic life protection. The acute (1-hour) and chronic (4-day) aquatic toxicity criteria are converted to average monthly and maximum daily effluent limitations. Based on the statistics, it is possible to calculate an average monthly effluent limitation that is lower than the chronic criterion. The procedures for calculating water quality-based effluent limitations are described in detail in the Fact Sheet (Attachment F, WQBEL Calculations, Section IV.C.4.d.)

The City also objects to the use of the USEPA National Recommended Water Quality Criteria (NRWQC) for aluminum as the basis for effluent limits. The City has not provided information specific to Old River that demonstrates that the NRWQC for aluminum are not applicable. In the absence of such information, the Regional Water Board must rely on the national criteria to prevent toxicity to aquatic life from aluminum. The national criteria were developed based on scientific studies that concluded that aluminum is toxic to aquatic life at specified concentrations. Since the discharge contains aluminum it is necessary to assure that the discharge does not result in toxicity. The narrative toxicity objective from the Basin Plan is applicable to the discharge. Aluminum is a toxic constituent of the discharge. Applying the narrative toxicity objective using the USEPA National Recommended Water Quality Criteria for aluminum is consistent with state policy, the *Policy for Application of Water Quality Objectives* in Chapter IV (beginning on page IV-16.00) of the Basin Plan. With respect to narrative objectives, the Regional Water Board must establish effluent limitations using one or more of three specified sources, including EPA's published water quality criteria. [(40 CFR 122.44(d)(1)(vi)(A), (B), or (C)].

The City points out that the NRWQC for aluminum, Criteria Continuous Concentration, contains a footnote that states,

“USEPA believes that use of Water-Effects Ratios might be appropriate because: (1) aluminum is less toxic at higher pH and hardness but relationship not well quantified; (2) aluminum associated with clay particles may be less toxic than that associated with aluminum hydroxide particles; (3) many high quality waters in U.S. exceed 87 ug/L as total or dissolved.”

Based on this information, the City requests that the NRWQC for aluminum be adjusted based on the pH and hardness of Old River prior to performing the reasonable potential analysis. However, USEPA states that the relationship

between aluminum toxicity, pH and hardness is not well quantified and recommends that a Water-Effects Ratio (WER) be used to adjust the criteria where necessary. The City has not submitted information supporting a WER for aluminum discharge to Old River. Without this information, the Regional Water Board must use the default assumption of a WER of 1.0, as was done in performing the reasonable potential analysis. As explained in the Fact Sheet, the acid soluble analysis method is allowed to be used to determine compliance with the effluent limits, which should eliminate from consideration aluminum associated with clay particles. The upstream receiving water data for aluminum exceeds both the acute and chronic NRWQC, based on total recoverable analyses. The City is welcome to provide additional upstream data using the acid soluble method. If those data are below the NRWQC, then the reasonable potential analysis could be revised and the need for effluent limits reassessed at that time.

CITY OF TRACY - NPDES COMMENT #12: Section IV.A.1.a., Table 4, and Section IV.5.e., Table 9. Copper Limits. The Regional Water Board inappropriately utilizes the copper objective from Sacramento-San Joaquin Basin Plan, Table III-1, in the derivation of proposed effluent limitations instead of the CMC included in the California Toxics Rule.

Request: The City requests that the proposed effluent limits for copper be recalculated using only the CTR standards as adjusted by the new Biotic Ligand Model (BLM), and the interim limit be set as a monthly average value. If not enough data exist, the City should be given adequate time under a compliance schedule to perform WER or BLM adjustment to reflect local water quality conditions along with a modification to the reopener at Provision VI.C.1.g. to amend the final limits based on the WER or BLM adjustment.

RESPONSE: The Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California (a.k.a., 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.

One cannot directly compare the CTR criteria with the Basin Plan site-specific objective, because the CTR includes separate criteria for acute and chronic aquatic toxicity, whereas, the site-specific objective is expressed as a single maximum concentration. For a meaningful comparison, water quality-based effluent limitations (WQBELs) were first developed based on each water quality objective/criterion and then compared. For the CTR criteria, WQBELs calculated using section 1.4 of the SIP result in an average monthly effluent limitation (AMEL) of 9.1 µg/L and a maximum daily effluent limitation (MDEL) of 14 µg/L (total recoverable). For implementing the Basin Plan’s numeric site-specific objective for copper, the Regional Water Board’s practice is to only require a MDEL, which would result in a MDEL of 10.4 µg/L (total recoverable).

The MDEL based on the CTR criteria (14 µg/L) exceeds the MDEL based on the Basin Plan site-specific objective for copper (10.4 µg/L). Therefore, it is necessary to set the MDEL at 10.4 µg/L to implement the Basin Plan site-specific objective for copper. However, an MDEL of 10.4 µg/L exceeds the AMEL based on the CTR criteria (9.1 µg/L). Therefore, to protect against chronic aquatic toxicity in the receiving stream, it is also necessary to include an AMEL of 9.1 µg/L.

The City requests that a reopener provision be included in the proposed Order to allow the permit to be reopened to amend the final limits based on the WER or BLM adjustment. The proposed Order already includes reopener provision VI.C.1.g., which addresses WER studies. Reopener provision VI.C.1.a. allows the permit to be reopened based on new information, which would include any studies provided by the City regarding the BLM.

CITY OF TRACY - NPDES COMMENT #13: Provision IV.A.1.a., Table 4. Human Health-based Limits. The tentative permit improperly includes maximum daily limits to implement human-health based water quality objectives. The limits for iron,

dichlorobromomethane, and chlorodibromomethane are all based on long-term (70 years of exposure) objectives to protect human health. No justification exists for short-term limits for these constituents.

Request: Impose only monthly averages for iron, dichlorobromomethane, and chlorodibromomethane since the objectives for these constituents are set to protect against long term chronic effects.

RESPONSE: The effluent limitations for iron are based on the Basin Plan site-specific water quality objectives for the Delta and are expressed as a maximum concentration. Therefore, the effluent limitations for iron are expressed as maximum daily effluent limitations in the tentative Order to implement the objective.

Dichlorobromomethane and chlorodibromomethane are priority pollutants. Thus, the SIP governs the calculation of effluent limitations. The effluent limitations for dichlorobromomethane and chlorodibromomethane were calculated in accordance with section 1.4 of the SIP, which contains procedures for calculating maximum daily and average monthly effluent limitations.

CITY OF TRACY - NPDES COMMENT #14: Section IV.A.1.d. and Fact Sheet, Page F-54. Temperature. Language was added to clarify that this limitation (i.e. that the “maximum temperature of the discharge shall not exceed the natural receiving water temperature by more than 20°F”) derived from the temperature objectives in the Thermal Plan.

The Central Valley Basin Plan establishes the threshold for acceptable temperature alterations as “...it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely effect beneficial uses.” If such demonstration is the result of the study specified on page F-7 of the Fact Sheet, the Permit should state that the subject effluent limitation should and will be modified.

Request: Add a reopener provision to Provision VI.C.1. for temperature modifications based on studies conducted by the City. Pages F-9 before Table F-1 and F-71 should also be amended to reflect changes made to the permit

RESPONSE: A new reopener provision has been added to the agenda version of the proposed Order.

CITY OF TRACY - NPDES COMMENT #15: Sections IV.A.2.a, 3.a., 4.a., and 5.a., Tables 5-8. Maximum Daily and Mass Limits for BOD₅ and TSS. The Regional Water Board is proposing to add limits based on maximum daily values and mass limits that are more stringent than required by federal law.

Request: Remove all maximum daily and mass limits for the conventional pollutants, BOD and TSS.

RESPONSE: Maximum daily effluent limitations for BOD₅ and TSS are included in the tentative Order to ensure the treatment works are not organically overloaded and operate in accordance with the design capabilities. Regarding mass limitations, federal regulation at 40 CFR 122.45(f)(1) states that “*Pollutants limited in permits shall have limitations, standards or prohibitions expressed in terms of mass...*” and 40 CFR 122.45(2) states that “*Pollutants limited in terms of mass additionally may be limited in terms of other units of measurement, and the permit shall require the permittee to comply with both limitations.*” Mass limitations for BOD₅ and TSS have been included in accordance with these regulations and are necessary to ensure the treatment works are not organically overloaded and operate in accordance with the design capabilities. Furthermore, BOD₅ and TSS are oxygen-demanding substances, therefore, mass limitations are also necessary to protect the aquatic life beneficial uses of the receiving stream.

CITY OF TRACY - NPDES COMMENT #16: Section IV.A.1.h. Dissolved Oxygen Limits. The City contends that a dissolved oxygen (DO) limit has not been adequately justified and that the limit was based on historic receiving water data (1998 to 2003), which is too old to rely on. Furthermore, the City contends that since the Permit already includes restrictions on all of the constituents that cause an oxygen demand on the receiving water (e.g., BOD, TSS, ammonia, and nitrogen) and a receiving water limitation requiring that the discharge not cause the concentrations of dissolved oxygen to fall below 5 mg/L in Old River, a DO effluent limit is duplicative, unnecessary, and should be removed.

Request: Remove the Dissolved Oxygen effluent limitation.

RESPONSE: The Basin Plan contains a numeric site-specific water quality objective for the Delta, in the vicinity of the discharge, that requires that dissolved oxygen concentrations shall not be reduced below 5 mg/L. Old River from the San Joaquin River to the Delta Mendota Canal is listed on the CWA Section 303(d) list for low dissolved oxygen.

Based on 556 receiving water samples measured in the vicinity of the discharge from 1998 through 2003, the average DO concentration was 8.8 mg/L, with a maximum and minimum of 14.3 mg/L and 4.6 mg/L, respectively. Effluent DO concentration data is not available. However, the discharge contains constituents that cause an oxygen demand on the receiving water (e.g. BOD, TSS, ammonia, and nitrogen). Since, at times the receiving water does not comply with the Basin Plan’s water quality objective for DO, the discharge has a reasonable potential to cause, or contribute, to an in-stream excursion of the DO

water quality objective. Water quality-based effluent limitations for DO have been included in the proposed Order in accordance with federal regulations.

CITY OF TRACY - NPDES COMMENT #17: PROVISION IV.A.1.I. ELECTRICAL CONDUCTIVITY. The City disagrees with the proposed effluent limitations for electrical conductivity because the final limits will likely become effective during the time while the Executive Officer must act, and then antibacksliding issues will arise. The City also contends that the options set forth in Enclosure 1 are problematic because these options require that reverse osmosis treatment will immediately or eventually be implemented. Given the large cost and environmental impact of reverse osmosis and brine disposal and the miniscule benefit given Tracy's contribution of salt to the Delta, none of the options proposed are supported by the City.

RESPONSE: The Staff Report provides a detailed analysis of the compliance and permitting issues with respect to salinity. The Regional Water Board has several options to consider.

CITY OF TRACY - NPDES COMMENT #18: Section IV.A.2.a, 3.a., 4.a., and 5.a., Tables 5-8. Mass and Daily Limits for Ammonia, Nitrate and Nitrite. The City contends that new monthly, daily, and mass effluent limitations for ammonia, nitrate, and/or nitrite are unwarranted. The City, without a requirement to do so, has begun constructing nitrification/denitrification facilities that will address these constituents and should be operational by the time this Permit becomes effective (e.g., 50 days after permit adoption). The City contends that there is not reasonable potential currently for nitrate and objects to the imposition of daily limits for ammonia and mass limits for ammonia, nitrate and/or nitrite.

Request: Remove nitrate limits as there is no reasonable potential; remove the mass and daily limits for ammonia and nitrite as unjustified and unnecessary.

RESPONSE: Untreated domestic wastewater contains ammonia. Nitrification is a biological process that converts ammonia to nitrite and nitrite to nitrate. Denitrification is a process that converts nitrate to nitrite or nitric oxide and then to nitrous oxide or nitrogen gas, which is then released to the atmosphere. Inadequate or incomplete denitrification may result in the discharge of nitrate and/or nitrite to the receiving stream. Therefore, the conversion of ammonia to nitrites and the conversion of nitrites to nitrates present a reasonable potential for the discharge to cause or contribute to an in-stream excursion above the Primary MCLs for nitrite and nitrate.

Title 40 CFR 122.45 (d) requires average weekly and average monthly discharge limitations for publicly owned treatment works (POTWs) unless impracticable. However, for toxic pollutants and pollutant parameters in water quality permitting,

the US EPA recommends the use of a maximum daily effluent limitation in lieu of average weekly effluent limitations for two reasons. *“First, the basis for the 7-day average for POTWs derives from the secondary treatment requirements. This basis is not related to the need for assuring achievement of water quality standards. Second, a 7-day average, which could comprise up to seven or more daily samples, could average out peak toxic concentrations and therefore the discharge’s potential for causing acute toxic effects would be missed.”* (TSD, pg. 96) The proposed Order utilizes maximum daily effluent limitations in lieu of average weekly effluent limitations for ammonia as recommended by the TSD for the achievement of water quality standards and for the protection of the beneficial uses of the receiving stream. Additionally, mass-based effluent limitations have been included for ammonia, nitrate, and nitrite because they are oxygen-demanding substances and the receiving water is impaired for dissolved oxygen deficiencies.

CITY OF TRACY - NPDES COMMENT #19: Section IV.A.2.b., IV.3.b., and IV.4.b. Flow Restrictions. The City suggests that there is no justification for flow requirements and that they be removed or set as an average over three consecutive dry weather months each year. Further, the City is concerned that its current discharge flow limit of 9 mgd (ADWF) might be exceeded before 2008.

Request: Revise IV.A.2.b. to read: “The Average Dry Weather Discharge Flow shall not exceed 9.0 million gallons per day. The average dry weather flow shall be determined over three consecutive dry weather months each year.”

RESPONSE: It is appropriate to limit the flow of the discharge and also include mass limitations. Additional language is proposed to be added to the Order as a late revision to clarify how compliance with the flow limit will be determined (see response to CITY OF TRACY – NPDES COMMENT #27).

CITY OF TRACY - NPDES COMMENT #20: Section IV.A.2.d. Mercury Mass Limits. The City questions the determination of reasonable potential for mercury and contends that this action is more stringent than required by federal law and that an analysis under Water Code section 13263 must be performed.

The City also requests that if the mercury mass limit is maintained, that it be changed back to the previously suggested performance-based annual mass limit of 0.51 pounds per year to better reflect the long term concerns with mercury mass loadings and to provide a bit more regulatory flexibility.

Request: Replace the proposed monthly limit with the previously suggested annual mass limit of 0.51 pounds per year because the monthly limit is impracticable, or remove the mass limit in Provision IV.A.2.d. because compliance is

infeasible and BMPs and Pollution Prevention requirements are imposed in lieu of a numeric limit as authorized by 40 C.F.R. §122.44(k)(3).

RESPONSE: The Delta waterways are listed in accordance with CWA section 303(d) as impaired for mercury, based on bioaccumulation of this pollutant in fish tissue. Regional Water Board staff are developing a draft Methylmercury TMDL for the Delta that proposes methylmercury load reductions for facilities discharging to the South Delta, including Old River.

The SIP recommends the Regional Water Board consider whether the mass loading of bioaccumulative pollutants should be limited in the interim to “*representative current levels*” pending development of applicable water quality standards or TMDL allocation. The intent is, at a minimum, to prevent further impairment while a TMDL for a particular bioaccumulative constituent is being developed. Any increase in loading of mercury to an already impaired water body would further degrade water quality.

The tentative Order implements the recommendation from the SIP for bioaccumulative constituents. The interim effluent limitation for mercury was developed based on the current performance of the facility, utilizing the maximum concentration detected in 12 effluent samples collected from August 2004 to July 2005. An annual limit would allow spikes to be averaged out over the year. The development of the interim effluent limitation is reasonable and is in accordance with the SIP.

CITY OF TRACY - NPDES COMMENT #21: Provisions IV.B., IV.C., V.B. and VI.C.5, Page E-10, Paragraphs VI, VII, and VIII (relating to groundwater), Page F-67, Paragraphs IV.E. and F, Page F-70, Paragraph V.B., Page F-70 and F-71, Paragraphs VI.D.2. and VI.E.1., Page F-80, Paragraph VII.B.5., and Page F-81, Paragraph VII.B.7. Unnecessary References and Provisions. These provisions referencing Land Discharge Specifications, Reclamation Specifications, Groundwater Limitations and Monitoring, and Construction, Operation and Maintenance Specifications, and Biosolids Monitoring contain no substantive provisions applicable to this NPDES permit and must be removed.

Furthermore, the City objects to references made to the separate WDR Order as someone might claim that this reference incorporates that separate permit into this NPDES permit and, thus, those separate requirements become federally enforceable.

Request: Remove Provisions IV.B., IV.C., V.B and VI.C.5., Paragraphs VI, VII, and VIII in Appendix E, and Paragraphs IV.E. and F., V.B., VI.D.2., VI.E.1., VII.B.5., and VII.B.7. in Appendix F as unnecessary. If maintained, all references to the City’s WDR Order should indicate that this separate order is not be incorporated by reference into the NPDES permit.

RESPONSE: Regional Water Staff believe references to a separate Order that regulates the groundwater discharges are appropriate. Furthermore, the request to remove the sections relating to groundwater and renumber the table of contents cannot be granted. The sections must remain to maintain consistency in the section numbering. It has been stated that these sections are not applicable.

CITY OF TRACY - NPDES COMMENT #22: Provision V.A.6.b. and V.A.13.f. MCLs. The tentative permit applies MCLs for radioactivity and pesticides directly to surface waters even though MCLs only apply to treated, served tap water.

Request: For the reasons provided herein and previously in comments related to the use of MCLs, Provisions V.A.6.b. and V.A.13.f. should be deleted.

RESPONSE: The receiving water has the designated beneficial use of municipal and domestic supply. The Basin Plan includes water quality objectives for radioactivity and pesticides requiring waters designated for use as domestic or municipal supply shall not contain concentrations of pesticides or radionuclides in excess of the Maximum Contaminant Levels. The receiving water limitations implement the Basin Plan.

CITY OF TRACY - NPDES COMMENT #23: Provisions VI.A.2.c. (second paragraph) and VI.B.1. Unlawful Permit Modification. The City objects to provisions that purport to require compliance with new regulatory effluent standards and prohibitions and new monitoring requirements even without an amendment of the permit.

Request: Remove the second paragraph of Provision VI.A.2.c. and the portion of VI.B.1, which states “, and future revisions thereto.”

RESPONSE: The permit does not delegate authority to the Executive Officer, nor require compliance with prospective objectives. The permit includes a reopener. The permit does state that if a new federal law or regulation requires immediate compliance, dischargers would have to comply with that new law or regulation.

CITY OF TRACY - NPDES COMMENT #24: Provision VI.C.1.g. Water Effects Ratios (WER) and Metal Translators. The language should be modified to state that if the Discharger spends the time, cost, and effort to perform a scientifically valid study to determine site-specific WERs and/or site-specific dissolved-to-total metal translators for copper, iron, and/or aluminum, and if those study results are approved by the

Executive Officer, this Order will be reopened to modify the effluent limitations for the applicable inorganic constituents.

Request: Change “may be reopened” to “will be reopened.”

RESPONSE: We cannot guarantee that the Order will be reopened. However, we will make every effort to reopen and modify the Order based on available staff resources.

CITY OF TRACY - NPDES COMMENT #25: Provision VI.C.1.h., and Fact Sheet, Page F-72, Paragraph VII.B.1.h. Human Health Dilution Credits. It is unclear why this needs to be a provision in this permit. The Antidegradation Policy does not require that permits be reopened upon implementation of new treatment technologies to lower effluent limits to meet the new performance levels. If harmonic mean levels are set to implement the existing water quality objectives, those same levels would apply despite the new technology.

Request: Remove Provision VI.C.1.h. and Paragraph VII.B.1.h. in Appendix F as not required, inconsistent with law, and unnecessary.

RESPONSE: In the tentative Order, the maximum allowable human health dilution credit is 20:1. However, the granting of the entire human health dilution credit could allocate an unnecessarily large portion of the receiving water’s assimilative capacity for human carcinogens and could violate the Antidegradation Policy. In previous NPDES permits, the Regional Water Board has developed effluent limitations for human carcinogens based on the amount of dilution that would be required, such that water quality objectives in the receiving water would be met when effluent concentrations are at estimated maximum concentrations. However, since the City is making upgrades to the facility, some of which could significantly increase the formation of chlorinated by products, using the current plant performance to calculate the necessary dilution credit could result in effluent limitations for dichlorobromomethane and chlorodibromomethane that could not be met after the facility upgrades. Therefore, at this time the tentative Order would allow the entire human health dilution credit. However, because the permit could then allocate an unnecessarily large portion of the assimilative capacity for human carcinogens, the tentative Order includes a reopener to lower the dilution credit based on the performance of the upgraded facility.

CITY OF TRACY - NPDES COMMENT #26: Provisions VI.C.3.a. and b. Pollution Prevention Plans. The City contends that the proposed insertion of the words “and implement” should be rejected as contrary to law. Words such as “conduct,” “implement,” and “implementation” related to a Pollution Prevention Plan (PPP) is

contrary to the ruling in SWRCB's precedential order in the *Tosco Avon Refinery* case, Order No. 2001-06.

*Request: To remedy this problem, the words "and implement" should be removed, or the following sentence be added to the end of Provisions VI.C.3.a. and b.:
".... The Pollution Prevention Plan required herein is not incorporated by reference into this permit."*

RESPONSE: The suggested language has been included in the agenda version of the proposed Order.

CITY OF TRACY - NPDES COMMENT #27: Provision VI.C.4b. Compliance Schedules. Phase 1 Improvements. The Regional Board should modify the language to state that "The permitted average ~~daily discharge~~ dry weather flow may increase to 10.8 mgd" upon compliance with the stipulated conditions. Further, the Regional Board should clarify that the average dry weather flow is defined as the flow for three consecutive dry weather months in a calendar year.

Request: Make suggested changes to permit language.

RESPONSE: The tentative Order includes flow limits expressed as "average daily discharge flow." Provision VI.C.4.b. provides the conditions upon which the permitted average daily discharge flow may be increased from 9 million gallons per day (mgd) to 10.8 mgd. There is no need to modify the term used for the permitted flow.

The purpose of the effluent limitation for average daily discharge flow is to ensure that the Facility is operating within its design capabilities. Compliance with the average daily discharge flow is defined in Section VII.J. to be based on dry weather flows. A late revision is proposed to clarify the compliance determination language by stating that that compliance with the average daily discharge flow will be based on the average daily flow for three consecutive dry weather months in a calendar year, which is consistent with the design of the Facility.

CITY OF TRACY - NPDES COMMENT #28: Provisions VI.C.4.b.i. and VI.C.4.c.i. Final Effluent Limits. The language of these sections needs to include "The discharge shall demonstrate compliance with Final or interim Effluent Limitations in Provision IV.A.1., Interim Effluent Limitations IV.A.5.d. and f., and Receiving Water Limitations V.A."

Request: These wording changes should be made to the end of the first sentence in Provisions VI.C.4.b.i. and VI.C.4.c.i. to make it clear that final limits do not apply where interim limits under a compliance schedule are imposed.

RESPONSE: The discharge must be capable of complying with the final effluent limitations for copper and aluminum before increasing the discharge flow rate to Old River. Allowing the discharge to exceed the water quality-based effluent limitations for these constituents would not be in compliance with Resolution 68-16.

CITY OF TRACY - NPDES COMMENT #29: Provision VI.C.4.c. Compliance Schedules. Phase 2-4 Improvements. The Regional Board should modify the language to state that “The permitted average daily discharge dry weather flow may increase to 16 mgd upon compliance” with the stipulated conditions. Further, the permit should define average dry weather flow as the flow for three consecutive dry weather months in a calendar year.

RESPONSE: See response to CITY OF TRACY – NPDES COMMENT #27

CITY OF TRACY - NPDES COMMENT #30: Provisions VI.C.4.d.i. and f., Pages F-8 Compliance Schedules for Final Effluent Limitations for Copper and Aluminum. The City contends that tying compliance with the copper and aluminum limits to the date of the Phase I improvements is not justified since these improvements are not designed specifically to address either copper or aluminum removal, only tertiary treatment and nitrification/denitrification, although the tertiary filters will likely provide some additional metals removal. The City also contends that Antidegradation is not a proper justification for the shortened compliance schedules.

Request: Remove the language “or upon compliance with Special Provisions VI.C.4.b., whichever is sooner,” from Provision VI.C.4.d.i. and f. , and footnote 3 on page 28 of the Permit, and make corresponding changes to the Fact Sheet. Change compliance date for aluminum to May 3, 2017 to be consistent with the Basin Plan compliance schedule.

RESPONSE: The discharge must be capable of complying with the final effluent limitations for copper before increasing the discharge flow rate to Old River to be in compliance with Resolution 68-16. In the proposed Order we were requiring compliance with the aluminum effluent limitations before allowing an increase in flow for the same reason. However, since aluminum in the receiving water exceeds the effluent aluminum, Resolution 68-16 does not apply. Therefore, a late revision is proposed to allow the discharge flow to increase to 10.8 mgd prior to compliance with the effluent limitations for aluminum.

CITY OF TRACY - NPDES COMMENT #31: Provision VI.C.6.b. Collection System.

The City very much appreciates the modification of the previously imposed requirements applicable to the collection system now that the collection system will be regulated separately under the statewide permit. However, the proposed provision uses language that might be interpreted to make compliance with that separate permit a condition of this NPDES permit. To remedy this problem, the language of this provision must be amended to state: "The Discharger shall be subject to the requirements of Order 2006-0003 and any future revisions thereto, which are not incorporated herein.

Request: Clarify that the statewide collection system general permit is not incorporated by reference into this NPDES permit for the treatment plant.

RESPONSE: The City's request is reasonable and the suggested language has been added to the agenda version of the tentative Order.

CITY OF TRACY - NPDES COMMENT #32: Provision VII.G. Total Residual Chlorine Effluent Limitations (Section IV.A.1.e.) The City appreciates the changes made to this Compliance Determination section and inclusion of language related to continuously monitored chlorine residual or dechlorination agents. Nevertheless, the City contends that some of the new language is unnecessary and prejudices that something is a violation without a hearing, the ability to present defenses, or to explain the results.

Request: Remove the first sentence from the last paragraph, which reads: "Any excursion above the 1-hour average or 4-day average total residual chlorine effluent limitations is a violation."

RESPONSE: The City's request is reasonable and the suggested modification has been made in the agenda version of the tentative Order.

CITY OF TRACY - NPDES COMMENT #33: Provision VII.H. TDS Annual Mass Loading. The City questions the need for language that appears to create a rolling-annual average instead of a calendar year annual limit. The City requests that section H.2 be replaced with the following:

"2. Twelve monthly mass loadings shall be calculated for each calendar month. The Discharger shall submit a cumulative total of the mass loadings for the previous calendar year in its annual report and the monthly mass loadings shall be reported ~~twelve calendar months~~ monthly with each self-monitoring report."

RESPONSE: The City's request is reasonable and the suggested modification has made in the agenda version of the tentative Order.

CITY OF TRACY - NPDES COMMENT #34: Pages D-6 and D-9 to D-10, Paragraphs V.B.2.a. and b., and VII.A. These paragraphs relate to Non-Municipal Facilities, do not apply and should be removed from this municipal permit.

Request: Remove Paragraphs V.B.2.a. and b., and VII.A., and renumber Paragraph V.B.2.c. as V.B.2.a., and Paragraph VII.B as VII.A.

RESPONSE: The provisions related to non-municipal facilities do not apply to the City's permit. However, to ensure consistency in NPDES permits the provisions will not be removed.

CITY OF TRACY - NPDES COMMENT #35: Page E-2, Paragraph II, Table of Monitoring Locations. The monitoring stations related to Outfall 002 (M-001 and R-004) should be clarified to explain that these sites related to Outfall 002 need not be monitored unless and until Outfall 002 is operational. This change would be consistent with footnote 1 on page E-10. The City also suggests that R-001 be changed to "Old River, approximately 1 mile upstream of Outfall 001, downstream of the split of Old and Middle Rivers, see Figure E-1."

Request: Add an asterisk at the bottom of page E-2 that states: " The Discharger need not collect samples from Outfall 002 or Monitoring Location R-004 until Outfall 002 is operational and in use." Amend the R-001 site as requested.*

RESPONSE: The City's request is reasonable and the suggested modifications have been made to the agenda version of the proposed Order.

CITY OF TRACY - NPDES COMMENT #36: Pages E-4 and E-7 Methylmercury samples now required. The City contends that since the Delta mercury TMDL has not yet been approved, the imposition of methyl mercury monitoring is premature and should be removed.

Request: Remove the methylmercury monitoring as there are no adopted criteria for methylmercury against which to compare monitoring data, and this monitoring has not been justified under Water Code §13267(b) and §13225(c). Instead, modify Provision VI.C.1. to authorize a reopener to amend the monitoring requirements after adoption of a mercury TMDL.

RESPONSE: Section 13383 of the Water Code allows the Regional Water Board to require monitoring. The requirement to monitor for Methylmercury is appropriate, because the Delta waterways are listed in accordance with CWA

section 303(d) as impaired for mercury, based on bioaccumulation of this pollutant in fish tissue. Methylmercury is the bioaccumulative form of mercury.

CITY OF TRACY - NPDES COMMENT #37: Page E-7, Paragraph IV.A.1., footnote 4, and Page E-12, Paragraph VIII.A.1., footnote 2. The City contends that the detection limits for priority pollutants without effluent limitations are not consistent with the SIP and should be modified.

Request: Modify the last sentence of these footnotes to state "For priority pollutants without effluent limitations, the detection limits shall be selected from the MLs published in Appendix 4 of the SIP" in order to be consistent with SIP Section 2.4.2.

RESPONSE: The requirement for selecting the appropriate detection level in the proposed Order is in accordance with the SIP and has not been changed.

CITY OF TRACY - NPDES COMMENT #38: Page E-12, Paragraph VIII.A.1. Remove the reference to noting the presence or absence of bottom deposits as the River is over 20 feet deep and bottom deposits are not readily visible.

Request: Remove reference to "c. bottom deposits" on Page E-12, or add "As applicable" to "Attention shall also be given to the presence or absence of:"

RESPONSE: There is no need to make the requested change. If the bottom is not visible at the time of monitoring, then the Discharger can report this on the discharger self-monitoring report.

CITY OF TRACY - NPDES COMMENT #39: Page E-14, Sampling Table. The table at the bottom of page E-14 and top of page E-15 states that "Monitoring Period Begins on... September 1, 2006." Since this time has passed, a new date should be included in this table.

Request: Replace "September 1, 2006" with an updated date.

RESPONSE: The proposed Order has been corrected.

CITY OF TRACY - NPDES COMMENT #40: Page F-8, last paragraph. Inconsistent Statements. The Fact Sheet states that an annual mass loading for TDS shall be "83,317 lbs/yr," yet the Permit at page 14 states "13,688 tons/year." This paragraph also needs to delete references to an agricultural supply study as that has been deleted from the Permit.

Request: Make the Salinity requirements consistent between the Fact Sheet and the Permit.

RESPONSE: The proposed Order has been corrected.

CITY OF TRACY - NPDES COMMENT #41: Page F-12, Paragraph V.C.3.b. The City contends that the Regional Board exceeds its authority by relying on the narrative water quality objectives *indefinitely*, and particularly where ample information exists to allow the State to properly adopt a numeric water quality objective.

Request: Adopt site specific objectives for all constituents that USEPA has promulgated criteria guidance in accordance with 33 U.S.C. §1313(c)(2) and CWC §13241.

RESPONSE: The proposed Order complies with the federal regulations and the Clean Water Act with respect to implementation of narrative water quality objectives. The Regional Water Board routinely conducts the triennial review as required by the Clean Water Act to set priorities for consideration of amendments to the Basin Plan to establish water quality objectives and has adopted numerous amendments establishing new water quality objectives.

CITY OF TRACY - NPDES COMMENT #42: Pages F-31, F-33, F-36, F-40, F-41, F-45, and F-54, Paragraphs V.C.3.e. (Aluminum), f. (Ammonia), j. (Chlorine Residual), r. (Mercury), s. (Nitrate/Nitrite), x. (Salinity). The City contends that the Fact Sheet does not provide evidence that the discharge has the reasonable potential to violate the Basin Plan's narrative toxicity or narrative chemical constituents objectives for several constituents. The City also asserts that the permit must include interim limits for nitrate and nitrite, if necessary, within the permit instead of in the attached TSO.

Request: Provide evidence that narrative objectives have the reasonable potential to be exceeded based on local conditions. Remove all interim limits from the TSO that are required through implementation of narrative objectives and place them inside the NPDES permit.

RESPONSE: The tentative Order complies with applicable law in determining effluent limits, including 40 CFR section 122.44(d). It is consistent with those regulations and the Basin Plan's "Policy for Application of Water Quality Objectives" to use USEPA's water quality criteria to develop effluent limits. The water quality criteria are based on scientific studies that conclude that a particular constituent is toxic under the parameters as set forth in the criteria. With respect to compliance schedules, the Regional Water Board has discretion to include a compliance schedule in a permit where it is basing the effluent limit on a "new interpretation" of the water quality criteria or objective. The Regional Water

Board is not required to include a compliance schedule in the permit. Regional Water Board staff is not proposing to make a change. The TSO and permit are consistent with past Regional Water Board practices.

CITY OF TRACY - NPDES COMMENT #43: Page F-46, Paragraph V.C.3.x.vi. Salinity Sources. The City suggests the following changes to the paragraph related to the discharges from Leprino:

~~“Based on data provided by the Discharger from January 2003 through December 2004, the The TDS of Leprino’s pre-treated industrial wastewater discharged to the industrial ponds is primarily in the range of 1500 mg/L to 2300 mg/L. has an average TDS of about 1000 mg/L, but triples to an average TDS of over 3000 mg/L by the time the wastewater is returned to the main facility. This results in a significant salt load to the main treatment facility, and ultimately to Old River. Leprino’s pre-treated industrial wastewater is then commingled with Discharger’s water in the 52 acres of ponds and discharged to the main treatment facility.”~~

Request: Make the suggested changes to the paragraph above.

RESPONSE: Some of the suggested language changes have been made to the tentative Order.

CITY OF TRACY - NPDES COMMENT #44: Page F-62. Paragraph V.C.5.a. Acute Aquatic Toxicity. The City questions whether a reasonable potential analysis has been performed prior to inclusion of toxicity requirements in the draft permit.

Request: Perform a reasonable potential analysis for acute toxicity prior to imposing limits for acute toxicity.

RESPONSE: The Basin Plan states that “...*effluent limits based upon acute biotoxicity tests of effluents will be prescribed where appropriate...*”. It is appropriate to include acute toxicity effluent limitations in the proposed Order, because the discharge contains toxic pollutants that if not properly controlled will cause or have the reasonable potential to cause or contribute to an exceedance of the Basin Plan’s narrative toxicity objective.

CITY OF TRACY - NPDES COMMENT #45: Pages F-65 and F-66, Paragraph V.D.1. Interim Limits. The Fact Sheet states that there are interim limits for Electrical Conductivity, when that interim limit was removed from the Permit.

Request: Remove the Interim Limit language for EC from the Fact Sheet.

RESPONSE: The proposed Order has been corrected.

CITY OF TRACY - NPDES COMMENT #46: The City strongly urges the Regional Board not to adopt this Time Schedule Order and to instead include any necessary interim requirements suggested therein in the permit instead. Furthermore, the City contends that no TSO is needed for nitrate as there is no reasonable potential for nitrate and no limit is required and that neither a TSO nor interim limits for nitrite are needed as the City believes that it will be able to comply with the nitrite limit upon the effective date of the Permit. Finally, no TSO is needed for dissolved oxygen as an effluent limitation has not been adequately justified (see above) and the TSO contains no interim limit for DO.

Request: Move all applicable and necessary requirements of the TSO, if any, into the Permit and delete the need to adopt a TSO. Make conforming changes as needed to the Permit and Fact Sheet.

RESPONSE: The effluent limitations for dissolved oxygen and nitrate are appropriate, see response to CITY OF TRACY – NPDES COMMENT #16 and CITY OF TRACY – NPDES COMMENT #18, respectively. The compliance schedules for meeting these limitations must be in a TSO, because they are existing numeric standards.

CITY OF TRACY - WDR COMMENT #1: The City reiterates its concern with the use of water quality objectives that are prospectively incorporated by reference from other agencies since those agencies do not follow the Water Code, CEQA, or the Clean Water Act when adopting those criteria.

RESPONSE: MCLs and the narrative objective are adopted water quality objectives in the Basin Plan, and the Basin Plan includes a policy for implementation of the objectives, which is also adopted. Therefore, compliance with Water Code section 13241, CEQA, and the Clean Water Act is not required prior to implementation of those objectives in the Permit.

CITY OF TRACY – WDR COMMENT #2: Finding 31 references Resolution 68-16, the state’s antidegradation policy, as requiring these facilities to meet Best Practicable Treatment and Control (“BPTC”). However, it is not clear that this Resolution applies due to its application to “high quality waters.” If the groundwaters are degraded as the Regional Water Board appears to state, then this Resolution would have no applicability. Until the background levels are determined, an antidegradation analysis as discussed in Findings 29-31 cannot be completed and BPTC may not be required.

RESPONSE: Regional Water Board staff agree that the BPTC evaluation study cannot be performed, or may be unnecessary, until the Discharger adequately characterizes background groundwater quality. Therefore, the BPTC evaluation study is only required 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. This change has been made in the agenda version of the proposed WDRs.

CITY OF TRACY – WDR COMMENT #3: Finding 41 sets forth the legal requirements of Water Code section 13267(b), but does not contain an analysis of the costs and whether those costs bear a reasonable relationship to the benefits to be received, and do not identify evidence for the need for the required reports. This analysis and evidence must be supplied prior to imposing monitoring and reporting requirements.

RESPONSE: The monitoring requirements in the proposed WDRs are the minimum necessary to determine compliance with the requirements.

CITY OF TRACY – WDR COMMENT #4: The Order section of the WDR on page 11 does not act to rescind the previous permit. Rescission language should be added to ensure that two different permits are not regulating the same facilities/discharges.

RESPONSE: There are no previous versions of waste discharge requirements for this Facility, therefore, there is nothing to rescind. The proposed NPDES permit rescinds the old NPDES permit, which includes land discharge requirements. The proposed NPDES permit will be heard at the same hearing as the proposed waste discharge requirements to regulate the land discharge units.

CITY OF TRACY – WDR COMMENT #5: Provision E.4. seems to authorize the Executive Order to revise the MRP. To the extent that the MRP is part of the WDRs, this language appears to be prohibited by CWC section 13223 and should be deleted.

RESPONSE: These requirements are waste discharge requirements, not an NPDES permit. Water Code section 13223 authorizes the Regional Water Board to delegate authority to the Executive Officer to issue and revise monitoring programs. To the contrary, some revisions to NPDES monitoring programs, in particular reduction in monitoring, must be made by the Regional Water Board after a public hearing.

CITY OF TRACY – WDR COMMENT #6: Provision E.5. requires that the “Discharger shall comply with the ‘Standard Provisions...’”. However, Tracy is already required to comply with the Standard Provisions under its NPDES permit, which is to be adopted at

the same hearing. For this reason, “Discharger” should be changed to “Leprino.” Further, many of the standard provisions are of federal origin and do not apply to WDRs. Portions applicable to the WDRs should be cut out of the Standard Provisions and applied herein. Finally, there are duplications with the Standard Provisions that should be removed if the Standard Provisions are maintained as applicable directly. For example, Provision E.6 references “proper operation and maintenance,” which is a requirement of the Standard Provisions. Additionally, Provision E.10. specifically references reporting requirements “[a]s described in the Standard Provisions.” There is no need for such duplication and maintaining this duplication places the City in jeopardy of violating two permit provisions for a single action. For these reasons, the Regional Water Board should make the requested changes to remove the language applying the Standard Provisions to the City.

RESPONSE: A late revision has been proposed for the tentative WDRs to clarify that to the extent that there are duplicate provisions they only apply once.

CALIFORNIA SPORTFISHING PROTECTION ALLIANCE (CSPA) COMMENTS

CSPA –NPDES COMMENT #1: The Order does not contain a protective or legal effluent limit for EC.

RESPONSE: The Staff Report provides a detailed analysis of the compliance and permitting issues with respect to salinity. The Regional Water Board has several options to consider.

CSPA –NPDES COMMENT #2: The proposed Permit contains a compliance schedule for aluminum based on “a new interpretation of the Basin Plan” as detailed in the Fact Sheet, page F-32 and Finding No. k. The Regional Board fails to provide any explanation or definition of the “new interpretation” of the Basin Plan.

RESPONSE: There are a number of Basin Plan narrative standards that are the basis for numeric effluent limits. The two most common narrative standards impacting NPDES Permits are the “No Toxics in Toxic Concentrations” standard, and the “Taste and Odor” standard. Time schedules can be included in permits for effluent limitations based upon “new interpretations” of narrative water quality objectives. An August 2005 Second District California Appeals Court Ruling [CBE v. SWRCB regarding the Avon Refinery (aka, Tosco Refinery)] greatly expanded the scope of “new interpretation”. Any effluent limit based upon a narrative water quality objective is a “new interpretation” that will allow a time

schedule to be placed in an NPDES Permit when that effluent limit is first applied to that discharger.

CSPA –NPDES COMMENT #3: The proposed Permit, Fact Sheet, pages F-30 and 31, removed two paragraphs discussing reasonable potential utilizing effluent variability and replaced them with a paragraph stating that all “reasonable potential” analyses with conducted in accordance with SIP Section 1.3 contrary to Federal Regulations 40 CFR § 122.44(d)(1)(ii).

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.

CSPA –NPDES COMMENT #4: Table F-4, *Statistics for Effluent Constituents with detectable Results*, has been removed from the Fact Sheet contrary to the public’s right to know.

RESPONSE: Table F-4 has been added to the proposed Order.

CENTRAL VALLEY CLEAN WATER ASSOCIATION (CVCWA) COMMENTS

CVCWA – NPDES COMMENT #1: CVCWA urges the Regional Board to not adopt final effluent limitations for EC in permits where it is impossible to comply without building reverse osmosis facilities. The costs associated with reverse osmosis and issues related to power costs and brine disposal, outweigh the limited environmental benefit to be gained by forcing POTWs down such a path, particularly where, as in Tracy's situation, the POTW is demonstrated to be a very small contributor to the local salinity. The Regional Board has already rightfully determined that the issue of salinity is a valley-wide problem that must be subject to a long-term solution.

RESPONSE: The Staff Report provides a detailed analysis of the compliance and permitting issues with respect to salinity. The Regional Water Board has several options to consider.

SOUTH DELTA WATER AGENCY (SDWA) COMMENTS

SDWA – NPDES COMMENT #1: The SDWA argues that the tentative Order presented by Staff is insufficient to protect the agricultural beneficial uses of the receiving water into which the City of Tracy discharges its treated effluent, because the proposed Order does not include any real limitation on salinity. The tentative Order only requires studies regarding what might be done to decrease the salinity of the Tracy discharge. The SDWA claims that effluent limitations based on the south Delta salinity standards are necessary to protect the agricultural beneficial uses.

RESPONSE: It is unclear if effluent limitations based on the south Delta salinity standards are necessary to protect the agricultural beneficial uses of the south Delta waterways. However, it is certain that effluent limitations based on these standards would require operation of a large-scale reverse osmosis treatment plant. The State Water Board has ruled in WQO 2005-005 (for the City of Manteca), the following, “...*the State Board takes official notice [pursuant to Title 23 of California Code of Regulations, Section 648.2] of the fact that operation of a large-scale reverse osmosis treatment plant would result in production of highly saline brine for which an acceptable method of disposal would have to be developed. Consequently, any decision that would require use of reverse osmosis to treat the City’s municipal wastewater effluent on a large scale should involve thorough consideration of the expected environmental effects.*” The State Water Board further states, “*Although the ultimate solutions to southern Delta salinity problems have not yet been determined, previous actions establish that the State Board intended for permit limitations to play a limited role with respect to achieving compliance with the EC water quality objectives in the southern Delta.*” The State Water Board also states that, “*Construction and operation of reverse osmosis facilities to treat discharges...prior to implementation of other measures to reduce the salt load in the southern Delta, would not be a reasonable approach.*”

A stakeholder group that included representatives from the SDWA, City of Tracy, Mountain House Community Services District (MHCS), California Sportfishing Protection Alliance, the Department of Water Resources, and the Regional Water Board developed appropriate scenarios for running the Delta Simulation Model II (DSM2 model) to evaluate the salinity impacts of the Tracy and MHCS wastewater discharges to the south Delta. The DSM2 modeling showed that under reasonable worst-case conditions the salinity impacts caused by the Tracy discharge are minimal. Therefore, the Regional Water Board finds in the proposed Order that imposing effluent limitations for salinity that require the construction and operation of reverse osmosis facilities to treat discharges prior to implementation of other measures to reduce the salt loading in the Tracy discharge is not a reasonable approach. This is consistent with the ruling by the State Water Board. The Tracy discharge is one of many contributors to the

salinity problems in the southern Delta. Even if the Tracy discharge were removed it would not solve the salinity problems in the area. The proposed Order provides reasonable salinity controls that put the Discharger on the path to reducing its salt loading to the Delta.

The proposed Order includes an interim annual mass-based effluent limitation for total dissolved solids (TDS) (see Section IV.A.5.f.). TDS is a measure of salinity, similar to electrical conductivity (EC), and was used for the interim limit because it can be converted to a mass loading using a conversion factor and the effluent flow rate. EC cannot be converted to a mass loading. The interim effluent limitation for TDS is based on current treatment plant performance and will ensure that the mass loading of salinity does not increase as the effluent flow rate increases. Holding the discharge's mass loading will result in lower concentrations of EC as the City expands its discharge. The modeling shows that the increases in salinity concentrations caused by the Tracy discharge in the south Delta are reduced as the effluent flow rate is increased to its permitted capacity of 16 mgd. Furthermore, the proposed Order requires the Discharger to implement measures to reduce the salinity in its discharge to Old River and requires the Discharger implement best practicable treatment or control (BPTC) of its discharge and develop and implement a pollution prevention plan for salinity in accordance with CWC section 13263.3.

SDWA – NPDES COMMENT #2: The proposed Order references the 1995 Water Quality Control Plan, but fails to mention the 2006 Bay-Delta Water Quality Control Plan adopted on 13 December 2006.

RESPONSE: This was an inadvertent omission. The proposed Order has been updated to mention the latest update of the Bay-Delta Water Quality Control Plan.

SDWA – NPDES COMMENT #3: The proposed Order represents that the permit will result in the degradation of the waters of the south Delta, but finds that such degradation is “consistent with the maximum benefit to the people of the state.” This conclusion lacks any basis in the documents and needs to be explained.

RESPONSE: The Fact Sheet contains a detailed Antidegradation analysis. See response to ELF – NPDES COMMENT #1, below.

SDWA – NPDES COMMENT #4: On page F-8 of the proposed Order it states that there is a mass loading limit of salt based on current loading. This was not found in the proposed Order. Why is the permittee allowed to maintain current mass loading rather than be required to make incremental, enforceable decreases in the loading?

RESPONSE: See response to SDWA – NPDES COMMENT #1.

SDWA – NPDES COMMENT #5: On page F-8 the proposed Order references a requirement for the permittee to evaluate the appropriate effluent limit to protect agricultural beneficial uses. This does not appear in the provisions.

RESPONSE: This was an error that has been corrected.

SDWA – NPDES COMMENT #6: On page F-15 the proposed Order continues the misconception that temporary barriers are installed to improve salinity. They are not. They improve water levels and are not operated to improve water quality.

RESPONSE: Though the commentor may not agree that the barriers are effective in improving water quality, the Department of Water Resources (DWR) South Delta Section website (http://sdelta.water.ca.gov/web_pg/tempbar.htm), states that one of the objectives of the temporary barriers program are to improve water quality:

- “● *Increase water levels, circulation patterns, and **water quality** in the southern Delta area for local agricultural diversions, and*
- “● *Improve operational flexibility of the State Water Project to help reduce fishery impacts and improve fishery conditions.” (emphasis added)*

SDWA – NPDES COMMENT #7: On page F-17 of the proposed Order it states that the South Delta Improvements Program permanent operable gates will be operating by April 2009. The estimated date for operation has been changed to one or two years later.

RESPONSE: The proposed Order has been updated to indicate the latest estimated date for operation of the permanent gates.

SDWA – NPDES COMMENT #8: Table F-3 appears to have been written by someone unfamiliar with the salinity problems in the Southern Delta. To suggest that there are site specific problems with salinity in the South Delta is a misrepresentation. The statement in the table’s footnote #2 suggests that the problem exists only in limited areas. To the contrary, it exists throughout the Southern Delta. In addition, footnote #4 to the table continues the fallacy that the standards are only to be met at three locations. The 2006 WQCP clarified that the standards apply throughout the channels.

RESPONSE: Footnote #2 has been modified by removing the last two sentences. Footnote #4 states the following, “*Compliance with the 1995 Bay-Delta Plan water quality objectives are determined at three monitoring locations in the South Delta.*” This statement is correct. We understand that the water

quality objectives for the south Delta are applicable for all locations in the south Delta. However, compliance with the water quality objectives will be determined at the three monitoring locations. The clarification in the December 2006 revision of the Bay-Delta Plan states the following in Appendix I (page 16):

*“Tables 1, 2, and 3 in the Plan provide the water quality objectives applicable to waters of the San Francisco Bay system and the legal Sacramento-San Joaquin Delta. Unless otherwise indicated, water quality objectives for a general area, such as the southern Delta, are applicable for all locations in that general area. **The compliance locations indicated in the tables will be used to determine compliance with the objectives.**”* (emphasis added)

SDWA – NPDES COMMENT #9: The proposed Order describes how the contributions of Leprino Foods to Tracy’s system sometimes average over 3000 TDS, yet the proposed Order does nothing to address this high salinity source.

RESPONSE: The proposed Order requires the City of Tracy to meet best practicable treatment or control (BPTC) and requires the development and implementation of a pollution prevention plan in accordance with CWC section 13263.3. The City must address the discharges from Leprino Foods Company in addressing these requirements.

SDWA – NPDES COMMENT #10: The proposed Order only speculates that reverse osmosis could resolve the concentration problems, with no analysis of other opportunities. Is there no opportunity to dilute the effluent before or after it is discharged? Has there been any public discourse on alternative methods of reducing the concentration and/or load?

RESPONSE: The proposed Order requires the City meet BPTC, which requires a thorough evaluation of all alternatives to control the salinity of its discharge. The Regional Water Board cannot prescribe the methods of control.

STATE WATER CONTRACTORS (SWC)

SWC – NPDES COMMENT #1: In June 2006, the SWC provided comments on the May 2006 tentative Order and we are encouraged that some of the issues we raised have been addressed in the revised tentative Order. In particular, we support salinity options 2 and 3, which will help ensure salinity objectives for the South Delta are met. We would also like to echo the comments that one of our member agencies, Metropolitan Water District of Southern California. We share MWD's concern with the apparent incorrect specification of the interim maximum daily effluent limitations for ammonia.

RESPONSE: See response to MWD-NPDES COMMENT #1, below.

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA (MWD)

MWD – NPDES COMMENT #1: The tentative Order includes interim maximum daily effluent limitations for ammonia that exceed the historical mean plus 3.3 standard deviations. In addition, there is neither an average monthly nor average weekly interim effluent limit for ammonia, and we ask that such limits be included.

RESPONSE: When developing performance-based interim effluent limitations it is necessary to consider effluent variability. In developing the interim limitation, where there are ten sampling data points or more, sampling and laboratory variability is accounted for by establishing interim limits that are based on normally distributed data where 99.9% of the data points will lie within 3.3 standard deviations of the mean (*Basic Statistical Methods for Engineers and Scientists, Kennedy and Neville, Harper and Row*). However, for ammonia in the City's discharge, the observed maximum effluent concentration (MEC) was 42 mg/L. In cases where the observed MEC exceeds the 99.9%, the MEC is used for the interim limit. The proposed Order has been updated to make this clearer.

The interim effluent limit is not intended to be protective of beneficial uses. The purpose of the interim limit is to put a ceiling on the discharge. Therefore, it is not appropriate to include average weekly or average monthly effluent limitations.

ENVIRONMENTAL LAW FOUNDATION (ELF)

ELF – NPDES COMMENT #1: ELF asserts that the 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 asserts that the order would allow an increase in mass loading of certain constituents that are not allowed by the two policies and allow degradation without making appropriate findings. The commenter also asserts that the public process is inadequate.

RESPONSE: The Tentative Order complies with the antidegradation policies. The Regional Board agrees that the federal and state antidegradation policies are triggered if the discharge could result in degradation. In this case, the Tentative Order would authorize an expansion of the facility, which could result in degradation of water quality. The federal antidegradation, where it applies, does not prohibit any change in water quality, but requires that changes be justified based on a three-part test. The first part of the test is that existing instream uses must be maintained. Tentative Order requires compliance with applicable federal technology-based standards and with effluent limits where the discharge could have the reasonable potential to cause or contribute to an exceedance of water quality standards. The Tentative Order is significantly more stringent than the previous order; it requires implementation of tertiary treatment, which is in excess of federal technology-based standards, and will result in the addition of nitrification and denitrification facilities. The Tentative Order does not allow the discharger to increase the mass loading of salinity despite expansion of the facility. Due to the increase in treatment requirements, the Tentative Order will result in maintenance of existing instream uses. The commenter has provided no evidence to the contrary. The second part of the test is that degradation of high quality waters is allowed if the state finds that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located, which is a balancing test. In this case, as documented in the Fact Sheet, the City of Tracy is growing and continued treatment of its wastewater is necessary to protect water quality and accommodate growth. The Regional Board does not have the jurisdiction to control growth in the City of Tracy, but is required to assure that the discharge is adequately treated. Tertiary and advanced wastewater treatment required by the Tentative Order is a very high level of treatment. As demonstrated in the Fact Sheet at pages F 77-79, the discharge will result in insignificant additional impacts on water quality. 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. Table F-1 lists the pollutants of concern and the corresponding effluent concentrations and mass loadings. The effluent concentrations for all constituents will remain the same or decrease and the increase in mass for some constituents will increase only very slightly and for

some there will be a decrease. In the case of oxygen demanding substances (e.g. BOD, ammonia, nitrate, and nitrite) the concentration and mass will be decreased significantly due to increased treatment. The accommodation of the development, as set forth in the federal antidegradation policy and in the Water Code (see Water Code section 13241(e)), justifies lowering of receiving water quality. In this case, however, the Tentative Order would authorize very minimal, if any lowering of receiving water quality given the increased level of treatment required by the Order. The third part of the test applies to so-called "Outstanding National Resource Waters", but the receiving water in this case is not such a water. The Fact Sheet has been revised in response to the comment to be more clear.

The Regional Water Board disagrees that the public process is inadequate. The Regional Water Board is providing an opportunity to comment on the Tentative Order. The Tentative Order properly implements the Clean Water Act and the Water Code, requires advanced level of treatment, and where authorized by law, allows the discharger reasonable time schedules to achieve compliance with new requirements. The Tentative Order requires the Discharger, pursuant to Water Code section 13263.3, to prepare a pollution prevention plan to determine feasible measures to reduce waste discharges and to implement the plan. Water Code section 13263.3(e) requires the Regional Water Board or the Discharger to provide an opportunity for public comment on the plan. A late revision is proposed to revise the proposed Order to clarify that the discharger and/or Regional Water Board will provide an opportunity for public comment and public proceeding on the pollution prevention plan.

LEPRINO FOODS COMPANY (LEPRINO)

LEPRINO – WDR COMMENT #1: The number and substance of the requested changes is minimal, and primarily addresses the universal use of the term Discharger to include both the City of Tracy and Leprino Foods Company. Leprino understands that because it operates pretreatment facilities that the Board feels pose a threat to groundwater, Leprino is named as a Discharger. However, there are sections in the WDRs that refer to activities prior to Leprino utilizing Pond 2 as well as sections that refer to other City of Tracy treatment processes or studies that Leprino has no impact on or was not part of. You will see that in our proposed changes, Leprino has attempted to clarify this in those sections where it feels it should not be universally included as a named Discharger.

RESPONSE: Leprino's requests are reasonable and the suggested modifications have been made in the agenda version of the tentative Order.