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October 26, 2012

**VIA EMAIL AND U.S. MAIL**

Jim Marshall, Senior Engineer
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA. 95670

Re: Comments on 2012 Draft NPDES Permit for the City of Tracy (R5-2012-XXXX)
*Client-Matter No. 07547.00004*

Dear Mr. Marshall:

The City of Tracy ("City") greatly appreciates that many requested changes were made by the Central Valley Regional Water Quality Control Board ("Regional Board") on the draft version of the City's National Pollutant Discharge Elimination System ("NPDES") permit ("Permit"). However, many other comments and suggested changes were not addressed or acknowledged. Therefore, we provide you with additional detailed comments and also have attached a new red-line version of the tentative NPDES Permit, which contains suggested modifications. We have provided this in hard copy as well as in an electronic format to make it more convenient for our recommended modifications to be implemented.

Below are the issues of concern to the City in order of appearance in the permit. We hope that these additional changes will be made as requested before the final version of the Permit is adopted in December:

**Permit, Table 3. Administrative Information, Permit Effective Date.**

Pursuant to the NPDES Memorandum of Agreement between the U.S. Environmental Protection Agency and the California State Water Resources Control Board (Sept. 22, 1989) at page 22, section II.F.2, the permit should be effective on the 50th day after the date of adoption. Since there are no dates on the draft permit, this comment is merely to ensure that the permit's effective date is properly set.

***Request:*** ***Set permit effective date 50 days after the permit adoption date.***

**Section II. Findings, Paragraph D (Fact Sheet, Section I.A.) – Use Term "Permittee" instead of "Discharger"**

Paragraph D of the Findings states "For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein." Federal regulations use the term "permittee." (*See e.g.*, 40 C.F.R §122.41 ("the permittee").) The term "discharger" has a much more negative connotation that is not accurately applied to the City, which operates an advanced tertiary treatment facility discharging recycled water. The Regional Board should make a policy decision, starting with this Permit, that the permit holder of advanced treatment facilities will be called "permittee" instead of "discharger" in recognition of the additional investment made in installing and operating advanced pollution control facilities.

***Request: Make a global change to modify "Discharger" to "Permittee" throughout the permit.***

**Section II. Findings, Paragraph P, pg. 10 – The Permit Contains Provisions More Stringent than Federal Law and, Therefore, the Conclusion that It Does Not Must be Removed.**

Finding II.P. improperly and inaccurately states that "Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA." This statement must be removed for several reasons. First, the inquiry is not whether the Order *collectively* is more stringent; instead, each individual requirement must be viewed separately. (*See City of Burbank v. State Water Resources Control Board, et al,* 35 Cal. 4th 613, 618 (2005)("When, … a regional board is considering whether to make the pollutant restrictions in a wastewater discharge permit *more stringent* than federal law requires, California law allows the board to take into account economic factors, including the wastewater discharger's cost of compliance.")) In that case, the California Supreme Court remanded the matter for further proceedings at the Superior Court level to determine whether the individual pollutant limitations in the permits challenged met or exceeded federal standards. (*Id.*) The Superior Court overturned many of the effluent limitations as being more stringent than required by federal law. (*See* Statement of Decision, *City of Burbank v. State Water Resources Control Board, et al*, Case No. BS060960 (June 28, 2006).)

The Permit's technology-based pollutant restrictions are more stringent than required by the CWA. The CWA requires POTWs to meet secondary treatment standards as technology-based requirements. Secondary treatment for BOD and TSS is defined as an average monthly concentration of 30 mg/l. The permit contains average monthly BOD and TSS limits of 10 mg/l (indicative of tertiary treatment), an average weekly limit of 15 mg/L and a daily maximum limit of 20 mg/L, in addition to mass limits. This Permit should state that the CWA requires POTWs to meet secondary treatment standards as a technology-based requirement and this Permit

exceeds those federal requirements, or revise BOD and TSS limits to 30 mg/l as a monthly average limit. In addition, Finding II.I. states that "the discharge must meet minimum federal technology-based requirements based on Secondary Treatment Standards at 40 CFR Part 133, but the limits required are more stringent than federal law and, thus, an analysis must be performed of the factors set forth in Water Code section 13241. *See* Draft Permit at Finding II.I and at F-63.[1]

This paragraph should recognize that the individual effluent limitations being required are in many cases more stringent than required by federal law and a Water Code section 13263/13241 analysis should be conducted in *each* of those cases. For example, federal law does not require numeric limits (40 C.F.R. §122.44(d) and (k)(3); *Communities for a Better Environment v. State Water Resources Control Board* (2003) 109 Cal. App. 4th 1089, 1104-5; *In the Matter of the Petition of Citizens for a Better Environment, Save San Francisco Bay Association, and Santa Clara Valley Audubon Society*, Order No. WQ 91-03, May 16, 1991), mass limits where objectives and other limits in the permit are concentration-based (40 C.F.R. §122.45(f)(ii)), daily maximum or other short term limits where longer term limits (monthly and weekly averages) have not been demonstrated with evidence to be impracticable (40 C.F.R. §122.45(d)(2)), or tertiary treatment requirements (40 C.F.R. Part 133). Each of these requirements is more stringent than required by federal law. Since this paragraph and other similar findings in the Fact Sheet are legally and factually flawed, they should be removed or corrected prior to adoption of the City's final permit.

***Request:*** ***Remove the last sentence of Finding II.P. and remove other similar, unsupported findings from the Fact Sheet.***

**Finding II.Q., and Fact Sheet Pg. F-11, Section III.C.5. – <u>Antidegradation Policy</u>.**

This finding is incorrect for several reasons. First, SWRCB Resolution No. 68-16 cannot "incorporate the federal antidegradation policy" since that federal policy was adopted decades after the SWRCB resolution of 1968. In order to be accurate, the statement should read "…Resolution 68-16 ~~incorporates~~ <u>has been deemed to be consistent with</u> the requirements of the federal antidegradation policy," and/or alternatively, "…Resolution 68-16 ~~incorporates~~ <u>satisfies the federal requirement for adoption of an anti-degradation policy by the State of California</u>." The current language is inaccurate and should be changed before the final permit is adopted.

[1] The Permit at page F-63 states "The Central Valley Water Board has previously considered the factors in Water Code section 13241 in establishing these requirements." This is inadequate and must be included in this permit to support these limits. Furthermore, the Fact Sheet lacks evidence to support the findings that a 13241 analysis was previously considered. Such findings, without being supported by evidence in the record, are legally insufficient. C.C.P. §1094.5(c); 40 C.F.R. §124.8(b)(4); *Topanga Association for a Scenic Community v. County of Los Angeles*, 11 Cal.3d 506, 515 (1974); *California Edison v. SWRCB*, 116 Cal. App. 751, 761 (4th Dt. 1981); *see also In the Matter of the Petition of City and County of San Francisco, et al.*, State Board Order No. WQ-95-4 at 10 (Sept. 21, 1995).

***Request: Amend the paragraph related to Antidegradation Policy to accurately reflect the relationship between this state policy and federal law.***

**Section III. Discharge Prohibition A. (Fact Sheet, Section IV.A.1) – Apply only to "treated wastewater"**

This provision duplicates Discharge Prohibition III.B. and should be clarified to apply only to "treated" wastewater, or should include the language "Except as set forth in Provision III.B." Untreated wastewater and waste would be regulated under Discharge Prohibition III.B. Inadequate justification exists for this Discharge Prohibition. In addition, the Fact Sheet description of this prohibition is not accurate and needs to be modified to correspond to the language of the prohibition.

***Request: Modify Discharge Prohibition III.A. and the Fact Sheet as requested.***

**Section III. Discharge Prohibition D. (Fact Sheet, Section IV.A.4.) – Remove Provisions about "Pollutant-Free Wastewater."**

The City has been piloting and is currently planning to implement a full-scale thermal desalination process whereby its effluent will be desalinated and then blended back into the non-desalinated effluent in order to meet the applicable water quality standards for salinity. This provision III.D., if it remains, may have the unintended consequence of making the City's desalination project unlawful under the Permit, thereby thwarting this important salinity control project. In addition, this provision violates Water Code section 13360(a) by prescribing the manner of compliance. For these reasons, and since there is no authority provided for this provision,[2] the City requests that this provision be deleted from the Permit.

***Request: Remove Discharge Prohibition III.D and Fact Sheet Section IV.A.4.***

**Section IV. Effluent Limitations and Discharge Specifications, Table 6 - Inclusion of Mass Limits Not Required by Federal Law.**

The Permit includes mass limits for constituents in Table 6 that are not adequately justified and are not required to be included since the permit also contains concentration-based limits and a flow cap at Provision IV.A.1.k. (thereby including inherent mass limits since mass is derived from concentration and flow).

[2] The Permit Fact Sheet at page F-17 states that "this prohibition is based on CFR Part 122.41 et seq. that requires the proper design and operation of treatment facilities." However, this regulation also requires that "the permittee must comply with all conditions of this permit" (40 C.F.R. §122.41(a)) and that "the permittee shall at all times properly operate and maintain all facilities and systems of treatment and control… which are installed or used by the permittee to achieve compliance with the conditions of this permit" (40 C.F.R. §122.41(e)). Thus, section 122.41 does not prohibit the inclusion of pollutant-free wastewater, particularly if that water is produced by the "facilities and systems of treatment and control," such as a desalination facility, at the wastewater treatment plant.

Federal law does not require mass limits where other included limits and the applicable water quality objectives are concentration-based. (*See* 40 C.F.R. §122.45(f)(ii)("all pollutants limited in permits shall have limitations, standards, or prohibitions expressed in terms of mass, *except*: (ii) When applicable standards and limitations are expressed in terms of other units of measurement.")(emphasis added).) The Regional Board is proposing mass limits not required by federal law.[3] As such, the mass limits should be removed or, as held by the California Supreme Court, the Regional Water Board must perform a California Water Code section 13263/13241 analysis prior to imposing these limits. (*See City of Burbank v. State Water Resources Control Board,* 35 Cal. 4th 613, 629 (2005).)

Mass limits are also specifically *not required* for Technology-Based Limits, such as BOD and TSS. The federal regulations only require concentration-based effluent limits and 85% removal requirements. (*See* 40 C.F.R. §133.102(a)(1)-(3) and (b)(1)-(3); *see e.g.,* Order No. R2-2012-0051, Table 6 (monthly and weekly conventional pollutant limits only with no mass limits required).) Mass limits are only authorized where *substituting* the percent removal requirements with a mass loading limit for less concentrated influent wastewater for separate sewers. (40 C.F.R. §133.103(d).) Since the Regional Board is *not* substituting mass limits for percent removal requirements that are contained in Provision IV.A.1.b., the mass limits are not justified under federal law. If being imposed under state law, these requirements more stringent than federal law have not been adequately justified and all considerations under Water Code section 13263 and 13241 have not been satisfied.

Finally, effluent limits for mass are unnecessary since the permit requires the City to monitor and report the mass loading (lbs/day) in the SMRs. (Permit at E-17, MRP Section X.B.7.a.) There is no need to place the City in duplicative enforcement jeopardy when the Regional Board will have the information it needs on mass loading and enforceable concentration limits, which are the standards set to protect the applicable beneficial uses.

***Request: Remove all mass limits from Table 6 because not required and not adequately justified. (See accord R2 permits, such as R2-2012-0051 at 9-10; R2-2008-0014 at 12 (no mass limits).)***

**Section IV. Effluent Limitations and Discharge Specifications, Table 6 - <u>Inclusion of Daily or Instantaneous Limits Not Required by Federal Law</u>.**

Federal law only authorizes <u>monthly and weekly average effluent limitations</u> for publicly owned treatment works ("POTWs") without a demonstration that such effluent limitations are

[3] The fact that the federal regulations do not prohibit a state from going beyond federal law to include both mass and concentration limits (40 C.F.R. §122.45(f)(2)) does not make this a federal *requirement.* The Regional Board's choice to be more stringent than required by federal law requires additional analysis and justification. (*Burbank*, 35 Cal. 4th at 629.)

"impracticable." (*See* 40 C.F.R. §122.45(d)(2)("For continuous discharges all permit effluent limitations, standards and prohibitions, including those necessary to achieve water quality standards, shall unless impracticable be stated as: (2) Average weekly and average monthly limitations for POTWs.")) The Permit includes not only average weekly and average monthly limits, but also includes limits based on maximum daily, 7-day median, 4-day average, 1-hour average, or instantaneous values. (*See* Provisions IV.A.1.a, e, i and *l.*) These proposed limits are more stringent than required by federal law and have not been adequately justified.[4] California courts have already held that such limits are not allowed unless demonstrated to be impracticable and these decisions are binding on the Water Boards since not appealed. (*See City of Burbank v. State Water Resources Control Board,* 35 Cal. 4th 613, 623, n.6 (2005)(The Supreme Court held: "Unchallenged on appeal and thus not affected by our decision are the trial court's rulings that... (2) the administrative record failed to support the specific effluent limitations; (3) the permits improperly imposed daily maximum limits rather than weekly or monthly averages;...)(emphasis added).)

Because no additional analysis has been done to demonstrate impracticability, the Regional Board must remove the daily maximum, instantaneous, 1-hour, 4-day and 7-day median effluent limits from City's tentative permit at Table 6 and Provision IV.A.1. that are inconsistent with and more stringent than federal law because not stated as weekly and monthly averages.

The justification for use of daily maximum limits is not clear for the constituents in Table 6 since many of these are not water quality-based limits.[5] The only purported justification is located in the technology-based limitations section of the Fact Sheet. However, limits other than weekly and monthly averages are contrary to the holding in State Board Order No. 2002-0012 at pg. 20 ("Weekly averages are effective for monitoring the performance of biological wastewater treatment plants.").

In addition, case law applies this rule to all constituents, even those that have the ability to be acutely toxic. In the case of *City of Ames, Iowa*, EPA Environmental Appeals Board, NPDES Appeal No. 94-6 (Apr. 4, 1996), EPA contended that a maximum daily limit for ammonia may be imposed because it is impracticable to meet water quality standards by using an average weekly limit. The hearing officer determined that EPA's contention was not well founded, as it ***is*** practicable to meet water quality standards using an average weekly limit for ammonia. The decision stated that this issue of fact was relevant to the pertinent decision in that the use of the

[4] The Regional Board cannot justify its actions based on federal guidance and recommendations (*see* Permit at F-74) because EPA guidance cannot overrule promulgated federal regulatory requirements contained in 40 C.F.R. §122.45(d)(2).

[5] The Fact Sheet at pg. F-17 to F-18 states that these are technology-based limits, but they are not the technology-based limits prescribed by federal law for POTWs, which is secondary treatment. 40 C.F.R. Part 133. Further, mass limits are not required under the federal technology standards. *Id.* Thus, these are state-only requirements, more stringent than required by federal law, and must be justified by a Water Code section 13263/13241 analysis, and could be subject to claims for state mandates.

maximum daily limit in the NPDES permit may have the effect of unreasonably increasing the risk of non-compliance with a resulting substantial increase in operating costs to avoid non-compliance. The hearing officer determined, "as the regulation makes clear, the Regional Administrator does not have unlimited discretion to include daily limits; maximum daily limits may be included in a permit for a POTW only if weekly average limits are impracticable." On remand, the Regional Administrator was directed to reconsider the factual issue of whether it would be practicable to state the effluent limitations as weekly and monthly averages. If it would be practicable, then such averages were to be included in the permit and the daily maximum and instantaneous limits should be removed and replaced with weekly averages. This decision is binding upon EPA Region IX, and thus its delegated state agencies.

Further, the findings in the Fact Sheet do not prove that weekly and monthly average limits prescribed by federal law are impracticable, particularly when those limits are also simultaneously prescribed. (40 C.F.R. §122.45(d)(2); Draft Permit at Table 6.). Therefore, these daily limits are not authorized by federal law, by state case law binding on the Water Boards, or by State Water Board precedent. Since these are only arguably required under the State Implementation Plan for aquatic life criteria, these limits, if retained, must be specified as "state-only" requirements so these limits will not be federally enforceable. Moreover, the Permit already requires proper operation and maintenance such that these additional requirements are duplicative and unnecessary. (*See* Attachment D, Section I. at pg. D-1.)

For these reasons, any alleged authorization of daily or instantaneous maximum limitations for POTWs without the requisite impracticability analysis must fail as inconsistent with federal requirements. See Water Code §13372 (requiring state program to be consistent with federal requirements under the CWA). As such, the Regional Board must remove all daily and instantaneous maximum final effluent limitations unless and until the Regional Board conducts an individualized analysis of each constituent and provides evidence in the record of impracticability as to each limit. (*See supra City of Woodland v. RWQCB and SWRCB, Order Granting Writ of Administrative Mandamus* at pg. 20.)

Furthermore, some of the daily or instantaneous maximum limits included in the Permit (e.g., bis(2-ethylhexyl)phthalate, chlorodibromomethane, dichlorobromomethane, and nitrate+nitrite) may be related to objectives set for long-term human health protection (*e.g.*, designed to provide protection for 70 years of exposure, not for acute effects). The limits for these constituents would be adequately regulated by monthly averages alone since there is no evidence that these human health-based limits are impracticable to apply as monthly or even longer (*i.e.*, annual) averages.

The Regional Board appears to believe that the averaging periods for the objectives and the averaging periods for the effluent limits need to be identical, such as with total chlorine residual, but this is not the case. The effluent limitations must merely protect the beneficial uses and not cause the receiving water to exceed the applicable water quality objectives. Longer term average effluent limits may be applied yet still meet a shorter term average objectives in the receiving water.

***Request:*** ***Remove improperly justified short term average limits that are not monthly and weekly averages as required by federal law.***

**Section IV. Provision IV.A.1.a, Table 6, and Fact Sheet pgs. F-49 to F-52 – pH, Pathogens, Temperature, Ammonia and Nitrate + Nitrite, and Acute Toxicity Limits.**

There is no reasonable potential for pH, pathogens, temperature, ammonia, nitrate + nitrite, or toxicity and, therefore, no effluent limits for these constituents are required. (40 C.F.R. §122.44(d)(1).) The findings of the Permit show that, for ammonia, "the discharge is not causing exceedances of the ammonia criteria in the receiving water" and all data since June 2007 have been non-detect. (*See* Permit at F-52 (emphasis added).) Similarly, for nitrate + nitrite, the Permit finds: "Based on 174 samples collected from August 2008 thru December 2011, the MEC for nitrite was 0.5 mg/L and the MEC for nitrate was 8.5 mg/L, therefore, based solely on the effluent data there is no reasonable potential for the discharge to cause or contribute to an in-stream excursion above the MCLs." (*Id.* at F-61(emphasis added).) For acute toxicity, the permit concludes "The discharge has been consistently in compliance with the acute effluent limitations." (*Id.* at F-71.)

Notwithstanding these facts, the Permit attempts to justify the inclusion of pH, pathogens, temperature, ammonia, nitrate + nitrite, and acute toxicity limits based on the fact that "untreated domestic wastewater contains ammonia." (*Id.* at F-50, F-61, F-64, F-68, and F-71.) This statement ignores that the City's Permit is not regulating the discharge of "untreated domestic wastewater," it is regulating tertiary treated recycled water with nitrification and denitrification that has been in place since August of 2008. (*Id.* at 5, Finding II.E.) This new information (e.g., that there is no reasonable potential) and the new treatment since the last permit justifies removal of the effluent limitations for pH, temperature, ammonia, nitrate + nitrite, and acute toxicity. Under CWA section 402(o)(2)(A), backsliding would be allowed since "material and substantial alterations or additions to the permitted facility" occurred after permit issuance which justify the application of a less stringent effluent limitation. Also, under CWA section 402(o)(2)(B)(i), backsliding would be allowed since "information is available which was not available at the time of permit issuance …which would have justified the application of a less stringent effluent limitation at the time of permit issuance." (*See also* SWRCB Order No. WQO 2003-0012 at pgs. 15-17.)

In addition, notwithstanding the lack of reasonable potential, the Permit proposes ammonia limits expressed as both monthly average and daily maximum limits, and as mass limits. The Regional Water Board imposed daily limits for ammonia without consideration as to whether the weekly average limits were impracticable. *Id.* at 10-11. As stated above, the fact that weekly ammonia limits are not impracticable has already been decided by EPA and the Regional Board should be bound by that determination. *City of Ames, Iowa*, EPA Environmental Appeals Board, NPDES Appeal No. 94-6 (Apr. 4, 1996). Furthermore, as explained above, mass limits are also not

required and should be removed. (*See accord* Order No. R5-2011-0012 at para. 8, removing mass limits for nitrate+nitrite.)

***Request:*** ***Remove pH, temperature, ammonia, nitrate + nitrite, and acute toxicity limits as improperly imposed where no reasonable potential exists.***

**Section IV. Provision IV.A.1., Final Effluent Limitations, Footnote or Compliance Determination Language Needed for pH Limits**

If the Regional Board maintains the pH limits notwithstanding the lack of demonstrated reasonable potential, then the Regional Board should include the following footnote to Table 6 or compliance determination language in Section VII as is utilized in other regions, including the Bay Area.

> [FN to Table 6 pH Limits] **pH**. If the Discharger monitors pH continuously, pursuant to 40 CFR 401.17, 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.

*See e.g., Order No.* R2-2012-0051 at 9, fn 2.

***Request:*** ***Please include the requested footnote to Table 6 or compliance determination language in SectionVII. for pH.***

**Section IV. Provision IV.A.1., Table 6, and Fact Sheet pg. F-53 – Bis(2-ethylhexyl)phthalate Limits.**

The Regional Board is proposing to make the bis-2 effluent limits more stringent than required[6]

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[6] No need exists to impose a daily value on this constituent since it is a human health objective set to protect for 70 years of exposure eating 6.5 grams of fish and 2 liters of water from downstream waters. A monthly average limit alone is appropriate and other regional boards in the State routinely require only monthly average limits for human health criteria, such as bis(2-ethylhexyl)phthalate.

In addition, the Regional Board should consider an alternative cancer risk factor for this constituent since the likelihood of people having the presumed levels of exposure are low. EPA has authorized cancer risk factors from $10^{-4}$ to $10^{-7}$, but selected $10^{-6}$ for California in the CTR because of its mistaken presumption that the State had selected that level. This was a mistake because EPA was relying upon the Inland Surface Waters Plan of 1991 that was judicially overturned in 1994 for failure to comply with the law. The fact is that California, for drinking water protection has adopted Proposition 65 and drinking water MCLs that are set based on $10^{-5}$ and $10^{-4}$ risk levels. *See* 22 Cal. Code Regs. §§ 12703(b) and 12711 (Prop. 65 regulatory cancer risk level which represents "no significant risk" for sources of drinking water is $10^{-5}$). Were the Regional Board to select a $10^{-5}$ risk level, or a $10^{-4}$ risk level consistent with that used for drinking water human health protection, the City might not have reasonable potential for this constituent, and would not need an effluent limitation. Adoption of a less rigorous $10^{-5}$ risk level cancer risk factor would not require a new federal rulemaking as these levels were contemplated in the NTR and CTR criteria. *See* 57 Fed. Reg. 60848 (Dec. 22, 1992). Thus, a different cancer risk factor (*e.g.*, $10^{-4}$ or $10^{-5}$ used for the derivation of some drinking water standards (*see* Fact Sheet at F-55 citing one-in-a million risk level as de minimis risk level), instead of the CTR's use of $10^{-6}$) is appropriate. [EPA has recognized that "States were not limited to a 1 in 1 million risk level ($10^{-6}$). EPA generally regulates pollutants treated as carcinogens in the range of $10^{-6}$ to $10^{-4}$ to protect average exposed individuals and more highly exposed populations." 57 Fed. Reg. 60855 (Dec. 22, 1992).]

EPA's human health criteria are based on at least three related conservative considerations: cancer potency or systematic toxicity, length of exposure, and risk characterization. EPA Water Quality Standards Handbook at 3-2 (August 1994). EPA's methodology provides flexibility that should be used by RWQCBs to craft SSOs or effluent limitations while still protecting human health. Because MUN is not an existing use for the subject water bodies, each water body creates little chance of posing a lifetime cancer risk to someone who might incidentally ingest a small amount of the water. [Generally, the incidental ingestion reference is 50 milliliters (mL), which can be found at: USEPA, 1989, Risk Assessment Guidance for Superfund: Volume I Human Health Evaluation Manual Part A, EPA/540/1-89/002. This amount is substantially less than the standard ingestion amount of 2 liters (L)/day.]

The State is not limited to choosing only the risk level published in the 304(a) criteria guidance documents, nor is the State limited to the base case exposure assumption. *See* CTR, 65 Fed. Reg 31699 ("EPA notes that States and Tribes . . . have the discretion to adopt water quality criteria that result in a higher risk level"). Thus, the State, when adopting water quality standards or deriving effluent limitations, is free to choose a risk level appropriate for the local conditions, as long as it explains the rationale for doing so. [*Id.,* WQS Handbook at 3-15. In the Preamble to the NTR, EPA stated that a federal rulemaking would not be needed for the State to adopt a $10^{-5}$ risk level "because the Agency has considered in this rule that criteria based on either $10^{-5}$ or $10^{-6}$ risk levels meet the requirements of the Act." 57 Fed. Reg. 60860. If the State wished to use a risk level below $10^{-5}$, it merely had to submit support in the record for the adoption of this alternate level. *Id.*at 60855.]

Second, when deriving effluent limitations to implement human health criteria, the water intake factor ("WI") should be altered for CTR/NTR and drinking water criteria. *See* WQS Handbook at 3-9. Where MUN is not an existing use or where municipal water is combined with other sources of water, the factor WI should be decreased from the presumed 2 liters/day to some lesser number between 0 and 2 liters. Furthermore, since these criteria are set to protect water drinkers over a lifetime of exposure (*i.e.,* 70 years), a great deal of flexibility is built in to adjust for lesser or incidental exposures.

Third, when deriving effluent limitations to implement human health criteria, the fish consumption factors should be deleted, or altered to more appropriately reflect actual fish consumption rates, if any, for the water bodies at issue. Because access is often limited and/or the species found in the waters are not those sought by sport fishers, fish consumption is necessarily limited as well.

Fourth, exposure assumptions can be altered. Where exposure is only anticipated to be rare or only occasional, or where 70 years of exposure is unlikely, the calculations should be adjusted to include a shorter exposure duration.

by collapsing the applicable mixing zone. The Fact Sheet has recognized a harmonic mean mixing zone dilution of 20:1 at the build out flows of 16 mgd, and that this dilution is "appropriate and reasonable." (Fact Sheet, Section IV.C.1.c.vi..) Thus, at current flows and until the City reaches build out flows, this dilution ratio is very conservative. Nevertheless, the Regional Board is proposing to arbitrarily reduce that dilution value to 7.5:1 when calculating the bis-2 limit.[7] This essentially becomes a performance-based limit, which is not required by federal law or the State Implementation Policy ("SIP"). In fact, nothing in the SIP, which has extensive requirements regarding the approval of mixing zones and dilution requirements, states or implies that plant performance should be a consideration in the establishment of an approvable dilution credit or in the sizing of an acceptable mixing zone. Furthermore, the SIP does not otherwise require the severe proposed reduction of the dilution credit that might place the City in compliance jeopardy, but for the reduction. This reduction also cannot be based on antidegradation or Best Practicable Treatment and Control ("BPTC") because there has been no antidegradation or BPTC analysis. The net effect is that the City's compliance cushion, which should be available under the SIP, has been proposed to be significantly reduced. (*See* Order No. R5-2011-0012 (amended Order No. R5-2007-0036 by updating the Fact Sheet discussion regarding the 20:1 human carcinogen mixing zone).)

***Requests: Revise the limits for bis(2-ethylhexyl)phthalate to include only a monthly average limit of 36 µg/L[8] to include the entire harmonic dilution mixing zone of 20:1. Revise the Fact Sheet to remove references to a more limited dilution ratio.***

**Section IV. Provision IV.A.1., Table 6, Copper and Lead Limits**

**Copper.** Effluent limits for copper in the tentative Permit were not properly derived. The effluent limits for copper should be 13 µg/L (AMEL) and 27 µg/L (MDEL). As described on pgs. F-36 and F-37 of the Fact Sheet, use of a downstream ambient hardness of 200 mg/l to calculate the ECA using the Concave Down Metals method will result in WQBELs that are protective under all flow conditions, from the effluent dominated condition to a high flow condition. This would result in effluent limits of 13 µg/L (AMEL) and 23 µg/L (AWEL), which are reasonably protective of aquatic life beneficial uses. Instead, the Regional Board imposed an

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Fourth, exposure assumptions can be altered. Where exposure is only anticipated to be rare or only occasional, or where 70 years of exposure is unlikely, the calculations should be adjusted to include a shorter exposure duration. For example, this duration data could be extrapolated from migration data that would show the average length of time an individual resides in a particular area. The Regional Board should take these considerations into account when imposing CTR human health-based criteria as effluent limitations.

[7] The Permit is inconsistent regarding the actual dilution value being proposed. Page F-30 and in Attachment H, H-1, of the Permit references a 7:5:1 value. On pages F-32, F-33, F-53 and possibly elsewhere, the Permit references a 1.5:1 dilution value. This should be resolved by making them all 20:1 dilution based on the harmonic mean value.

[8] This value was derived using the appropriate coefficient of variation of 0.6, instead of 2.8 used by the Regional Board.

MDEL equal to the Basin Plan objective of 10.4 µg/L, with no AMEL. The Basin Plan objective fails to consider hardness effects on copper toxicity and is overly conservative for application to the City of Tracy NPDES permit.

The Regional Board is arbitrarily mixing and matching reasonable potential analyses, criteria, and effluent limits for copper. No reasonable potential is found for copper using the Basin Plan objective, so limits should not be based on that objective. Limits should be based on the CTR, which has been determined to be protective of aquatic life uses and which supersedes the Basin Plan objective. (*See* 40 C.F.R. §131.38(b)(1) fn b – apply since site specific criteria not cited in footnote.) The fact that the WQBELs would exceed the BP objective is not a justification for not utilizing the CTR-based limit when the Fact Sheet recognizes that the upstream waters are being diluted by the effluent. Furthermore, it would not be impracticable to calculate monthly and weekly average limits from the calculated CTR criteria.

***Request: Assign appropriately calculated monthly and weekly average CTR-based effluent limits for copper.***

**Lead.** Reasonable potential does not exist for lead. The maximum effluent concentration for lead was an *estimated* value (J-flagged) of 0.21 µg/L, and the maximum ambient concentration was 1.5 µg/L. These concentrations do not exceed the 5.9 µg/L chronic criterion, the lowest CTR criteria calculated following the Concave Up method described on pg. F-40 of the Fact Sheet.

The SIP states on pg. 6, Step 6 that "If B [maximum ambient concentration] is greater than the C [the lowest applicable criterion] and the pollutant was *not detected in any of the effluent samples*, effluent monitoring is required…" (emphasis added) This means that if the pollutant was not detected in any of the effluent samples, then no effluent limits are required. The minimum reporting limit for lead was 0.5 µg/L, and no samples were reported above that level. Eight effluent samples were reported as J-flagged, or estimated at a concentration above the method detection limit and below the reporting limit, with a maximum estimated value of 0.21 µg/L. These estimated values should not be considered as actual detected concentrations. Therefore, reasonable potential cannot be triggered by the ambient data alone. Effluent limits for lead should not be assigned where reasonable potential has not been established.

Table 6 of the Permit has proposed effluent limits of 4.8 and 9.7 for lead. However, Attachment H set the lowest limits, as AMEL and MDEL respectively, for lead as 6.3 and 9.9. Neither of these sets of effluent limitations is correct and should be removed from the permit.

***Request: Remove lead effluent limits from the Permit.***

**Section IV. Provision IV.A.1., Table 6, THM Limits**

The effluent limits in the permit Table 6 are not equal to the values calculated within the Fact Sheet on pages F-54 and F-56 and are not consistent with the values derived using SIP methodology specified in the SIP. The proper effluent limits are as follows:

CDBM: AMEL = 8 ug/l; AWEL = 21 ug/l
DCBM: AMEL = 10 ug/l; AWEL = 27 ug/l

Further, the proposed monthly limit for chlorodibromomethane should be 8 instead of 8.0 to be consistent with the number of significant figures for the other effluent limits.

***Request:*** ***Modify the THM limits to be consistent with the SIP methodology. .***

**Section IV. Provision IV.A.1.e., Total Residual Chlorine**

The previous permit included the following limits for total residual chlorine:

> **Total Residual Chlorine.** Effluent total residual chlorine shall not exceed:
> i. 0.01 mg/L, as a 4-day average;
> ii. 0.02 mg/L, as a 1-hour average

(*See* Order No. R5-2007-0036-01 at 9, Provision IV.A.1.f.) The new Permit makes these limits more stringent by adding significant figures to require:

> **e. Total Residual Chlorine.** Effluent total residual chlorine shall not exceed:
>
> **i.** 0.011 mg/L, as a 4-day average; and
> **ii.** 0.019 mg/L, as a 1-hour average.

There is no explanation for this change in the limits and there is no reasonable potential analysis demonstrating that such limits are required for this discharge.

***Request:*** ***Remove the Total Residual Chlorine Limits if no RP, or if RP, maintain previous limits as monthly and weekly average limits.***

**Section IV. Provision IV.A.1.f., Total Dissolved Solids Mass Limit**

The City's previous permit had the following requirement for total dissolved solids (TDS):

> **Effective immediately**, the total annual mass discharge of total dissolved solids shall not exceed 13,688 tons/year. This interim performance-based limitation

> shall be in effect until the Regional Water Board establishes final effluent limitations for salinity.

(*See* Order No. R5-2007-0036-01 at 13, Provision IV.A.5.e.) The proposed Permit maintains this performance-based limit, but now applies it as a *final* effluent limitation without adequate justification.

***Request:*** ***Maintain the TDS mass limit from the previous permit as an <u>interim</u> limit.***

**Section IV. Provision IV.A.1.j. and *l.*, <u>Diazinon, Chlorpyrifos, and Methylmercury Limits</u>**

For diazinon, chlorpyrifos, and methylmercury, effluent limits are included because of the existence of a TMDL for those parameters even though either no data exists to do an RP analysis, or there is no reasonable potential based on the available data.

Under 40 C.F.R. §122.44(d)(1)(i), effluent limits are only required for pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the permitting authority determines are or may be discharged at a level which will cause, have the reasonable potential (*RP*) to cause, or contribute to an excursion above a water quality standard. Section 122.44(d)(1)(ii) - (vi) shows how to determine RP for different situations. Then, in section 122.44(d)(1)(vii), it states "<u>when developing water quality-based effluent limits under this paragraph</u> [*meaning where RP is demonstrated and a limit is required*], the permitting authority shall ensure that:.... (B) effluent limits...are <u>consistent with the assumption and requirements of any available wasteload allocations</u> (WLAs) for the discharge prepared by the State and approved by EPA pursuant to 40 C.F.R. §130.7." Thus, the <u>need to be consistent with the WLAs does not arise *until and unless* there is demonstrated RP for the impairing pollutant</u>. Further, even where WLAs must be included, where RP exists, it does not need to match the WLA exactly, it just needs to be *consistent with* the assumptions and requirements, so it could be modified. The analysis is similar under SIP Section 1.4, that when the RWQCB determines that WQBELs are needed, then effluent limits should be consistent with the TMDL requirements (Section 1.4.A.)

Thus, for chlorpyrifos and diazinon and for methylmercury,[9] if there is no RP, then no effluent limit is required. The WLAs can be included a RWLs (as was done in the Port of Stockton permit), or as performance goals. Then, under the SIP, where the final compliance date for the WLAs exceeds the term of the permit, the final effluent limit can be included in the findings. (SIP Section 2.2.1)

[9] There is no adopted water quality criterion for methylmercury and to the extent that the 0.06 ng/L value is being used as a criterion, this criterion was not adopted in accordance with the requirements of Water Code section 13241.

Section 1.3 of the SIP states, "The RWQCB shall conduct the analysis in this section for each priority pollutant with an applicable criterion or objective, excluding priority pollutants for which a Total Maximum Daily Load (TMDL) has been developed, to determine if a water quality-based effluent limitation is required in the discharger's permit." (emphasis added) Since chlorpyrifos, diazinon, and methylmercury are not "priority pollutants" for which a TMDL has been developed, these pollutants do not qualify for the RP exclusion. (*See* 40 C.F.R. §131.38(b)(1) listing the 126 "priority toxic pollutants in the State of California.)

Under the SIP language, an RP analysis would first be required, and then 40 C.F.R. 122.44(d)(1)(vii)(B) would only apply once reasonable potential is determined and in subsequently "developing water quality-based effluent limits under this paragraph {Section 122.44(d)." Without an RP analysis, section 122.44(d) cannot be used to justify inserting the WLAs.[10] Thus, because there is no RP for diazinon, chlorpyrifos, and methylmercury, these WLAs could be included as Receiving Water Limitations instead of effluent limits.

***Request: Remove the effluent limits for diazinon, chlorpyrifos, and methylmercury until reasonable potential has been demonstrated for the City's discharge.***

**Section IV. Provision IV.A.2.a., Interim Mercury Limit**

The previous permit had the following interim mercury limit:

> **Effective immediately**, the total monthly mass discharge of total mercury shall not exceed 0.042 pounds/month. This interim performance-based limitation shall be in effect until the Regional Water Board establishes final effluent limitations after adoption of the final mercury Delta TMDL.

The currently proposed Permit has the following language:

> a. **Mercury, Total. Effective immediately**, and until 31 December 2030, the total annual mass discharge of total mercury shall not exceed **41 grams**. These interim effluent limitations shall apply in lieu of the final effluent limits for methylmercury (Section IV.A.1.i).

The currently proposed 41 grams/year total mercury limit is significantly more stringent than the 0.042 pounds/month limit although both are represented to be "performance-based." Basically,

[10] TMDLs are not self-implementing. *See Pronsolino v. Nastri* 291 F.3d 1123, 1140 (9th Cir. 2002) (*cert. denied* 539 U.S. 926 (June 16, 2003) (States must implement TMDLs only to the extent that they seek to avoid losing federal grant money; there is no pertinent statutory provision otherwise requiring implementation of § 303 plans [TMDLs] or providing for their enforcement.) Any limits suggested or wasteload allocations included in a final TMDL cannot be presumed to be part of a permit until reasonable potential for that pollutant has been established.

0.042 pounds/month is equal to 19 grams/month, which is equal to 228 grams/year. A 41 grams/year limit represents an **82% reduction** from the earlier total mercury limit of 0.042 pounds/month. The Permit fails to provide an adequate reason/justification for the change.

In addition, the citations in the new limit to methylmercury final limits should be removed since there is no reasonable potential for methylmercury as explained above. Finally, the citations in this section to Section IV.A.1.i. are incorrect, and should be IV.A.1.j, *if* that methylmercury limit is maintained.

***Request:*** ***Maintain the current Interim Mercury Limit and make other requested changes.***

**Section V. Receiving Water Limitations, Para. A, Surface Water Limitations – Additional Clarification of Language Necessary.**

The City proposed additional language used in other permits in this region to clarify the scope and purpose of Receiving Water Limitations; however, that proposed language was ignored. The City encourages the Regional Water Board to insert the following proposed language in Provision V.A after the first sentence:

> "However, a receiving water condition not in conformance with the limitation is not necessarily a violation of this Order. The Central Valley Water Board may require an investigation to determine cause and culpability prior to asserting a violation has occurred."

This language is consistent with Regional Board Order No. R5-2011-0005, and should be incorporated into all permits that contain Receiving Water Limitations.

***Request:*** ***Make requested language changes to Section V.A.***

**Section VII., Paras. D., E. and G., MRP, Section X.B.4 – Remove or Modify Problematic Compliance Determination Language.**

Section VII. of the draft Permit prejudges what constitutes a violation of the Permit, without providing an enforcement hearing, due process, or the opportunity to present contrary evidence or defenses, and unlawfully presumes that the permittee "will be considered out of compliance" or "is in violation," even though there may be an explanation or excuse for such non-compliance (*see e.g.,* Standard Provisions D.1.G. and H.) All such references prejudging "violations" must be removed and can be replaced with a more generic "may be deemed out of compliance" or "may be grounds for an enforcement action." The compliance determination language belongs in the Enforcement Policy, not in an individual NPDES permit. Reliance on the permit template issued by the State Water Board is not acceptable as this is not a regulation, merely a guidance document able to be readily changed.

Another alternative is to reverse the presumption to what is deemed in compliance as follows:

Permit, VII. D. .... If the 7-day median of total coliform organisms does not exceeds a most probable number (MPN) of 23 per 100 milliters, the Permittee ~~Discharger~~ will be considered ~~out of~~ to be in compliance.

E. ... If the Permittee does not have ~~A~~any excursions above the ~~1 hour or 4 day average~~ total residual chlorine effluent limitations ~~is a violation~~, then the Permittee will be considered to be in compliance.

G. .... For purposes of reporting and administrative enforcement by the Central Valley Water Board and the State Water Board, the ~~Discharger~~ Permittee shall not be deemed out of compliance with the effluent limitations if the concentration of the priority pollutant in the monitoring sample is ~~greater~~ less than or equal to the effluent limitation and ~~greater~~ less than ~~or equal to~~ the reporting level (RL).

MRP, X.B.4. ... For purposes of reporting and administrative enforcement by the Central Valley Water Board and the State Water Board, the ~~Discharger~~ Permittee shall not be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is ~~greater~~ less than or equal to the effluent limitation and ~~greater~~ less than ~~or equal to~~ the reporting level (RL).

***Request:*** ***Modify the Compliance Determination language as suggested.***

**Section VI.C. Reopener Provisions, Add New Reopener to Adjust Monitoring based on Regional Monitoring Programs.**

The Regional Board and others are reviewing regional monitoring programs to determine the existence of overlapping and potentially duplicative monitoring requirements. The Permit should include a reopener to allow for the permit and/or the MRP to be modified to adjust the monitoring requirements based on the findings of the regional monitoring program review.

***Request:*** ***Insert a reopener to allow for monitoring requirements to be modified based on the findings of the regional monitoring program review.***

**MRP, Section V.A.2. Pg.E-9, Sample Types.**

The City requests that Flow Through samples be added to *Sample Types* in this section.

***Request:*** ***Make requested change to sample types.***

**MRP, Section V.A.3. Pg.E-9, Test Species.**

The City requests that this section be clarified to state that the City can use either fathead minnows or rainbow trout, and that the same species need not be used for the duration of the permit.

***Request:*** ***Make requested change to test species.***

**MRP, Section V.B.7. Pg.E-10, Dilutions.**

The language in the parentheses ("unless the receiving water is toxic") should be removed. If the receiving stream is more toxic than the City's effluent, then the City would like the opportunity to illustrate that toxicity through the Chronic Toxicity test.

***Request:*** ***Make requested change to remove parenthetical comment.***

**MRP, Section VIII.A.1.c., Bottom Deposits.**

The City has difficulty obtaining information on the presence or absence of bottom deposits when the bottom of the River is rarely visible. For this reason, the City requests that this requirement be removed, or conditioned to "if visible."

***Request:*** ***Make requested change to remove bottom deposits requirement.***

**MRP Section X.D.4, and Fact Sheet at F-97, Sanitary Sewer Overflows**

The Monitoring and Reporting Program (MRP) for the NPDES permit for the treatment plant should not contain a prohibition on sanitary sewer overflows. Section X.D.4 states that "Sanitary sewer overflows are prohibited by this Order." This language should be removed as unnecessary for the MRP.

In addition, on page F-97 of the redline, it says in the collection system section that "The Discharger must comply with this Order and separately with the requirements of the General Order, which are incoroporated [sic] herein by reference." This separate state law only permit should not be incorporated by reference, which would allow citizen suits to enforce a non-NPDES permit. This sentence on page F-97 should be revised to say "not incorporated"

***Request:*** ***Make requested changes to MRP and Fact Sheet.***

**MRP, Section X.D.7.e.xii., Pg. E-24, Pretreatment Budget.**

The MRP requires submission of a summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases. The Regional Board should provide an explanation of the need for and assess the burden of providing such information as required by, *inter alia,* Water Code section 13267(b).

***Request:*** ***Remove requirement for annual pretreatment budget.***

**Appendix I, Table I-1, Incorrect Title**

Table I-1 is titled "priority pollutants" when it includes things like flow and temperature and other constituents that are not priority pollutants. This title should be modified to say "Priority Pollutants and Other Constituents of Concern."

***Request:*** ***Correct the Title of Table I-1.***

**MRP, Section X.D.5., and Appendix I, Section III.B., Effluent and Receiving Water Study and Requiring Detection Levels below ML Values**

The Regional Board has not adequately justified this new Appendix I, Effluent and Receiving Water Study under Water Code section 13267(b)(1) or 13225(c), nor has it justified removing the City's discretion to choose an ML or RL for compliance determination purposes as allowed under the SIP.

Under the SIP, Minimum Levels (MLs) are "for use in reporting and compliance determination purposes in accordance with section 2.4" of the SIP. (*See* SIP, Appendix 4, at 4-1.) The SIP also states that "[t]hese MLs shall be used until new values are adopted by the SWRCB and become effective." (*Id.*) The SIP allows dischargers to "select any one of th[e] cited analytical methods [in Appendix 4] for compliance determination." (SIP at section 2.4.2.) However, the language in the new permit requires a new "Criterion Quantification Level" not set forth in any regulation or the SIP, which must be equal to or lower than the MLs. (Permit, Appendix I at Section III.B. at I-7.) Then, contrary to the SIP, which allows dischargers to choose whether to use a calibration standard lower than the ML,[11] the Permit is mandating that "the Permittee shall specifically acknowledge its agreement to use such a value." (*Id.* at I-7.) For these reasons, this Appendix should be removed from the Permit as well as all references to this Appendix elsewhere in the Permit.

***Request:*** ***Remove New Appendix I as unjustified and unnecessary.***

**MRP, Section X.D.5., and Appendix J, Dioxin and Furan Sampling**

The Regional Board has not adequately justified this new Appendix J under Water Code section 13267(b)(1) or 13225(c). Appendix J requires the City to conduct effluent and receiving water monitoring for 2,3,7,8-TCDD congeners during dry and wet weather. Dioxin monitoring was required under the SIP, within one year of the effective date of that policy, which was adopted in

[11] SIP at Section 2.4.2 ("The discharger's laboratories may... employ a calibration standard lower than the ML value in Appendix 4."); *see also* Section 2.4.3, para. 5 (specifying that the discharger, the RWQCB, and the SWRCB must agree on a lowest quantifiable limit to substitute for the reporting level (RL).)

2000. (SIP at Section 3.) Then, this monitoring was just to be for three years (ending in 2004) at which point, the SWRCB and RWQCB were to assess the data and determine if further monitoring was necessary. (*Id.*) Adding this new Appendix J twelve years after the effective date of the 2000 SIP is not authorized or justified. Additionally, proper interpretation of dioxin and furan congener data requires application of the use of Bioaccumulation Equivalency Factors (BEFs) in addition to the TEFs specified in Appendix J. If Appendix J is retained, it should be modified to require use of BEF factors.

***Request:*** ***Remove New Appendix J as unjustified and unnecessary. If retained, Appendix J should be modified to include application of BEFs.***

We look forward to working with Regional Board staff in the weeks ahead to determine whether additional changes can be made to the final permit such that the permit can be adopted on consent. If the proposed changes are not made, then we request that we be allotted at least 30 minutes at the upcoming adjudicatory hearing on this permit. We also request that this matter not be set for December 6th as the City's representatives have other commitments that date, but are available for a hearing on December 5th or 7th.

We are more than happy to meet with staff in person or via telephone if there are any questions or concerns related to our comments. Please contact Steve Bayley at (209) 831-4434 to set up a meeting at your earliest convenience.

Respectfully submitted,

DOWNEY BRAND LLP

Melissa A. Thorme

1285615.1

cc: Steve Bayley, City of Tracy
Tom Grovhoug, LWA