

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

Response to Written Comments
On March 2007 Draft NPDES Permit for
Municipal and Industrial Wastewater Discharges of
Mercury to San Francisco Bay
(“Watershed Permit”)

The Regional Water Board received timely written comments on the draft Watershed Permit distributed on March 16, 2007, for public comment from the following eleven groups and agencies:

1. Bay Area Clean Water Agencies (**BACWA**), dated April 16, 2007
2. Baykeeper (**BK**), dated April 16, 2007
3. Central Contra Costa Sanitary District (**CCCSD**), dated April 16, 2007
4. East Bay Municipal Utility District (**EBMUD**), dated April 16, 2007
5. Mountain View Sanitary District (**MVSD**), dated April 12, 2007
6. Palo Alto (**PA**), City of, dated April 12, 2007
7. Petaluma (**PET**), City of, dated April 16, 2007
8. Sunnyvale (**SUN**), City of, dated April 16, 2007
9. U.S. Environmental Protection Agency (**USEPA**), dated April 16, 2007
10. West County Wastewater District (**WCWD**), dated April 16, 2007
11. Western States Petroleum Association (**WSPA**), email dated April 13, 2007

The comments are organized by subject instead of commenter. This is to provide context to revisions to the draft Watershed Permit because some of the comments touch on the same subject but in opposing ways. After a General subject section, the organization of the comments corresponds to sections of the draft Watershed Permit as follows:

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This Response to Comments summarizes each comment in *italics* (quoted where possible, or paraphrased for brevity) followed by Regional Water Board staff’s response. Each comment is keyed to the commenter(s) using the initials for the commenter(s) listed above. For the full context and content of the comment, please refer to the comment letters associated with this item available at www.waterboards.ca.gov.

GENERAL

Comment G.1: (BACWA, CCCSD, EBMUD, PA, SUN) *We request that the Regional Water Board commit to combining pollutant-specific permit requirements into this Watershed Permit. We support the watershed permit approach for implementing the mercury TMDL in part because it establishes a method of accounting for future offsets should the State develop such a program. We strongly urge the Regional Water Board to maintain this approach and apply it to other legacy pollutants into one Watershed Permit instead of multiple permits. Multiple permits would be very confusing and may have conflicting requirements. (BACWA provided specific changes to the draft Permit)*

Response: We cannot make the requested commitment now (and have thus not incorporated the changes suggested by BACWA). However, we do share the desire for simple and understandable requirements that do not conflict. As the Regional Water Board establishes other TMDLs and/or implementation strategies, we will assess the pros and cons of implementation options and select the most effective and efficient option that assures compliance with the goal of each TMDL and/or strategy. A watershed permit, either as an add-on to this Watershed Permit, or a separate watershed permit will be one of the options we consider.

Comment G.2: (BK) *The Watershed Permit should not be issued before the State Water Board has approved the Basin Plan Amendment that establishes the Total Maximum Daily Load for Mercury. Also, the public comment period for the Watershed Permit should be reopened if the State Water Board makes changes to the Basin Plan Amendment that establishes the TMDL.*

Response: The State Water Board approved the TMDL on July 17, 2007. We have made revisions to the Watershed Permit in response to the State Water Board's resolution approving the TMDL, as well as the comments below, and a new 30-day comment period is being provided on these revisions.

I. FACILITY INFORMATION

Comment I.1: (PET) *Table 4A should reflect the correct contact information for the City of Petaluma.*

Response: We have revised Table 4A of the Watershed Permit with the correct information provided by the City of Petaluma.

Comment I.2: (WCWD) *Table 4A should reflect the correct information for the District.*

Response: We have revised Table 4A and F-1A of the Watershed Permit with the correct information provided by the District.

II. FINDINGS

Comment II.1: (BACWA, CCCSD, EBMUD, SUN) *We request that reference should be made to Chapter 3 of CEQA in the appropriate finding and Fact Sheet section.*

Response: Though we agree that the CWC limits this exemption to Chapter 3 of CEQA, revising the draft Watershed Permit is not necessary. The paragraphs at issue are template language developed by the State Water Board, and though lacking in that one minor detail, are not incorrect. Moreover, the suggested addition of “Chapter 3” does not contribute substantively to the permit requirements. If the commenters believe this change is important, we invite them to bring this up with the State Water Board as it continues to revise and refine template language so that such minor refinements could be more efficiently and effectively incorporated into future permits statewide.

III. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

Comment III.1: (BK) *“Our most significant concern is the proposed permit’s lack of enforceable mass limits for individual discharges, which contravenes federal law and is inconsistent with the TMDL. Federal law requires permit effluent limits be established for ‘each outfall or discharge point’ of a permitted facility. 40 C.F.R. § 122.45(a) (emphasis added); 40 C.F.R. § 123.25 (making requirements applicable to State programs). Permit effluent limits for each discharge point must be expressed in terms of mass. Id. at 122.45(f)(1).” Also, “when permits limits are expressed in terms of mass and another ‘unit of measurement,’ such as concentration, ‘the permit shall require the permittee to comply with both limitations.’ Id. at 122.45(f)(2) (emphasis added).... The draft permit language defining compliance with mass effluent limits in terms of group performance attempts to bypass these legal requirements. Making the mass limits enforceable in only limited circumstances blatantly disregards permitting requirements spelled out in the CWA and its implementing regulations.”*

“Conditioning permit compliance on group performance is also inconsistent with the TMDL approved by this Regional Board in August of 2006. ... The Bay mercury TMDL states how the Regional Board will exercise its enforcement discretion, stating the Regional Board’s intent to ‘pursue enforcement actions against those individual dischargers whose mass discharges exceed their mass limits.’ BPA at 18, 20. The draft permit, however, goes beyond an articulation of enforcement discretion and defines compliance with effluent limits in terms of group performance. Draft Permit at 12, 14.”

“We also object to the group compliance regime because it appears to encourage de facto trading wherein mercury reductions at one facility enable another facility to discharge more mercury than allowed by its individual limit. Bioaccumulative pollutants are unsuitable for trading, whether explicit or implicit. See EPA Water Quality Trading Policy (January 13, 2003) (available at <http://www.epa.gov/owow/watershed/trading/tradingpolicy.html>). Furthermore, the group compliance regime lacks the formal safeguards—such as a trading association and procedures for formally adjusting post-trade effluent limits—of established trading programs.”

Response: The commenter is incorrect that the permit lacks enforceable mass limits for individual dischargers and effluent limits at each outfall or discharge point of a permitted facility. The mass limits are set forth in Tables 6 and 8. Additionally, the permit establishes limits applicable to each outfall as required by 40CFR122.45(a). More importantly, the effluent limits are “consistent with the assumptions and requirements of any available wasteload allocation” as required under 40 CFR 122.44(d)(1)(vii)(B).

The Watershed Permit is also consistent with the TMDL implementation plan which specifies that the “individual municipal wastewater wasteload allocations shown ... shall be implemented via individual mass limits and an aggregate mass limit that is the sum of the individual allocations.... The Water Board will issue a San Francisco Bay watershed mercury NPDES permit to all dischargers listed ... to implement the individual and aggregate mass limits.” (BPA-18) Similar language is in the TMDL for industrial wastewater dischargers. This Watershed Permit correctly follows the provisions of the TMDL in establishing individual and aggregate mass limits that are consistent with the wasteload allocations of the TMDL. The commenter’s objections to the aggregate mass limits were fully considered and rejected by the Regional Water Board when it adopted the TMDL with the aggregate mass allocations.

Finally, the Watershed Permit’s aggregate mass limit does not encourage defacto pollutant trading. The Watershed Permit would establish mass-based triggers for each discharger (again consistent with the TMDL), independent of the aggregate mass limits, that if exceeded would require that discharger to take actions “to correct current and prevent future trigger exceedances.” (Watershed Permit V.C.1.c., p. 17) Though there could be some room for pollutant trading as Water Board staff recognized during the TMDL proceedings, trading is extremely unlikely because each discharger is required to take actions to ensure it operates within its own individual wasteload allocation.

Comment III.2: (BACWA, CCCSD, EBMUD, SUN) *The concentration limits in Table 6 require another level of control over and above the TMDL adopted August 9, 2006. These concentration limits provide a third tier to ensure that each permittee knows what is expected for effluent quality. We hope that the Regional Water Board and the public do not lose sight of the most important aspect which is attainment of the aggregate allocation.*

Response: We have revised the concentration limits in Table 6 to be consistent with 40 CFR 122.44(d)(1)(vii)(B). In this way, the revised concentration limits in Table 6 are not

another level of control over and above the TMDL, but will instead help ensure attainment of the WLAs in the TMDL. The State Water Board, in its resolution approving the TMDL on July 17, 2007, states that it anticipates *“that any NPDES permit or permits that implement the San Francisco Bay mercury TMDL will include individual numeric effluent limitations consistent with the assumption and requirements of waste load allocations for each wastewater discharger, that will be individually-enforceable.”* We revised limits using the complete data set that was used to establish the waste load allocations in the TMDL. The concentration limits in the first draft of the Watershed Permit were based only on a subset of these performance data and are thus not as consistent with the TMDL as limits derived using the entire data set (2000-2003). The Fact Sheet has been revised to provide the technical basis and details of the calculations for both municipalities and industries.

Comment III.3: (BK) *“To ensure compliance with antibacksliding requirements, the draft permit should be amended to incorporate AMELs and MDELs for each discharger that are at least as stringent as those in current permits.” Unless this is done, the “permit violates federal anti-backsliding requirements because it contains permit limits less stringent than those in current permits. ...The average monthly effluent limitations (‘AMELs’) for at least five dischargers are higher than those in their current permits. No question exists about whether the proposed AMELs are ‘comparable’ to the current limits. Both are interim limits and are based on current performance, so less stringent limits are inappropriate. See SWRCB Order WQ 2001-06 (reasoning that a WQBEL is not ‘comparable’ to a performance based limit); NRDC v. EPA, 859 F.2d 156 (D.C. Cir. 1988) (upholding EPA’s authority to prohibit backsliding from BPJ-based permits). The proposed permit also appears to backslide from previous permits because it lacks maximum daily effluent limitations (‘MDELs’).”*

“Exceptions to the backsliding prohibition are narrow and not applicable here. Under section 303(d)(4)(1), effluent limits based on a WLA may be relaxed provided that the cumulative effect of all revised limits ensures attainment of the applicable water quality standard. The current permit limits, however, are not based on a WLA, therefore, the section 303(d)(4)(1) exception does not apply. Even if section 303(d)(4) applied in situations where only the current permit limit is based on a WLA, the Regional Board’s own analysis in the TMDL shows that the WLAs will not achieve water quality standards for many decades after this permit expires. Thus, the cumulative effect of the revised limits does not ensure attainment of the water quality standard and the section 303(d)(4)(1) exception is inapplicable.”

Response: As explained in the response to Comment III.2, above, we have revised the Watershed Permit to establish revised average weekly and average monthly effluent limits (AWEL and AMEL) for municipal dischargers that are consistent with the assumptions and requirements of the TMDL as required by 40 CFR 122.44(d)(1)(vii)(B). As such, these concentration limits are water quality based effluent limits, as are the mass limits directly based on the WLAs. With respect to anti-backsliding concerns, please refer to the discussion in the revised Fact Sheet.

Comment III.4: (BK) *“The Clean Water Act requires that all permits for the discharge of pollutants contain effluent limitations sufficient to achieve all applicable water quality standards. C.F.R. § 122.44(b)(1), (d). WLAs are a type of water quality based effluent limitation. Id. at § 130.4(h). They do not supersede, however, all other water quality based effluent limits. As recognized by EPA guidance, “[t]he goal of the permit writer is to derive permit limits that...protect against acute and chronic impacts...and assure attainment of the WLA and water quality standards. EPA Permit Writers’ Manual, p 111 (emphasis added). Thus, if the WLA-derived permit limits are not sufficient to protect against acute and chronic impacts, then the permit must contain additional limits.”*

“It is unclear whether the limits in the proposed permit are adequate to achieve all applicable water quality standards, including those related to toxicity. Current permits issued by this Regional Board contain WQBELs based on the Basin Plan’s criteria for protection of salt water aquatic life from toxicity. While these limits are not yet in effect, they are substantially lower than the limits in the proposed permit. This suggests that lower concentration-based limits may be necessary to protect against toxicity and to implement the Basin Plan’s acute toxicity criteria of 2.1 µg per liter. We ask that the Regional Board demonstrate how the proposed limits will ensure compliance with all applicable water quality standards, including those for toxicity.”

Response: No changes to the Watershed Permit are necessary in response to this comment. We remind the commenter not to lose sight of the fact that effluent limitations based on the WLA are the single most important factor in achieving water quality standards. That said, we understand the need to protect against acute and chronic impacts. The permit does so with concentration based MDELs (AWELs for POTWs) and AMELs that are more stringent than necessary for prevention of aquatic toxicity.

As noted by the commenter, the objective for the prevention of aquatic toxicity is 2.1 µg/L. No discharger named in the Watershed Permit has ever measured mercury above 2.1 µg/L. This means there is no reasonable potential to cause or contribute to an exceedance of this objective (i.e., to cause or contribute to aquatic toxicity); so effluent limits are not required nor necessary. To further illustrate this point, limits using the 2.1 µg/L objective would yield an AMEL of 1.0 µg/L and MDEL of 2.1 µg/l (based a protective 0.6 default coefficient of variation from the SIP and USEPA’s Technical Support Document). The AMELs and MDELs (AWELs for POTWs) in the Watershed Permit are at least 10 times more stringent than these acute toxicity limits, which demonstrates that the proposed limits are more stringent than necessary for prevention of aquatic toxicity.

Comment III.5: (BK) *“As discussed above in the backsliding context, the draft permit incorrectly fails to include MDELs. Federal and state regulations require that permits for continuous discharges contain MDELs. 40 C.F.R. § 122.45(d); SWRCB, Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and*

Estuaries of California, p. 10 (2005). As recognized by the Regional Board, MDELs are effective at protecting against acute water quality effects, including preventing mortality to aquatic organisms. See Order No. R2-2007-0024, RWQCB, San Francisco Bay Region, Waste Discharge Requirements for the Pinole-Hercules Wastewater Treatment Plant (adopted March 14, 2007). Failure to include them in this permit is unjustified and illegal.”

Response: 40CFR122.45 requires average weekly and average monthly effluent limits for POTWs. It does not require maximum daily effluent limits for POTWs unless average weekly limits are impractical. We have revised the Watershed Permit to include both MDELs and AMELs. Please see response to Comment III.3 and 4, above.

Comment III.6: (PA) *Using daily flow rate to calculate “the monthly mass emission allows the result to be strongly influenced by the flow on the day that the sample is collected.... It would be more accurate, and consistent with typical practices, to use the average effluent flow rate for the entire month in calculating the mass emission. ...”*

Response: We have not revised the Watershed Permit in response to this comment. The practice of using daily flow rate is consistent with standard methodology for calculating mass emissions as specified by the Water Board’s Standard Provisions (at Section G) going as far back as 1977. These Standard Provisions (last updated in 1993) are an attachment to all individual permits as well as the Watershed Permit. Using the daily flow rate, as opposed to the monthly flow rate, is a more accurate way to calculate mass emissions when there is more than one sample in a month which there can be when there are trigger exceedances. Also, if sample dates are randomly selected (as they are required to be by Self-Monitoring Program, Part A, Section C.1 and C2) the results averaged over the year for the annual average mass limit, will be less influenced by any one day’s flow.

Comment III.7: (BACWA, CCCSD, EBMUD, SUN) *The draft Watershed Permit, its Fact Sheet, and the TMDL require a 40% reduction of effluent loading from clean water agencies in 20 years. Achieving this reduction will require a fair and equitable offset and credit program consistent with the State Board remand Resolution 2005-0060. This resolution states that the offset policy will not result in an undue burden on municipal wastewater. Without an offset program, compliance with the 40% reduction will require about \$300 Million each year for advance treatment at existing secondary facilities. So if no viable offset program is in place, rather than proceeding with such an investment, BACWA will ask that the TMDL and Watershed Permit be reopened to reconsider the 40% reduction requirement.*

Response: We have not changed the draft Watershed Permit in response to this comment. The 40% reduction is required by the TMDL approved by the State Water Board on July 17, 2007. If the State Water Board adopts an offset policy, or if the TMDL is revised by the U.S. EPA, or subsequent action of the Regional Water Board, we will revise the draft Watershed Permit accordingly and provide another opportunity for public comment on

those revisions. Furthermore, the Watershed Permit will expire and be reopened in about 5 years. At that time, additional changes can be brought forth for consideration, but only if those changes are consistent with a TMDL or offset policy that is in effect.

Comment III.8: (BACWA, CCCSD, EBMUD, SUN) *BACWA members will need the full 20 years to implement the 40% reduction, because it will take time to develop pollution prevention programs, conduct various studies on mercury fate and transport for more effective controls, and develop a regional offset program.*

Response: We have revised the draft Watershed Permit at Section III to specifically include the final Waste Load Allocations that reflect the 40% reduction in response to USEPA's comment below (see Comment III.9). In consideration of BACWA's comment, this revision does provide the full 20 years allowed by the TMDL.

Comment III.9: (USEPA) *“Consistent with EPA’s November 29, 2006 letter from Alexis Strauss to Tom Howard, while compliance schedules may extend beyond the permit term, the permit must include, as enforceable permit provisions, all of the actions necessary under the compliance schedule, including interim requirements and final permit limitations. Please amend the draft permit to include the final waste load allocations, as well as the 10 year interim requirements.”*

Response: We have revised Table 6 of the Watershed Permit by adding the interim (10-year) and final (20-year) waste load allocations specified in the TMDL for municipal wastewater dischargers.

Comment III.10: (USEPA) *“Given that the authorizing provision in the TMDL implementation plan requires compliance with the WLAs ‘within 10 and 20 years,’ we recommend adding the words ‘up to.....’ in two locations in footnote (5) located on page 13 of the permit. The language should read ‘the Municipal Dischargers listed in this table have up to 10 years to achieve the interim aggregate load limit and associated individual load limits, and up to 20 years to achieve the aggregated final....’*

Response: We have revised the Watershed Permit as suggested.

Comment III.11: (CCCSD) *The text within the two effluent limitations sections should make distinction between “Municipal Dischargers” and “Industrial Dischargers” consistent with the headings for each section.*

Response: We have revised the draft Watershed Permit to distinguish between “Industrial Discharger” and “Municipal Discharger” where such a distinction is necessary.

Comment III.12: (CCCSD) *At Footnote 1a, we suggest rounding to the nearest tenth of a kilogram rather than to the nearest kilogram.*

Response: We have not made the change suggested to Footnote 1a, because it would not be consistent with the TMDL wasteload allocations. However, we did make the suggested change to Footnote 1b for industrial dischargers.

For Footnote 1a, rounding to the nearest kilogram as currently specified in the Watershed Permit is equivalent to rounding to two significant digits. This is consistent with the TMDL wasteload allocations. For Footnote 1b, rounding to the nearest kilogram would result in just one significant digit. So for consistency with the TMDL WLA, we have revised footnote 1b to specify rounding to the nearest tenth of a kilogram.

IV. RECEIVING WATER LIMITATIONS

No comments were submitted on this section of the draft Watershed Permit.

V. PROVISIONS

Comment V.1: (BACWA, CCCSD, EBMUD, SUN) *The Federal Standard Provisions (Attachment D) should not be included because these are already in existing individual permits of the permittees covered by the Watershed Permit. Included Attachment D would increase the possibility of conflict with existing requirements.*

Response: We are not revising the draft Watershed Permit to delete Attachment D because the Attachment is necessary to make the permit complete. Though existing permits already contain these requirements, the Watershed Permit supersedes all mercury requirements in those individual permits. This includes the standard provisions related to mercury. For example, the standard provisions require certain records be kept, which if not specified in the Watershed Permit would not be enforceable if those records were not kept for mercury samples. As to the issue of conflict, there is no conflict because both permits refer to the same standard provisions.

Comment V.2: (BK) *“The draft permit illogically sets concentration limits for American River Canyon, PG&E, Rhodia, and Mirant Potrero that are lower than the applicable MDEL and/or AMEL triggers. Specifying triggers that are higher than the applicable limit essentially makes the triggers meaningless because, by the time the additional requirements are triggered, the discharger is already in violation.”*

Response: As mentioned in the response to Comment III.2, we have revised the concentration limits for all the industrial dischargers to be consistent with the assumptions and requirements of the TMDL. As a result, all the concentration limits are now higher than the triggers making this comment moot.

Comment V.3: (MVSD) *“Along with four other municipal dischargers, we have been categorized as ‘advanced secondary’ and have received a significantly lower monthly average trigger of 0.011 ug/L compared to the other secondary plants (0.041 ug/L) and the industrial dischargers (0.037 ug/L). ...The tiered policy of trigger levels appears to punish the best performers with more restrictive limitations and monitoring and reporting requirements that are unlikely to explain minor exceedances. ...We propose that triggers be eliminated for advanced secondary treatment plants A monthly average result of 0.011 ug/L would not lead us to uncover any significant sources that we would not otherwise find due to violations of the monthly average limit of 0.021 ug/L Perhaps a more equitable approach would be to eliminate all triggers for all.... Triggers and associated requirements that will not yield measurable environmental results on mercury in San Francisco Bay, but will certainly increase the paperwork generated by dischargers and the Water Board. ... Because NPDES dischargers make up only 1% of the load to the San Francisco Bay, we urge the Water Board to reconsider the proposed trigger policy. ...”*

Response: We have not made changes to the Watershed Permit in response to this comment. The trigger levels and associated requirements are consistent with the TMDL implementation plan.

Comment V.4: (PA) *“Provision C.1.c ...should read ‘..exceeds any of the applicable triggers..’, as in Provision C.1.a.”*

Response: We have revised Provision C.1.c. as suggested.

Comment V.5: (BACWA, CCCSD, EBMUD, SUN. PA) *The 60-day requirement for mercury reduction action plans must be revised to 6 months. Though we recognize the TMDL specifies 60 days, this timeframe is not feasible. It typically takes 2 to 4 weeks from the time samples are collected just to receive analytical results from contract laboratories. Then the discharger must begin 4 weeks of accelerated sampling, the outcome of which determines whether or not to proceed with the Action Plan. Also, the scope of the action plan is broad so sufficient time should be provided to prepare a meaningful one.*

Response: We have revised the Watershed Permit to require the action plan within 120 days of the initial trigger exceedance. This will allow for 4 weeks for the initial sample turn around, plus 4 weeks for the accelerated verification monitoring (which the

discharger has the option to do under expedited turn around timeframes), and the TMDL's 60-day timeframe to develop the report.

Comment V.6: (CCCSD) *CCCSD supports the concentration triggers for investigative action. Information developed can further expand pollution prevention activities to address sources.*

Response: We agree. Thank you for your support of pollution prevention activities.

Comment V.7: (CCCSD, PA) *Table 12, task i. for accelerated sampling needs to be clarified in how it applies to the average monthly trigger if the accelerated sampling spans more than one calendar month, or how a single sample would be compared to it and the annual mass trigger. Also, it should be clarified if accelerated samples above and beyond the proposed weekly sampling will be acceptable.*

Comment V.8: (CCCSD) *CCCSD recommends that additional text be added to the second sentence in "i. Accelerated Sampling" section of Table 12 so that it reads "If all four samples show mercury levels below the triggers, return to routine sampling, complete the reporting of this exceedance as required, and do not initiate the Action Plan for Mercury Reduction as required in section iii of this Table."*

Response to Comments V.7 and V.8: We have revised V.C.1.c., Table 12, task i. (page 17) as follows:

"i. Accelerated Sampling. As soon as the Discharger becomes aware of the exceedance, resample within 48 hours and commence weekly sampling (or more frequent than weekly) ~~for 3 weeks~~ for a total of 4 samples (including the initial sample). If all 4 samples show mercury levels below the triggers, return to routine sampling. If during the accelerated sampling, any of the samples are above either the concentration or mass trigger, proceed with action plan for mercury reduction and continue sampling monthly until the observed mercury discharge is below the trigger levels for 3 consecutive months, at which point the Discharger may return to routine monitoring, complete the reporting of this exceedance as required by Tasks ii. and iv., and discontinue efforts under Task iii, below."

We do not believe the other suggested changes are necessary. As currently written, when accelerated sampling spans more than one month, under the current proposed language, the discharger must proceed with its mercury action plan if the average of samples in any month are above the monthly trigger. For further clarification, we have included examples in the Fact Sheet of different scenarios to guide dischargers into taking the correct and required course of actions.

Comment V.9: (CCCSO) CCCSO suggests the deadline for “iv. Annual Reporting” be changed to “Annually until Discharger demonstrates compliance with trigger levels for a continuous 12-month period of sampling.” Otherwise, the annual reporting would be triggered indefinitely regardless of discharge levels. Also, we suggest that the reporting be allowed as part of each discharger’s pollution prevention program annual report.

Response: We have made the change to Table 12, under Deadline for Task iv. (page 17) as follows:

“Annually due February 1st of each year until the Discharger demonstrates compliance with trigger levels for a continuous 12-month period of sampling.”

We propose keeping the due date to February 1 so that the information will be included in annual self-monitoring reports rather than the pollution prevention reports for two reasons. The first is that pollution prevention reports are not currently required of all dischargers proposed to be covered under the Watershed Permit. The second reason is that there are two due dates for pollution prevent reports in current individual permits: February 28 and August 31. It is beneficial for the public to have only one date to track when such reports should be available for their review under this one Order.

Comment V. 10: (CCCSO) CCCSO recommends that the text establishing the dental amalgam control program be modified to specify that the 85 percent participation rate only apply to amalgam waste-generating dental practices. If the 85 percent standard applies to all dental practices including non-amalgam-generating dental specialties (e.g. orthodontics, periodontics), then achieving the standard will be more difficult region-wide.

Response: We have changed Provision V.C.2. as follows:

“The Dischargers in Table 1A shall develop, implement, and document cost-effective pretreatment/pollution prevention reduction strategies for dental offices to manage and reduce the amount of mercury amalgam that is discharged from dental offices into the public wastewater collection systems in accordance with the following:

- a. The target for this program is that 85% of dental offices that generate mercury amalgam waste in the region will be participating...”

Comment V.11: (BACWA, CCCSO, EBMUD, SUN) We support the special studies for municipal wastewater treatment plants. As an example of its commitment, BACWA has already funded the Water Environmental Research Foundation study that will advance the knowledge of mercury in San Francisco Bay.

Response: Comment noted. We recognize and acknowledge BACWA’s leadership in initiating these studies and encourage its continued commitment in this effort.

Comment V.12: (BACWA, CCCSD, EBMUD, SUN) *We urge the Regional Water Board to not hold clean water agencies responsible for measuring the effectiveness of the risk reduction program which more correctly falls to the Department of Health Services or other state health based organizations. Furthermore, we strongly object to Provision V.C.4 that clean water agencies mitigate health impacts. BACWA will continue to work as required by the TMDL but cannot accept these responsibilities in a permit.*

Response: We partly agree with this comment because the TMDL requires dischargers to “reduce,” not mitigate, health impacts. We have revised Provision V.C.4.d. as follows:

“Investigating ways to address public health impacts of mercury in San Francisco Bay/Delta fish, including activities that reduce actual and potential exposure of ~~and mitigate~~ health impacts to those people and communities most likely to be affected by mercury”

We have also revised the language associated with this provision in the Fact Sheet. But since neither the TMDL nor Provision V.C.4 hold the dischargers responsible for measuring the effectiveness of their risk reduction programs, the other suggested revisions are not needed to the Watershed Permit in response to this comment.

Comment V.13: (BK) *“We strongly support the source control, special studies, and risk management requirements contained in the permit but note that the permit needs more specificity. Other than the dental program, none of the draft permit provisions specify the level of effort required by each discharger.*

More importantly, the risk management requirements are insufficient. As eloquently stated by representatives of local environmental and community groups during a December 2006 meeting sponsored by the Clean Estuary Partnership, education and outreach are of limited value when people depend on fishing local waters for sustenance. Risk reduction needs to go beyond signage and, ultimately, provide community-based alternatives to Bay-caught fish. We ask that the risk management section be changed to emphasize provisions c and d, related to health-risk assessments and communication and investigating ways to reduce actual and potential exposures.

Response: The source control, special studies, and risk management provisions have the correct level of specificity for this first phase implementation of the TMDL. If there is evidence at a later date that more detailed requirements are necessary to ensure success, more details can be included at that time.

Comment V.17: (BK) *“We support the use of recycled wastewater by industrial dischargers and appreciate the Regional Board’s efforts to facilitate reuse. We are, however, concerned that the increase of mercury discharged by the industrial permittee may have unintended local effects. Although the total amount of mercury being discharged does not increase, the mass being emitted at a particular discharge point will. The permit and accompanying fact sheet should discuss how the permit will ensure that the increase does not result in local impacts or a violation of receiving water limitations.*

Response: Revisions to the permit requirements are unnecessary because the currently proposed requirements adequately ensure against local effects. Provision V.C.3 requires studies to evaluate the presence of or potential for local effects in the vicinity of wastewater discharges. Also, as discussed in the Fact Sheet, the discharge locations for the recycled water producer and user will be close together because of the cost of water transport between facilities. We have revised the Fact Sheet at VII.B.5 at the second paragraph to further clarify this point as follows:

“The Adjustment is only applicable if the mercury in the recycled wastewater is ultimately discharged through ~~an~~the industrial discharger’s outfall. The Adjustments are calculated based on a mass balance principals and will thus not result in any net increase in mercury loadings to the Bay. The mass Adjustment subtracted from one industrial discharger, is then added to the municipal discharger who supplied the recycled wastewater and who would have otherwise discharged that mercury through its municipal treatment plant discharge outfall. Furthermore, Local impacts from this shift in loading will be minimal because the discharge locations for the two will be to the same receiving water body. This is because the cost of water transport between facilities that are very far apart would make the reuse project infeasible. Furthermore, this Order’s Provision V.C.3 requires Additional Special Studies that will look for the ‘presence of, or potential for, local effects in the vicinity of wastewater discharges.’ If any local impacts are determined, the Regional Water Board will require appropriate corrective measures.”

Comment V. 14: (CCCSD) *In subsections V.C. 5a, 5b, and 5c, the “Discharger” is not identified as the Municipal Discharger or the Industrial Discharger. CCCSD recommends that “Municipal” or “Industrial” be included with the text of subsections 5a, 5b, and 5c.*

Response: We have revised Provisions V.C. 5a and 5b to clarify that it is the “industrial” discharger who shall collect the samples to justify its application of mercury discharge adjustments.

Comment V.15: (BACWA, CCCSD, EBMUD, SUN, WCWD) *We support the discharge adjustment for recycled wastewater use by industrial dischargers, and suggest*

*a change to the permit that avoids penalizing, or providing a disincentive, for the municipal agency supplying the recycled wastewater for undertaking such projects. We request the Regional Board reconsider the draft permit approach of recycled water credits and reverse adjustments and instead implement a simpler and more direct “transference of pollutant allocations” in these types of water recycling projects. This was discussed in greater detail in EBMUD’s June 5, 2006, letter. We request removing Special Provisions C.5. from the final Waste Discharge Requirements. If the provision must be retained, the District requests an alternate method of determining permit compliance with the mass effluent limits. A permit violation would be determined **only if** the recycled water provider (the Municipal Discharger) **and** recycled water user (the Industrial Discharger) exceed their average annual mercury mass effluent limits. This approach of effectively combining the two discharger’s mass allocations would ensure there is no net increase in the mass of mercury discharged to the SF Bay. Suggested changes to the current enforcement language are provided in the following paragraph:*

Special Provisions C.5.d. If an industrial Discharger opts to apply a Mass Emission Adjustment, the Regional Water Board shall transfer that Adjustment to the mass emission for the corresponding discharge interval from the municipal Discharger who is the producer and source of the recycled wastewater. If the reverse Adjustment results in calculated mass discharge levels above the municipal Discharger’s and the industrial Discharger’s Average Annual Mercury Mass Limits, and the Total Municipal Group mass limit as specified in the III.A is also exceeded, that municipal Discharger is in violation of its mass limit and is subject to enforcement action by the Regional Water Board.

Response: We have revised the draft Watershed Permit to meet the intent of the commenters’ subparagraph above with clearer language. We have also incorporated some of the other editorial changes suggested (by EBMUD). These changes are shown in the revised draft Watershed Permit. However, we cannot amend the TMDL to allow for the adjustments suggested (by EBMUD in their June 2006 letter) as that would require further amendment to the Basin Plan. Also, we will not remove Provision V.C.5 entirely because its removal would be a disincentive for industrial recycled water users.

Comment V.16: (WCWD) *“It is not necessary to institute the concentration and mass adjustment procedures” for recycled wastewater use. “The impacts on the San Francisco Bay that occur from transferring wastewater (and its associated mercury content) can be tracked by the Water Board through bookkeeping and examination of monthly and annual Self Monitoring Reports submitted by the dischargers.”*

Response: We disagree that simple bookkeeping is adequate to address shifting of mercury loads from wastewater reuse. The adjustments, spelled out in the Watershed Permit, are very necessary to ensure compliance with effluent limits through legal accountability for the mercury transferred between a recycled wastewater producer and its user.

VI. COMPLIANCE DETERMINATION

No comments were related to this section of the draft Watershed Permit.

ATTACHMENT D, STANDARD PROVISIONS

Comment D.1: (BK) *“We ask that the Regional Board require written reporting of all noncompliance. While we recognize that provision E.3. (page D-9) is a standard provision laid out by federal regulations, we strongly urge the Regional Board not to accept oral reports in lieu of written ones. A written record of compliance enhances transparency and facilitates outside review of compliance and should be required in all situations.*

Response: This provision is based on 40CFR 122.41(l)(6)(iii) and cannot be revised. Revision is also unnecessary because this waiver of a written report is only for a written report due 5 days after a discharger becomes aware of a violation. The MRP (IV.B, E-4) would still require a written report (the monthly self-monitoring report) that describes the details and circumstances of all permit violations for that monitoring period.

MONITORING AND REPORTING PROGRAM

Comment MRP.1: (BACWA, CCCSD, EBMUD, SUN) *The Monitoring and Reporting Program should more clearly specify that it is applicable only to mercury. In order to prevent confusion among permittees, we request language revisions as shown in the mark-up provided by BACWA.*

Response: We have accepted some of the revisions suggested, but not most of them as they would make the permit incomplete. The draft Watershed Permit is a stand alone permit that supersedes all requirements for mercury in the permittees’ individual permits. As such, some of the same requirements that apply to other pollutants in the individual permits must be repeated in the Watershed Permit for completeness.

Comment MRP.2: (BK) *“We are concerned that the monitoring frequency required in the draft permit is insufficient. Federal regulations require that all permits contain monitoring sufficient to assure compliance with permit limitations and to generate data that is representative of the monitored activity. 40 C.F.R. §§ 122.44(i), 122.48(a). Although the permit requires compliance with AMELs, it only requires monitoring monthly or quarterly. We fail to see how monthly or quarterly monitoring will generate*

data sufficient to determine compliance with AMELs, which by definition suggest the averaging of more than one sample each month.

“Furthermore, the record lacks any evidence that the monitoring requirements will produce data that will be representative of the discharges or that will enable a compliance determination. EPA guidance specifies several factors to be considered in determining the appropriate monitoring frequency. These factors include the variability of the pollutant in the discharge, the discharger’s history of compliance, and the number of monthly samples used in developing the permit limits or effluent guidelines. U.S. EPA NPDES Permit Writers’ Manual, EPA 833-B-96-003, pp. 119-122 (December 1996). None of these factors appear to have been considered in determining monitoring frequency. Instead, the fact sheet erroneously and unpersuasively concludes that the monitoring frequencies are justified by each discharger’s contribution of mercury and its resources to conduct the monitoring. Consideration of either these factors is not relevant under federal regulations and will not necessarily lead to representative data.”

Response: The monitoring frequencies proposed in the Watershed Permit are generally comparable to the frequencies used to generate the data upon which the TMDL wasteload allocations were calculated. These frequencies are thus adequately representative of the discharges and are appropriate for use in compliance determination with the limits based on those allocations. This is consistent with the USEPA guidance cited by the commenter. We also disagree that if limits are expressed in terms of monthly average, then that by definition, there must be more than one sample in a month. This conclusion is baseless. A standard definition of “average” does not require that it be calculated using more than one value, just that it be the average of all values. So if there is one sample in a month, the average is the value for that one sample. We have added to the Watershed Permit a definition for arithmetic mean (or average), and other terms used to help clarify matters. These definitions were developed by State Water Board staff for the state’s NPDES permit template. So these same definitions are also in more recent permits developed by this and other regions throughout the State.

Comment MRP.3: (PA) *Table E-2 should be revised to allow either 24-hour composite or grab samples for methylmercury as it currently does for total mercury samples.*

Response: We have revised Table E-2 as suggested.

Comment MRP.4: (PA) *The Watershed Permit would add another layer of duplicative reporting requirements that take up staff resources better applied to implementing programs. For instance, all of the necessary data used to calculate the mass loading values on the ‘Annual Mercury Information Reporting Form Part 2 of 3’ (page E-10) are already submitted to the Electronic Reporting System (ERS) by those dischargers using the ERS. The mass loadings could easily be calculated by the Regional Water Board using the ERS information, or new fields could be added to the ERS allowing dischargers to submit monthly and rolling annual average mass emission data. If it is necessary to utilize the reporting form because some dischargers are not yet using the ERS, the form*

should include a footnote stating that it will be discontinued once all dischargers are using the ERS. Similarly, the information requested on the 'Annual Mercury Information Reporting Form Part 3 of 3' (page E-12) duplicates information that would already be included in the annual Pollutant Minimization Program (PMP) report (Palo Alto's Clean Bay Plan) that is due on the last day of February. The Mercury Watershed Permit should simply require that PMP reports contain this information.

Response: We have revised the MRP to allow dischargers reporting data to ERS to check and initial a box on Part 2 of the form to avoid having to re-enter those data on the form. By checking and initialing this box, the discharger certifies that its ERS data are complete and accurate. This is necessary because ERS is a voluntary system. Though most of its data are accurate and reliable, we occasionally find incorrectly entered data in it. So with the exception of the data in Part 2 for ERS dischargers, these forms are necessary to allow Regional Water Board staff to check compliance with aggregate mass limits in a timely fashion. Also, as opposed to being burdensome, use of these forms will assist dischargers to collaborate on the preparation of the report required by V.C.2 (Mercury Source Control Program for Municipal Dischargers).

Comment MPR.5: (PA) *“Specific language on monitoring and reporting should remain in individual permits....” “Having these requirements in pollutant-specific Watershed Permits will inevitably lead to confusion when permit requirements conflict with dischargers' existing NPDES permits. Permit requirements for submittal of Self Monitoring Program (SMP) Annual Reports provide a useful example. Palo Alto's existing NPDES permit requires submission of monthly SMP Reports and a SMP Annual Report. The SMP Annual Report is due on the last day of February. However, a provision of the permit states that the Annual Report need not be submitted if all data has been previously submitted electronically. Palo Alto participates in the ERS, and therefore is not required to submit a SMP Annual Report. In the Mercury Watershed Permit, Section IV.B.2 of the Monitoring and Reporting Program states: "The Dischargers shall submit mercury data collected as part of this Order in the regular monthly or quarterly Self Monitoring Reports, and in the annual Self Monitoring Reports required in the Discharger's individual permit..." Section IV.B.S then states: "Additionally, for reporting in the annual Self Monitoring Report due February 1, each Discharger shall provide its mercury information on the forms shown at the end of this section (pages E-9 through E-13) as an attachment to the cover letter for the annual report ... " This permit language seems to say that mercury data must be submitted in the SMP Annual Report only if required by the individual permit, but then goes on to require submission of mercury information forms as an attachment to the annual report. Further complicating the situation, Section IV.C of the Monitoring and Reporting Program says that dischargers participating in Optional Group Compliance Reporting must provide the mercury information forms to the a regional entity by February is", but must indicate in the cover letter of the February 1st SMP Annual Report their commitment to participate in the Group Compliance Reporting.”*

Response: We have clarified the MRP language at IV.B.2 to state that if a discharger is not otherwise required to submit an annual report by its individual permit, they must then do so as required by this Watershed Permit.

Specific to Palo Alto, please note that the Regional Water Board by letter of December 2, 2003, effective January 1, 2004, modified the due date of Annual Reports from all NPDES wastewater dischargers to February 1st of each year. Any annual reports from Palo Alto are due on this day, not the last day of February indicated above. Our records show that this letter was sent to “William D. Miks, Palo Alto Reg WPC, Palo Alto, City of, 2501 Embarcadero Wy, Palo Alto, CA 94303.”

Comment MRP.6: (WCWD) *“If the effluent credit is claimed by the recycled water user, the provider should receive information on a monthly basis to determine the magnitude of the adjustment. This information may be critical in assessing actions required by the District under **Special Provisions V.C. 1. Triggers for Additional Mercury Control**. Additionally, this information may be needed by the District to prevent a de facto reduction in the District's individual wastewater allocation and an associated reduction in discharge capacity. The District is requesting removal of Special Provisions V.C.5. from the final Waste Discharge Requirements. If the provision must be retained, the District requests monthly information from the industrial Discharger on the amount of credit being claimed. If this information is received by the District in a timely manner, it will be included in the District's monthly Self Monitoring Reports. In order for the District to obtain and report the mass adjustment, the following change is suggested to Attachment E. Monitoring and Reporting Program:*

Reporting Requirements IV.B. 2. The Dischargers shall submit mercury data collected as part of the Order in the regular monthly or quarterly Self Monitoring Reports, and in the annual Self Monitoring Reports required in each Discharger's individual permit. If a Discharger monitors mercury more frequently than required by the Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the SMR. As required in each Discharger 's individual permit, for those dischargers required to report monthly, monthly reports shall be due no later than 30 days after the end of the calendar month. For industrial Dischargers claiming an effluent credit for recycled water use pursuant to Provision V.C.5, the amount of credit claimed for that month shall be reported monthly to the municipal Discharger that supplied the recycled water. The reporting from the industrial Discharger to the municipal discharger shall be completed no later than 15 days following the end of the calendar month. The municipal and industrial Dischargers shall then include this information in their respective monthly SMRs. For those dischargers required to report quarterly in its individual permit, quarterly reports shall be due 30 days after the end of each calendar quarter. Annual reports shall be due on February 1 following each calendar year.”

Response: We have revised the reporting requirements of the draft Watershed Permit as suggested to require the recycled wastewater user to provide its adjustments to the

recycled wastewater producer. However, as discussed in response to comments V.15 and V.16, the recycled wastewater adjustment is necessary and cannot be deleted.

Comment MRP.7: (WSPA) *WSPA “would be willing to be the group reporting mechanism only for the refineries if they were to choose that option. However, we would not be willing to do so the any non-refinery industrials.”*

Response: We have revised the optional group reporting provision at IV.C. to reflect that only petroleum refinery dischargers have the option of reporting through WSPA. A non-petroleum industrial discharger has the option of reporting through BACWA if it has made prior arrangements with BACWA to do so.

FACT SHEET

Comment FS.1: (BACWA, CCCSD, EBMUD, SUN) *The Fact Sheet should indicate that the mercury requirements do not place limits on growth.*

Response: We have not revised the draft Watershed Permit because the suggested changed goes beyond the purpose of the Watershed Permit. The purpose of the Permit is to implement the waste load allocations of the SF Bay Mercury TMDL, not to make Water Board policy statements.

Comment FS.2: (USEPA) *“Compliance schedules need to be consistent with EPA regulations at 40 CFR 122.47, which require that the compliance schedule be appropriate and require compliance as soon as possible. The Fact Sheet for the permit should describe how the ‘appropriate’ and ‘as soon as possible’ requirements have been satisfied.”*

Response: We have revised the Fact Sheet at IV.A.4 as follows:

“WQBEL’s are based on the established aggregate wasteload allocations of ~~11 kg/yr~~ for municipal Dischargers and ~~4.3 kg/yr~~ for industrial Dischargers which comprise a portion of the San Francisco Bay mercury TMDL. For the San Francisco Bay mercury TMDL, loads are expressed in terms of annual mercury loads in kilograms per year (kg/yr) because the adverse effects of mercury occur through long-term bioaccumulation. The loads are intended to represent long-term averages and account for long-term variability, including seasonal variability.

The San Francisco Bay mercury TMDL’s initial aggregate load limit of 17 kg/yr and associated individual load limits for municipal Dischargers are shown in Table F-5 below. Also shown are the interim aggregate load

limit and associated individual load limits applicable in 10 years, and final wasteloads allocations that apply in 20 years.

The Order allows up to 10 and 20 years for compliance with the interim and final aggregate load limits based on the TMDL's wasteload allocations. These timeframes are appropriate to allow the municipal dischargers time to implement additional measures to reduce their contribution of mercury discharge to San Francisco Bay. The timeframes are as soon as possible because of the high level of uncertainty in pollution prevention methods and other measures envisioned in the TMDL for reducing mercury discharge concentrations from municipalities. As indicated in the TMDL, the other measures that would be necessary include wastewater re-use, pollutant trading, offsets and/or system improvements. The uncertainties inherent in developing a pollutant trading and offset program warrant this long timeframe as state policies for these programs are still in its initial stages. The development and design of plans for the infrastructure and funding required for significantly increasing wastewater re-use, and system improvements by public agencies also warrant such a timeframe."

Comment FS.3: (WCWD) *"Table F-5. TMDL Mass Limits and Wasteload Allocations for Municipal Wastewater Dischargers (page F-16). Footnote (c) is attached to the West County Agency, Combined Outfall, 2000-2003 Initial Load Limit. This footnote indicates data quality concerns. The exact nature of these concerns should be detailed in the permit or through communication with West County Agency."*

Response: The notation for Table F-5 is from the TMDL. As it is not pertinent to the Watershed Permit's requirements, we have deleted it from the Fact Sheet.