CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

RESPONSE TO WRITTEN COMMENTS
ON THE REISSUANCE OF WASTE DISCHARGE REQUIREMENTS FOR:

Central Marin Sanitation Agency
San Rafael, Marin County
NPDES Permit No. CA0038628

I. Central Marin Sanitation Agency – December 22, 2006
II. U.S. EPA – December 13, 2006
III. San Francisco Baykeeper – December 22, 2006
IV. Editorial Changes

Note: The format of this staff response begins with a brief introduction of the party's comments, followed with staff's response. Interested persons should refer to the original letters to ascertain the full substance and context of each comment.

I. Central Marin Sanitation Agency (CMSA) – December 22, 2006

CMSA Comment 1
On page 1, (Table 1) CMSA requests the name of the facility be changed from "Central Marin Sanitation Agency Wastewater Treatment Plant and Sewage Collection System" to "Central Marin Sanitation Agency Wastewater Treatment Plant and its Force Main".

Response 1
We have no objection since the collection system for Central Marin Sanitation Agency (CMSA) is owned by satellite agencies. Therefore, the Tentative Order has been revised as suggested.

CMSA Comment 2
On page 5, (Finding F) CMSA requests the words "Best Professional Judgment (BPJ) in accordance with 40 CFR §125.3" be deleted as was done in the East Bay Dischargers Authority (EBDA) Permit as a consequence of BACWA comments.

Response 2
We have made the change requested as the CMSA Tentative Order does not specify technology limits based on BPJ in accordance with 40 CFR 125.3. However, we continue to disagree with BACWA's interpretation that 40 CFR BPJ limits must be imposed prior to 1989. 40 CFR states that "compliance is required…in no case later than March 31, 1989," (emphasis added) not imposition of those limits.

CMSA Comment 3
On page 6, (Finding G) of the Tentative Order, CMSA requests that we remove the reference to "proposed State criteria" for development of water quality based effluent

limitations since it believes the use of proposed criteria would be underground rulemaking."

Response 3
We are denying this request. This finding cites 40 CFR 122.44(d) which indicates proposed State criteria may be used.

CMSA Comment 4
The first and last sentences of Finding M should be removed as legal conclusions not supported by evidence in the record. There are several instances where permit requirements are more stringent than required by the federal Clean Water Act.

Response 4
We are denying this request since we are unaware of conditions in the permit that are more stringent than the federal Clean Water Act.

CMSA Comment 5
On page 8, (Discharge Prohibition A), the word "treated" should be inserted before the word "wastewater" to be consistent with recent permits.

Response 5
We have no objection. The Tentative Order has been revised as suggested.

CMSA Comment 6
On page 9, the word "anticipated" should be removed from the blending prohibition because it is sometimes not possible to anticipate a blending event, and in any event, blending is reported in routine monitoring reports after the event.

Response 6
We are denying this request. Consistent with 40 CFR 122.41, the Water Board can only approve an anticipated bypass. Bypasses are anticipated in the event that influent flows exceed a certain threshold. In this case, influent flows above 30 mgd would require the District to bypass secondary treatment, and would be considered an anticipated bypass under 40 CFR 122.41(m)(4)(ii).

CMSA Comment 7
CMSA requests that the copper final effluent limits in the expiring permit be revised to reflect the new Water Effects Ratio (WER) because CMSA has noted copper concentrations that are higher than those experienced at the time of the last permit reissuance, and therefore, justify the application of a less stringent limitation at this time. Further, CMSA points out that the Water Board should apply the exceptions to antibacksliding (1) because it has made the commitment to do so, (2) because it is allowable under the regulations, (3) because it should not be in the business of penalizing good behavior (the ability to meet final limits at the time of the last permit adoption); (4) so as to not otherwise create an unfair advantage among political jurisdictions in the same region, (5) it could also certainly be argued even that it was a random occurrence

that CMSA happened to get final limits when most POTWs were getting interim limits, and (6) most important -- it is scientifically appropriate and defensible, which is good public policy.

Response 7

We are denying this request because CMSA has not satisfied anti-backsliding requirements. Clean Water Act § 1342(o) sets forth the conditions under which backsliding is permissible. Reissued permits cannot contain less stringent effluent limitations except under specific circumstances, one of which is when information is available that was not available when the permit was last issued. However, § 1342(o) includes a condition to this exception. New information can be used as a basis for backsliding only when other actions decrease pollutant discharges. In other words, since it is feasible for CMSA to continue complying with final limits (our statistical analysis indicates that this is the case), we cannot apply a less stringent limit for copper unless CMSA documents how it will reduce copper in other areas of the watershed.

CMSA Comment 8

In Table 8 and Table E-1, all minimum levels less than the effluent limits should be included in the permit. Section 2.4.5 of the SIP specifies that when there is more than one ML value given for a substance, the RWQCB shall include as RLs, in the permit, all ML values, and their associated analytical methods listed in Appendix 4 that are above the calculated effluent limit. The discharger may select any one of those cited analytical methods for compliance determination. Also, minimum levels for the FAA, GFAA, and ICP methods were included in the monitoring and reporting program section of the South Bay System Authority draft permit.

Response 8

We are denying this request because the minimum levels included in the Tentative Order for copper are needed to evaluate reasonable potential during the next permit reissuance.

CMSA Comment 9

Mass Emission Limit for Mercury. CMSA incorporates by reference earlier legal arguments made in BACWA petitions for review of Bay Area permits adopted from 2000 through 2003 (e.g. Petition for Review of Contra Costa County Sanitation District's Permit, Appeal No. OCC A-1399 (a)), in order to preserve CMSA's legal rights to challenge the mercury mass limits should the mercury TMDL not be timely adopted or should it be adopted in a manner different than that currently proposed. CMSA intends to withdraw this comment or any legal action taken to enforce this comment once an acceptable mercury TMDL has been timely adopted and implemented.

Response 9

CMSA states its intention to incorporate all BACWA petitions from 2000 to 2003. This statement is quite broad, and we assume CMSA's intent is to raise only issues pertinent to its Tentative Order, and, based on the comment heading, the mercury mass limit. (BACWA's petitions, which related to past permits, were placed in abeyance and are now expired.) Title 40 of the Code of Federal Regulations (§ 122.44) requires effluent limits

to achieve water quality objectives and specifically authorizes permit conditions based on narrative objectives. The Tentative Order contains both mass and concentration limits. The concentration limits relate to the protection of aquatic life from toxic effects; the mass limit relates to bioaccumulation and human health. All these limits are performance-based interim limits to be replaced by final limits at the conclusion of the compliance schedule or limits based on the San Francisco Bay Mercury TMDL if approved. We further note that the State Water Board has upheld the Regional Water Board's imposition of mercury mass limits on all four occasions when it reviewed this issue. Specifically, the State Water Board upheld mercury mass limits in its decisions on the permits for Tosco (WQ 2001-06), Napa (WQ 2001-16), Chevron (WQ 2002-0011), and East Bay Municipal Utility District (WQ 2002-0012).

CMSA Comment 10

The mercury TMDL and its WQBELs and WLAs should supersede the mercury WQBELs listed in the permit upon its implementation through a watershed permit. The permit states that the mercury TMDL will supersede the mercury WQBELs listed in the permit upon its implementation through a permit amendment. CMSA requests that the language be changed to reflect how the Regional Water Board and BACWA have been discussing implementation for the mercury TMDL:

(Effluent Limitations and Discharge Specifications 6.c., Page 13)

The mercury TMDL and its WQBELs and WLAs will supersede the mercury WQBELs listed in Table 4 and this interim mass emission limitation upon its implementation through a ~~permit amendment~~ watershed permit.

Response 10

We are denying this request since using the term watershed permit is unnecessary and would restrict the Water Board's options for implementing the mercury TMDL. A permit amendment would encompass a watershed permit, and by using the term permit amendment it allows for alternate mechanisms for implementing the mercury TMDL should a watershed permit remain unadopted.

CMSA Comment 11

CMSA requests that the permit be revised to clarify how ambient background receiving water studies are actually being conducted. The permit requires CMSA to participate in collecting background ambient receiving water monitoring for priority pollutants. CMSA meets this requirement by participating in the collaborative BACWA study. Therefore, language in the permit should be clarified as follows:

(Provision C.2.b., Page 17)

Final Report: The Discharger shall submit a final report that presents all the data to the Regional Water Board 180 days prior to Order expiration. This requirement can be met through the submittal of receiving water data as it becomes available by BACWA or SFEI.

Response 11
We have no objection. The Tentative Order has been revised as suggested.

CMSA Comment 12
CMSA is only able to participate in dioxin studies initiated by BACWA. CMSA is a non-voting member of BACWA, and BACWA in turn is a member of the Clean Estuary Project (CEP). Since CSMA is only an indirect participant in the Clean Estuary Project, it does not have control over the actions of the CEP, and therefore reference to potential studies on dioxin by the CEP must be removed from the permit. CMSA requests that the language in the permit be changed as follows:

(*Provision C.2.e, Page 17*)
Since the dioxin-TEQ TMDL will, in part, be based on the PCBs TMDL, support of the PCB TMDL shall be sufficient if there are no existing BACWA ~~or Clean Estuary Project~~ studies on dioxin.

Response 12
See response to USEPA Comment 1 on compliance schedules.

CMSA Comment 13
CMSA believes it is inappropriate to require, in advance, pollutant reductions by permittees starting July 1, 2009, in the event the cyanide site-specific objective and the mercury TMDL are not adopted by the Regional Water Board. The municipal governments around the Bay Area have contributed millions of dollars to conduct these studies, the technical work is complete, and peer review is complete. The only activity that remains is the Basin Plan Amendment adoption and approval process, over which the permittees have no control. This requirement is effectively punishing permittees because the Regional Water Board cannot accomplish the tasks it has committed to. In addition, this provision assumes that wholly new technologies capable of reducing trace contaminants from POTW effluent can be developed in a few months. Moreover, the need for these technologies is extremely doubtful, and in any event CMSA should not be put in the position of having to develop technologies that would obviate the need for TMDLs. Timely and appropriate action by the Regional Water Board to adopt TMDLs and the SSO, with the participation of CMSA and other Bay Area POTWs, will render this entire issue moot. Language should be revised as follows:

(Provision C.2.e, Page 17)
By January 31 of each year, the Discharger shall submit an update to the Regional Water Board to document its participation efforts toward development of the TMDL(s) or SSO(s). The Discharger can submit updates through the regional Bay Area Clean Water Agencies (BACWA) studies for these pollutants. These status reports must address, but not be limited to, the efforts in support of the SSO or TMDL for cyanide, mercury, and dioxin-TEQ since the dioxin-TEQ TMDL will, in part, be based on the PCBs TMDL, support of the PCB TMDL shall be sufficient if there are no existing BACWA ~~or Clean Estuary Project~~ studies on dioxin. ~~In the event TMDL(s) or SSO(s) are not developed for mercury or cyanide by July 1, 2009, the Discharger shall submit by July 1, 2009, a~~

~~*schedule that documents how it will further reduce pollutant concentrations to ensure compliance with the final limits specified in IV.3 Effluent Limitations for Toxic Substances*~~

Response 13
See response to USEPA comment 1 on compliance schedules.

CMSA Comment 14
Words such as "conduct," "implement," and "implementation" must be removed from this section of the permit related to Pollutant Minimization Programs (PMP) and Pollution Prevention Plans (PPP) in accordance with the SWRCB's precedential order in the Tosco Avon Refinery case, Order No. 2001-06. Under this case, the Regional Water Board lacks the authority to require incorporation of or "implementation" of a PMP or PPP in a state-issued permit. See Water Code §13263.3(k) ("a regional board…may not include a pollution prevention plan in an waste discharge requirements or other permit issued by that agency"); Order No. 2001-06 at 38-40 and 60, para.9 (March 7, 2001)("The Regional Board cannot require in a permit that a discharger implement a pollution prevention plan.")(all emphasis added).

Under the Tosco decision, the State Board made no differentiation between PPPs and PMPs. See Order No. 2001-06 at 39 ("the Board treats a waste minimization plan the same as if it were labeled a pollution prevention plan."). The state law proscription against including PPPs in permits was to ensure that the contents of PPPs are not subject to citizen suits under the Clean Water Act. Id. In that case, the Board found that state law, at Water Code §13263.3, did not prevent a requirement in a permit to prepare a PPP/PMP. Id. At 40. However, a requirement to implement the plan was inconsistent with the process set forth in section 13263.3 because the Regional Water Board can only require a discharger to comply with the PPP "after Providing an opportunity for comment at a public proceeding with regard to that plan." Id. citing Water Code §13263.3(e).

The only way to avoid this inconsistency with the law is for the permit to not include words such as implement or conduct or for the permit to expressly state that for any PPP or PMP, the permit does not incorporate this plan by reference into the permit.

In addition, CMSA requests that language be revised to reflect more realistic goals for pollutant loadings. Language should be revised to be consistent with the recently adopted Vallejo permit as follows:

(Provision C.3.a, Page 18)

a. *The Discharger shall continue to ~~implement and~~ improve, in a manner acceptable to the Executive Officer, its existing Pollutant Minimization Program to ~~reduce~~ promote minimization of pollutant leadings of cyanide, mercury, and dioxin-TEQ to the treatment plant and therefore to the receiving waters. Dioxin-TEQ will be included in the Pollution Minimization Program only if a source is identified. In addition, the Discharger shall implement any applicable additional pollutant minimization*

measures described in Basin Plan implementation requirements associated with the cyanide SSO if and when this SSO becomes effective and an alternate limit takes effect.

The "promote minimization of" language is consistent with the Vallejo Sanitation and Flood Control District permit adopted on August 9, 2006.

Response 14
Please see Response to U.S. EPA Comment 1.

CMSA Comment 15
CMSA requests changes to the definitions of "Daily Discharge" and "Reporting Level" in Appendix A.

Response 15
We are denying this request. The definition of daily discharge is consistent with federal regulations and proper sampling guidelines. The definition for reporting level is consistent with the SIP. They are also consistent with definitions used in recently adopted permits, and the Statewide permit template. We prefer not to change them to maintain consistency among permits.

CMSA Comment 16
In Table E-3, the minimum sampling frequency for influent flow should be changed back to daily as in the existing permit.

Response 16
We have no objection. The Tentative Order has been revised as suggested.

CMSA Comment 17
In Table E-3 and Table E-4, CMSA requests that the requirement to report "time of occurrence" for maximum and minimum flow rates be removed from the permit.

Response 17
We have no objection. The Tentative Order has been revised as suggested.

CMSA Comment 18
In Table E-4, CMSA requests that effluent monitoring frequency for oil and grease be changed to quarterly.

Response 18
We have no objection. The Tentative Order has been revised as suggested.

CMSA Comment 19
In Table E-4, CMSA requests that the requirement for sampling pH at M-001be eliminated.

Response 19
We have no objection since CMSA will continuously monitor for pH at M-002. The Tentative Order has been revised as suggested.

CMSA Comment 20
In Table E-4, CMSA requests that effluent monitoring for priority pollutant organics be changed to once during the permit term.

Response 20
We are denying this request. In our view, a POTW with a pretreatment program should conduct priority pollutant monitoring at least annually to evaluate if these pollutants have the potential to be present above water quality objectives.

CMSA Comment 21
In Tables E-4 and E-5, CMSA requests that the monitoring location for certain parameters be changed from M-001 (pre-chlorination) to M-002 (post-chlorination) to be consistent with CMSA's current practices.

Response 21
We have no objection. The Tentative Order has been revised as suggested.

CMSA Comment 22
In Table E-4, CMSA requests that the requirement to collect 4-liter samples for 2,3,7,8-TCDD and congeners be eliminated. Also, the corresponding minimum level in Table E-1 should be changed to reflect the smaller sample volume.

Response 22
Footnote 10 to Table E-4 has been deleted as suggested. However, we are denying the suggested changes to the minimum levels Table E-1.

CMSA Comment 23
In Table E-5, CMSA requests removal of the effluent turbidity monitoring.

Response 23
We have no objection since turbidity monitoring is of more value at facilities that use UV for disinfection. Therefore, the Tentative Order has been revised as suggested.

CMSA Comment 24
In Table E-5, CMSA requests effluent chlorine residual sampling frequency be changed to be consistent with the existing permit and other permits.

Response 24
We have no objection. The Tentative Order has been revised as suggested.

CMSA Comment 25
In Table E-5, CMSA requests that the requirement for standard observations at effluent monitoring location M-002 be eliminated since it is inaccessible.

Response 25
We have no objection. The Tentative Order has been revised as suggested.

CMSA Comment 26
In Table E-5, CMSA requests that footnote (3) for table E-5 be eliminated.

Response 26
We have no objection. The Tentative Order has been revised as suggested.

CMSA Comment 27
In Section V.B.1.d of the Monitoring and Reporting program (page E-5),CMSA requests that the dilution series for whole effluent chronic toxicity be modified.

Response 27
We have no objection. The Tentative Order has been revised as suggested.

CMSA Comment 28
In Section V.B.2.b of the Monitoring and Reporting program (page E-6), CMSA requests that the compliance summary data requirement be modified to require it to report the three most recent samples for chronic toxicity instead of the past eleven.

Response 28
We have no objection. The Tentative Order has been revised as suggested.

CMSA Comment 29
In Section IX.B of the Monitoring and Reporting program (pages E-9&E-10), CMSA requests that cyanide be removed from the blending monitoring requirements.

Response 29
We have no objection since CMSA has shown that during blending events, and at varying TSS concentrations, cyanide has remained below its effluent limit. Therefore, the Tentative Order has been revised as suggested.

CMSA Comment 30
In Section IX.B of the Monitoring and Reporting program (pages E-9&E-10), CMSA requests changes to the frequency of monitoring during blending to reflect that chlorine residual is sampled every two hours and pH is monitored continuously. Additionally, CMSA requests that it be exempt from monitoring oil and grease during blending events because this is a dry weather issue.

Response 30
We have no objection. The Tentative Order has been revised as suggested.

CMSA Comment 31
CMSA requests that the storm water flows covered under the General Permit be clarified. Specific parts of CMSA's facility are covered under the Storm Water General Permit. Annual reports are submitted to the Water Board each year. CMSA requests that clarifying language be added as follows:

(Fact Sheet, Section II.B.2.b, page F-3)
The State Water Resources Control Board's (the State Board's) statewide NPDES permit for storm water discharges associated with industrial activities (NPDES General Permit CAS000001- the General Permit) was adopted on November 19, 1991, amended on September 17, 1992, and reissued on April 17, 1997. ~~The Discharger is not required to be covered under the General Permit as all storm water flows into the headworks of the facility, and is treated along with the wastewater discharge from the facility.~~ The facility is covered under the General Permit for all parts of the facility that do not drain to the headworks.

Response 31
We have no objection. The Tentative Order has been revised as suggested.

CMSA Comment 32
CMSA requests that the final dioxin-TEQ effluent limit be eliminated from the fact sheet. There is insufficient data to determine a performance based interim limit; therefore, CMSA requests that the permit be changed to be consistent with recently adopted permits for discharges with reasonable potential based on dioxin TEQ (Vallejo).

Response 32
We are denying this request. While we agree that there are insufficient data to determine a performance based interim limit for dioxin-TEQ, it is possible to calculate final limits in accordance with the SIP. Additionally, U.S. EPA requires that we include final limits in the permit (see response to USEPA comment 1).

CMSA Comment 33
The following typographical error in Finding B (page 5) should be changed. Influent appears to be confused with effluent.

Raw ~~effluent~~ influent goes through comminuters at the remote pump stations, and then goes through bar screens and grit removal at the Discharger's facility prior to primary treatment using clarifiers.

Response 33
The Tentative Order has been revised as suggested.

II. U.S. EPA – Two letters both dated December 13, 2006

U.S. EPA Comment 1

U.S. EPA indicates that it recently sent two letters to the State Water Resources Control Board (October 23, 2006, and November 29, 2006) to clarify U.S. EPA policy on the use of compliance schedules in NPDES Permits. First, U.S. EPA indicates that while compliance schedules may extend beyond the term of a 5-year permit, final limits and the compliance schedule provision must be placed in the enforceable portion of the permit. Second, U.S. EPA points out that it is not appropriate to authorize a compliance schedule in order to accommodate the need to complete a regulatory action such as development of a TMDL or site-specific objective. U.S. EPA indicates that the purpose of a compliance schedule is to give the permittee time to undertake actions to meet a water quality based effluent limitation, and that the permit needs to include an enforceable sequence of actions consistent with 40 CFR 122.47.

Response 1

On the first issue, dioxin-TEQ is the only pollutant for which a compliance schedule extends beyond the term of the permit. To address U.S. EPA's concern, we revised the Tentative Order to include, in the enforceable portion of the permit, final limits for dioxin-TEQ, and a compliance schedule provision for this pollutant (see Provision VI.C.2.e, and below).

On the second issue, we revised the Tentative Order by deleting Provision VI.C.2e since the basis for that provision was a compliance schedule based on TMDL development, which U.S. EPA has now disapproved. In order to more clearly show the sequence of actions we originally proposed to be required by the permit for pollutants under a compliance schedule, Provision VI.C.2.e of the Revised Tentative Order now indicates the following:

2e. Mercury, Cyanide, and Dioxin-TEQ Compliance Schedules

The Discharger shall comply with the following tasks and deadlines:

Task	Deadline
1. Implement source control measures identified in the Discharger's Infeasibility Report to reduce concentrations of cyanide, mercury, and dioxin-TEQ to the treatment plant, and therefore to receiving waters.	Upon the effective date of this Order.
2. The Discharger shall evaluate and report on the effectiveness of its source control measures in reducing concentrations of mercury, cyanide, and dioxin-TEQ to its treatment plant. If previous measures have not been successful in enabling the Discharger to comply with final limits for mercury, cyanide, or dioxin-TEQ, the Discharger shall also identify and implement additional source control measures to further reduce concentrations of these pollutants. If the cyanide SSO becomes effective and an alternate limit takes effect, the Discharger shall implement any applicable additional pollutant minimization measures described in Basin Plan implementation requirements associated with the cyanide SSO.	Annually in the Annual Best Management Practices and Pollutant Minimization Report required by Provision VI.C.3
3. In the event source control measures are insufficient for meeting final water quality based effluent limits specified in Effluent Limitations and Discharge Specifications A.3 for mercury, cyanide, and dioxin-TEQ, the Discharger shall submit a schedule for implementation of additional actions to reduce the concentrations of these pollutants.	July 1, 2009 for mercury and cyanide April 1, 2011 for dioxin-TEQ
4. The Discharger shall commence implementation of the identified additional actions in accordance with the schedule submitted in task 3, above.	Within 45 days of the date specified for task 3, above.
5. Full Compliance with IV. Effluent Limitations and Discharger Specifications A.3 for mercury and cyanide.	April 28, 2010
6. Full Compliance with IV. Effluent Limitations and Discharger Specifications A.3 for dioxin-TEQ. Alternatively, the Discharger may comply with the limit in IV Effluent Limitations and Discharge Specifications through implementation of a mass offset strategy for dioxin-TEQ in accordance with the policies in effect at that time.	April 1, 2017

In support of this compliance schedule provision, we revised the Fact Sheet to indicate that our basis for granting maximum allowable compliance schedules for mercury, cyanide, and dioxin-TEQ is because of the considerable uncertainty in determining an effective measure (e.g., pollution prevention, treatment upgrades) that should be implemented to ensure compliance with final limits. In our view, it is appropriate to

allow the Discharger sufficient time to first explore source control measures before requiring it to propose further actions, such as treatment plant upgrades, that are likely to be much more costly. This approach is supported by the Basin Plan (page 4-25), which states: "In general, it is often more economical to reduce overall pollutant loading into treatment systems than to install complex and expensive technology at the plant."

To reduce overlap with Provision VI.C.2e, we have also revised Provision VI.C.3a. Best Management Practices and Pollutant Minimization Program, as follows:

"The Discharger shall continue to ~~implement and~~ improve, in a manner acceptable to the Executive Officer, its existing Pollutant Minimization Program to promote minimization of pollutant loadings ~~of cyanide, mercury and dioxin-TEQ~~ to the treatment plant and therefore to the receiving waters. ~~Dioxin-TEQ will be included in the Pollution Minimization Program only if a source is identified. In addition, the Discharger shall implement any applicable additional pollutant minimization measures described in Basin Plan implementation requirements associated with the cyanide SSO if and when this SSO becomes effective and an alternate limit takes effect.~~"

Additionally, we revised the basis in the Fact Sheet for VI.C.3a to remove the citation to section 2.2.1 of the SIP because it is no longer applicable to that provision.

U.S. EPA Comment 2
EPA is concerned that excessive infiltration and inflow (I&I) in CMSA's service area appears to occurring, and that the permit should require provisions requiring the discharger to implement all feasible alternatives to bypass, including I&I reduction measures.

EPA believes the permit does not adequately document that CMSA has explored all feasible alternatives to bypass as required by 40 CFR 122.41(m)(4)(i)(A-C). The fact sheet should discuss the findings of CMSA's no feasible alternative analysis, and present data on the wet weather peak flows. Hydraulic and treatment improvement projects to reduce bypass should be contained in the permit with enforceable schedules for completing the projects. I&I improvements should be explored as feasible alternatives, and I&I improvement measures should be incorporated into the permit as enforceable provisions.

It is important to state clearly in the permit or permit findings whether the Regional Board approved an anticipated bypass under Federal regulations. If this permit does authorize anticipated bypass, under Discharge Prohibition III. C, the following language in bold should be added to the second sentence, "Such discharges are ***approved under the bypass conditions stated in 40 CFR 122.41(m)(4)****..." In addition, EPA recommends clarifying the basis for the bypass approval either in this section or in the findings.*

Response 2
We share U.S. EPA's concern regarding excessive I&I in the collection system and the bypasses that occur as a result. CMSA is taking substantial measures to reduce bypass occurrences, but bypasses are expected to continue (although at a less frequent rate) even

with these improvements implemented until I&I improvements projects or other measures are implemented. CMSA has not evaluated I&I improvements because it does not own the satellite collection systems that discharge to the treatment plant. However, it has been working collaboratively with the satellite collection system agencies to assist with the development of local and regional solutions to control I&I.

In our view, CMSA's no feasible alternative analysis meets the minimum requirements of 40 CFR 122.41(m)(4)(i)(A-C). A more comprehensive analysis would have taken many months to produce and it would have significantly delayed the permit renewal. Therefore, we are accepting the existing analysis for this permit term and we will require CMSA perform a more comprehensive analysis in the next permit cycle. We have revised the Fact Sheet (page F-16) to more thoroughly discuss the findings of CMSA's no feasible alternative analysis, and to present data on wet weather flows, as follows (text additions are in bold):

"On October 19, 2006, the Discharger submitted a no feasible alternatives analysis that addresses measures it has taken and plans to take to reduce and eliminate bypasses during peak wet weather events so that such bypasses could be approved pursuant to 40CFR122.41(m)(4). **For the calendar years 2003-2005, the Discharger explains that blending occurred on 114 days, for a total of 1635 hours. The total volume of effluent discharged during that period that contained blended flow was approximately 2,344 million gallons. The frequency of blending events expected to occur in any one particular year is unpredictable, due to the inability to forecast rainfall and the severity of storm events. However, based on historical data, which included 50 years of rainfall records and 48 years of hourly flow data used to predict the frequency of flows over 20 MGD, findings from the Discharger's 2004 Capacity Management Study predicted there would be approximately 33 events per year. Recently, the Discharger conducted wet weather trials, and demonstrated that it could change operation of its aeration basin from parallel or series mode to Contact Stabilization mode, and this would increase its secondary treatment capacity during high flows from 20 mgd to 30 mgd. This increase in secondary treatment capacity is expected to result in a 55% reduction in volume blended during the permit term.**

Additionally, the No Feasible Alternatives Analysis indicates that the Discharger is at the 50% design level for its Wet Weather Improvement Project. This project ~~This analysis~~ identified improvements to the facility to reduce the frequency of bypasses. These improvements include construction of a new polymer feed facility for chemically enhanced primary treatment, construction of two new primary clarifiers, mechanical system improvements to the grit removal facilities, installation of automated aeration system valves and gates to facilitate switching to contact stabilization mode during high flows, adding two new serpentine chlorine contact tanks, adding an effluent pump station to increasing the marine outfall's hydraulic capacity to 125 MGD (expandable to 155 MGD) regardless of tide level and, expanding the effluent storage pond from 3 MG to 7 MG for emergency storage. **Once the Discharger completes the Wet Weather Improvement Project, it expects an additional 50% reduction in volume blended.**"

In order to ensure that treatment plant improvements proposed by CMSA will be implemented, and to address inflow and infiltration to satellite collection systems, we have revised the Tentative Order to include a new provision VI.C.6 Correction Measures to Minimize Blending Events:

"The Discharger shall comply with the following tasks and deadlines to complete its Wet Weather Improvement Project, and to address Inflow and Infiltration into Satellite collection Systems:

Tasks	**Compliance Date**
1. *Final Design.* Complete the design and peer review of the Wet Weather Improvement Project, and have the project ready for public bid.	June 30, 2007
2. *Public Bidding Process.* Advertise the construction project for the Wet Weather Improvement Project with a public bid opening.	August 31, 2007
3. Award Contract. Board of Commissioners approves the selected responsible bidder.	November 30, 2007
4. Commencement of Construction. Commence construction of the Wet Weather Improvement Project.	January 31, 2008
5. Annual Report. The Discharger shall report on the status of its Weather Improvement Project. Additionally, the Discharger shall report on its collaboration efforts with satellite collection systems, and the measures these agencies are implementing to reduce inflow and infiltration. In this Report, the Discharger shall also consider options for expanding its legal authority to reduce I/I from satellite collection systems.	Annually with the Annual Self-Monitoring Report required pursuant to Attachment E, Section XII.B.2 (due February 1st)
6. Completion of Wet Weather Improvement Project. The Discharger shall document that it has completed installation, and that all equipment is online and operational.	October 31, 2011

Finally, we revised Prohibition III.C to include the language suggested by U.S. EPA to clarify that the Revised Tentative Order authorizes bypass under the conditions stated in 40 CFR 122.41(m)(4).

III. San Francisco Baykeeper – December 22, 2006

Baykeeper Comment A.1
No legal basis exists for the mercury and cyanide interim limits and compliance schedules.

The federal Clean Water Act contemplates the use of compliance schedules for implementing revised or new standards provided that state law and standards allow for their use. 33 U.S.C. § 1313(e)(3)(A), (F); 40 C.F.R. § 130.5(b)(1), (6). The following California regulations and standards provide for the limited use compliance schedules:

the California Toxics Rule, 40 C.F.R. § 131.38(e); (2) the State's implementation plan for the control of toxic pollutants ("SIP"), Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, Section 2, p. 20 (2005); and (3) the Water Quality Control Plan for the San Francisco Bay Basin("Basin Plan"). The CTR and the SIP only authorize compliance schedules for CTR-established criteria, whereas the Basin Plan allows compliance schedules for all other pollutants.

Neither the CTR nor the SIP provides the legal basis for the mercury and cyanide compliance schedules in this permit. The final mercury water quality based effluent limitation ("WQBEL") is based on the Basin Plan criteria; therefore the CTR and SIP do not apply and can not provide the basis for the permit's compliance schedule. The cyanide limit, however, is based on criteria promulgated via the National Toxics Rule, 40 C.F.R. § 131.36, and explicitly incorporated into the CTR. 40 C.F.R. § 131.38(B)(1),fn (r). Therefore, the CTR and SIP provisions apply to, although they do not allow, the compliance schedule for cyanide.

The CTR provision authorizing compliance schedules expired May 18, 2005. 40 CFR § 131.38(e)(8). As part of its issuance for the CTR, the U.S.EPA stated that compliance schedules for CTR criteria can be used after May of 2005 only if (1) the State Board adopts and EPA approves, a statewide and/or regional policy authorizing compliance schedules, and (2) EPA acts to "stay the authorizing compliance schedules provisions in [the CTR]." 65 Fed. Reg. 31704-5. Although EPA has approved the SIP provisions related to CTR-based compliance schedules, it has not acted to amend the federal regulations prohibiting the use of compliance schedules after 2005. Therefore, unless and until EPA amends the CTR through formal notice and comment rulemaking procedures, the Regional Board can not issue permits with compliance schedules for CTR pollutants such as cyanide.

The Basin Plan also does not authorize compliance schedules and interim limits for cyanide or mercury. The Basin Plan allows for the use of compliance schedules to implement newly adopted objectives or standards. Regional Board 2 Resolution No. 95-076. New standards must be implemented "as soon as possible, but in no event later than [four years for source controls and ten years for any additional measures to comply with effluent limitations] after new objectives or standards take effect." Id. The cyanide criterion was published in the NTR in 2000 and the Basin Plan mercury objective has been in place since 1995. Clearly, neither standard is new and the ten year timeframe for implementation has long passed. Therefore the Basin Plan does not authorize the use of compliance schedules in this situation and we ask that they be removed.

Response A.1

We have not made changes in response to this comment because the Tentative Order proposes compliance schedules for mercury and cyanide that are lawfully granted. As noted in the Fact Sheet, the cyanide water quality criterion is based on the NTR, and the mercury criterion is based on the Basin Plan. In both cases, the compliance schedules are based on the Basin Plan's compliance schedule provision in Chapter 4.

With respect to granting compliance schedules, the Basin Plan allows compliance schedules of up to ten years for new objectives or standards. See Basin Plan, p. 4-14. The Water Board has reasonably construed this Basin Plan provision to authorize compliance schedules for new interpretations of existing standards resulting in more

stringent effluent limitations, which construction has been upheld by the State Board in Order WQ 2001-06 (the "Tosco Order") and recently by the California Court of Appeal in Communities for a Better Environment, et al. v. State Water Resources Control Board, et al., 2005 WL 2065306 (Cal.App. 1 Dist.).

In this case, the promulgation of the SIP results in new interpretations of the existing standards for cyanide and mercury, and more stringent effluent limitations. To illustrate this more fully, the following shows how the water quality based effluent limits for cyanide and mercury under the SIP are more stringent than under the Basin Plan (the method used prior to the adoption of the SIP).

Table 1: Water Quality Based Effluent Limits Under the Basin Plan and SIP

Pollutant	Objective	Basin Plan		SIP	
		MDEL	AMEL	MDEL	AMEL
Cyanide (μg/L)	1.0	10	not required	6.4	3.3
Mercury (μg/L)	0.025	0.025	not required	0.040	0.021

SIP Methodology for Effluent Limit Calculation

Step 1: Identify Applicable Water Quality Criteria (WQC) cyanide = 1.0 μg/L chronic and acute. Mercury = 0.025 μg/L chronic, 2.1 μg/L acute, and 0.051 μg/L human health.

Step 2: For each WQC, calculate the effluent concentration allowance (ECA)

ECA = C + D(C-B)
where: C = WQC, D = dilution credit, and B = background
B = 0.4 μg/L for cyanide, based on Regional Monitoring Program data
B = 0.0086 μg/L for mercury for protection of aquatic life, and
0.0022 μg/L for protection of human health, based on Regional Monitoring Program data

ECA (cyanide) = 1.0 + 9(1-0.4)
ECA (cyanide) = 6.4 (both chronic and acute)

ECA (mercury) = 0.025 + 0(0.025-0.0086) - chronic
ECA (mercury) = 2.4 + 0 (2.1-0.0086) – acute
ECA (mercury) = 0.051 + 0(0.051-0.0022) – human health

ECA (mercury) = 0.025 chronic, 2.1 acute, and 0.051 human health

Please note under the SIP (1.4.2.2.B), the Water Board has the discretion to deny or significantly limit dilution credit in calculating water quality based effluent limits. In the case of mercury, a dilution credit is not

allowed because of unsafe levels found in fish (see page F-28 of the draft permit).

Step 3: Determine the Long-Term Average (LTA) by multiplying the ECA with a factor that adjusts for effluent variability. As documented in the Fact Sheet, the coefficient of variation for cyanide is 0.57, and for mercury is 0.56. Therefore, in accordance with the SIP, the ECA acute and chronic multipliers for cyanide will be 0.33 and 0.54; and for mercury will be 0.34 and 0.55.

Cyanide
LTA_{acute} = 6.4*0.33= 2.14
$LTA_{chronic}$ = 6.4*0.54 = 3.47

Mercury
LTA_{acute} = 2.4*0.34 = 0.816
$LTA_{chronic}$ = 0.025*0.55 = 0.0137

Step 4: Select the lowest LTA. In this case, the LTA for cyanide = 2.14, and for mercury is 0.0137.

Step 5: Calculate the water quality based effluent limitations, using the average monthly effluent limitation (AMEL), and maximum daily effluent limitation (MDEL) multipliers, which are based on the coefficient of variation, and provided by the SIP.

Cyanide
AMEL = 2.14*1.53 = 3.3 μg/L
MDEL = 2.14*2.99 = 6.4 μg/L

Mercury
AMEL = 0.0137*1.52 = 0.021 μg/L
MDEL = 0.0137*2.96 = 0.040 μg/L

Step 6: For the applicable human health criterion/objective, set the AMEL equal to ECA (step 2). To calculate the MDEL, multiply the ECA by the ratio of the MDEL multiplier to the AMEL multiplier. In the case of mercury, this multiplier = 1.95.

Cyanide
Not applicable

Mercury
AMEL = 0.051
MDEL = 0.051*1.95 = 0.099

Basin Plan Methodology for Effluent Limit Calculation

Cyanide

$C_e = C_o + D(C_o - C_b)$

where: C_e = the effluent limitation, C_o = the water quality criteria- 1.0 µg/L, D = dilution credit, and C_b = background- 0 µg/L*

$C_e = 1.0 + 9(1-0)$

$C_e = 10$ µg/L

* The Basin Plan (p. 4-13, Background Concentrations) states: "For substances not included in Table 4-7, the background concentrations were assumed to be zero in calculating effluent limitations…" Table 4-7 of the Basin Plan does include background values for cyanide; thus, zero was used in the above calculation

Mercury

$C_e = C_o + D(C_o - C_b)$

where: C_e = the effluent limitation, C_o = the water quality criteria- 0.025 µg/L, D = dilution credit, and C_b = background- 0 µg/L*

$C_e = 0.025 + 0(0.025-0.004)$

$C_e = 0.025$ µg/L

Baykeeper Comment 2

The compliance schedules and interim limits lack enforceable interim requirements likely to lead to compliance.

Assuming, that the draft permit's compliance schedules are authorized by law, the limitations still fail to comport with federal and state requirements. The Clean Water Act defines compliance schedules as "an enforceable series of actions or operations leading to compliance with an effluent limitation, other limitation, prohibition, or standard." 33 U.S.C. §1362(a). Similarly, the SIP directs the Regional Board to "establish interim requirements and dates for their achievement in the NPDES permit." SIP at 22. Both regulations clearly contemplate that a compliance schedule contains specific, enforceable milestones that will lead to attainment of applicable standards within the shortest time possible. This interpretation is also consistent with EPA's view. In a letter disapproving portions of the North Coast Basin Plan's compliance schedule provisions, Action Water Division Director Alexis Strauss stated that "the Regional Board, when it issues permits, must nevertheless establish enforceable requirements leading to compliance with final effluent limitations" Letter to Tom Howard, Active Executive Director, SWRCB from Alexis Strauss, Water Division Director, EPA, dated November 29, 2006.

No provision of the current draft permit imposes requirements on Central Marin that are designed or intended to lead to compliance with WQBELs. Rather, the permit merely requires the discharger to provide status reports on their efforts in support of SSOs or

TMDLs, and to continue to implement and improve their existing Pollutant Minimization Programs. It is unclear how these actions are likely to result in compliance with the, notably short, timeframe required by the permit. In order to make the permit consistent with relevant laws and policy and not subvert the original purpose of compliance schedules, the permit must contain specific, enforceable interim steps that will lead to compliance with WQBELs within the shortest time possible, as required by 40 C.F.R. § 122.47(a)(1) and 131.38(e)(4).

Response 2

Please see the response to U.S. EPA's comment 1 for the revisions we have made to the Tentative Order to more clearly describe the enforceable interim requirements that were originally proposed and that are intended to lead to compliance with final limits for cyanide, mercury, and dioxin-TEQ.

Baykeeper Comment 3

The permit's conclusion that immediate compliance is infeasible is unfounded. Demonstration of infeasibility to immediately comply with final limitations is a prerequisite to the issuance of compliance schedules. The Regional Board's infeasibility analyses for mercury and cyanide are impermissibly based only on the discharger's assertion that compliance is infeasible and on its discharge monitoring data. The fact sheet offers no evidence and provides no analysis of the feasibility of achieving WQBELs by changing operations and maintenance practices, installing equipment, changing administration of the pretreatment program, improving staff training, or taking other measures. It is appropriate to assume, without any evidence or analysis, that a history of discharging pollutants at levels exceeding WQBELs means compliance with WQBELs is infeasible. Before issuance, the permit should be amended to include a synopsis of the discharger's feasibility analysis as well as projected costs and efficacy of various potential improvements.

Response 3

The Board is not merely assuming that it is infeasible for CMSA to comply. CMSA's discharge record shows that it can not comply and that there have been exceedances of the WQBELs calculated for mercury and cyanide. Additionally, to reduce mercury concentrations, CMSA has been conducting source control measures such as participating in the North Bay Watershed Association to produce educational materials for dentists, medical clinics, and to collect spent fluorescent lamps from hardware stores. Such efforts have led to a significant decrease in mercury concentrations since 1999. For cyanide, CMSA has already implemented a pretreatment program, which has resulted in a significant decrease in cyanide levels entering (and thus being discharged from) the plant. Additionally, data from 2004 and 2005 shows that cyanide has been detected more frequently in effluent (79%) than influent (54%) and is often present at higher concentrations in effluent. This is because cyanide is most likely generated in the treatment process (chlorination). The foregoing, combined with CMSA's monitoring data, which show cyanide and mercury concentrations above current limits, strongly supports that it is infeasible for it to immediately comply with final WQBELs for mercury and cyanide.

As indicated above, the final WQBELs for cyanide and mercury are difficult technical challenges that CMSA needs time to meet. The compliance schedules for these pollutants are therefore set at the maximum legal duration. We believe this is the most reasonable approach to take because of the difficulty involved in meeting the final limits.

Baykeeper Comment 4

Relaxation of limits for cyanide violates the CWA's prohibition on backsliding. The Clean Water Act's antibacksliding policy was adopted in order to implement the Act's "national goal that the discharge of pollutants into the navigable waters be eliminated by 1985." 33 U.S.C. § 1251; 49 Fed. Reg. 37,898, 38,019 (September 26, 1984). It states that a permit may not be renewed or reissued with less stringent effluent limitations than those contained in the previous permit. 33 U.S.C. § 13429(o), 40 C.F.R. § 122.4(l)(1). The draft permit violates the antibacksliding policy by relaxing the limits for copper, nickel, and cyanide. The sole justification offered for the higher limits—that the previous ones were interim limits—is unpersuasive. Implicit in the notion of interim limits is the understanding that subsequent limits will be more, not less stringent. Increasing the amount of a pollutant that a facility can discharge based solely on the fact that the permit lacked a final limit runs counter to the purpose of the antibacksliding policy and the goals of the Clean Water Act. Please remove the provision allowing for relaxation of the cyanide limits upon issuance of SSO or, at a minimum, amend the permit finding and the fact sheet to explain in detail how the loosening complies with antibacksliding and antidegradation requirements. Additionally, Baykeeper points out that Footnote 4(a) of Table 7 includes a typographical error since it lists the units for cyanide in mg/L instead of μg/L.

Response 4.

We have revised the Tentative Order to correct the units for cyanide (the units should be in μg/L instead of mg/L as Baykeeper points out). On the issue of backsliding, we disagree with Baykeeper's assertion that the new limits for cyanide violate the Clean Water Act's prohibition against backsliding.

The interim limit for cyanide in Order 01-105 was based on treatment plant performance, and therefore, is not comparable to a WQBEL (or a technology-based limit). No WQBEL was ever imposed for cyanide emitted by this Discharger. Therefore, there is no comparable effluent limit from which to backslide for this pollutant.

Baykeeper Comment 5

The permit must contain a numeric effluent limits for dioxin-TEQ. The draft permit illegally omits numeric effluent limits for dioxin. As recognized in the fact sheet, Central Marin's discharge has a reasonable potential to cause or contribute to exceedances of the Basin Plan's bioaccumulation objective because of dioxin. Therefore, the permit must contain a WQBEL as required by 40 CFR §122.4(d)(1)(i). The most applicable criterion for dioxin-TEQ is established in the CTR and is 0.14 pg/L. 40 CFR §131.38. Table 7 on page 10 of the permit should therefore include a WQBEL of 0.14 pg/L of dioxin TEQ.

If immediate compliance with the final limit is infeasible as asserted in the tentative order, then the permit must also contain a numeric interim limit. The SIP requires that permits contain numeric interim limits when the discharger is granted a compliance schedule exceeding one year. SIP at 21. The draft permit recognizes this fact, but offers the unpersuasive rationale that insufficient data exists to calculate an appropriate performance based limit. The SIP provides no such exception to the requirement that interim limits be numeric. The Regional Board should use its best professional judgment to determine an appropriate limit, whether that be based on actual sampling data or some other method. Additionally, the Regional Board should require monthly monitoring of dioxin-TEQ in order to determine annual mass loading of this bioaccumulative pollutant and in order to generate sufficient data to establish appropriate AMELs.

Response 5

We have revised the Tentative Order to include numeric limits for dioxin-TEQ (see Response to U.S. EPA Comment 1).

On the issue of interim limits, we disagree that they are required for dioxin-TEQ. This is because compliance schedules for dioxin-TEQ are based on the Basin Plan and 40 CFR 122.47 not the SIP. In the case of dioxin-TEQ, it is impossible to calculate an interim performance based limit because CMSA has only collected eight samples for this pollutant. In order to develop an adequate data set to evaluate current performance, and set an interim limit in the next permit, this Order requires twice/yearly monitoring. While 40 CFR 122.47(a)(3) requires interim requirements, it does not require interim limits. Because the Tentative Order grants the District a compliance schedule for dioxin-TEQ, it requires that it (a) implement a pollution minimization program to reduce loadings of dioxin-TEQ to its treatment plant, and (b) monitor twice per year. In our view, these interim requirements satisfy 40 CFR 122.47(a)(3), and are reasonable for this discharge.

On monitoring frequency, we do not believe that increasing the frequency to monthly is likely to provide beneficial information relative to the costs ($1,000 to $2,000 per analysis). The dioxin-TEQ monitoring frequency required by the Tentative Order is consistent with monitoring requirements for dioxin-TEQ and other priority pollutants in other Region 2 permits.

Baykeeper Comment 6

The blending provision in Discharge Prohibition C is illegal. Paragraph III.C. of the draft permit incorrectly purports to authorize discharges of blended wastewater in situation that are not allowed under the federal bypass regulations, 40 CFR §122.4(m). The discharge of blended wastewater is a bypass under to [sic} federal regulations. Id. at 122.44(m)(1); see NPDES Permit Requirements for Peak Wet Weather Discharges from POTWs Serving SSOs. 70 Fed. Reg. 76013, 76015 (Dec. 22, 2005). Bypasses are illegal except in very narrowly defined circumstances, including when unavoidable to prevent substantial damage to life or property or when necessary for essential maintenance. 40 CFR §122.41(m). The draft permit's assertion that blended wastewater may be discharged when peak wet weather flow exceeds capacity is an exception recognized by federal regulations and, therefore, must be removed.

Response 6

In our view, the allowance for bypass in the Tentative Order is consistent with 40 CFR 122.41(m). CMSA has documented that secondary treatment facilities will fail if flows exceed 30 mgd. Therefore, bypassing when flows exceed this threshold is necessary to prevent substantial damage to property.

Baykeeper Comment 7

The permit findings must demonstrate that no feasible alternatives exist to bypasses. The draft permit erroneously authorizes anticipated bypasses in advance of the required feasibility determination. Anticipated bypasses may be allowed provided that the meet all the requirements of 40 CFR§122.4(m)(4), including, the requirement that no feasible alternatives exist to the bypasses. As the EPA noted in the comments on the recently-approved East Bay Dischargers Authority permit, anticipated bypasses may only be approved in the permit after analysis and implementation of all feasible alternatives. Letter to Lila Tang from EPA regarding NPDES Permit No. CA 0037699, July 12, 2006. Furthermore, the conclusions of the feasibility analysis must be stated in the permit findings and the permit must include the specific conditions under which the discharge may occur, including minimum wet weather flow rates. Id. While the draft permit requires Central Marin to conduct a utility analysis, this analysis should have been completed prior to issuing the permit. Unless and until Central Marin demonstrates that no feasible alternatives exist and that it has implemented all feasible alternatives, may the permit allow bypasses.

Response 7

As indicated on page F-16 of the Tentative Order and in our response to U.S. EPA Comment 2, CMSA submitted a reasonably complete No Feasible Alternatives Analysis, dated October 19, 2006, that addresses measures it has taken and plans to take to reduce and eliminate bypasses during peak wet weather events. Also, as described in our response to U.S. EPA Comment 2, we revised the Tentative Order to include additional requirements and background from this analysis.

Baykeeper Comment 8

Bypasses must be monitored for all pollutants for which the permit contains effluent limits. The draft permit allows bypasses provided that it doesn't cause a violation of applicable discharge and receiving water limitations. Lacking, however, are requirements that Central Marin actually monitor the bypasses to ensure compliance with effluent limitations. The permit should identify a bypass monitoring location and require monitoring of all bypasses for copper, mercury, cyanide, dioxin-TEQ, pH, dissolved oxygen, ammonia, TSS, BOD, and indicator bacteria.

Response 8

The draft permit requires that CMSA monitor for all pollutants for which it has effluent limits with the exception of oil and grease, copper, mercury, and cyanide. This is because oil and grease is a dry weather issue, and CMSA has done a study that shows if concentrations of TSS meet the weekly average limit of 45 mg/L, CMSA will comply

with effluent limits for the remaining pollutants (i.e., TSS is an appropriate indicator for compliance with these pollutants).

Baykeeper Comment 9
Clarify that 40 CFR §122.41(m) applies to the discharge and not the required utility analysis. Section 122.41(m)(4) generally prohibits bypasses and describes the narrow circumstances in which the State may not enforce this prohibition. The regulation does not, as suggested in section VI.C.5.c, impose requirements on any utility analysis required by the Regional Board. Section VI.C.5.c., read in conjunction with Discharge Prohibition III.C., is confusing and misleading. Please clarify in both sections of the permit that 40 C.F.R. section 122.41(m) prohibits bypasses except when unavoidable to prevent loss of life, personal injury, or severe property damage; no feasible alternatives exists; and the permittee complied with notice requirements. Please also separately clarify the purpose and requirements of the utility analysis required in section VI.C.5.c.

Response 9
CMSA completed a no feasible alternatives analysis, dated October 19, 2006, that indicated under certain circumstances bypasses are unavoidable. To minimize the need to bypass, the Revised Tentative Order requires that the District implement corrective measures (see Response to U.S. EPA Comment 2). As many of these corrective measures are expected to be implemented over the next five years, the District will need to reevaluate if there are no feasible alternatives to bypass if it seeks to continue bypassing in the next permit. Hence, the permit must include a provision that requires another utility analysis in order to evaluate the need, five years from now, for bypasses to occur at this facility.

Baykeeper Comment 10
Minimum levels are to be used only for purposes of reporting and enforcement discretion. Minimum levels ("ML") cannot be used to determine compliance except for purposes of reporting and agency enforcement discretion. In situations where a chemical-specific permit effluent limit is too low to be detected in discharge samples, EPA and the SIP allow the permit writer to use the minimum level ("ML") as the reporting level. The ML, however, cannot be used in lieu of a water quality-based effluent limit. This interpretation was recently affirmed by the First Division of the California Court of Appeal, the controlling division for San Francisco. In Waterkeepers N. California v. State Water Resources Control Board, the Court of Appeal held that while the State Board may provide enforcement guidelines for the Regional Boards, it lacks authority to "frame effluent requirements to reflect the technological limits for detection in discharge samples." Waterkeepers, 102 Cal.App.4th 1448, 1461 (2002). Therefore, when the ML is greater than applicable WQBEL, the ML can only be used to determine compliance for purposes of reporting and the exercise of enforcement discretion and Section VII.A. and Table 7 (footnote 5) of the draft permit should be amended to state this.

The draft permit also specifies an ML for cyanide that is higher than the final WQBEL, meaning that once the final WQBEL becomes effective, determining actual compliance will be impossible. If lower reporting levels are feasible, then the Regional Board should

work towards establishing one that is lower than the typical effluent limits contained in wastewater permits. Section 2.4.3 of the SIP outlines the procedure for deviating from SIP-specified MLs and federal regulations allow for the use of a non-EPA approved method if it has a lower detection limit that is necessary to determine compliance with WQBELs.

Response 10

We recognize that this is an option to explore if minimum levels are higher than final limits. However, in the case of cyanide, the ML required by the permit is that which is currently achievable by commercial laboratories statewide. We do not have the staff resources to pursue validation of alternate test procedures at this time. Also, it is likely that a site-specific objective will become effective that will eliminate the need to reduce the ML in order to demonstrate compliance with cyanide limits.

Baykeeper Comment 11

The permit should contain a numeric ML for dioxin-TEQ. The ML for dioxin TEQ is unclear and not reflected in Table E-1 of the monitoring provisions on page E-3 of the T.O. Although the permit states that the ML is one half of that specified for EPA Method 1613, it should contain an actual numeric ML. EPA regulations approving Method 1613 support an ML of 10 x 10-15. 62 Fed. Reg. 48395, 48399 (September 15, 1997). Therefore, the ML for dioxin-TEQ should be 5 x 10-15 and should be included in Table E-1.

Response 11

Dioxin-TEQ is calculated using TEFs applied to the concentrations of each dioxin and furan congener, and the MLs vary between congeners. It is therefore not possible to specify a numerical ML for dioxin-TEQ. Instead, we have specified that the ML for each congener must be ½ that specified by EPA Method 1613. This is also due to the fact that the MLs specified by EPA 1613 are based on the past performance of nationwide laboratories, and lower MLs are now commercially achievable at California laboratories.

Baykeeper Comment 12

The draft permit should impose an effluent limitation for chronic toxicity. Baykeeper indicates that the Regional Board's proposed approach to chronic toxicity regulation is not environmentally protective and is inappropriately calculated to insulate the discharger from enforcement for discharging chronically toxic effluent. The draft permit improperly fails to impose an immediately effective chronic toxicity effluent limitation. EPA regulations mandate the inclusion of whole effluent toxicity limits in NPDES permits whenever a discharge "causes, has the reasonable potential to cause, or contributes to an in-stream excursion above a narrative criterion within an applicable State water quality standard." 40 C.F.R. § 122.44(d)(1)(v). The record supports that Central Marin's discharge has such reasonable potential. It has been EPA policy for well over a decade that whole effluent toxicity includes both acute toxicity and chronic toxicity and that the latter should be measured by identified EPA protocols that employ appropriately sensitive species from a suite of three or more tested species. The permit, however, merely provides that failure to conduct required toxicity tests or a Toxicity Reduction

Evaluation (TRE) "shall result in the establishment of effluent limitations for chronic toxicity." This provision is inappropriately designed to protect the permittee from regulation rather than to protect the environment.

To begin, no environmental protection reason exists for declining to impose a chronic toxicity limitation until the permittee has failed to comply with toxicity testing requirements or TRE requirements. The effluent will be no more or less toxic if either event occurs. The only rationale for imposing a chronic toxicity limitation at that point would be as a sanction against a violating permittee. This sanction, however, would only have consequence if the permittee's discharge is in fact excessively toxic. As the monitoring provisions are currently written (with monitoring required only every six months and a TRE required only if the three sample median exceeds 10 TUc), it will take at least 18 months before the Regional Board would consider imposing a chronic toxicity limit. In this situation it is tenable that Central Marin will have been allowed to discharge chronically toxic effluent for months with complete immunity.

Ironically, the Regional Board implicitly recognizes that guarding against chronic toxicity is important environmentally, but fails to heed the logic implicit in this recognition. As noted, the Permit mandates that the permittee must increase bioassay testing from once every six months to once per month if its effluent is shown to violate a three sample median value of 10 TUc (which, again, will take 18 months worth of data to calculate) or to violate a single sample median of 20 TUc. If this accelerated monitoring shows similar toxicity, then the permittee must conduct a Toxicity Identification Evaluation/Toxicity Reduction Evaluation (TIE/TRE) which is supposed to curtail chronic toxicity. Thus, the Regional Board recognizes the need to mandate chronic toxicity reduction as a permit requirement to protect the environment. This being so, the Regional Board should follow the standard approach to regulation of all other pollutant discharge mandated by Clean Water Act section 301(b)(1)(C) and accompanying EPA regulations and set an effluent limitation needed to ensure that the permittee does not discharge a chronically toxic effluent. The Regional Board is opting not to impose a chronic toxicity effluent limitation solely for an impermissible purpose: to shield the permittee from Clean Water Act enforcement by the U.S. Environmental Protection Agency and citizens via Clean Water Act section 505 citizen suit and instead to create a chronic toxicity regulatory process that gives unbridled discretion to the Executive Officer to fashion his or her own unilateral regulatory approach.

Finally, the requirement that chronic toxicity testing shall only be conducted once every six months is unduly lenient and not environmentally protective. Under this approach, the permittee could discharge chronically toxic effluent for several months without this being detected given the absence of monitoring data. Moreover, generation of only two test results per year will hardly provide the robust data set needed to evaluate the toxicity profile of the permittee's discharge. Finally, such infrequent testing will fail to capture potential seasonal variability in effluent toxicity. A minimum of monthly testing should be required to correct these problems.

<u>Response 12</u>

We disagree that reasonable potential for the discharge to exceed the chronic toxicity narrative objective exists and that monthly monitoring should be required. The Discharger monitors chronic toxicity in its discharge twice per year using EPA protocols and employing appropriately sensitive species, and compares the results to trigger values of a three-sample median of 10 chronic toxicity units (TUc), and a single-sample maximum of 20 TUc. The triggers are consistent with Table 4-6 of the Basin Plan. The Discharger's monitoring history from 2002 to 2006 shows that there were no exceedances of the chronic toxicity triggers. The Tentative Order includes a reopener clause allowing the Regional Water Board to amend an adopted Order if, after consistent detection of chronic toxicity in excess of the triggers, the Discharger fails to aggressively implement all reasonable control measures in its TRE workplan.

Baykeeper Comment 13
The draft permit impermissibly allows the Executive Officer to unilaterally modify permit terms.

The following provisions are impermissible in that they allow the Executive Officer unilaterally to amend the permit without complying with public notice and comment procedures. Failure to allow public participation violates the notice and comment requirements contained in the Clean Water Act's NPDES regulations and unfairly shuts out EPA and citizen groups from participation and enforcement. See 40 C.F.R. §§ 124.5(c), 124.6(d) and 124.10; 23 Cal. Code of Reg. § 2235.2 ("Waste discharge requirements for discharge from point sources to navigable waters shall be issued and administered in accordance with the currently applicable federal regulations for the . . . NPDES program"); Environmental Defense Center, Inc. v. EPA, 344 F.3d 832, 856-57 (9th Cir. Cal. 2003), cert. denied, Texas Cities Coalition on Stormwater v. EPA, 541 U.S. 1085 (2004); Waterkeeper Alliance, Inc. v. EPA, 399 F.3d 486, 503-04, amended by 2005 U.S. App. LEXIS 6533 (2d. Cir. 2005). Each of the following provisions should be amended to specify that the Regional Board will provide public notice and accept public comment before making the permit modifications contemplated.

1. TIE/TRE workplan and accelerated toxicity monitoring.

The draft permit mandates submission and implementation of a TIE/TRE workplan that, inter alia, addresses comments from the Executive Officer. Permit at E-6. Similarly, the permit mandates that the permittee may drop accelerated toxicity testing monitoring if "based on the TRE, the Executive Office authorizes a return to routine monitoring." Permit at 12.

2. Pretreatment Program.

Paragraph VI.C.5.a. allows the Executive Officer to approve the discharger's pretreatment program or any amendments to the pretreatment program without providing public notice and taking public comment.

3. Monitoring Program.

The monitoring program outlined in the permit contains numerous provisions vesting the Executive Officer with the authority to make or approve changes to the permit. The following provisions should be changed:

- *Test organisms shall be fathead minnow or rainbow trout unless specified otherwise in writing by the Executive Officer. Permit at E-4.*
- *If specific identifiable substances in the discharge can be demonstrated by the Discharger as being rapidly rendered harmless upon discharge to the receiving water, compliance with the acute toxicity limit may be determined after the test samples are adjusted to remove the influences of those substances. Written approval from the Executive Officer must be obtained to authorize such an adjustment. Permit at E-4.*
- *Test species. Pimephales promelas. The Executive Officer may change to another test species if data suggest that another test species is more sensitive to the discharge. Permit at E-5.*
- *Design of the screening phrase shall, at a minimum, consist of the following elements: 1. Use of test species specified in Tables 1 and 2 (attached), and use of the protocols referenced in those tables, or as approved by the Executive Officer. Permit at E-15.*
- *Stage 2 shall consist of a minimum of two test batteries conducted at a monthly frequency using the three most sensitive species based on the Stage 1 test results and as approved by the Executive Officer. Permit at E-16.*

Response 13

We disagree that the provisions at issue allows the Executive Officer to unilaterally modify permit terms. However, since Executive Officer approval offers little value in a number of the instances brought forth by Baykeeper, we are deleting that requirement in those provisions with two exceptions: (1) investigating a TRE/TIE, and (2) evaluating compliance with an acute toxicity limit where substances that cause toxicity may be rendered harmless upon discharge to the receiving water. In both these cases, it is not to the benefit of the environment to have the Discharger reduce chronic toxicity monitoring when its investigation is not complete, or make adjustments to effluent tests at its own discretion. In our view, Executive Officer approval in these instances is necessary to implement the terms of the permit, and assure that the Discharger is applying good and reasonable technical decisions regarding appropriate toxicity monitoring practices. We do not believe that these submittals need to be noticed for public comment since they do not affect the permit's prohibitions, limitations, or provisions. Furthermore, these submittals are public documents, and are made available upon request if anyone would like to provide input on such matters.

Baykeeper Comment 14

The draft order must require completion of a Sanitary Sewer Management Plan.

On July 7, 2005, the Regional Board notified Central Marin, via a section 13267 request, that it is required to prepare and implement a Sanitary Sewer Management Plan

("SSMP"). This requirement as well as the reporting requirements imposed via the 13267 request should be incorporated into section VI.C.5.d. of the permit.

Response 14

The District does not own sanitary sewers that discharge to the treatment plant. These satellite collection agencies are covered under State Water Resources Control Board Order No. 2006-0003-DWQ Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

Baykeeper Comment I5

The permit should require actual receiving water monitoring. In this permit, as with previous permits, the discharger is allowed to participate in the Regional Monitoring Program ("RMP") in order to fulfill receiving water monitoring requirements. Baykeeper is concerned that the RMP may not be an adequate surrogate for gathering site-specific data related to individual dischargers' impacts. In addition to participating in the RMP, all dischargers should be required to study the local impacts to receiving water caused by their own discharges.

Response 15

We are denying this request because our view is that the RMP is actual receiving water monitoring, which not only satisfies permit requirements but also provides regional context for sampling efforts. This provision is consistent with the Discharger's previous permit, and because the RMP gives us enough information to protect beneficial uses and perform reasonable potential analysis. RMP data may also be augmented with data from special studies conducted to support SSOs or TMDLs.

Baykeeper Comment 16

The effluent limitation for bacteria is not protective of beneficial uses. As noted in the permit's findings, designated beneficial uses of applicable receiving waters include shellfish harvesting, water contact recreation and non-contact water recreation, all of which are impaired by the presence of untreated waste. Based on the lack of information in the permit findings, we are unconvinced that strictly applying the Basin Plan's technology-based limits for total coliform to this discharge will protect beneficial uses. Furthermore, EPA's 1986 Ambient Water Quality Criteria for Bacteria recommends and the Beach Act requires the use of enterococci as an indicator in marine waters. 40 C.F.R. § 131.41. We ask that new indicator bacteria limits be established for enterococci and total coliform based on federal criteria, that the permit and fact sheet be amended to explain how the final limits are derived from those criteria, and that the permit and fact sheet explain how the final limits are protective of beneficial uses. Additionally, the effluent limit for total coliform is expressed as a five-sample median total coliform density. Most multi-sample effluent limits for bacteria are expressed as arithmetic or geometric means; we are unaware of any limitation expressed as a median. Please explain the rationale for choosing the median as the basis for determining compliance rather than the arithmetic mean or the geometric mean, the latter of which would minimize the effect of outliers.

Response 16

The total coliform limits for this permit are taken directly from Table 4-2 of the Basin Plan. In establishing these limits, the Regional Water Board determined that they would "... help [to] achieve the water quality objectives identified in Chapter 3" (p. 4-2, 1982

Basin Plan). We continue to believe Table 4-2 requirements for this discharge would meet applicable water quality objectives and protect beneficial uses in Chapter 3, due to natural die off of pathogenic organisms, and dilution achieved by deepwater diffusers. That said, the 2004 triennial review recognized as a high priority the need to review and update Basin Plan requirements for bacteriological indicator organisms. Regional Water Board staff hope to begin work on this item in the near future.

Our rationale for choosing the median as a basis for compliance is based on the Basin Plan (Table 4-2). We are unaware of the use of an arithmetic mean for bacterial limits because of the extreme variability in this indicator test. The use of a geometric mean and median are similar as they are both measures of central tendency.

Baykeeper Comment 17
Finally, in addition to all of our comments above, we respectfully request that the Regional Board articulate rational for the following:

1. *Removal of the interim MDEL for mercury;*
2. *Failure to include interim AMELS for mercury and cyanide;*
3. *Failure to include mass limits for dioxin-TEQ;*
4. *The requirement that cyanide and chronic toxicity be monitoring at Location M-001, but not M-002, whereas acute toxicity is measured at M-002 but not M-001; and*
5. *The statistical and regulatory basis for section VII.B., which computes the median in place of the arithmetic mean when the data set contains DNQ or DN values rather than using zero or ½ the method detection limit.*

Response 17
We removed the interim MDEL of 1.0 μg/L for mercury from the previous permit because monitoring data show that in the past five years mercury has been substantially lower than this threshold, and the inclusion of an interim MDEL for mercury is inconsistent with our approach for POTWs with secondary treatment, which is to use pooled data from secondary treatment facilities to set an interim AMEL in order to hold all POTWs with secondary treatment to an equivalent level of performance.

In the case of cyanide, the Regional Water Board uses site-specific data to set interim limits based on current performance. Our approach has been to set an interim MDEL when using site-specific data. A performance based AMEL can be set using the same data set, but would be statistically identical to the MDEL.

On dioxin-TEQ, the Tentative Order did not include an interim mass limit because there are only eight samples for this pollutant, and a number of congeners are consistently nondetect, which makes the calculation of a reasonable interim limit impossible.

On requirements for monitoring cyanide and chronic toxicity, we inadvertently indicated that the District should use M-001, when the correct location should be M-002. We have corrected the Tentative Order.

The regulatory basis for section VII.B, which computes the median in place of the arithmetic mean when the data set contains DNQ or nondetect values, is Section 2.4.5 of the SIP.

IV. Editorial Changes

Finding E, page 5 – The reference to Public Resources Code Section 21100, et seq. was deleted.

Appendix C of Attachment H, page H-11 – This appendix was modified to reflect the correct table numbers and page numbers. The language was modified as follows (~~strikethrough~~ words deleted, **bold** words added):

> The Discharger shall conduct sampling of its treatment plant's influent, effluent and sludge at the frequency as shown in Table ~~2~~ **E-6** on Page ~~5~~ **E-8** of the ~~Self-Monitoring Program (SMP)~~ Monitoring and Reporting Program (MRP).
>
> The monitoring and reporting requirements of the POTW's Pretreatment Program are in addition to those specified in ~~Table 1 of the SMP~~ **the MRP**. Any subsequent modifications of the requirements specified in ~~Table 1~~ **the MRP** shall be adhered to and shall not affect the requirements described in this Appendix unless written notice from the Regional Water Board is received. When sampling periods coincide, one set of test results, reported separately, may be used for those parameters that are required to be monitored by both Table 1 and the Pretreatment Program. The Pretreatment Program monitoring reports shall be sent to the Pretreatment Program Coordinator.
>
> 1. Influent and Effluent Monitoring
>
> The Discharger shall monitor for the parameters using the required test methods listed in Table ~~3~~ **E-1** on page ~~5~~ **E-1** of the ~~SMP~~ **MRP**. Any test method substitutions must have received prior written Regional Water Board approval. Influent and effluent sampling locations shall be the same as those sites specified in the Self-Monitoring Program.