

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

RESPONSE TO WRITTEN COMMENTS

ON THE REISSUANCE OF WASTE DISCHARGE REQUIREMENTS FOR:

City of Pinole
Pinole-Hercules Water Pollution Control Plant
Pinole, Contra Costa County
NPDES Permit No. CA0037796

-
- I. U.S. EPA – February 13, 2007**
II. City of Pinole – February 14, 2007
III. Bay Area Clean Water Agencies – February 16, 2007
IV. San Francisco Baykeeper – February 20, 2007
V. Environmental Law Foundation – February 20, 2007
VI. 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. U.S. EPA – February 13, 2007

U.S. EPA Comment 1

U.S. EPA requests that the Water Board require the City of Pinole to collect chronic toxicity monitoring data on a routine basis in order to determine if there is reasonable potential for chronic toxicity in the City of Pinole's treated wastewater. To support its position, U.S. EPA points out that chronic toxicity monitoring has not been conducted at this site, and the SIP requires chronic toxicity monitoring determine compliance with the Basin Plan chronic toxicity objective. At a minimum, U.S. EPA indicates that screening phase monitoring for chronic toxicity should be required during the first year of the permit term, rather than prior to the subsequent permit term.

Response 1

We have revised the Tentative Order to require Pinole to conduct screening phase monitoring within one year of the effective date of the Order instead of prior to the next permit reissuance. However, at this point, we believe that it is premature to require consistent monitoring for chronic toxicity. This is because Pinole does not receive significant amounts of wastewater from industrial sources, and it discharges treated wastewater to San Pablo Bay via a deepwater outfall and diffuser. Therefore, it seems unlikely that this discharge will exhibit chronic toxicity at levels that would have adverse consequences to aquatic life. That said, we agree that it is appropriate to conduct screening phase monitoring sooner than later. In the event screening phase monitoring shows significant chronic toxicity, we will amend the self-monitoring program to require more consistent monitoring.

II. City of Pinole – February 14, 2007

City of Pinole Comment 1

The City of Pinole requests that the Water Board remove the reference to Best Professional Judgment (BPJ) in Finding F. It points out that BPJ was not used to specify limits in this permit and, based on Pinole's interpretation of 40 CFR 125.3 limits imposed using BPJ are not applicable after March 31, 1989.

Response 1

We have made the change requested since the Pinole Tentative Order does not specify technology limits based on BPJ in accordance with 40 CFR 125.3. However, we disagree with Pinole'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.

City of Pinole Comment 2

On page 2, (Finding G) of the Tentative Order, Pinole 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 2

We have not made the change requested because we disagree with Pinole's contention. 40 CFR 122.44(d)(1)(vi) clearly states, "where a State has not established a water quality criterion... such a criterion may be derived using a proposed State criterion..." Additionally, the language at issue is template language developed by the State Water Board, and Pinole has provided no convincing reason to change it.

City of Pinole Comment 3

Pinole requests that the Water Board remove the first and last sentences of Finding M. This is because Pinole believes that these statements are not supported by evidence in the record since the Tentative Order contains restrictions for individual pollutants (e.g., copper and dioxin) that are more stringent than required by the Clean Water Act.

Response 3

We are denying this request since we are unaware of conditions in the permit that are more stringent than the federal Clean Water Act (CWA). In the cases of both copper and the narrative objective for dioxin-TEQ, these were developed and submitted to U.S. EPA prior to May 30, 2000, and therefore, are "applicable water quality standards for purposes of the CWA" pursuant to 40 CFR 131.21(c)(1).

City of Pinole Comment 4

On page 5 (Finding O), the City requests that the Water Board indicate that the removal of a water body from the 303(d) list be cited as a "new information" exception to the antibracksliding rule and, based on this exception the Water Board remove the last sentence from Finding O, which states: "All effluent limitations in this Order are at least

stringent as the effluent limitations in the previous Order.” This is because the Water Board removed copper from the 303(d) list in December 2004, and the City does not believe the use a new copper WER to calculate effluent limits should violate anti-backsliding requirements.

Response 4

We are denying this request because Pinole 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. While the removal of copper from the 303(d) list is “new information”, it is not sufficient to allow the Water Board to recalculate final copper limits. This is because § 1342(o) includes a condition to the exception of “new information.” 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 Pinole 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 Pinole documents how it will reduce copper in other areas of the watershed.

City of Pinole Comment 5

The City requests that the Water Board recalculate the final cyanide limits based on the amended data set submitted to the Water Board on January 19, 2007. Using the amended data set would change the average monthly effluent limitation for cyanide from 2.9 µg/L to 3.0 µg/L.

Response 5

We recalculated final effluent limits for cyanide with the amended data set, and agree that the average monthly effluent limitation should equate to 3.0 µg/L. Additionally, we recalculated the alternate limits for cyanide. The maximum daily effluent limitation now equates to 43 µg/L instead of 44 µg/L, while the average monthly effluent limitation remains at 20 µg/L.

City of Pinole Comment 6

The City requests that the Water Board use a WER of 2.4 to calculate final copper limits as done by the Water Board Reasonable Potential Analysis completed on July 11, 2006, and referenced in Attachment F, page F-28. To support its position, the City indicates that it is appropriate to relax water quality based effluent limitations based on new information such as the removal of copper from the 303(d) list and the pending adoption of a copper SSO. Additionally, the City indicates that while it has been able to comply with previous final copper limits, an increase in new construction (i.e., copper piping), and potential drought conditions could affect future compliance.

Response 6

We are denying this request. Please see Response 4.

City of Pinole Comment 7

The City requests the Water Board remove final dioxin-TEQ limits from the Tentative Order. This is because (1) compliance with the proposed final limits cannot accurately be assessed due to technological limitations of laboratory instruments and difficulties in measuring dioxin; (2) the dioxin-TEQ limit was determined using the narrative bioaccumulation objective for 2,3,7,8-TCDD along with toxic equivalence factors (the City, BACWA, SBSA, CMSA, and CCCSD are questioning the legality of this conversion); and (3) the Water Board has acknowledged that the primary source of dioxins and furans in the Bay Area is air emissions from combustion sources and, as such, dioxin in wastewater is beyond the City's control.

Response 7

We are denying this request. The dioxin-TEQ final limitation is a translation of the bioaccumulation narrative WQO from the Basin Plan into a numerical water quality-based effluent limit (WQBEL). 2,3,7,8 -TCDD (i.e., dioxin) and compounds that exhibit similar effects (i.e., dioxin congeners) are bioaccumulative and have been shown to violate the bioaccumulation narrative WQO in San Francisco Bay. Toxic equivalents (TEQ) to 2,3,7,8-TCDD are calculated using Toxic Equivalency Factors (TEFs) published by U.S. EPA and the World Health Organization. Therefore, translation of the narrative bioaccumulation WQO into a WQBEL using dioxin-TEQ is reasonable.

On the issue of addressing compliance, we agree that current laboratory methods are not sensitive enough to detect dioxin and furan compounds at levels low enough to document compliance with final limitations. However, the practice of establishing limits below analytical quantification is in accordance with Basin Plan policy (4.7.4), and the SIP. To account for this, section 2.4.5 of the State Implementation Policy (SIP) indicates that in determining compliance with an effluent limitation a discharger should be deemed out of compliance if the concentration of a priority pollutant is greater than the effluent limitation and equal to or greater than the reported minimum level (ML). On page 23 of the Tentative Order, under Section VII Compliance Determination, this language is also included. In the case of dioxin-TEQ, the Water Board will evaluate compliance with final limits based on MLs that are achievable by commercial laboratories in the State of California. We have revised the Tentative Order to indicate that Pinole shall use MLs that are ½ of those specified for U.S. EPA Method 1613.

The Water Board has recognized that the primary sources of dioxins and furans in the Bay Area are from air emissions; however, we are required to set effluent limits because there are levels of dioxins and furans in Pinole's discharge that have reasonable potential to contribute to an exceedance of the Basin Plan's narrative WQO because the Bay is listed as impaired by dioxins and furans. This is consistent with 40 CFR 122.44(d)(i), which states: "Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality."

City of Pinole Comment 8

The City requests that the Water Board change Effluent Limitations A.3, Table 3, Note [4a] to reference the more recent Draft Staff Report on Proposed Site-Specific Water Quality Objectives for Cyanide for San Francisco Bay.

Response 8

We modified the Tentative Order to reference *Staff Report on Proposed Site-Specific Water Quality Objectives for Cyanide for San Francisco Bay*, dated December 4, 2006, since this is the most recent report.

City of Pinole Comment 9

The City requests that the Water Board remove the second paragraph in Provision A.2a (page 13) that details an annual evaluation of reasonable potential for selected constituents. As a substitute for this paragraph, the City requests that the Water Board insert the following: "The Discharge shall summarize the annual results of the data collected to date and describe future monitoring to take place, based on these results, in the Annual Report required by Part A of the Self-Monitoring Program (Attachment G). The first Annual Report required under this Order is due February 1, 2008, for the period from the effective date of this Order through December 31, 2007.

Response 9

We are denying this request. The purpose of the annual evaluation is to ensure that the City actively investigates and implements corrective measures to minimize the concentration of any pollutant that has increased during this permit cycle, and has the potential to adversely affect water quality. Furthermore, this language is consistent with other permits that were recently adopted by our Board (e.g., Central Marin Sanitation Agency at the January 2007 meeting).

City of Pinole Comment 10

The City requests that the Water Board remove Provision A.2c, which requires the City to prepare and implement a Capacity Increase Study. The City points out that the Tentative Order adequately addresses this issue in Provision A.2d.

Response 10

We agree that Provision A.2d of the Tentative Order provides an acceptable framework for addressing capacity issues at the City of Pinole's Water Pollution Control Plant, and therefore, we will remove Provision A.2c from the Tentative Order.

City of Pinole Comment 11

The City requests that we modify Provision A.2d of the Tentative Order to indicate that the purpose of these tasks are also to increase dry and wet weather treatment capacity, and to include the requirement for Pinole to consider legal and statutory options for expanding its legal authority to reduce I/I from the portion of the collection system owned and operated by the City of Hercules in its Collection System Master Plan, as opposed to including this in annual status reports.

Response 11

We modified the Tentative Order to include these clarifications.

City of Pinole Comment 12

The City requests that we modify Provision A.2f (task 1) to indicate that source control measures will be conducted per the schedule identified in Pinole's infeasibility to comply reports for cyanide, mercury, and dioxin-TEQ.

Response 12

We modified the Tentative Order to include this clarification.

City of Pinole Comment 13

The City requests that the Water Board modify Provision A.2f (task 2) to acknowledge the pending adoption of the mercury TMDL and implementation of that TMDL through a watershed permit.

Response 13

We are denying this request. This is because we believe it is premature to include measures related to the implementation of the mercury TMDL. In the case of cyanide, the Tentative Order has been crafted in a way that alternate limits based on the site-specific objective will become effective without the need for a permit amendment. With mercury, the Water Board will need to either amend Pinole's permit individually or through a watershed permit. That being the case, the amendment process would be the appropriate time to include other measures required by the mercury TMDL such as pollution minimization.

City of Pinole Comment 14

The City requests that the Water Board reduce the monitoring frequency of dioxin and furans from semi-annually to annually.

Response 14

We are denying this request. 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.

City of Pinole Comment 15

The City requests that the Water Board remove the requirement for chronic toxicity screening because the effluent is discharged through a deepwater diffuser, the average dry weather flow is only 3 mgd, and there are no major industries located in the service area.

In the event screening requirements for chronic toxicity are retained, the City requests that the Water Board allow ammonia removal prior to completing the analysis. This is because the City has already identified ammonia interferences when conducting acute toxicity analyses and believes that the presence of ammonia will interfere with chronic toxicity analyses as well.

Response 15

We intend to keep the requirement for chronic toxicity screening (see Response 1 to U.S. EPA). On allowing ammonia removal, we cannot grant this request at this time because the City has not provided evidence showing ammonia interference in chronic toxicity tests.

City of Pinole Comment 16

The City requests that the Water Board modify the Fact Sheet to ensure that it is consistent with changes suggested by the City in the Tentative Order.

Response 16

We modified the Fact Sheet based on our responses to the City's first 15 comments.

City of Pinole Comment 17

The City requests that the Water Board make four editorial changes:

a. Fact Sheet, II.A.5, 2nd paragraph (page F-4)

...These storm water flows constitute all industrial storm water at this facility and consequently ~~there are no separate~~ this Order shall serve to regulate industrial storm water at this facility.

b. Fact Sheet, IV.A.3, 3rd Paragraph (page F-14)

The Discharger has satisfied the criteria of 40 CFR 122.41(m)(4)(i)(A-C). Bypasses are necessary to prevent severe property damage when flow exceeds the capacity of secondary treatment...

c. Fact Sheet, VI.A. (page F-37)

*This Order requires daily flow monitoring and twice per week monitoring for CBOD, ~~four~~ **two** times per week monitoring of TSS, and monthly monitoring for cyanide and mercury to facilitate...*

d. Fact Sheet, VI.B. (page F-37)

*...daily monitoring for temperature and dissolved oxygen, monthly monitoring for oil and grease, copper, cyanide, mercury, **ammonia-nitrogen**, and acute toxicity, ~~and quarterly monitoring for ammonia-nitrogen~~, and twice per year monitoring for dioxin-TEQ...*

Response 17

We modified the Tentative Order to include these corrections.

III. Bay Area Clean Water Agencies (BACWA) – February 16, 2007

BACWA Comment 1

BACWA requests that Finding E of the Tentative Order include language that indicates the California Water Code section 13389 limits the CEQA NPDES permit exemption to Chapter three of CEQA.

Response 1

We modified the Tentative Order to add “chapter 3” to Finding E.

BACWA Comment 2

BACWA requests that the Water Board remove the reference to Best Professional Judgment (BPJ) in Finding F. It points out that this sentence should be removed as was done in the East Bay Dischargers Authority (EBDA) Permit as a consequence of BACWA comments.

Response 2

See Response 1 to the City of Pinole.

BACWA Comment 3

BACWA requests that the Water Board remove the reference to proposed state criterion in Finding G.

Response 3

See Response 2 to the City of Pinole.

BACWA Comment 4

BACWA requests that the Water Board remove the first and last sentences from Finding M since the legal conclusions are not supported by evidence in the record. BACWA indicates that there are several instances where the permit requirements are more stringent than required by the federal Clean Water Act.

Response 4

See Response 3 to the City of Pinole.

BACWA Comment 5

BACWA requests that the Water Board add language to Finding R to indicate that the Regional Water Board has notified the Discharger and interested agencies and persons of its intent to adopt an NPDES permit and prescribe waste discharge requirements...

Response 5

We have modified the Tentative Order to include this additional language.

BACWA Comment 6

BACWA requests that the Water Board use a Water Effects Ratio (WER) to compute final limits for copper. It indicates that the Water Board has the discretion to apply the WER and has not sufficiently stated why the WER is not applied in this case.

Response 6

See Response 4 to the City of Pinole.

BACWA Comment 7

BACWA requests that the Water Board remove the final limits for mercury from the permit because BACWA believes that it is inappropriate to include final limits when there is no indication that the permittee will be able to meet this limit.

Response 7

We are denying this request. In our view, there is no basis for removing final concentration limits for mercury. The Water Board must include limits for mercury because there is reasonable potential for Pinole to discharge this pollutant at levels that could adversely affect water quality. Since mercury is a priority pollutant the Water Board must develop limits based on the prescriptive measures of the State Implementation Policy. However, because of the considerable uncertainty in determining the most effective measure that should be implemented to ensure compliance with final mercury limits, we have provided Pinole with the maximum compliance schedule permissible by law.

BACWA Comment 8

BACWA requests that the Water Board remove the final limit for dioxin-TEQ from the permit. It indicates that there is insufficient basis for applying a final limit for dioxin-TEQ to meet the narrative water quality objective.

Response 8

See Response 7 to the City of Pinole.

BACWA Comment 9

BACWA 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 Central Contra Costa Sanitary District's Permit, Appeal No. OCC A-1399(a)), in order to preserve BACWA'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. BACWA 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

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).

BACWA Comment 10

BACWA requests that the Water Board revise the Tentative Order to clarify how ambient background receiving studies are actually being conducted. Pinole meets the permit requirement to participate in collecting ambient receiving water monitoring for priority pollutants by participating in a collaborative study with BACWA. Therefore, BACWA requests that we add the following language to Provision C.2b Ambient Background Receiving Water Study:

*This 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 10

We modified the Tentative Order to include this clarification.

IV. San Francisco Baykeeper – February 20, 2007

Baykeeper Comment A.1

No legal basis exists for the mercury, cyanide, and dioxin compliance schedules.

As Baykeeper has repeatedly stated in prior comments to the San Francisco Regional Water Quality Control Board (“Regional Board”), the CWA forbids the Regional Boards from issuing “compliance schedules” which delay the effective date of Water Quality Based Effluent Limitations (“WQBELs”) past July 1, 1977. To date, the Regional Board has rejected these comments. Baykeeper and other public interest environmental groups currently have pending appeals to the State Water Resource Control Board (“State Board”) which raise this issue, as well as a pending federal court lawsuit which seeks a ruling in accord with our contentions. We have included an attachment to this letter which repeats our contentions with respect to the legality of delaying the effective date of WQBELs past July 1, 1977 to preserve our rights on appeal to the State Board.

Baykeeper is aware that the Regional Board has repeatedly asserted that provisions in the CWA and U.S. Environmental Protection Agency (“EPA”) regulations governing compliance schedules (33 U.S.C. § 1313(e)(3)(A), (F); 40 C.F.R. §§ 130.5(b)(1), (6), 131.38(e), 122.47) authorize using compliance schedules to delay the effective date of WQBELs in certain circumstances. Specifically, the Regional Board has contended that such WQBEL-delaying compliance schedules (hereinafter “compliance schedules”) are authorized in the circumstances specified by (1) the California Toxics Rule (“CTR”), 40 C.F.R. § 131.38; (2) the State’s implementation plan for toxic pollutant control, Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, Section 2, p. 20 (2005) (“SIP”); and/or (3) the San Francisco Bay Basin Plan (“Basin Plan”).

The CTR and the SIP, however, cannot provide the basis for the compliance schedules in the permit. While the CTR contains a provision allowing schedules of compliance when dischargers need time to achieve WQBELs based on CTR criteria, this provision expired

by its own terms on May 18, 2005. 40 C.F.R. § 131.38(e). The SIP also purports to authorize compliance schedules for WQBELs based on CTR criteria, however, the SIP can no longer lawfully do so. When it promulgated the CTR, EPA explicitly stated that compliance schedules for CTR criteria can be issued 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 schedule provisions in [the CTR].” 65 Fed. Reg. 31704-5. Although EPA has partially approved the SIP provisions relating to CTR-based compliance schedules, it has not acted to amend the federal regulations prohibiting the use of compliance schedules after 2005. Because the CTR compliance schedule provision has expired and EPA has not acted to amend the CTR, the Regional Board may not issue compliance schedules for WQBELs based on CTR criteria.

Unlike the CTR and SIP, the Basin Plan contains provisions that ostensibly still allow the use of compliance schedules, albeit in limited situations. The Basin Plan authorizes compliance schedules to implement newly adopted objectives or standards. San Francisco Bay RWQCB Resolution No. 95-076. Compliance schedules must implement new standards “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.* For purposes of determining the availability of compliance schedules, adoption of the SIP did not change or newly interpret underlying objectives. See State Board Draft Order In the Matter of Own Motion Review of East Bay Municipal Utility District Wet Weather Permit, page 29 (January 12, 2007) (hereinafter “State Board Draft EBMUD Order”).

Despite the draft permit’s assertions to the contrary, compliance schedules for cyanide, mercury and dioxin are not authorized by the Basin Plan. Permit Fact Sheet, Appendix F-4: General Basis for Final Compliance Dates. The final limit for cyanide is based on criteria first established by the National Toxics Rule in 1992, and the objective for mercury was adopted more than twenty years ago, in 1986. 40 C.F.R. § 131.36, 57 Fed. Reg. 60848 (Dec. 22, 1992). The permit limit for dioxin is based on the Basin Plan narrative objective, which is interpreted using CTR criteria first established in 1999. 64 Fed. Reg. 61182 (November 9, 1999). Clearly none of the bases for the permit limits are new and all but that for dioxin have been in existence for more than ten years. Therefore, the permit should not contain compliance schedules for these pollutants.

Even if the Basin Plan did allow compliance schedules for the pollutants in this permit, the deadlines established by the permit are incorrectly calculated. Although supposedly based on the Basin Plan, the draft permit calculates the deadline for final compliance with final cyanide and mercury limits as ten years from the effective date of the SIP. As recently recognized by the State Board, the SIP did not change or newly interpret underlying objectives, it merely established consistent procedures to implement existing standards. State Board Draft EBMUD Order at 29. Compliance schedules must be calculated based on the date that the applicable objective or standard was adopted. Therefore, 2002 was the latest date for compliance with cyanide WQBELs, and 1996 was the latest date for compliance with mercury WQBELs.

Response A.1

We have not made changes in response to this comment. The July 1, 1977, statutory deadline applies to those water quality standards in effect before July 1, 1977. For such pollutants, we agree that full and immediate compliance is mandatory. For those water quality standards adopted or revised after that date, such as cyanide, mercury, and dioxin, permits may grant compliance schedules to achieve compliance with water quality standards if the State has authorized a compliance schedule in its Basin Plan or a Policy. See *In the Matter of Star-Kist Caribe, Inc.*, 3 E.A.D 172 (U.S. EPA Appeals Board 1990). Here, the Basin Plan authorizes compliance schedules.

In our view, the Tentative Order proposes compliance schedules for mercury, cyanide, and dioxin-TEQ that are lawfully granted. As noted in the Fact Sheet, the cyanide water quality criterion is based on the NTR, the mercury criterion is based on the Basin Plan, and the dioxin-TEQ criterion is based on the narrative bioaccumulative objective in the Basin Plan. The compliance schedules for cyanide, mercury, and dioxin-TEQ 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 Water Board in Order WQ 2001-06 (the “Tosco Order”).

We are aware that the State Water Board staff, in a draft Order, dated January 12, 2007, concerning the East Bay Municipal Utility District Wet Weather Permit, indicated that the adoption of the SIP did not result in a “new interpretation” of the mercury objective and that compliance schedules are not available for NTR pollutants. This position is a draft staff position only, and has not been considered by the State Water Board. Furthermore, we disagree with it because the promulgation of the SIP results in more stringent effluent limitations, and therefore, a new interpretation of the existing standards for cyanide and mercury is reasonable. 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	3.0
Mercury (µg/L)	0.025	0.025	not required	0.044	0.019

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

$$ECA (\text{cyanide}) = 1.0 + 9(1-0.4)$$

$$ECA (\text{cyanide}) = 6.4 (\text{both chronic and acute})$$

$$ECA (\text{mercury}) = 0.025 + 0(0.025-0.0086) - \text{chronic}$$

$$ECA (\text{mercury}) = 2.4 + 0 (2.1-0.0086) - \text{acute}$$

$$ECA (\text{mercury}) = 0.051 + 0(0.051-0.0022) - \text{human health}$$

$$ECA (\text{mercury}) = 0.025 \text{ chronic, } 2.1 \text{ acute, and } 0.051 \text{ human health}$$

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-26 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 0.68, and for mercury is 0.82. Therefore, in accordance with the SIP, the ECA acute and chronic multipliers for cyanide will be 0.29 and 0.49; and for mercury will be 0.24 and 0.43.

Cyanide

$$LTA_{\text{acute}} = 6.4 * 0.286 = 1.83$$

$$LTA_{\text{chronic}} = 6.4 * 0.487 = 3.12$$

Mercury

$$LTA_{\text{acute}} = 2.4 * 0.243 = 0.58$$

$$LTA_{\text{chronic}} = 0.025 * 0.431 = 0.01077$$

Step 4: Select the lowest LTA. In this case, the LTA for cyanide = 1.83, and for mercury is 0.01077.

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

$$\text{AMEL} = 1.83 * 1.64 = 3.0 \text{ } \mu\text{g/L}$$

$$\text{MDEL} = 1.83 * 3.49 = 6.4 \text{ } \mu\text{g/L}$$

Mercury

$$\text{AMEL} = 0.01077 * 1.77 = 0.019 \text{ } \mu\text{g/L}$$

$$\text{MDEL} = 0.01077 * 4.12 = 0.044 \text{ } \mu\text{g/L}$$

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 = 2.32.

Cyanide

Not applicable

Mercury

$$\text{AMEL} = 0.051$$

$$\text{MDEL} = 0.051 * 2.32 = 0.12$$

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 $\mu\text{g/L}$, D = dilution credit, and C_b = background- 0 $\mu\text{g/L}$ *

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

$$C_e = 10 \text{ } \mu\text{g/L}$$

* 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 $\mu\text{g/L}$, D = dilution credit, and C_b = background- 0.004 $\mu\text{g/L}$

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

$$C_e = 0.025 \mu\text{g/L}$$

For mercury the limits developed under the SIP are more stringent because the Basin Plan methodology only limits that maximum daily discharge, whereas the SIP includes an AMEL. Over time, Pinole will need to ensure that its discharge does not violate the more stringent AMEL calculated according to the SIP. In other words, under the SIP Pinole must ensure that its discharge on average does not exceed 0.019 $\mu\text{g/L}$, whereas under the Basin Plan it can discharge, on average, up to 0.025 $\mu\text{g/L}$.

In the case of dioxin-TEQ, the Water Board developed a limit because U.S. EPA has found that dioxins and furans are accumulating in fish tissue in San Francisco Bay, and therefore, we know that the narrative bioaccumulation water quality objective from the Basin Plan is not being met. Because Pinole discharges to the Bay, and dioxins are present in the discharge, there is reasonable potential to cause or contribute to a violation of the narrative objective. Since this permit translates the narrative bioaccumulative objective for dioxins and furans into a numeric limit, the effective date of this translation is the effective date of the permit. Therefore, the Water Board may grant a compliance schedule of up to ten years from the effective date of the permit for dioxins and furans. Because of the considerable uncertainty in determining the most effective measure that should be implemented to ensure compliance with final dioxin-TEQ limits, we have provided Pinole with the maximum compliance schedule permissible by law.

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 schedules are still inconsistent 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). This requirement is reflected in the SIP, which 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 compliance schedules consist of specific, enforceable milestones that will lead to attainment of applicable standards within the shortest time possible. 40 C.F.R. §§ 122.47(a)(1) and 131.38(e)(4). This interpretation was recently reinforced by EPA. In a letter disapproving portions of the North Coast Basin Plan's compliance schedules provisions, Water Division Director Alexis Strauss stated that "the Regional Board, when it issues permits, must nevertheless establish enforceable requirements leading to compliance with the final effluent limitation." Letter to Tom Howard, Acting Executive Director, SWRCB from Alexis Strauss, Water Division Director, EPA, dated November 29, 2006.

No provision of the draft permit imposes requirements on the discharger that are designed or intended to lead to compliance with WQBELs. The draft order is misleading in that it purports to require the discharger to undertake tasks to achieve compliance with WQBELs. These tasks, however, fail to identify any actions necessary for compliance with WQBELs other than continued implementation of source control measures, which have been ineffective to date. The Regional Board ostensibly places the onus on the discharger to identify actions other than source control measures necessary to achieve compliance with WQBELs, yet the draft permit does not require identification of these actions until ten months before WQBELs for cyanide and mercury take effect. Such a short timeframe evinces the Regional Board's intent that these compliance schedules be nothing more than a "paper effort." Underscoring the Regional Board's unacceptable approach to compliance schedules is the lack of evidence offered that the schedules are "based on the shortest practicable time required to achieve compliance [with WQBELs]." SIP Section 2.1., page 21. We strongly urge the Regional Board to rewrite section ¶ VI.C.2.f and all other sections affecting compliance schedules so that they (1) require meaningful actions by the discharger to come into compliance with WQBELs and (2) provide evidence that the schedules are as short as practicable.

Response 2

We have not made changes in response to this request. In our view, maximum allowable compliance schedules are appropriate for mercury, cyanide, and dioxin-TEQ 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. We believe it is appropriate to allow Pinole 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. As it is unclear what measures should be implemented to achieve compliance with final water quality based effluent limitations, it is our position that the method and manner of achieving compliance should be at the discretion of the City of Pinole.

Baykeeper Comment 3

The permit must contain an interim numeric effluent limit for dioxin-TEQ. The SIP requires numeric effluent interim limitations be established in all permits containing compliance schedules that exceed one year. SIP Section 2.2.1, at page 22. The limits must be based on the more stringent of current facility performance or an existing permit limitation. Id. Given that the previous permit lacked a numeric limit for dioxin, the interim permit limit should be based on current performance. If, as claimed in the draft permit, available data is insufficient to establish a performance-based limit, then the permit must require sufficient monitoring to establish a limit. At a minimum, the permit should require monthly monitoring in order to determine annual mass loading and in order to generate sufficient data to establish appropriate Average Monthly Effluent Limitations ("AMELs").

Response 3

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 Pinole has only collected seven 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.

Comment 4

Baykeeper indicates that the permit authorizes illegal bypasses. Under the Clean Water Act section 301(b)(1)(B), effluent limitations for Publicly Owned Treatment Works (“POTWs”) must be based upon secondary treatment. EPA regulations reinforce the secondary treatment requirement by prohibiting bypasses, which are diversions of untreated effluent from any portion of a treatment facility. 40 C.F.R. § 122.41(m). Included in the definition of bypass is the discharge of blended wastewater. “Wastewater that has been diverted around biological treatment units or advanced treatment units” whether or not that wastewater has been subsequently blended with fully treated wastewater is a “bypass” as defined in 40 CFR 122.41(m)(1). Thus, the federal bypass regulations apply to discharges of blended wastewater. See 70 Fed Reg. 76013, 76015 (Dec. 22, 2005) (EPA’s proposed blending policy).

The draft permit is inconsistent with federal bypass regulations in several respects. First, it purports to allow bypasses whenever the discharge complies with effluent and receiving water limitations. Bypasses, including discharges of blended wastewater, are prohibited unless they do not cause an exceedance of effluent limitations and are for essential maintenance to assure efficient plant operation. 40 C.F.R. § 122.41(m)(2). Discharge Prohibition III.C., however, incorrectly allows bypasses when the first condition is satisfied but not the second. To be consistent with the federal regulations, Discharge Prohibition III.C must be amended to specify that the permittee may not discharge blended wastewater, even if the discharge complies with the permit limitations, unless doing so is necessary for essential maintenance.

Second, the permit illegally authorizes all bypasses whenever influent flow exceeds plant capacity. All bypasses are prohibited by federal law. 40 C.F.R. § 122.41(m)(4). The Regional Board may not bring an enforcement action against a discharger, however, when the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; there are no feasible alternatives to the bypass; and the permittee complies with applicable notice requirements. 40 C.F.R. § 122.41(m)(4). The Regional Board may, at its discretion, choose not to bring an enforcement action for an anticipated bypass when, considering the bypass’ adverse effects, it determines that the three

conditions outlined above are met. 40 C.F.R. 122.41(m)(4)(ii). Anticipated bypasses may only be approved if the discharger has implemented all feasible alternatives, which include capital projects to ensure adequate treatment plant capacity. Letter to Lila Tang from EPA regarding NPDES Permit No. CA 0037699, July 12, 2006; U.S. v. City of Toledo, 63 F. Supp. 2d 834, 839 (N.D. Ohio 1999), see also Save Our Bays and Beaches v. City and County of Honolulu, 904 F. Supp. 1098, 1134-36 (D. Haw. 1994).

The draft permit provides the permittee with a blanket authorization to bypass based solely on the permittee's assertions that it has no feasible alternatives. Missing from the permit findings and fact sheet is any evidence that the permittee has actually implemented all feasible alternatives, that the Regional Board has considered the bypass' adverse effects on the environment, and that bypasses when plant capacity is exceeded will result in severe property damage as defined by 40 C.F.R. 122.41(m)(1)(ii) (e.g, "damage to the treatment facilities which causes them to become inoperable"). This is clearly at odds with the bypass regulations, which explicitly prohibit bypasses, but limit the Regional Board's enforcement discretion in specific circumstances. In order for Discharge Prohibition ¶ VI.C.5.d to accurately reflect federal regulations, the entire second paragraph should be deleted. See EPA Comments on the East Bay Dischargers Authority Permit, permit No, CA0037699 (July 12, 2006). Additionally, the requirements of ¶ VI.C.5.d, corrective measures to eliminate blending, must be amended to include a specific deadline by which blending and discharges from outfall 002 will no longer occur.

Response 4

We have not made changes in response to this request. Contrary to Baykeeper's position, all bypasses are not prohibited by federal law. 40 CFR 122.41(m)(4)(ii) states: "The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph (m)(4)(i) of this section." In this case, Pinole has met these three conditions: (1) shown the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage, (2) shown there were no feasible alternatives to the bypass, and (3) submitted notices.

As described in the Fact Sheet of the Tentative Order, Pinole submitted a no feasible alternatives analysis, dated December 20, 2006, that documented at flows above 10.3 mgd secondary treatment capacity would be exceeded, and therefore, significant damage to its treatment plant could occur if it attempted to process flows above this threshold. Therefore, at this time, there are no feasible alternatives to bypass because Pinole's treatment capacity is insufficient to process flows it receives during wet weather. To address the need for continued bypass, Pinole's no feasible alternatives analysis provided a framework for evaluating the best mechanisms for minimizing or eliminating bypasses during wet weather events. Based on Pinole's initial estimates, we believe that once it implements corrective measures, bypassing during wet weather will become unnecessary. Therefore, as a condition of permitting continued bypass during this permit cycle, the Tentative Order requires Pinole in Provision VI.2d to complete a number of tasks to eliminate blending by June 1, 2016. In our view, this is a reasonable time frame

considering the need, and significant costs, of addressing this issue through (a) collection system improvements, and (b) wastewater treatment plant upgrades.

Comment 5

Baykeeper indicates that relaxation of the cyanide limit violates the Clean Water Act's prohibition on backsliding.

The draft permit violates the anti-backsliding policy by allowing relaxation of the permit limit for cyanide. Draft Permit IV.A.3 fn 2 at page 9. 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) (emphasis added). This policy prohibits a reissued permit from containing an effluent limit that is less stringent than that in the previous permit. 33 U.S.C. § 13429(o), 40 C.F.R. § 122.4(l)(1).

The draft permit for Pinole, however, specifies that the cyanide limit will be relaxed upon adoption of a Site Specific Objective ("SSO"). The sole justification offered for the higher limit—that the previous one is an interim limits—is unpersuasive. Implicit in the concept 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 lack of a final limit in the previous permit runs counter to the purpose of the antibacksliding provisions, especially when the discharger has demonstrated its ability to comply with the more stringent, performance-based interim limits. Please remove the provisions allowing for increased cyanide discharges or, at a minimum, amend the permit findings and the fact sheet to explain in detail how the relaxed limits comply with anti-backsliding and anti-degradation requirements.

Response 5

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 the Tentative Order is based on treatment plant performance, and therefore, is not comparable to a WQBEL. As determined by the State Water Board in Order WQ 2001-06 (the "Tosco Order"), antibacksliding applies to comparable limits. In other words, final is compared to final, interim to interim. The previous permit did not impose a final WQBEL for cyanide. Therefore, there is no comparable effluent limit from which to backslide for this pollutant.

On antidegradation, this issue is addressed through the standards setting process for cyanide, and therefore, an evaluation in this individual NPDES permit is unnecessary. To be consistent with proposed cyanide SSO, we have revised the last sentence of task 2 from Provisions VI.C.2e of the Tentative Order to read: "If the cyanide SSO becomes effective and an alternate limit takes effect, the Discharger shall implement ~~those any applicable additional pollutant minimization~~ measures described in Basin Plan implementation requirements associated with the cyanide SSO.

Baykeeper Comment 6

Baykeeper requests that the draft permit specify a lower minimum level for cyanide. The draft permit specifies a minimum level (“ML”) and reporting level (“RL”) for cyanide that exceeds the final average monthly concentration WQBEL, meaning that once the final WQBEL becomes effective, determining actual compliance with that limit will be impossible. Baykeeper contends that a lower ML could and should be established for cyanide and urges the Regional Board to do so. 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. Given the Regional Board’s limited resources, we suggest that the discharger community be required, by time schedule order or other appropriate administrative request, to assist in development of lower MLs if their permits contain WQBELs that are lower than the SIP-specified MLs.

Response 6

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. 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. So it would not be a reasonable use of Water Board or Discharger resources to investigate lowering the ML for cyanide.

Baykeeper Comment 7

*Baykeeper indicates that the permit needs to be modified (for example, footnote 5 to Section IV.A.3.) to clarify that MLs and/or Reporting Levels (“RLs”) cannot be used to determine CWA compliance and instead may only be used to guide Regional Board enforcement discretion and as supplemental information in dischargers’ reporting (i.e., statements in Discharge Monitoring Reports that the sampling results were above or below the ML or RL). In *Waterkeepers N. California v. State Water Resources Control Board*, the First Division of the California 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). To prevent MLs or RLs from essentially supplanting WQBELs in situations where the ML or RL is equal to or greater than applicable WQBEL, they must be used only to determine compliance for purposes of reporting and the exercise of enforcement discretion.*

Response 7

We are not making changes in response to this request. The language Baykeeper finds objectionable is taken directly from Section 2.4.5 of the State Implementation Policy, which states:

“Dischargers shall be deemed out of compliance with an effluent limitation, if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the RL.”

Comment 8

Baykeeper requests that the permit include an appropriate reasonable potential analysis for whole effluent chronic and acute toxicity.

Baykeeper indicates that the Regional Board's proposed approach to whole effluent toxicity regulation is inappropriately calculated to insulate the discharger from enforcement. The permit perpetuates the Regional Board's improper tack by failing to include a reasonable potential analysis for either chronic or acute toxicity. The Basin Plan contains a narrative water quality objective for whole effluent toxicity ("WET"). Consistent with long-established EPA guidance, compliance with a narrative WET standard must be determined by considering both the acute and chronic toxicity of a discharge. U.S. EPA, Technical Support Document for Water Quality-based Toxics Control, EPA/505/2-90-001, page 4 (March 1991) ("[t]he whole effluent approach to toxics control...involves the use of acute and chronic toxicity tests."). In order to determine whether the permittee's discharge violates the Basin Plan narrative objective, the Regional Board must conduct a reasonable potential analysis for both acute and chronic toxicity. This requirement has been reiterated by the State Board, which in the recently issued Draft EBMUD Order, proposes to direct the Regional Board to revisit the EBMUD permit to "address reasonable potential for [whole effluent toxicity] and, if reasonable potential exists, include appropriate limitations based on Basin Plan [acute and] chronic toxicity requirements." State Board Draft EBMUD Order at 21.

The permit fact sheet and related permit findings, however, include no information suggesting that the Regional Board has conducted a reasonable potential analysis ("RPA") for either acute or chronic toxicity for the permittee's discharge. The permit also lacks any effluent limit for chronic toxicity limit, requiring only that the discharger conduct "screening phase monitoring." Draft MRP V.B.1 at page E-7. Not only is this regime unjustifiably accommodating to the discharger, it is not calculated to enable a determination of whether the discharge is causing or contributing to a violation of the Basin Plan's narrative toxicity objective.

Response 8

We have not made changes in response to this request. The purpose of a reasonable potential analysis is to determine if limits are needed to protect water quality. In the case of acute toxicity, consistent with the Basin Plan Pinole's permit assumes reasonable potential exists, and requires that Pinole comply with acute toxicity limitations from Table 4-4 of our Basin Plan.

For chronic toxicity, Pinole has not conducted monitoring to determine if its discharge has reasonable potential. However, given the size of Pinole's discharge, the small amount of industries that discharge to its treatment plant, and the fact that it discharges via a deepwater diffuser, we do not believe that this discharge will exhibit chronic toxicity at levels that threaten water quality. To more fully evaluate the potential for chronic toxicity in Pinole's discharge, the Revised Tentative Order will require that

Pinole conduct screening phase monitoring within one year of the effective date of this Order (see Response 1 to U.S. EPA).

Baykeeper Comment 9

Baykeeper indicates that the Tentative Order must require receiving water monitoring. Baykeeper indicates that the draft permit inappropriately excuses the permittee from conducting receiving water monitoring. Actual monitoring of the discharge receiving waters is necessary to determine whether the discharge is violating the permit's receiving water limits and causing or contributing to a violation of the Basin Plan. Participation in the Regional Monitoring Program or the Bay Area Clean Water Agencies' receiving water studies does not exempt the permittee from conducting its own receiving water studies. Fact Sheet ¶ VI.C.2 at page F-20, 38. Although an RMP station is located near the discharge outfall, the draft permit, findings and fact sheet lack any other evidence that RMP monitoring—including frequency and duration—is sufficiently representative of the discharge that it can be used to demonstrate compliance with receiving water limitations. The permit must be amended to require regular monitoring of the receiving waters near its discharge for all parameters for which the permit contains receiving water limitations.

Response 9

We have revised the Tentative Order at page E-8 to require that, with each annual self-monitoring report, Pinole document how it complies with Receiving Water Limitations V.A. This may include using discharge characteristics (e.g., mass balance with effluent data and closest RMP station), receiving water data, or a combination of both.

Baykeeper Comment 10

Baykeeper indicates that the draft permit fails to articulate how the effluent limitations for bacteria are protective of beneficial uses. The draft permit contains effluent limitations for total coliform that are based on Table 4-2 of the Basin Plan, which sets forth technology-based effluent limitations for conventional pollutants including total coliform. The permittee's discharge, however, obviously has reasonable potential to cause or contribute to exceedance of water quality standards for bacteria given that the discharge contains human sewage. Accordingly, the proper basis for the bacteria effluent limitations are the applicable water quality standards set forth in: (1) the water quality objectives for waters whose beneficial use include shellfish harvesting found in Table 3-1 of the Basin Plan (i.e., 5-sample median fecal coliform value not to exceed 14 MPN/100 ml and the 90th percentile value not to exceed 43 MPN/100 ml and 5-sample median total coliform value not to exceed 70 MPN/100 ml and the 90th percentile value not to exceed 230 MPN/100 ml), (2) the water quality objectives for salt waters used for recreation found in Table 3-2 (which is a legally binding part of the Basin Plan and which established steady state enterococcus limitations of 35 MPN/100 ml and instantaneous maximum limitations of 104 MPN/100 ml), and (3) the EPA Beach Act Rule (which establishes similar enterococcus water quality objectives in heavily used recreational waters, which include the waters at issue. 40 C.F.R. § 131.41). The permit must be amended to include a total coliform limit derived from the applicable water

quality objectives for shellfish harvesting, an enterococcus limit based on Table 3-2, and enterococcus monitoring.

Response 10

As Baykeeper points out, 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 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. In this case, we do not believe that enterococci limits (derived for protecting the beneficial use of water contact recreation) are necessary because the limits for total coliform in the Tentative Order are designed to protect the Basin Plan's more stringent water quality objectives for protecting water contact and shellfish harvesting. 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 hopes to begin work on this item in the near future.

Baykeeper Comment 11

Baykeeper indicates that the draft permit impermissibly allows the Executive Officer to unilaterally modify permit terms. The permit and MRP contain provisions inappropriately allowing permit changes to be made by unilaterally by the Executive Officer. Permit changes, unless minor, may not be made without complying with public notice and comment procedures. 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). In the context of monitoring effluent discharges, only changes to reporting or monitoring frequency may be made by the Executive Officer. State Board Draft EBMUD Order at 33. Please amend the permit findings at ¶ II.P (page 5), and the general monitoring provisions, ¶ I.A (page E-2), to specify that all changes to the monitoring requirements, except for those to frequency, must be approved, after notice and comment, by the Regional Board. We also request similar revisions to all provisions allowing the Executive Officer to unilaterally modify the permit, such as those at ¶ IV.A.5.c and d at page 10 (allowing exemptions to bioassay test methods and exceptions to toxicity limits).

Response 11

Consistent with the new State Water Board template, we have revised Finding P to read: "Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to

implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.” Additionally, we have deleted the sentence from the Monitoring and Reporting Program that states: “The MRP and SMP may be amended by the Executive Officer pursuant to U.S. EPA regulations 40 CFR 122.62, 122.63, and 124.5.”

We are not making changes to Provision IV.A.5.c and d of the Tentative Order because it is not to the benefit of the environment to have the Discharger make adjustments to effluent tests at its own discretion. In our view, Executive Officer approval in this instance 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.

V. Environmental Law Foundation – February 20, 2007

Environmental Law Foundation Comment 1

The Environmental Law Foundation indicates that the Tentative Order fails to demonstrate compliance with California’s Antidegradation Policy. The Fact Sheet states that the effluent limits imposed in the permit “hold the Discharger to performance levels that will not cause or contribute to water quality impairment or further water quality degradation.” The subsequent analysis, however, does not readily lend itself to that conclusion.

First, the Fact Sheet says nothing about conventional pollutants whose discharge the Regional Board is authorizing. Consequently, while the Fact Sheet does provide some discussion regarding the likely degradation arising from the discharge of copper, mercury, cyanide, and dioxin-TEQ, the Fact Sheet is silent regarding all other pollutants in the discharge such as BOD₅, TSS, pH, oil and grease, chlorine residuals, settleable matter, and total coliform bacteria. Thus, the Fact Sheet’s statement that the permit will not further water quality degradation is nothing more than a bald assertion. Case law requires that the Regional Board do more, including making findings on all those “legally relevant subconclusions supportive of . . . [the] ultimate decision.” (Topanga Assn. for a Scenic Community v. County of Los Angeles (1974), 11 Cal. 3d 506, 516; Glendale Memorial Hosp. & Health Center v. Dept. of Mental Health (2001), 91 Cal. App. 4th 129, 140-42 (holding unspecified, “boilerplate” findings insufficient where greater detail was necessary to determine whether there was support for the agency determination); see also City of Rancho Palos Verdes v. City Council of Rolling Hills Estates (1976), 59 Cal. App. 3d 869, 889) (holding city council resolution invalid due to lack of findings on “the sub-issues leading to the ultimate decision”).) So, what are the likely impacts of the discharge of conventional pollutants going to be on water quality in San Pablo Bay? The lack of such a sub-finding—with supporting data and analysis—here, in the present case, is fatal to the Tentative Order.

Second, the sub-findings that are included in the Fact Sheet are completely conclusory and without any evidence in the record to support them. At best, these findings are entirely pro-forma. At worst, they are incoherent. For instance, for dioxin-TEQ, the Fact Sheet states that because the previous permit did not include effluent limitations for dioxin-TEQ, antidegradation requirements are satisfied (Fact Sheet, p. F-32). It is not clear, however, what analytic path the Regional Board is taking with regard to this finding given that it is irrelevant to complying with the state's antidegradation requirements that effluent limits for a particular pollutant were not imposed in a prior permit. The only thing that is relevant is whether the present discharge of a pollutant will result in water quality degradation. (See Region 9, U.S. EPA, Guidance on Implementing the Antidegradation Provisions of 40 C.F.R. 131.12, p. 4 (June 3, 1987) [hereafter "EPA Guidance"] ("The first step in any antidegradation analysis is to determine whether or not the proposed action will lower water quality.")) Yet the Fact Sheet leaves unstated why water quality will not be degraded by imposing effluent limitations on a discharge that had previously been unregulated. Clearly, the Regional Board must do more to substantiate its antidegradation finding.

Nor is it sufficient for the Regional Board to cursorily conclude that antidegradation requirements are met simply because the discharger is being held to the prior permit term's effluent limitations. (See Fact Sheet §§ IV.C.4.a.(5), b.(9).) That would only be sufficient if current water quality was the baseline against which degradation is measured. Current water quality, though, can serve as the baseline only if that water quality is (1) the best that has existed since 1968 or (2) has been specifically authorized consistent with the state's antidegradation policy. (State Water Resources Control Board, Administrative Procedures Update No. 90-004, p. 4 (July 2, 1990) [hereafter "APU 90-004"].) Absent from the Tentative Order or the Fact Sheet, though, is any finding regarding baseline water quality, let alone the water quality resulting from authorizing this discharge. As above, the absence of such findings is unlawful. (See Topanga, supra, 11 Cal. 3d at 516.) So, what is baseline water quality for San Pablo Bay and has any decrease in water quality since 1968/1975 been authorized by the Board after making the specific findings required by the state's antidegradation policy? That would include the finding that the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control have been achieved. The Regional Board must make such findings in order to direct the public's attention to the analytical route the Board traveled from the evidence to the Tentative Order. (Topanga, supra, 11 Cal. 3d at 515.)

Yet instead of making all the necessary findings and conducting all the necessary studies and analysis, the Regional Board has stuck its head in the sand, doing all it can to remain oblivious to likely degradation. The upshot is that the only things supporting the Order's antidegradation findings are a wish and a prayer, not substantive analysis. Case law, again, requires more. (Healing v. California Coastal Comm. (1994), 22 Cal. App. 4th 1158, 1167 ("A conclusory statement in findings, unsupported by any evidence in the record . . . is per se insufficient."); Southern California Edison Co. v. State Water Resources Control Bd. (1981), 116 Cal. App. 3d 751, 759.)

Response 1

The State's antidegradation policy (Resolution 68-16) provides in relevant part as follows:

- “1. Whenever the existing water quality is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water, and will not result in water quality less than that prescribed in the policies.
2. Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained. . . .”

The State policy has been interpreted to incorporate the federal antidegradation regulations, which establish a three-part test for determining when increases in pollutant loadings into surface waters may be permitted.

Under either policy, the threshold question to determine whether a comprehensive antidegradation analysis (e.g., analysis of and findings showing how degradation is permissible when balanced against the benefit to the public of the activity) is required is whether the proposed action will result in a lowering of water quality. In the POTW context, antidegradation is typically triggered when there is a new discharge or an expansion of an existing facility, since such activities presumably lower water quality.

In the case of Pinole, there will be no lowering of water quality such that a comprehensive antidegradation analysis is required. Contrary to the commenter's assertion, the baseline receiving water quality by which to measure degradation *is* indeed the current water quality level that has been authorized in the existing permit for copper, mercury, cyanide, dioxin, and the conventional pollutants. To the extent the commenter is suggesting that that the existing level of discharge was not authorized consistent with antidegradation policies, it is far too late to challenge such authorization. In any case, there will be no lowering of water quality beyond the current level authorized in the existing permit because the Tentative Order does not provide for an increase in the permitted design flow, allow for a reduction in the level of treatment, or increase effluent limitations for the pollutants in question. With respect to dioxin-TEQ, in particular, the above conditions are true and since the Tentative Order includes a limitation where one did not exist before, we are not authorizing degradation beyond what was allowed in the previous permit. In other words, the Tentative Order continues the status quo with respect to the level of discharge authorized in the existing permit. Therefore, adoption of this Tentative Order will not degrade water quality beyond what is currently permitted

and findings authorizing degradation are thus not applicable in this case. We further note the opposite of degradation will occur as the Tentative Order requires the City of Pinole to initiate upgrades at its facility to improve treatment during extreme storm events. As such, we expect improvements in water quality by moving forward with the adoption of this Tentative Order. In any event, we have revised the Fact Sheet to better explain our conclusions how the Tentative Order complies with and is consistent with State and federal antidegradation requirements.

Specifically, we revised the Fact Sheet (page F-10) to include the following language at the end of the paragraph under the heading Antidegradation Policy:

“This is because this Order does not provide for an increase in the permitted design flow, allow for a reduction in the level of treatment, or increase effluent limitations with the exception of cyanide. In the case of cyanide, alternate limits based on a site-specific objective will be higher than the current interim limit if the site-specific objective for cyanide becomes effective during the permit term. However, the standards setting process for cyanide addressed antidegradation, and therefore, an analysis in this permit is unnecessary. As such, there will be no lowering of water quality beyond the current level authorized in the previous permit, which is the baseline by which to measure whether degradation will occur. The Order continues the status quo with respect to the level of discharge authorized in the previous permit and thus there will be no change in water quality beyond the level that was authorized in the last permit. Findings authorizing degradation are thus not applicable.”

Additionally, starting on page F-27 of the Fact Sheet, under the heading WQBEL Calculations, we removed the sentences under “Antibacksliding/Antidegradation” for each pollutant (i.e., copper, mercury, cyanide, and dioxin-TEQ). This is because page F-10 of the Fact Sheet already documents how this Order satisfies antidegradation and anti-backsliding requirements. In other words, an individual discussion for each pollutant is unnecessary since all effluent limits are at least as stringent as those permitted under the previous permit (satisfies anti-backsliding), and the Order does not allow for a lowering of water quality beyond what is currently permitted (satisfies antidegradation).

Environmental Law Foundation Comment 2

Environmental Law Foundation indicates that the Water Board must support its findings with water quality modeling and a consideration of all relevant information.

The operative question, then, that the Regional Board must answer in properly complying with antidegradation requirements, is whether the discharge will degrade water quality. (EPA Guidance, p. 4.) In answering that question, the Regional Board must employ more than unsubstantiated conclusion and conjecture. It must employ water quality modeling or some other scientific methodology to establish whether or not the permitted discharge will degrade water quality. (APU 90-004, p. 6.) This is particularly important for pollutants that are bioaccumulative for which there is “no safe ‘threshold’ concentration.” (EPA Guidance, p. 8.) The nature of these pollutants mandates stricter scrutiny and more stringent and formal analysis and proof regarding degradation. (APU

90-004, pp. 2-3; EPA Guidance, p. 8). It is simply unconscionable for the Board to pass over the likely impacts of the discharge of such pollutants in a cursory and conclusory fashion.

Moreover, in conducting this analysis, the Regional Board must factor in all relevant information, including the cumulative impact of the discharge (both present and historical) as well as any history of permit noncompliance. (See APU 90-004, pp. 2-3 (“Regional boards are urged . . . to note that repeated or multiple small changes in water quality (which would otherwise not require detailed analysis) can result in significant water quality degradation”); EPA Guidance, p. 6; see also Arizona Department of Environmental Quality, Antidegradation Implementation Procedures, pp. 3-12, 3-16 (March 2005) (cumulative impacts and permit noncompliance should be factored into antidegradation analysis); New Mexico Water Quality Control Commission, State of New Mexico Continuing Planning Process, Appendix A, p. 2 (Dec. 14, 2004) (same).)

The Regional Board must consider cumulative impacts because the permitted discharge does not exist in a vacuum: other dischargers are discharging similar pollutants into San Pablo Bay, potentially to the point where the present discharge will break the proverbial camel’s back, leading to lower than existing water quality. The point to California’s antidegradation policy is to avoid that. So, what is this discharge’s cumulative impact?

The Board should also consider the permittee’s compliance history because that history portends what the actual impact to San Pablo Bay will be as a result of issuing the Tentative Order. In this connection, the Fact Sheet is entirely devoid of any analysis regarding the discharge of waste through the shallow water outfall. Granted, the Tentative Order does not permit the discharge of wastewater through that outfall, but the Regional Board cannot lawfully cast a blind eye towards such a discharge—one that will most assuredly occur even in violation of the permit given that the Permittee itself recognizes that the permitted outfall provides insufficient capacity and given that such discharges have occurred in the past despite prohibitions against such discharges. (See San Francisco Regional Water Quality Control Board, Order No. 01-106, § A.2 (Oct. 1, 2001) (prohibiting discharge of waste through shallow water outfall); Fact Sheet § II.B.2, p. F-5 (noting that the shallow outfall was used nine times between April 2005 and March 2006).) This is particularly important given that the Fact Sheet recognizes that there are viable shellfish beds in San Pablo Bay that could be affected by the discharged wastewater. The potential degradation to these shellfish beds and water quality in general arising from such an “unpermitted” discharge, therefore, must be analyzed. (See EPA Guidance, p. 6 (“This determination [i.e., whether water quality will be degraded] should include the cumulative impacts of all previous and proposed actions and reasonably foreseeable actions which would lower water quality below the established baseline.”).) Before the Regional Board can summarily conclude that issuing the Tentative Order will have no effect on water quality, it must ensure that that conclusion incorporates the likely potential non-compliance that will occur over the next permit term.

As it currently stands, however, the Tentative Order and Fact Sheet contain no cumulative impacts analysis, no analysis of compliance history, no analysis period. This is insufficient as a matter of law and violates the spirit and intent behind the Clean Water Act and the Porter-Cologne Act, both of which have as their central goals the protection and maintenance of water quality. (33 U.S.C. § 1251 (a) (objective is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters”); Water Code § 13000 (“the state must be prepared to exercise its full power and jurisdiction to protect the quality of waters in the state from degradation”).) To turn a blind eye towards California’s antidegradation policy is a mistake, one that this Board should not commit.

Response 2

The Tentative Order continues the level of discharge authorized in the existing permit. No modeling is necessary to conclude that there will be no changes to water quality in continuing a previously authorized level of water quality.

With respect to cumulative impacts, we agree that when considering small changes in water quality, it is appropriate to consider the change in the context of what else is being allowed into the Bay. In this case, however, there will be no change to water quality and thus this is not applicable. Additionally, we note that a cumulative impacts analysis is mandated in the CEQA context, not in the antidegradation context, and the NPDES permits (other than for new sources) are exempt from CEQA’s substantive requirements to engage in any form of environmental review. *County of Los Angeles v. State Water Resources Control Board*, 50 Cal.Rptr.3d 619 (2006).

With regard to Pinole’s use of its shallow water outfall, it should be emphasized that the Tentative Order prohibits such discharges, and includes a provision that requires Pinole to undertake corrective measures to eliminate its use. The commenter suggests we presume that Pinole will not comply with the Tentative Order and somehow factor that in determining whether degradation will occur. Absent evidence that violations will in fact occur, we decline to do so. Moreover, even if violations do occur, any potential impact is minimal because of the duration and volume of discharges through Pinole’s shallow water outfall. Typically, Pinole uses its shallow water outfall to discharge about 0.4 million gallons over a period of several hours. More importantly, the discharges through Pinole’s shallow water outfall that it can remedy occur during extreme wet weather when recreation and shellfish harvesting are unlikely to occur.

VI. Editorial Changes

VI.A.2 Regional Water Standard Provisions, page 12, has been revised to read:

The Discharger shall comply with all applicable items of the *Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits, August 1993* (Standard Provisions, Attachment G), and any amendments thereto. Where provisions or reporting requirements specified in this Order **and Attachment G** are different from equivalent or related provisions or reporting requirements given in the Standard Provisions **in Attachment D**, the specifications of this Order **and/or Attachment G** shall

apply **in areas where those provisions are more stringent**. Duplicative requirements in the federal Standard Provisions in VI.A.1.2, above (Attachment D) and the regional Standard Provisions (Attachment G) are not separate requirements. A violation of a duplicative requirement does not constitute two separate violations.