

**California Regional Water Quality Control Board  
San Francisco Bay Region**

**RESPONSE TO WRITTEN COMMENTS**

on June 2012 Tentative Order for the City of Pinole,  
Pinole-Hercules Water Pollution Control Plant, Pinole, Contra Costa County

The Regional Water Board received written comments from the City of Pinole and San Francisco Baykeeper on the tentative order distributed in June 2012 for public comment.

This response summarizes each of their comments in *italics* (paraphrased for brevity) with the Regional Water Board staff response. For the full content and context of each comment, refer to the comment letters located in Appendix B.

Staff also initiated some changes of its own to the tentative order. The discussion of these changes follows the responses to comments below.

**City of Pinole**

***City Comment 1: The City requests that the compliance date for Table 8, Copper Action Plan, Task 4, be updated to reflect that it already completed the study.***

*The Bay Area Clean Water Agencies already submitted an updated study plan and schedule to conduct “Technical Studies to Investigate Possible Copper Sediment Toxicity and Technical Studies to Investigate Sublethal Effects on Salmonids.” The City participated in this effort and requests that the compliance date for Task 4 be updated to reflect completion of this requirement.*

**Response to City Comment 1**

We agree and revised the tentative order as follows:

**Table 8. Copper Action Plan**

<b>Tasks</b>	<b>Compliance Date</b>
<p><b>4. Undertake Studies to Reduce Copper Pollutant Impact Uncertainties</b> The Discharger shall submit an updated study plan and schedule to conduct, or cause to be conducted, technical studies to investigate possible copper sediment toxicity and technical studies to investigate sublethal effects on salmonids. Specifically, the Discharger shall include the manner in which the above will be accomplished and describe the studies to be performed with an implementation schedule. To satisfy this requirement, dischargers may collaborate and conduct these studies as a group.</p>	<p align="center"><del>With annual pollution prevention report due February 28, 2013</del> <b><i>Completed</i></b></p>

**City Comment 2: The City requests that the due dates in Table 10, Corrective Measures to Eliminate Blending and Use of Emergency Outfall, be extended to allow sufficient time to complete the design of the planned upgrades and start construction.**

The City requests that Task 5, Complete Plant Upgrade Design, be changed from August 1, 2013, to March 1, 2014, and that Task 6, Start Construction of Plant Upgrades, be extended from June 1, 2014, to September 1, 2014. The extensions are necessary to allow sufficient time to complete the design phase and maintain the time needed to schedule and start construction.

**Response to City Comment 2**

We agree and revised the tentative order as follows:

**Table 10. Corrective Measures to Eliminate Blending and Use of Emergency Outfall**

Tasks	Compliance Date
<b>5. Complete Plant Upgrade Design</b> Provide documentation of complete final design, including, but not limited to, construction specifications, cost estimates, implementation schedule, etc. List hydraulic capacity of all components in treatment train prior to upgrades.	<del>August 1, 2013</del> <u>March 1, 2014</u>
<b>6. Start Construction of Plant Upgrades</b> Provide documentation of any revisions to final designs previously submitted and submit final stepwise implementation schedule.	<del>June 1, 2014</del> <u>September 1, 2014</u>

**City Comment 3: The City requests further description of monitoring location EFF-001E.**

The City requests clarification of the monitoring location for the emergency outfall. As with EFF-001B, the sampling location for EFF-001E is typically the same location as EFF-001. The City requests that the description for EFF-001E in Table E-1 (page E-1) include the language, “This may be same location as EFF-001.”

**Response to City Comment 3**

We agree and revised the tentative order as follows:

**Table E-1. Monitoring Station Locations**

Type of Sampling Location	Monitoring Location Name	Monitoring Location Description
Effluent	EFF-001E (formerly EFF-002)	At any point in the emergency outfall pipe. <u>This may be the same location as EFF-001.</u>

**City Comment 4: The City requests less frequent monitoring for Enterococcus.**

The City says routine monitoring for Enterococcus, at four times per year, is not warranted and is inconsistent with recently adopted Order No. R2-2012-0027 for the Rodeo Sanitary District Water Pollution Control Facility, which shares the deep water outfall. The City requests that Enterococcus monitoring be conducted at a reduced frequency of twice per year, and states that if the effluent limitation is exceeded, there would be a temporary increase in monitoring to five times per month for three months.

#### Response to City Comment 4

We did not revise the tentative order. The difference between the Rodeo Sanitary District permit and this tentative order is that the Rodeo Sanitary District permit (Order No. R2-2012-0027) requires routine monitoring twice per year, not four times per year. However, this tentative order is consistent with the more recently-adopted Central Marin Sanitation District permit (Order No. R2-2012-0051), which also requires monitoring four times per year. We revised that permit to include the additional monitoring in response to a U.S. EPA comment. We note that the City's proposed revision would actually require more monitoring than specified in the tentative order because the City proposes five samples per month, twice per year, for a total of ten routine samples per year. As set forth in Monitoring and Reporting Program Table E-3, Effluent Monitoring — EFF-001, footnote 9, the tentative order only requires four routine samples per year.

***City Comment 5: The City requests that the Monitoring and Reporting Program allow total ammonia samples to be collected as 24-hour composites.***

*For consistency with recent permits and nutrient monitoring requirements, the City requests that Tables E-3, E-4, and E-5 allow it to collect total ammonia samples as 24-hour composites instead of individual (grab) samples.*

#### Response to City Comment 5

We agree and revised the tentative order as follows. These changes also include footnote renumbering and altered minimum sampling frequency as described under “Staff Initiated Changes,” below:

**Table E-3. Effluent Monitoring – EFF-001**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Total Ammonia <sup>[11]</sup>	mg/L as N	<del>Grab</del> <u>C-24</u>	1/Month

**Table E-4. Effluent Monitoring – EFF-001B**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Total Ammonia <sup>[8] [9]</sup>	mg/L as N	<del>Grab</del> <u>C-24</u>	1/Year <sup>[3]</sup>

**Table E-5. Effluent Monitoring – EFF-001E**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Total Ammonia <sup>[8] [9]</sup>	mg/L as N	<del>Grab</del> <u>C-24</u>	<del>1/Month</del> <u>1/Year<sup>[3]</sup></u>

***City Comment 6: The City requests information on acceptable methods of compliance with the new total chlorine residual minimum level.***

*The new total chlorine residual minimum level (ML) requirement in Monitoring and Reporting Program (MRP) section VIII.D.3 specifies use of an analytical method to detect total chlorine residual at an ML no greater than 0.05 mg/L. The City uses an online chlorine residual analyzer (Wallace and Tiernan Products, Micro 2000 Residual Analyzer) to assess chlorine effluent limit compliance. According to the operations manual for the analyzer, its accuracy is 0.001 mg/L when measuring chlorine residual in the range of 0 to 0.1 mg/L. To verify that the instrument is working properly, laboratory staff calibrates the analyzer at least twice a day using Standard*

*Methods 4500-Cl C (Iodometric Method II). If this testing and verification method is sufficient to meet the new ML requirement, changes to MRP section VIII.D.3 or the Fact Sheet may be needed for clarity. Other NPDES permittees use different equipment and compliance methods. As a result, the City suggests it may be more efficient to develop a regional compliance approach through discussion with Bay Area Clean Water Agencies representatives rather than approving each permittee's compliance procedures separately.*

### **Response to City Comment 6**

We agree. There is currently no standard method to comply with the previously proposed chlorine residual minimum level. Thus, to keep the requirements already specified in Attachment G, section III.A.2, we revised the tentative order as follows:

MRP Section VIII.D.3:

~~3.— Attachment G section III.A.2, is revised to read as follows:~~

~~2.— Use of Appropriate Minimum Levels~~

~~Table C lists the suggested analytical methods for the 126 priority pollutants and other toxic pollutants that should be used, unless a particular method or minimum level (ML) is required in the MRP. For chlorine residual, the Discharger may use any approved analytical method that has an ML less than or equal to 0.05 mg/L.~~

~~For priority pollutant monitoring, when there is more than one ML value for a given substance, the Discharger may select any one of the analytical methods cited in Table C for compliance determination, or any other method described in 40 CFR part 136 or approved by the USEPA (such as the 1600 series) if authorized by the Regional Water Board Executive Officer. However, the ML must be below the effluent limitation and water quality objective. If no ML value is below the effluent limitation and water quality objective, then the method must achieve an ML no greater than the lowest ML value indicated in Table C. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.~~

*City Comments 7, 8, 9, 10, and 11: The City requests correction of typographical errors. The City identified a number of typographical errors for correction.*

### **Response to City Comments 7, 8, 9, 10, and 11**

We agree and revised the tentative order.

*City Comments 12 and 13: The City requests clarification of that dilution credits reflect conditions after upgrades.*

*The City requests that the discussion on dilution credits in Fact Sheet section IV.C.4.b and section IV.C.4.b.(2)(c) be expanded to explain that the dilution ratio of 33:1 was estimated under acute and chronic conditions to exist after wastewater treatment plant upgrades are completed.*

## Response to City Comments 12 and 13

We agree and revised the tentative order as follows:

Fact Sheet Section IV.C.4.b:

- b. Dilution Credit.** The SIP allows dilution credits for completely-mixed discharges, and under certain circumstances for incompletely-mixed discharges. The Discharger submitted a dilution study, *Near-field Mixing Zone and Dilution Analysis for the Deep Water Outfall Diffuser in San Pablo Bay* (Larry Walker Associates, October 1, 2009). The report presents findings regarding the initial dilution of the discharge at the outfall based on the USEPA-approved mixing zone modeling package, CORMIX. The study estimates dilutions are currently 279:1 for chronic toxicity and 43:1 for acute toxicity. Estimates for future dilution ratios following the wastewater treatment plant upgrades are estimated to be 279:1 under chronic conditions and 33:1 under acute conditions.

Fact Sheet Section IV.C.4.b.(2)(c):

- (c) For ammonia, a conservative estimated actual initial dilution was used to calculate the effluent limitations. This is justified because ammonia, a non-persistent pollutant, quickly disperses and degrades to a non-toxic state, and cumulative toxicity effects are unlikely. In the study entitled *Near Field Mixing Zone and Dilution Analysis for the Deep Water Outfall Diffuser in San Pablo Bay* (Larry Walker Associates, October 2009), the Discharger estimated initial dilution ratios to be at least 279:1 ( $D = 278$ ) at the annual average dry weather flow rate of 5.2 MGD (4.06 MGD from the Discharger and 1.14 MGD from the Rodeo Sanitary District), and at least 43:1 ( $D = 42$ ) at the current peak flow rate of 12.8 MGD (10.3 MGD from the Discharger and 2.5 MGD from the Rodeo Sanitary District). The initial dilution ratios under future conditions are estimated to be at least 279:1 ( $D = 278$ ) at the annual average dry weather flow of 5.2 MGD (same as current flows, 4.06 MGD from the Discharger and 1.14 MGD from the Rodeo Sanitary District), and at least 33:1 ( $D = 32$ ) at the future peak flow of 17.1 MGD (14.6 MGD from the Discharger, following plant upgrades, and 2.5 MGD from the Rodeo Sanitary District). The 279:1 dilution ratio is appropriate for calculating limits based on the chronic criterion because that criterion is an annual median; the dilution ratio at the annual average flow rate is the most representative of long-term (chronic) conditions. The 33:1 dilution ratio is appropriate for calculating limits based on the acute criterion ~~because that criterion has no averaging period~~; the dilution at the worst-case maximum flow rate is the most representative of short-term (acute) conditions. Acute dilution ratios were calculated assuming slack tide conditions.

### ***City Comments 14: The City requests consistent ammonia effluent limitations.***

*The City points to inconsistencies in the ammonia effluent limitations listed in Table 7, Effluent Limitations for Toxic Pollutants, Fact Sheet section IV.C.4.c.(3)(c), and Table F-8, WQBEL Calculations. The City requests that the Average Monthly Effluent Limit (AMEL) be 113 mg/L and the Maximum Daily Effluent Limit (MDEL) be 182 mg/L.*

## Response to City Comment 14

We agree to revise the tentative order as follows:

**Table 7. Effluent Limitations for Toxic Pollutants**

Parameter	Units	Effluent Limitations <sup>[1]</sup>	
		Average Monthly Effluent Limit (AMEL)	Maximum Daily Effluent Limit (MDEL)
Copper <sup>[2]</sup>	µg/L	58	120
Cyanide	µg/L	20	43
Dioxin-TEQ	µg/L	1.4 x 10 <sup>-8</sup>	2.8 x 10 <sup>-8</sup>
Total Ammonia, as N	mg/L	<del>113</del> 110	<del>182</del> 180

We are in agreement that the effluent limits should be consistent but do not agree that the correct limits should be expressed with three significant digits. The limits are kept to two significant digits to be consistent with water quality objectives in the Basin Plan.

**San Francisco Baykeeper**

***Baykeeper Comment 1: Baykeeper requests additional monitoring of blending and emergency outfall events.***

*Tables E-4, Effluent Monitoring – EFF-001B, and E-5, Effluent Monitoring – EFF-001E, require the City to monitor certain parameters during blending and use of the emergency outfall.*

*Baykeeper thinks the monitoring frequency is too relaxed to determine if the effluent limits are being met. Baykeeper requests monitoring each parameter at least once per day during blending and use of the emergency outfall.*

**Response to Baykeeper Comment 1**

We disagree. The monitoring requirements for blending and use of the emergency outfall are the same as those for almost every other NPDES permittee in the San Francisco Bay Region, as set forth in Attachment G. Daily monitoring for all parameters is unnecessary because most blending and emergency outfall events are of short duration, often lasting less than a day, and many of the monitored constituents are diluted by the additional infiltration and inflow. When adopting Attachment G through Order No. 2010-0054, the Regional Water Board found that total suspended solids is an appropriate surrogate for other pollutants. When total suspended solids are below 45 mg/L, discharges are very likely to comply with other effluent limitations. Total suspected solids concentrations above 45 mg/L could indicate poor treatment and possibly violations of other effluent limitations. Therefore, it is required for samples to be retained during blending and use of the emergency outfall, and if the total suspended solids trigger is exceeded, the retained samples are monitored for other pollutants of concern.

We note that the tentative order contained errors in the monitoring requirements for blending and use of the emergency outfall. We revised the tentative order to correct these errors as described in “Staff Initiated Changes,” below.

***Baykeeper Comment 2: Baykeeper requests the City of Hercules and its collection system be named as a co-permittee or issued a separate NPDES permit.***

*Baykeeper asserts that the City cannot produce an adequate Utility Analysis and will continually find the elimination of blending infeasible due to upstream inflow and infiltration. The Plant receives wastewater from the City of Pinole and the City of Hercules collection systems, yet the permit only applies to the Pinole collection system. The tentative order states that the City of Hercules jointly owns the outfall with the City of Pinole and the Rodeo Sanitary District, showing that it plays a significant role in plant operations. Baykeeper points out several blending and near shore outfall events due to high flows in upstream collection systems, including the Hercules collection system. Baykeeper requests that the City of Hercules and its collection system be named as a co-permittee or issued a separate NPDES Permit to ensure that all wastewater discharges from the Pinole-Hercules wastewater treatment plant meet the Clean Water Act's secondary treatment requirements.*

**Response to Baykeeper Comment 2**

We disagree. We named only the City of Pinole in the tentative order because only the City of Pinole, not the satellite sewage collection system, submitted a permit application, and because the City of Pinole is the sole owner and operator of the treatment plant.

We revised a statement in Fact Sheet section II.B, to clarify that Rodeo Sanitary District operates and maintains the joint outfall, as follows:

**II. FACILITY DESCRIPTION**

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Treated wastewater is discharged into San Pablo Bay through a submerged deep water diffuser about 3,775 feet offshore at a depth of about 16 feet below mean sea level. The 120-foot diffuser consists of 15 pairs of diffuser ports (30 ports total) placed 8 feet apart on center. The ports are sharp-edged and 2.5 inches in diameter. ~~The Discharger, the City of Hercules and Rodeo Sanitary District jointly own~~ operates and maintains the outfall.

We agree that, by definition, a “treatment works treating domestic sewage” includes the treatment plant and its associated sewage collection system (40 CFR 122.2). Historically, however, only the portion of the system that is owned by the same agency that owns the treatment works has been subject to NPDES permit requirements.

As the State Water Board concluded during the issuance of its statewide General WDRs for Wastewater Collection Systems, the theory that all publically owned treatment works NPDES permits be expanded to include all satellite sewage collection systems (or that owners or operators of these systems be permitted separately under the federal Clean Water Act) is not widely accepted, and U.S. EPA has issued no guidance toward this end. Based on this and the fact that California’s Porter-Cologne Water Quality Control Act has a broader reach than the Clean Water Act to regulate a larger universe of potential discharges from sewage collection systems (for example, discharges to groundwater as well as surface water, potential discharges as well as actual discharges, and discharges that do not reach waters and discharges that do), the State Water Board chose to regulate collection systems under the Porter-Cologne Water Quality Control Act. We agree with this approach and see no benefit to also regulate them through

NPDES permits when the collection systems are not otherwise legally tied to publically owned treatment works NPDES permits.

We note that, in 2008, U.S. EPA Region I proposed to include numerous separately owned and operated sewage collection systems within an NPDES permit for the Upper Blackstone Water Pollution Abatement District in Massachusetts. U.S. EPA's Environmental Appeals Board, however, determined that the region did not sufficiently articulate the factual and legal basis for including the collection systems and remanded the permit back to the region (In Re Upper Blackstone Water Pollution Abatement District, NPDES Appeal Nos. 08-11 to 08-18 & 09-06, Order Denying Review in Part and Remanding in Part, Decided May 28, 2010). On remand, the region chose to forego naming the collection systems. Moreover, we cannot simply "add" parties to a permit without, at a minimum, affording those parties notice and an opportunity to comment.

Lastly, with the proposed upgrades and the rigorous collection system improvements required by Provision VI.5.c, the City expects to eliminate the need to blend before the end of the coming permit cycle, thus eliminating Baykeeper's primary justification for permitting the City of Hercules separately.

***Baykeeper Comment 3: Baykeeper requests that the City's Utility Analysis further analyze its ability to fund peak wet weather flow improvements.***

*Baykeeper believes the City's Utility Analysis for Wet Weather Bypass of Secondary Treatment fails to include a full cost feasibility analysis. The City only presents cost totals, not the community's ability to fund improvements. Baykeeper requests a full assessment of how the City will fund the upgrades.*

### **Response to Baykeeper Comment 3**

We disagree. The previous Utility Analysis is consistent with the study required by the previous order (Order No. R2-2002-0024, Provision VI.5.d, Utility Analysis and Implementation Schedule for Wet Weather Bypass of Secondary Treatment). This order would require more information to be submitted with the next Utility Analysis. Specifically, Table 10, Corrective Measures to Eliminate Blending and the Use of Emergency Outfall, Task 18, requires analysis of "alternatives' estimated cost relative to Discharger's (and City of Hercules') ability to finance costs" and further notes "One means to assess a community's ability to fund wet weather improvements is to consult USEPA's CSO Guidance for Financial Capability Assessment and Schedule Development, EPA Publication Number 832-B-97-004."

***Baykeeper Comment 4: Baykeeper requests that the tentative order require the City to fund collection system upgrades.***

*Baykeeper requests the tentative order explicitly require the City to spend significant funds to improve its collection system. As written, the tentative order only implies that the City will spend the money it saves by not constructing a parallel pipeline to eliminate the need for the emergency outfall on its collection system, but there is no evidence that an equivalent amount (about \$10 million) will actually be spent on the collection system.*

#### **Response to Baykeeper Comment 4**

We disagree. Table 10, Corrective Measures to Eliminate Blending and the Use of Emergency Outfall, Tasks 11-16, requires efforts to better control the collection systems of both the City of Pinole and the City of Hercules. Although no specific expenditure is required to execute these tasks, implementation of a Wet Weather Improvement Program and annual evaluations and reports will require substantial investments. Moreover, although Provision III.C allows blending and use of the emergency outfall under certain circumstances, there is no guarantee that the Regional Water Board will approve such bypasses in the future. Therefore, it is in the City's best interest to reduce inflow and infiltration to avoid bypasses.

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#### **Staff Initiated Changes**

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In addition to minor formatting and grammatical edits, we made the following staff-initiated changes to the tentative order.

We revised the facility name in Tables 1, 4, and F-1 and Table F-1, and in Fact Sheet section I, as follows:

Pinole-Hercules Water Pollution Control Plant and its wastewater collection system

We revised Provision VI.A.2 as follows:

- 2. Regional Standard Provisions.** The Discharger shall comply with all applicable items of the Regional Standard Provisions, and Monitoring and Reporting Requirements for NPDES Wastewater Discharge Permits (Attachment G), ~~including amendments thereto.~~

We revised Provision VI.C as follows:

- e.** If the Discharger requests adjustments in effluent limits due to the implementation of stormwater diversion pursuant to the Municipal Regional Stormwater Permit (Order No. R2-2009-0074) for redirecting dry weather and first flush discharges from the storm drain system to the sanitary sewer system as a stormwater pollutant control strategy.
- f.** Or as otherwise authorized by law.

We revised Monitoring and Reporting Program section VIII.B.4 as follows:

- 4. ~~ML~~ RL and MDL Reporting.** The Discharger shall report with each sample result the Reporting Level (RL) and Method Detection Limit (MDL) as determined by the procedure in 40 CFR 136...

We revised the tentative order to be consistent in naming of the two types of bypasses discussed in the tentative order: (1) blending and (2) use of the “emergency shallow water outfall” or “emergency outfall,” or “diversion.” Some examples follow:

We revised Findings II.B as follows:

Currently when wet weather flows exceed 10.5 MGD, the Discharger must divert excess flows to a nearby ~~shallow-water~~ emergency shallow water outfall. With the proposed upgrades, this diversion would not occur until flows exceed 14.6 MGD... With the proposed upgrades, ~~emergency~~ diversion to the emergency shallow outfall would not occur until flows exceed 14.6 MGD.

We revised Fact Sheet section IV.A.2 as follows:

This prohibition provides an exception for peak wet weather diversions to the Discharger’s emergency shallow ~~near-shore~~ water outfall.

We revised Fact Sheet section VII.C.5.c as follows:

**c. Corrective Measures to Eliminate Blending and Reduce Use of Emergency Outfall.** The Regional Water Board will use the No Feasible Alternatives Analysis to review and approve or deny the peak wet weather ~~diversions~~ bypasses based on the determination of whether there are feasible alternatives to those ~~diversions~~ bypasses. If these criteria are met and no feasible alternative exists, the Regional Water Board may approve peak wet weather flow ~~diversions~~ bypasses around secondary treatment units in an NPDES permit for discharges from a municipal treatment plant as an anticipated bypass under 40 CFR 122.41(m)(4)(ii).

We revised Monitoring and Reporting Program section IV, including Tables E-4 and Table E-5, as follows:

#### IV. EFFLUENT MONITORING REQUIREMENTS

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**Table E-4. Effluent Monitoring –EFF-001B**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow <sup>[1]</sup>	MGD	Continuous	Continuous/D
Volume of Partially-treated Wastewater Discharged	MG	Calculated	1/Blending Event
Duration of Blending <sup>[2]</sup>	Hours	Calculated	1/Blending Event
CBOD <sub>5</sub>	mg/L	<del>Grab</del> C-24	<del>1/Year</del> <sup>[3]</sup> 1/Day
TSS	mg/L	C-24	1/Day
pH <sup>[4]</sup>	s.u.	Continuous	<del>1/Day</del> Continuous/D
Chlorine, Total Residual <sup>[5]</sup>	mg/L	Grab	Every 2 Hours
Total Coliform <sup>[6]</sup>	MPN/100 mL	Grab	1/Day <sup>[3]</sup>

Parameter	Units	Sample Type	Minimum Sampling Frequency
Enterococcus Bacteria <sup>[6], [7]</sup>	MPN/100 mL	Grab	1/Day <sup>[3]</sup>
<u>Dissolved Oxygen</u> <sup>[8]</sup>	<u>mg/L</u>	<u>Grab</u>	<u>1/Day</u>
<u>Dissolved Sulfides</u> <sup>[8]</sup>	<u>mg/L</u>	<u>Grab</u>	<u>1/Day</u>
Temperature	°F	Grab	1/Day
Copper	µg/L	C-24	1/Year <sup>[3]</sup>
Cyanide	µg/L	Grab	1/Year <sup>[3]</sup>
Total Ammonia <sup>[8], [9]</sup>	mg/L as N	<del>Grab</del> C-24	1/Year <sup>[3]</sup>
Standard Observations <sup>[9], [10]</sup>	---	---	1/Blending Event

**Footnotes to Table E-4:**

Abbreviations:

- MGD = million gallons per day
- MG = million gallons
- s.u. = standard units
- mg/L = milligrams per liter
- C-24 = 24-hour composite
- MPN/100 mL = most probable number per 100 milliliters
- °F = degrees Fahrenheit
- µg/L = micrograms per liter

Notes:

- [1] Flow shall be monitored continuously, and the following information shall be reported in self-monitoring reports for each month:
- Daily average flow (MGD)
  - Monthly average flow (MGD)
  - Maximum and minimum daily average flow rates (MGD)
- [2] For each blending event, report the date and time each event starts and ends.
- [3] If a TSS sample collected on the same day exceeds 45 mg/L, the frequency shall be once per day.
- [4] If pH is monitored continuously, the minimum and maximum pH values for each day shall be reported in monthly Self-Monitoring Reports (SMRs).
- [5] Effluent chlorine residual concentrations shall be monitored continuously or, at a minimum, every two hours. The Discharger shall report for each day the maximum residual chlorine concentration observed following dechlorination. However, if monitoring continuously, the Discharger shall report for each day the maximum residual chlorine concentration based only on discrete readings from the continuous monitoring taken every hour on the hour. The Discharger shall retain continuous monitoring readings for at least three years. The Regional Water Board reserves the right to use all other continuous monitoring data for discretionary enforcement.
- [6] When replicate analyses are made of a bacteria sample, the reported result shall be the geometric mean of the replicate results.
- [7] If after three months the Discharger has demonstrated full compliance with the enterococcus effluent limitation, the minimum monitoring frequency shall be reduced to four times per year. The four samples shall be collected in different calendar months during the higher recreational water contact season (June to October). If the enterococcus effluent limitation is later exceeded, the Discharger shall conduct 5/Month accelerated sampling for at least three consecutive months. If full compliance is demonstrated after the three-month period, the Discharger may return to the 4/Year sampling frequency.
- [8] Dissolved sulfides shall be measured when dissolved oxygen concentration is less than 2.0 mg/L.
- [8] [9] Monitoring of total ammonia shall occur concurrently with monitoring for temperature and pH to provide for determination of the un-ionized ammonia fraction. Ammonia shall be measured as Total Ammonia (as N).
- [9] [10] Standard Observations are specified in the Regional Standard Provisions (Attachment G, section III.C.2).

When using the emergency outfall, but not when blending, the Discharger shall monitor discharges at Monitoring Location EFF-001E as follows.

**Table E-5. Effluent Monitoring – EFF-001E**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Flow <sup>[1]</sup>	MGD	By Calculation	Continuous/D
Volume of Wastewater Discharged	MG	Calculated	1/ Event
Duration of Bypass <sup>[2]</sup>	Hours	Calculated	1/Event
CBOD	mg/L	C-24	1/Day
TSS	mg/L	C-24	1/Day
pH <sup>[3] [4]</sup>	s.u.	Continuous	Continuous
Chlorine, Total Residual <sup>[4] [5]</sup>	mg/L	Grab	Every 2 hours
Total Coliform <sup>[5] [6]</sup>	MPN/100 mL	Grab	1/Day
Enterococcus Bacteria <sup>[5] [6], [7]</sup>	MPN/100 mL	Grab	1/Day
Dissolved Oxygen <sup>[7] [8]</sup>	mg/L	Grab	1/Day
Dissolved Sulfides <sup>[7] [8]</sup>	mg/L	Grab	1/Day
Temperature	°F	Grab	1/Day
Copper	µg/L	C-24	<del>1/Month</del> 1/Year <sup>[3]</sup>
Cyanide	µg/L	Grab	<del>1/Month</del> 1/Year <sup>[3]</sup>
Total Ammonia <sup>[8] [9]</sup>	mg/L as N	<del>Grab</del> C-24	<del>1/Month</del> 1/Year <sup>[3]</sup>
Standard Observations <sup>[9] [10]</sup>	---	---	1/Event

**Footnote for Table E-5**

Abbreviations:

- MGD = million gallons per day
- mg/L = milligrams per liter
- µg/L = micrograms per liter
- C-24 = 24-hour composite

Notes:

[1] For influent flow, the following information shall be reported monthly:

- Daily average flow (MGD)
- Monthly average flow (MGD)
- Maximum and minimum daily average flow (MGD)

[2] Report the date and time each event starts and ends.

[3] If a TSS sample collected on the same day exceeds 45 mg/L, the frequency shall be once per day.

[3] [4] If pH is monitored continuously, the minimum and maximum pH values for each day shall be reported in monthly Self-Monitoring Reports.

[4] [5] Effluent chlorine residual concentrations shall be monitored continuously or, at a minimum, every two hours. The Discharger shall report for each day the maximum residual chlorine concentration observed following dechlorination. However, if monitoring continuously, the Discharger shall report for each day the maximum residual chlorine concentration based only on discrete readings from the continuous monitoring taken every hour on the hour. The Discharger shall retain continuous monitoring readings for at least three years. The Regional Water Board reserves the right to use all other continuous monitoring data for discretionary enforcement.

[5] [6] When replicate analyses are made of a bacteria sample, the reported result shall be the geometric mean of the replicate results.

[6] [7] If after three months the Discharger has demonstrated full compliance with the enterococcus effluent limitation, the minimum monitoring frequency shall be reduced to four times per year. The four samples shall be collected in different calendar months during the higher recreational water contact season (June to October). If the enterococcus effluent limitation is later exceeded, the Discharger shall conduct 5/Month accelerated sampling for at least three consecutive months. If full compliance is demonstrated after the three-month period, the Discharger may return to the 4/Year sampling frequency.

[7] [8] Dissolved sulfides shall be measured when dissolved oxygen concentration is less than 2.0 mg/L.

[8] [9] Monitoring of total ammonia shall occur concurrently with monitoring for temperature and pH to provide for determination of the un-ionized ammonia fraction. Ammonia shall be measured as Total Ammonia (as N).

[9] [10] Standard Observations are specified in the Regional Standard Provisions (Attachment G, section III.C.2)

We revised Table F-9 in Fact Sheet section VII.B as follows:

**Table F-9. Summary of Routine Monitoring Requirements**

Parameter	Influent INF-001	Effluent EFF-001	Effluent EFF-001B	Effluent EFF-001E	Sludge and Biosolids	Receiving Water
Flow	Continuous	Continuous	Continuous/D	Continuous/D		
Volume of Water Discharged			1/Event	1/Event		
Duration of Event			1/Event	1/Event		
CBOD	2/Week	2/Week	<del>1/Year</del> 1/Day	1/Day		
TSS	2/Week	4/Week	1/Day	1/Day		
CBOD & TSS % Removal		1/Month				
Oil and Grease		1/Quarter				
pH		Continuous	Continuous	Continuous		Support RMP
Chlorine, Total Residual		1/2 Hours	1/2 Hours	1/2 Hours		
Acute Toxicity		1/Month				Support RMP
Chronic Toxicity		2/Year				Support RMP
Total Coliform		3/Week	1/Day	1/Day		Support RMP
Enterococcus Bacteria		5/Month	1/Day	1/Day		Support RMP
Dissolved Oxygen		1/Day	1/Day	1/Day		Support RMP
Dissolved Sulfides		1/Day	1/Day	1/Day		Support RMP
Temperature		1/Day	1/Day	1/Day		Support RMP
Copper		1/Month	1/Year	<del>1/Month</del> 1/Year		Support RMP
Cyanide	1/Year	1/Month	1/Year	<del>1/Month</del> 1/Year		Support RMP
Total Ammonia		1/Month	1/Year	<del>1/Month</del> 1/Year		Support RMP
Dioxin-TEQ		2/Year				Support RMP
Standard Observations		1/Week	1/Event	1/Event		
All other priority pollutants		1/Year				Support RMP
Metric tons/year					Attachmt G, section III.B.1	
Paint filter test					Attachmt G, section III.B.2	

**Footnotes to Table F-9:**

Routine effluent monitoring requirements specific to bypass events, both blending and diversions, are described in the MRP Tables E-4 and E-5.