

APPENDIX C

Response to Comments

RESPONSE TO WRITTEN COMMENTS

on Tentative Order for
City of San Mateo Wastewater Treatment Plant
2050 Detroit Drive, San Mateo, San Mateo County

The Regional Water Board received written comments from the following parties on a tentative order distributed for public comment in January 2013:

1. City of San Mateo
2. U.S. Environmental Protection Agency
3. San Francisco Baykeeper

This response to comments summarizes each comment in *italics*, followed by a Regional Water Board staff response. For the full content and context of each comment, refer to the comment letters. Revisions to the tentative order are shown with underline for additions and ~~strike through~~ for deletions.

City of San Mateo

City Comment 1: *The City requests that Provision VI.C.5.a, Specific Tasks to Reduce Blending, be revised to expand the ability of the Executive Officer to approve deviations from the collection system tasks and deadlines. The tentative order, as written, would authorize the Executive Officer to approve deviations from specific blending reduction tasks and deadlines, provided there is “reasonable progress toward development of an alternative strategy and reasonable assurance that the alternative strategy will achieve equal or better results.” As written, the tentative order authorizes deviations only for tasks related to plant upgrades.*

Response: We agree. The scope of Task 8 (Develop Method for Quantifying Inflow from Satellite Collection Systems) includes measuring or estimating inflows during wet weather so as to identify satellites with higher inflow and infiltration. Flexibility is appropriate for this task because it could involve flow monitoring and modeling, which cannot be completed in a dry year. Task 9 (Develop and Implement Wet Weather Improvement Program) is susceptible to funding complications, similar to plant upgrades. Therefore while these tasks and deadlines appear reasonable, circumstances could arise beyond the City’s control, making it impossible for the City to comply with these particular requirements. We revised the tentative order to allow the Executive Officer to approve deviations from these blending reduction tasks and deadlines when additional flexibility is warranted and appropriate justification is provided.

We revised section VI.C.5.a of the tentative order as follows:

The Discharger shall implement the following tasks to reduce blending. The Discharger may request, and the Regional Water Board authorizes the Executive Officer to approve, changes to Tasks 3, 4, 5, ~~and 6, 8, and 9~~ and associated deadlines specified below. The request and any approvals must be in writing. The basis for the request may include

allowing the Discharger time to consider a change in strategy for achieving compliance with Task 6 for completion of Plant upgrades to reduce blending. The Executive Officer may modify the tasks and deadlines as long as there is reasonable progress toward development of an alternative strategy and reasonable assurance that the alternative strategy will achieve equal or better results.

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

Specific Tasks to Reduce Blending. This provision is based on 40 CFR 122.41(m) and guidance provided by USEPA's proposed Peak Wet Weather Policy (December 2005)... Table 9 of the Order contains feasible actions that can be taken within the term of this Order to improve wet weather management and reduce blending.... Table 9 requires numerous tasks to improve the Discharger and satellite agencies' collection systems and increase secondary treatment capacity at the Plant to 60 MGD.

This Order allows the Executive Officer to approve deviations from blending reduction tasks and deadlines related to certain plant and collection system improvements because, while those tasks and deadlines appear reasonable, circumstances (e.g., difficulty identifying funding or delays in plant design or construction caused by third parties) could arise beyond the Discharger's control, making it impossible for the Discharger to comply with these particular requirements. Such approval would only be granted in limited instances where the Discharger demonstrated "reasonable progress toward development of an alternative strategy and reasonable assurance that the alternative strategy will achieve equal or better results."

Table 9 includes a requirement to submit a new No Feasible Alternatives Analysis with the application for permit reissuance. USEPA's proposed *Wet Weather Policy* suggests specific analyses for the Discharger to complete in order to determine whether its peak wet weather flow blending discharge should be considered a bypass under 40 CFR 122.41(m) and whether any feasible alternatives to blending are available...

City Comment 2: *The City requests clarification in the naming of the satellite collection systems. The satellite collection system for the County of San Mateo should be named the "County of San Mateo Tower Road Complex."*

Response: We agree and revised section II.B of the tentative order as follows:

The Plant and the collection systems belonging respectively to the City of San Mateo and the City of Foster City Estero Municipal Improvement District are collectively the Facility..... Three satellite wastewater collection systems (Town of Hillsborough, Crystal Springs County Sanitation District, and County of San Mateo Tower Road Complex) discharge to the Facility. The service area population is approximately 139,000.

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

Collection System. The Discharger's wastewater collection system is part of the Facility covered by this Order. The Plant also receives wastewater from the satellite wastewater collection systems of three municipal jurisdictions (Town of Hillsborough,

Crystal Springs County Sanitation District, and County of San Mateo Tower Road Complex). The combined collection system includes approximately 257 miles of sanitary sewer and 23 pump stations.

We revised Fact Sheet section VII.C.5.a (third paragraph) as follows:

This Order’s task requirements do not apply to the Discharger’s satellite agencies because they are not permittees under this Order. These satellites include the Town of Hillsborough, the Crystal Springs County Sanitation District, and the County of San Mateo Tower Road Complex. Each is subject to the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (General Order, Order No. 2006-0003-DWQ) and Cease and Desist Order No. R2-2009-0020....

City Comment 3: *The City requests that the tentative order recognize the potential beneficial use of biosolids. The City states that biosolids may be trucked to landfill for disposal but may also be applied to land for beneficial use.*

Response: We agree and revised section II.B (fifth paragraph) of the tentative order as follows:

Secondary sludge is thickened using dissolved air flotation prior to being blended with primary sludge from a gravity thickener. Thickened sludge is anaerobically digested in two digesters and then dewatered in a centrifuge. Dewatered ~~sludge is~~ biosolids are trucked to either land application sites for beneficial use or landfills for disposal. Centrate from the centrifuge and overflow from the thickening units are piped to the head of the liquid treatment process....

We revised Fact Sheet section II.A.4 as follows:

Biosolids Management. Secondary sludge is thickened using dissolved air flotation prior to being blended with primary sludge from a gravity thickener. Thickened sludge is anaerobically digested in two digesters and then dewatered in a centrifuge. Dewatered ~~sludge is~~ biosolids are trucked to either land application sites for beneficial use or landfills for disposal. Centrate from the centrifuge and overflow from the thickening units are piped to the head of the liquid treatment process. Trucking and disposal of biosolids is managed under contract by Terra Renewal Services (Garden Grove, CA) and Synagro Technologies, Inc. (Suisun City, CA).

City Comment 4: *The City requests clarification of the bacteria monitoring location when blending. The City requests that the monitoring location EFF-001b description be clarified to allow bacteria monitoring after adequate disinfection.*

Response: We agree and revised Monitoring and Reporting Program Table E-1 as follows:

Table E-1. Monitoring Station Locations

Type of Sampling Location	Monitoring Location Name	Monitoring Location Description
Influent	INF-001	At any point in the plant headworks at which all waste tributary to the plant is present and preceding any phase of treatment.

Type of Sampling Location	Monitoring Location Name	Monitoring Location Description
Effluent	EFF-001	At any point after full treatment prior to the outfall in Lower San Francisco Bay.
Effluent	EFF-001a (formerly EFF-001-D)	At any point in the disinfection facilities where adequate contact with the disinfectant is assured.
Effluent	EFF-001b	At any point at which all blended fully-treated and primary-treated waste tributary to the outfall is present (may be the same location as EFF-001 or, for bacteria monitoring, the same location as EFF-001a).
Biosolids	BIO-001	Biosolids.

City Comment 5: *The City requests reduced pretreatment monitoring frequencies. The City states it has met the prerequisites for a reduction in pretreatment monitoring frequency as specified in Attachment H, Appendix H 4. The City requests VOC and BNA monitoring be decreased to once every five years, and metals monitoring be decreased to once per year (except for metals with effluent limits).*

Response: We agree. Attachment H, Appendix H 4, section A, states, “the minimum frequency of Pretreatment Program influent, effluent, and biosolids monitoring shall be dependent on the number of [significant industrial users] identified in the Discharger’s Pretreatment Program.” The City has two significant categorical industrial users and neither currently discharges; therefore, the minimum monitoring frequency of once every five years is appropriate. The monthly influent and effluent monitoring frequency for copper and nickel is retained for consistency with Table E-3. Also, if one of the significant categorical industrial users were to start discharging, or if another significant industrial user were to commence operations in the service area, the monitoring frequency should revert to that required in the previous order.

We agree and revised Table E-6 as follows:

Table E-6. Pretreatment and Biosolids Monitoring Requirements

Constituents	Sampling Frequency ^[8]			Sample Type ^[4]	
	Influent INF-001	Effluent EFF-001 ^[1]	Biosolids BIO-001	INF-001 and EFF-001	Biosolids BIO-001
VOC ^[2]	2/Year 1/5 Years	2/Year 1/5 Years	2/Year 1/5 Years	Grabs	Grabs ^[6c]
BNA ^[3]	2/Year 1/5 Years	2/Year 1/5 Years	2/Year 1/5 Years	Grabs	Grabs ^[6c]
Metals ^[4]	1/Month 1/Year	1/Month 1/Year	2/Year 1/Year	24-hr Composite ^[6a]	Grabs ^[6c]
Copper	1/Month	1/Month	1/Year	24-hr Composite ^[6a]	Grabs ^[6c]
Nickel	1/Month	1/Month	1/Year	24-hr Composite ^[6a]	Grabs ^[6c]
Hexavalent Chromium ^[5]	1/Quarter 1/Year	1/Month 1/Year	2/Year 1/Year	Grabs	Grabs ^[6c]
Mercury	1/Quarter	1/Month	2/Year 1/Year	Grab or 24-hr Composite ^[6a,6b]	Grabs ^[6c]

Constituents	Sampling Frequency ^[8]			Sample Type ^[4]	
	Influent INF-001	Effluent EFF-001 ^[1]	Biosolids BIO-001	INF-001 and EFF-001	Biosolids BIO-001
Cyanide, Total	1/Month ^[7]	1/Month	2/Year 1/Year	Grabs	Grabs ^[6c]

Footnotes:

- [1] Effluent monitoring conducted in accordance with Table E-3 can be used to satisfy these pretreatment monitoring requirements.
- [2] VOC: volatile organic compounds
- [3] BNA: base/neutrals and acids extractable organic compounds
- [4] The metals are arsenic, cadmium, ~~copper~~, lead, ~~nickel~~, silver, zinc, and selenium.
- [5] The Discharger may elect to report total chromium instead of hexavalent chromium. Samples collected for total chromium measurements shall be 24-hour composites.
- [6] Sample types:
- If an automatic compositor is used, the Discharger shall obtain 24-hour composite samples through flow-proportioned composite sampling. Alternatively, 24-hour composite samples may consist of discrete grab samples combined (volumetrically flow-weighted) prior to analysis or mathematically flow-weighted.
 - The Discharger may use automatic compositors for mercury if either (1) the compositing equipment (hoses and containers) comply with ultraclean specifications, or (2) appropriate equipment blank samples demonstrate that the compositing equipment has not contaminated the sample.
 - The biosolids sample shall be a composite of the biosolids to be disposed. Biosolids collection and monitoring shall comply with the requirements specified in Attachment H, Appendix H-4. The Discharger shall also comply with the biosolids monitoring requirements of 40 CFR 503.
- [7] The Discharger may use the influent monitoring required in Table E-2 to satisfy this pretreatment monitoring requirement.
- [8] If one of the significant categorical industrial users resumes discharging or if a new significant industrial user commences operations within the service area, the Discharger shall notify the Regional Water Board in writing within 10 days of becoming aware of the significant industrial user's intent to discharge. Sampling frequencies shall increase as follows:
- biosolids: twice per year;
 - VOC and BNA influent and effluent: twice per year;
 - metals influent and effluent: once per month;
 - hexavalent chromium effluent: once per month; and
 - hexavalent chromium influent: once per quarter.

City Comment 6: *The City requests that persons authorized to sign and submit reports reflect day-to-day operations, not treatment plant ownership. The City requests that a City of Mateo representative be the sole individual authorized to sign and submit reports because the City of San Mateo owns the majority of the facility, performs the day-to-day operations, and is responsible for all regulatory reporting.*

Response: We agree and revised Fact Sheet Table F-1 as follows:

Table F-1. Facility Information

WDID	2 417035001
CIWQS Place ID	255420
Discharger	City of San Mateo and City of Foster City Estero Municipal Improvement District, a joint powers authority
Name of Facility	City of San Mateo Wastewater Treatment Plant and its wastewater collection system.
Facility Address	2050 Detroit Drive, San Mateo, CA 94404 San Mateo County

Facility Contact, Title, Phone	Chad Davisson, City of San Mateo, Environmental Services Division Manager, (650) 522-7385 Brad Underwood, City of Foster City, Public Works Director, (650) 286-3200 610 Foster City Blvd, Foster City CA 94404, bunderwood@fostercity.org
Authorized Person to Sign & Submit Reports	Same as above Chad Davisson, City of San Mateo, Environmental Services Division Manager, (650) 522-7385
Mailing Address	330 West 20 th Avenue, San Mateo, CA 94403
⋮	⋮

City Comment 7: *The City requests that changes made to the tentative order be reflected in the Fact Sheet. The City requests that any changes based on its comments above also be reflected in the Fact Sheet to avoid conflicts or ambiguities.*

Response: We agree. The changes shown above include necessary Fact Sheet revisions.

United States Environmental Protection Agency (USEPA)

USEPA Comment 1: *USEPA requests that the maximum daily effluent limit for cyanide of 43 ug/L be reduced to 38 ug/L to avoid backsliding. USEPA interprets the anti-backsliding requirements of Clean Water Act sections 402(o)(2) and 303(d)(4) as applying to individual limits, not the long-term average effluent concentration used to derive monthly and daily limits.*

Response: We revised the tentative order to reflect USEPA’s interpretation of the anti-backsliding requirements. Specifically, we revised Table 8 of the tentative order as follows:

Table 8. Toxic Pollutant Effluent Limitations

Constituent	Units	Effluent Limitations ⁽¹⁾	
		Average Monthly	Maximum Daily
Copper	µg/L	54	72
Cyanide	µg/L	20	43 38
Dioxin-TEQ	µg/L	1.4 x 10 ⁻⁸	2.8 x 10 ⁻⁸
Nickel	µg/L	30	71
Total Ammonia, as N	mg/L	66	120

We revised Fact Sheet sections IV.C.4.c(2)(c) and (d) as follows:

(c) **WQBELs.** WQBELs for cyanide, calculated according to SIP procedures with an effluent data CV of 0.65 and a dilution credit of D = 9, are an AMEL of 20 µg/L and an MDEL of 43 µg/L. The previous order imposed an AMEL of 22 µg/L and an MDEL of 38 µg/L. Because the AMEL best represents the long-term water quality condition (versus the MDEL), these limits are more stringent than those from the previous order (AMEL of 22 µg/L and MDEL of 38 µg/L). This Order establishes the more stringent MDEL to avoid backsliding effluent limitations.

(d) **Anti-backsliding.** Anti-backsliding requirements are satisfied because this Order’s cyanide limits are at least as more stringent as ~~than~~ those in the previous order.

USEPA Comment 2: *USEPA requests clarification of the fecal coliform effluent limits and monitoring expectations. USEPA recommends that the 90th percentile effluent limit be evaluated using 11 (rather than 10) samples. USEPA also recommends that the fecal coliform monitoring frequency be changed to five times per month, the same as for enterococcus.*

Response: We agree and revised section IV.A.3.b of the tentative order as follows:

Fecal Coliform Bacteria. The ~~geometric five-day log~~ mean fecal coliform density in a calendar month shall not exceed 200 MPN/100 mL; ~~mL~~ and the 90th percentile value of the last 11 ~~ten~~ values shall not exceed 400 MPN/100 mL.

We revised Monitoring and Reporting Program Table E-4 as follows:

Table E-4. Effluent Monitoring — EFF-001a

Parameter	Units	Sample Type	Minimum Sampling Frequency
Enterococcus Bacteria ^{[1], [2]}	MPN/100 mL	Grab	5/Month
Fecal Coliform Bacteria	MPN/100 mL	Grab	1/Week <u>5/Month</u>

We revised Fact Sheet Table F-12 as follows:

Table F-12. Monitoring Requirements Summary

Parameter	Influent INF-001	Effluent EFF-001 or EFF-001a	Effluent EFF-001b	Sludge and Biosolids BIO-001	Receiving Water
⋮	⋮	⋮	⋮	⋮	⋮
Fecal Coliform		1/Week <u>5/Month</u>	1/Day		
Enterococcus		1/Week <u>5/Month</u>	1/Day		
⋮	⋮	⋮	⋮	⋮	⋮

USEPA Comment 3: *USEPA requests changes to the collection system tasks to reduce blending to ensure that all feasible alternatives are implemented. USEPA suggests adding language to Table 9 to clarify that the collection system tasks must include all feasible alternatives.*

Response: We agree and revised Table 9 of the tentative order as follows:

Table 9. Specific Tasks to Reduce Blending

Task	Due Date
⋮	⋮
<i>Collection System Tasks</i>	
⋮	⋮
9. Develop and Implement Wet Weather Improvement Program The Discharger shall, in cooperation with the satellite collection system agencies, develop and begin implementing a workplan for a comprehensive Wet Weather Improvement Program that establishes measurable goals to reduce infiltration and inflow (I/I) and minimize blending during wet weather. <u>The workplan shall include all feasible alternatives to reduce blending caused by I/I during peak flows.</u> The workplan shall consolidate the following:	December 1, 2013

<ul style="list-style-type: none"> a. relevant components from existing sewer management programs, including, but not limited to, Sewer System Management Plans (SSMPs) and private sewer lateral programs; b. findings from existing reports, including, but not limited to, the Capacity Evaluation dated July 7, 2009, from Task 1; c. required actions from Cease and Desist Order No. R2-2009-0020, effective March 13, 2009; and d. other actions and activities the Discharger deems necessary and effective to minimize peak wet weather flows to the Plant. 	
<p>10. Develop Master Plans for Collection System Upgrades The Discharger shall submit a Collection System Master Plan that includes, at a minimum, a 10-year capital improvement project and implementation schedule to reduce I/I for Discharger-owned collection system improvements, based in part on capacity findings from Tasks 1 and 9. <u>The plan shall include all feasible alternatives to reduce blending caused by I/I during peak flows.</u></p>	<p>April 1, 2014</p>
<p>⋮</p>	<p>⋮</p>

USEPA Comment 4: *USEPA recommends modifying the chronic toxicity test dilution series. USEPA recommends using a dilution series that better brackets the in-stream waste concentration, assuming at least 10:1 dilution (10% effluent).*

Response: We agree and revised Monitoring and Reporting Program section V.B.1.e as follows:

Dilution Series. The Discharger shall conduct tests at ~~100%, 50%, 25%, 10%, and 5%~~ 40%, 20%, 10%, 5%, and 2.5%. The “%” represents percent effluent as discharged. Test sample pH in each dilution in the series may be controlled to the level of the effluent sample as received prior to being salted up.

USEPA Comment 5: *USEPA recommends updating a chronic toxicity monitoring method citation. USEPA provides the correct chronic toxicity method reference.*

Response: We agree and revised Monitoring and Reporting Program section V.B.1.d as follows:

Methodology. Sample collection, handling, and preservation shall be in accordance with USEPA protocols. In addition, bioassays shall be conducted in compliance with the most recently promulgated test methods, as shown in Appendix E-1. These are *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, currently fourth edition (EPA-821-R-02-014 ~~013~~), with exceptions granted the Discharger in writing by the Executive Officer and the Environmental Laboratory Accreditation Program....

We revised Monitoring and Reporting Program Appendix E-2, Table AE-1, footnote 3, as follows:

Short-term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to Marine and Estuarine Organisms. ~~EPA/600/4-90/003~~ EPA-821-R-02-014. ~~July 1994~~ October 2002.

San Francisco Baykeeper

Baykeeper Comment 1: *Baykeeper requests that USEPA's recreational water quality criteria be considered when setting bacteria effluent limits. Baykeeper recommends using the recreational water quality criteria for enterococci that USEPA published in December 2012. Baykeeper also requests that an E. coli effluent limit be added based on the USEPA criteria. Baykeeper states the 1998 fecal coliform study was unavailable for review prior to the close of comments.*

Response: We disagree. USEPA has not promulgated its 2012 criteria through regulations that apply to the San Francisco Bay Region. Because the Basin Plan contains bacteria water quality objectives adopted by the Regional Water Board and approved by the State Water Board and USEPA, we cannot substitute USEPA's non-promulgated criteria when deriving effluent limits for this permit. Our enterococcus limit is based on the implementation provisions of Basin Plan Table 4-2A, which does not call for an *E. coli* limit. Finally, the 1998 fecal coliform study was available for review throughout the public comment period. The public notice for this matter clearly states how to obtain additional information relevant to this proposed action. We have no record of anyone requesting a copy of it. However, since receiving this comment letter, we have provided a copy to Baykeeper.

Baykeeper Comment 2: *Baykeeper requests total ammonia effluent limits be lowered to levels consistent with facilities to the South. Baykeeper requests more stringent ammonia effluent limits, similar to those for the Palo Alto, San Jose, and Sunnyvale plants, asserting that South San Francisco Bay is nutrient-enriched. Baykeeper asserts that the tentative order's average monthly and maximum daily effluent limits of 66 and 120 milligrams per liter (mg/L) are inappropriate in light of degrading conditions. Baykeeper points out, for comparison, that the ammonia limits for the Palo Alto, San Jose, and Sunnyvale plants are 2.7 mg/L, 3 mg/L, and 18 mg/L. Baykeeper suggests that ammonia requirements have been applied inconsistently; only plants in the Lower South San Francisco Bay are required to reduce ammonia loads, although nutrients affect the entire South San Francisco Bay. Regarding nutrients, Baykeeper refers to recent USGS data showing increases in water column chlorophyll-a and decreases in dissolved oxygen concentrations. Baykeeper also refers to studies providing evidence that San Francisco Bay's historic resistance to the effects of nutrient enrichment is weakening, and stronger measures to control nutrients are necessary.*

Response: We disagree that our approach to ammonia and nutrients in this tentative order is inconsistent with our approach in other recent permits, including those for discharges to Lower South San Francisco Bay (south of the Dumbarton Bridge). We agree, however, that nutrients are a growing regional concern in the San Francisco Bay Estuary in part due to the information cited in the comment. Since current efforts underway may affect future ammonia limits, we highlighted this concern and summarized efforts underway in Fact Sheet section IV.C.4.c(5)(e). We respond to the issues of consistency with other permits and provide more information regarding nutrients below.

To address ammonia in the tentative order, we used site-specific data to calculate effluent ammonia limits based on un-ionized ammonia objectives in Basin Plan section 3.3.20 (which address only aquatic toxicity, not nutrient effects). We used data from the San Bruno Shoal RMP station (BB15), which is closest to the discharge and located just north of the San Mateo Bridge, to translate the Basin Plan's un-ionized ammonia water quality objectives to total ammonia criteria and to calculate ammonia effluent limits. These calculations are detailed in Fact Sheet sections IV.C.3.c and IV.C.4.c(5).

Regarding consistency among permits, we used the same procedure to determine if water-quality-based ammonia limits were warranted for this discharge as we used for the San Jose, Sunnyvale, and Palo Alto discharges (with the exception that we used the USEPA Technical Support Document for the Sunnyvale analysis). We did not find reasonable potential for San Jose or Sunnyvale; hence, those facilities have performance-based limits retained from previous orders to maintain their existing good performance. We concluded that water-quality-based limits were warranted for Palo Alto's discharge and calculated the ammonia limits for Palo Alto and those in this tentative order in the same manner (following State Implementation Policy procedures and using the nearest RMP station for background data).

The limits in this tentative order differ from those for Palo Alto primarily because Palo Alto discharges to shallow water with poor circulation and flow characteristics. Its discharges receive little, if any, initial dilution. In contrast, the San Mateo plant discharges to deep water through a submerged diffuser; thus, its discharge receives substantial initial dilution. Therefore, the ammonia limits in this tentative order are higher than those in the Palo Alto permit and comparable to those in the recently reissued South Bayside System Authority permit (Order No. R2-2012-0062).

To address nutrients, we have initiated a regionwide effort to study and evaluate nutrient effects in San Francisco Bay. The effects of nutrients discharged south of the Dumbarton Bridge have been a concern for some time: the potential effects of nutrients discharged to the rest of the Bay are, as Baykeeper's comment indicates, a recent but increasing concern. As yet, whether the observations demonstrate a water quality problem is not well understood. To address nutrient discharges and their potential effects, we are working with the Southern California Coastal Water Research Program (SCCWRP) and San Francisco Estuary Institute (SFEI) to develop a Nutrient Assessment Framework for San Francisco Bay. A Nutrient Assessment Framework will allow us to translate the Basin Plan narrative biostimulatory objective into numeric criteria, which in turn will allow us to calculate water quality-based effluent limits for nutrients.

We developed a *San Francisco Bay Nutrient Management Strategy* in November 2012, based in part on the *Nutrient Numeric Endpoint Literature Review and Data Gaps Analysis* (McKee, L.J., et. al., June 2011). We also issued a 13267 letter on March 2, 2012, requiring San Francisco Bay Region wastewater dischargers, including the Discharger, to extensively monitor their influents and effluents for nutrients. We will use this information to compare nutrient loads from wastewater discharges to loads from other sources, to support modeling and evaluation of load reduction scenarios, and to determine the need for additional wastewater treatment to address nutrients. The data may also be used to support TMDL development or other regulatory strategies. We also recognize Bay Area Clean Water Agencies (BACWA) engagement in funding nutrient-related studies (*Nutrient Strategy Development and Implementation: A proposal to BACWA and the San Francisco Bay Regional Water Quality Control Board*, January 18,

2012), as acknowledged in our January 24, 2012, letter to BACWA, *Water Board Support for Nutrient Strategy Development and Implementation*. The nutrient studies include: (1) coordination of nutrient strategy development and implementation, which will help refine our *San Francisco Bay Nutrient Management Strategy*; (2) development of numeric biogeochemical models, which will be used to evaluate biological responses under future nutrient loading scenarios; and (3) Suisun Bay Studies, which will investigate the potential relationship between ammonia, nutrients, and the decline of protected pelagic fish species in Suisun Bay.

In November 2012, the Regional Water Board's Basin Plan triennial review prioritized development of nutrient water quality objectives, development and implementation of biological objectives, and development of dissolved oxygen site-specific objectives.

Staff Initiated Changes

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

We revised section II.B of the tentative order as follows:

The Plant and the collection systems belonging respectively to the City of San Mateo and the City of Foster City Estero Municipal Improvement District are collectively the Facility. . . . The collection systems covered by this Order includes approximately 257 miles of sanitary sewer and 25 23 pump stations in the City of San Mateo, and approximately 66 miles of sanitary sewer and 49 pump stations in the City of Foster City Estero District. Three satellite wastewater collection systems (Town of Hillsborough, Crystal Springs County Sanitation District, and County of San Mateo Tower Road Complex) account for approximately 120 additional miles of sanitary sewer that discharge to the Facility. The service area population is approximately 139,000.

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

Collection System. The Discharger's wastewater collection system is part of the Facility covered by this Order. The Plant also receives wastewater from the satellite wastewater collection systems of three municipal jurisdictions (Town of Hillsborough, Crystal Springs County Sanitation District, and County of San Mateo Tower Road Complex), which account for approximately 120 additional miles of sanitary sewer. The Discharger's combined collection system includes approximately 257 miles of sanitary sewer and 25 23 pump stations in the City of San Mateo, and approximately 66 miles of sanitary sewer and 49 pump stations in the City of Foster City Estero District.

We revised Fact Sheet section II.F (fourth paragraph) as follows:

TSS and CBOD₅ concentrations were higher during blending than when not blending. However, blending is rare and typically of short duration and relatively small volume; therefore, the overall effects of increased pollutant loadings to San Francisco Bay are small. The average TSS and CBOD₅ results during blending were ~~14.3~~ 40 mg/L and ~~11.4~~ 26 mg/L. The average TSS and CBOD₅ results overall were 7.5 mg/L and 7.9 mg/L.

We revised Fact Sheet section IV.A.3(B) (third paragraph) as follows:

To reduce peak flows to the Plant, the City developed and implemented an annual sewer rehabilitation program, which focuses on sewer line repair and replacement to reduce inflow and infiltration... . In addition to intensive closed circuit television inspections and cleaning of sewer lines to assess and remedy troubled areas, from 2009 through ~~2011~~ 2012, the City repaired or replaced about ~~22,000~~ 28,000 linear feet of sewer pipe. ~~For 2012, pipe rehabilitation and replacement figures are anticipated to be between 3,531 and 8,000 linear feet.~~ As a result of implementing the supplemental environmental project that the Regional Water Board approved to incentivize private lateral replacement, 200 private sewer laterals (5,994 linear feet) have been inspected, resulting in replacement of 76 laterals (2,788 linear feet) since September 2009... .

We revised Fact Sheet section IV.B.2.a as follows:

CBOD₅ and TSS. The dry-season (May through September) seasonal effluent limitations for CBOD₅ and TSS are more stringent than the Secondary Treatment Standards because the Plant can provide advanced secondary treatment... . They were originally imposed in 1974 ~~1975~~ through Order No. 74-98 ~~75-47~~ as year-round limits to protect shellfish beds located along the shore from Burlingame to Foster City. In accordance with Resolution No. 78-8, the Shellfish Program investigated these shellfish beds and... found that they were not adversely affected by wastewater discharges... . Therefore, in 1982 ~~1984~~ (Order No. 82-51 ~~84-6~~), the Regional Water Board relaxed the CBOD₅ and TSS limits during the wet season, and has retained these limits since.

We revised Table 9 of the tentative order as follows:

Table 9. Specific Tasks to Reduce Blending

Task	Due Date
<i>Collection System Tasks</i>	
⋮	⋮
12. Report Progress on Implementing Wet Weather Improvement Program The Discharger shall evaluate and report on the implementation and effectiveness of its Wet Weather Improvement Program. The evaluation shall, at a minimum, consist of the following: ⋮	Annually, each June 30 May 15, beginning in 2014
⋮	⋮

We revised Fact Sheet Table F-12 as follows:

Table F-12. Monitoring Requirements Summary

Parameter	Influent INF-001	Effluent EFF-001 or EFF-001a	Effluent EFF-001b	Sludge and Biosolids BIO-001	Receiving Water
⋮	⋮	⋮	⋮	⋮	⋮
CBOD ₅	≅ 2/Week	≅ 2/Week	1/Year ^[2]		
TSS	≅ 2/Week	1/Day 2/Week	1/Day		
⋮	⋮	⋮	⋮	⋮	⋮