Appendix C Response to Comments

California Regional Water Quality Control Board San Francisco Bay Region

RESPONSE TO WRITTEN COMMENTS

On February 12, 2013, Tentative Order for City of Burlingame and North Bayside System Unit, San Mateo County

The Regional Water Board received written comments from the City of Burlingame and the U.S. Environmental Protection Agency (U.S. EPA) on a tentative order distributed for public comment. This response to those comments summarizes each comment in *italics* (paraphrased for brevity) followed by a staff response. Revisions are shown with strikethough for deletions and <u>underline</u> for additions. For the full content and context of each comment, refer to the comment letters.

After distributing the tentative order for review, we discovered that Tables 8, 9, and 10 were incorrectly numbered as Tables 9, 10, and 11. This response to written comments and the revised tentative order reflect the correct table numbers.

CITY OF BURLINGAME

City Comment 1

The City requests that the Order differentiate more clearly the responsibilities and jurisdictions of the City of Burlingame and the North Bayside System Unit (NBSU). It points out, among other things, that the City of Burlingame owns the effluent forcemain within the City limits, while the NBSU owns the forcemain outside the City boundaries, the combined effluent pumping station, effluent dechlorination facilities, and the deepwater outfall.

Response to City Comment 1

We agree and revised section II.B.1 of the Order as follows:

Facility Description. The City of Burlingame owns the wastewater collection system located within its city limits, and Veolia Water North America West, LLC under contract with the City operates, the City of Burlingame Wastewater Treatment Facility (hereinafter the Plant), and the effluent forcemain up to the city limits, where the effluent flows into the NBSU forcemain. The City operates the wastewater collection system and uses a contractor (currently Veolia Water West Operating Services, Inc.) to operate the Plant and its portion of the effluent forcemain and its associated wastewater collection system. The NBSU is a joint powers authority comprised of the cities of Burlingame, Millbrae, South San Francisco, San

Bruno, and the San Francisco International Airport (i.e., the City and County of San Francisco). It owns and operates the effluent forcemain outside Burlingame's city limits, the combined effluent pumping station, effluent dechlorination facilities, and the deepwater outfall.

The Plant, located south of the San Francisco International Airport and northeast of the City of Burlingame (see Attachment B), provides secondary treatment of domestic and commercial wastewater for the City of Burlingame, a portion of the Town of Hillsborough, and the Burlingame Hills Sewer Maintenance District. The service area population is approximately 37,000. No significant industrial users discharge to the <u>Plant Facility</u>.

The Plant discharges to the NBSU forcemain. From July 2009 through June 2012, the <u>Plant's</u> average monthly flow was 3.37 MGD, and the maximum daily flow was 13.15 MGD. The Plant design average daily dry weather flow is 5.5 MGD and the peak wet weather capacity, based on the engineered contractual limit for the <u>NBSU forcemain</u> effluent pipeline, is 16 MGD.

For purposes of this Order, the Plant, the City of Burlingame's collection system and effluent forcemain, and the NBSU forcemain, combined effluent pumping station, dechlorination facilities, and deepwater outfall are hereinafter collectively referred to as the "Facility."

We revised Fact Sheet section I.A as follows:

The City of Burlingame and the North Bayside System Unit (NBSU) (hereinafter the Discharger) discharge treated wastewater into the deepwater channel of Lower San Francisco Bay. The City of Burlingame owns the Plant, a Publicly Owned Treatment Works, and the portion of the sewage collection system and effluent forcemain located within its city limits. The Plant, currently operated by Veolia Water North America West, LLC, Operating Services, Inc., under contract with the City, provides secondary treatment of wastewater and discharges the effluent to the NBSU forcemain. The NBSU owns and operates the effluent forcemain outside Burlingame's city limits, the combined effluent pumping station, effluent dechlorination facilities, and the deepwater outfall. For purposes of this Order, the Plant, the City of Burlingame's collection system and effluent forcemain, and the NBSU forcemain, combined effluent pumping station, dechlorination facilities, and the deepwater outfall are hereinafter collectively referred to as the "Facility."

City Comment 2

The City requests that the Order identify the location of the emergency outfall with respect to Discharge Point 001 instead of Discharge Point 002 (the deepwater outfall). It states that the emergency outfall is very close (less than 0.1 miles) to Discharge Point 001.

Response to City Comment 2

As written, the location of the emergency outfall can more readily be compared to the location of the deepwater outfall (Discharge Point 002), the authorized discharge point. Discharge Point 001 is not a direct discharge point to surface water; it is where treated effluent flows into the NBSU forcemain. Nonetheless, we added text to clarify the location of the emergency outfall relative to Discharge Point 001 as well as Discharge Point 002. We revised the second paragraph of section II.B.4 of the Order as follows:

About once a year, when the effluent flow reaches 16.0 MGD (the engineered contractual limit for the NBSU pipeline), emergency discharge through a shallow water outfall occurs. The outfall, located approximately 0.6 miles southeast of Discharge Point No. 002, is a gated weir just off the final clarifier. This shallow water outfall is less than 0.1 miles from the point where treated effluent enters the NBSU forcemain (i.e., Discharge Point 001). Effluent discharged through the emergency outfall is fully treated (primary and secondary), disinfected, and dechlorinated (sodium bisulfite). These bypasses of the deep water outfall are subject to Discharge Prohibition III.C and Attachment D section I.G of this Order.

We revised the second paragraph of Fact Sheet section II.B as follows:

About once a year, when the effluent flow reaches 16.0 MGD (the engineered contractual limit for the NBSU pipeline), emergency discharge through a shallow water outfall occurs. The outfall, located approximately 0.6 miles southeast of Discharge Point No. 002, is a gated weir just off the final clarifier. This shallow water outfall is less than 0.1 miles from the point where treated effluent enters the NBSU forcemain (i.e., Discharge Point 001). Effluent discharged through the emergency outfall is fully treated (primary and secondary), disinfected, and dechlorinated (sodium bisulfite). These bypasses of the deep water outfall are subject to Discharge Prohibition III.C and Attachment D section I.G of this Order.

City Comment 3

The City requests that the Order include a process through which it may request changes to the approach and deadlines specified for developing and implementing a Wet Weather Improvement Plan (Table 8, Task 1). It contends that it has no authority to require actions of satellite collection system agencies and that unforeseen circumstances may force a delay in project completion or a change in strategy.

Response to City Comment 3

We disagree. We understand that the City has no jurisdiction over its satellite collection system agencies; however, Table 8, Task 1, requires nothing beyond the City's control. For example, Task 1 requires only that the Wet Weather Management Plan "describe the Discharger's strategy to work with its satellite agencies to reduce peak wet weather flows." Furthermore, we crafted Task 1 to require the City to simply cull and compile pertinent components of existing plans (e.g., sewer system management plans and wastewater collection system master plans) and begin implementation by December 1,

2013. If the City encounters unforeseen circumstances, it can and should describe such circumstances in the annual progress report described in Task 2.

City Comment 4

The City requests that the requirement for a flow-based rate structure (Table 8, Task 5) be removed. It points out that the Town of Hillsborough is charged a monthly fee based on the volume and quality of wastewater delivered to the treatment plant each month. The relatively small Burlingame Hills Sewer District is charged based on water consumption.

Response to City Comment 4

We agree. The Burlingame Hills area, as stated in Fact Sheet section II.A, has about 1,000 residents and contributes about 3% of the total treatment plant influent (estimated based on average dry weather flows). Given the relatively minor contribution and the challenges involved in measuring actual flows and changing contractual agreements, a flow-based rate structure is unwarranted. We revised Table 8 of the Order as follows:

Table 8. Specific Tasks to Reduce Blending

Tasl	k	Compliance Date	
	:	:	
4.	Quantify Inflow and Infiltration From Discharger and Satellite Agencies. The Discharger shall monitor, or otherwise estimate, flows from the City and the satellite agencies' collection systems to quantify the inflow and infiltration attributable to each agency. This report may be part of the Wet Weather Improvement Program Progress Report.	Annually, with Annual Self- Monitoring Report due February 1	
5.	Consider Flow-Based Rate Structure. The Discharger shall develop a flow based rate structure that accounts for the costs of treating and managing inflow and infiltration from the City and the satellite agencies and present this proposal to its City Council for consideration.	December 1, 2014	
<u>5</u> 6.	Prepare No Feasible Alternatives Analysis (Utility Analysis). If the Discharger seeks to continue to bypass peak wet weather flows around the secondary treatment units based on 40 CFR 122.41(m)(4)(i)(A)-(C)	With Report of Waste Discharge due December 1, 2017	
<u>6</u> 7.	Develop and Implement Public Notification Protocol. The Discharger shall develop and implement a public notification protocol to alert the public of any bypass including blending	August 1, 2013	

City Comment 5

The City requests that the deadline for Task 2 of the Cyanide Action Plan (Table 10) be changed to February 28 each year. It states that no potential cyanide sources have been identified.

Response to City Comment 5

We agree and revised Table 10, Task 2, of the Order as follows:

Table 10. Cyanide Action Plan

Ta	sk	Compliance Date	
1.	Review Potential Cyanide Sources	Completed	
	The Discharger shall submit an inventory of potential cyanide	November 5, 2008	
	sources		
2.	Implement Cyanide Control Program	With annual pollution	
	The Discharger shall submit a plan and begin implementation of	prevention report due	
	a program to minimize cyanide discharges to its treatment plant	February 28 each year	
	consisting, at a minimum, of the following elements	Completed	
		February 28, 2014	
3.	Implement Additional Cyanide Control Measures	With next annual	
	If the Regional Water Board notifies the Discharger that	pollution prevention	
	ambient monitoring shows cyanide concentrations are 1.0 μg/L	report due February 28	
	or higher	(at least 90 days	
		following notification)	
	<u> </u>		

City Comment 6

The City requests that the reporting units for enterococcus concentrations be changed to MPN/100 mL. It points out that the Enterolert method, which the City uses to measure enterococcus concentrations, does not provide results in CFU/100 mL.

Response to City Comment 6

We agree and revised section IV.A.2(a) of the Order as follows:

Enterococcus Bacteria: The geometric mean enterococci density of all effluent samples collected within a calendar month shall not exceed 35 Most Probable Number (MPN) per 100 mL (MPN/100 mL) Colony Forming Units per 100 mL (CFU/100 mL).

City Comment 7

The City requests the option to collect total ammonia effluent samples as either grab or 24-hour composites. It points out that the wastewater nutrients monitoring the Regional Water Board Executive Officer required through his March 2, 2012, letter prescribes 24-hour composite sampling.

Response to City Comment 7

We agree and revised Monitoring and Reporting Program Table E-3 as follows:

Table E-3. Effluent Monitoring – EFF-001

Parameter	Units Sample Type		Minimum Sampling Frequency	
:	:	:		
Chronic Toxicity ^[7]	TUc	C-24	2/Year	
Total Ammonia	mg/L as N	Grab <u>or C-24</u>	1/Month	
Copper, Total Recoverable	μg/L	Grab	1/Month	
:	:	:	:	

City Comment 8

The City requests reduced pretreatment monitoring and reporting frequencies. It points out that currently no significant industrial user is located within its service area. For the past eight years, the influent and effluent monitoring data on volatile organic compounds (VOCs) and base/neutral and acids extractable organics (BNAs) have been consistently non-detect or detected but not quantified.

Response to City Comment 8

We agree. Attachment H, Appendix H-2, states, "The pretreatment semiannual report is due on July 31st... unless an exception has been granted by the Regional Water Board's Executive Officer (e.g., pretreatment programs without any [significant industrial users] may qualify for an exception to the pretreatment semiannual report)." The City has no significant industrial users operating in its service area; therefore, the reporting frequency can be reduced. We revised Monitoring and Reporting Program section VII as follows:

The Discharger shall comply with the pretreatment requirements specified below for influent (at Monitoring Location INF-001), effluent (at Monitoring Location EFF-001), and biosolids (at Monitoring Location BIO-001). The Discharger shall report summaries of analytical results in annual and semi annual pretreatment reports in accordance with Attachment H. At its option, the Discharger may also report biosolids analytical results in its eSMR by manual entry, by EDF/CDF, or as an attached file.

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." Since the City has no significant industrial users in its service area, reduced monitoring frequencies are appropriate for most constituents. We revised the pretreatment program monitoring requirements accordingly. In doing so, we took care to be consistent with the influent and effluent cyanide and copper monitoring requirements in Monitoring and Reporting Program Tables E-2 and E-3, which require influent cyanide monitoring twice per year and effluent cyanide and copper monitoring once per month. We also took care to be as consistent as possible with the pretreatment requirements in the City of San Mateo Wastewater Treatment Plant permit reissued in March 2013. For biosolids, that permit requires VOC and BNA monitoring once every five years and metals and cyanide monitoring once per year. All these frequencies represent reductions when compared to the previous order. If a significant industrial user were to commence operations in the service area, we included a footnote requiring that monitoring frequencies increase. We revised Monitoring and Reporting Program Table E-6 as follows:

Table E-6. Pretreatment and Biosolids Monitoring Requirements

	San	npling Frequen	Sample Type ^[3]		
Constituents	Influent INF-001 ^[2]			INF-001 and EFF-001	Biosolids BIO-001
VOC	2/Year 2/Year 2/Year 1/5 Years 1/5 Years 1/5 Years		1/5 Years 2/Year	Grabs	Grabs ^[3b]
BNA			1/5 Years 2/Year	Grabs	Grabs ^[3b]
Metals ^[1]	1/ <u>Year</u> Month	1/ <u>Year</u> Month	<u>21</u> /Year	C-24 ^[3a]	Grabs ^[3b]
<u>Copper</u>	<u>1/Year</u>	1/Month	<u>1/Year</u>		Grabs ^[3b]
Cyanide	2/Year	1/Month	1/Year	<u>Grabs</u>	Grabs ^[3b]

Legend for Table E-6:

Constituents:

VOC volatile organic compounds

BNA base/neutrals and acids extractable organic compounds

Sampling Frequency:

1/month once per month
1/year once per year
2/year twice per year
1/5 years once every five years

Footnotes for Table E-6:

- The metals are arsenic, cadmium, copper, selenium, copper, lead, mercury, nickel, silver, zinc, and total chromium.
- Effluent Influent and effluent monitoring conducted in accordance with Tables E-2 and E-3 can be used to satisfy these pretreatment monitoring requirements.
- [3] Sample types:
 - a. 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.
 - b. 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.
- If a 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. Influent, effluent, and biosolids sampling frequencies shall increase as shown below:
 - VOC and BNA: twice per year; and
 - Metals, copper, and cyanide: once per month (influent and effluent) and twice per year (biosolids).

City Comment 9

The City requests that Fact Sheet Table F-13 be revised for consistency. Specifically, it asks that the table reflect changes in pretreatment program monitoring requested in City Comment 8.

Response to City Comment 9

We agree and revised Fact Sheet Table F-13 as follows:

Table F-13. Monitoring Requirements Summary

Parameter	Influent INF-001	Effluent E-001	Effluent E-002	Blended Effluent E-001B	Sludge and Biosolids B-001	Receiving Water
:	:	:	:	:	:	:
Bis(2- ethylhexyl) phthalate		2/Year		1/Year ^[5]		Support RMP
Copper		1/Month		1/Year ^[5]	<u>1/Year</u>	Support RMP
Cyanide	2/Year	1/Month ^[3]		1/Year ^[5]	1/Year	Support RMP
Ammonia		1/Month		1/Year ^[5]		Support RMP
:	:	:	:	:	:	:
All Other Priority Pollutants		1/Year ^[4]				Support RMP
Volatile Organic Compounds	1/5 Years 2/Year	1/5 Years 2/Year			1/5 Years 2/Year	
Base/Neutral and Acid Extractable Organic Compounds	1/5 Years 2/Year	1/5 Years 2/Year			1/5 Years 2/Year	
Metals ^[1]	1/ <u>Year</u> Month	1/ <u>Year</u> Month			<u>21</u> /Year	
Metric tons/year					See Attach. G, § III.B.1	
:	:	:	:	:	:	:

Footnotes for Table F-10:

City Comment 10

The City requests various non-substantive editorial changes.

Response to City Comment 10

We agree and revised the Order accordingly.

The metals are arsenic, cadmium, copper, selenium, copper, lead, mercury, nickel, silver, zinc, and total chromium.

If after three months the Discharger has demonstrated full compliance with this enterococcus effluent limitation, the minimum monitoring frequency is reduced to four times per year....

U.S. ENVIRONMENTAL PROTECTION AGENCY

U.S. EPA Comment 1

U.S. EPA requests changes to the collection system tasks to reduce blending to ensure that all feasible alternatives are implemented. U.S. EPA suggests adding language to Table 9 to clarify that the collection system tasks must include all feasible alternatives.

Response to U.S. EPA Comment 1:

We agree and revised Table 9 of the Order as follows:

Table 9. Specific Tasks to Reduce Blending

Task	Compliance Date	
1. Develop and Implement Wet Weather Improvement Plan. The Discharger shall, in cooperation with the satellite agencies, develop a comprehensive Wet Weather Improvement Plan The Plan shall consolidate relevant components from Wastewater Collection System Master Plan (Brown & Caldwell, 2010) for the City of Burlingame, Wastewater Collection System Master Plan Burlingame (North) Sewershed (Brown & Caldwell, 2011) for the Town of Hillsborough, and Wastewater Collection System Capacity Assurance Plan and Master Plan Update (Brown & Caldwell, 2011) for the Burlingame Hills Sewer Maintenance District. The Plan shall include all feasible alternatives to reduce blending caused by inflow and infiltration during peak flows. The Plan shall specify measures to be implemented at the Plant and the City-owned wastewater collection system, and identify their costs, implementation schedules, and proposed funding mechanisms	December 1, 2013	
 Report Progress on Implementing Wet Weather Improvement Plan. The Discharger shall evaluate and report on the implementation and effectiveness of its Wet Weather Improvement Program annually 	Annually, with Annual Self- Monitoring Report due February 1	
:	:	

U.S. EPA Comment 2

U.S. EPA expresses support for this Order's approach to backsliding. This Order applies the most stringent existing water quality-based effluent limits. New limits are compared individually to the corresponding limit in the previous order.

Response to U.S. EPA Comment 2:

This comment does not require a response.