Appendix C
Response to Comments

California Regional Water Quality Control Board
San Francisco Bay Region

RESPONSE TO WRITTEN COMMENTS
On the Reissuance of the NPDES Permit for Discharges from the
Cities of South San Francisco and San Bruno Water Quality Control Plant and Collection System

We received written comments from the cities of South San Francisco and San Bruno on a tentative order distributed for public review. This response to these comments summarizes each comment in *italics* (paraphrased for brevity) followed by a staff response. Revisions are shown with ~~strikethough~~ for deletions and underline for additions. For the full content and context of each comment, refer to the comment letter.

Comment 1: The cities request revision of Table 2 of the tentative order to clarify that their wastewater receives secondary treatment.

Response to Comment 1
We agree and changed Table 2 as follows:

Table 2. Discharge Locations

Discharge Point	Effluent Description	Discharge Point Latitude (North)	Discharge Point Longitude (West)	Receiving Water
002	Secondary ~~T~~treated effluent	37.665278	-122.361389	Lower San Francisco Bay

Comment 2: The cities request changing the deadline for submission of the Report of Waste Discharge (application for permit reissuance) from September 1, 2018, to December 1, 2018, which would provide the minimum 180 days prior to the permit expiration date.

Response to Comment 2
We did not make the requested change. We need the application about 270 days prior to the expiration date because it can take more than 180 days to prepare and reissue a permit, particularly if additional information beyond what is presented in the initial application is needed. Allowing nine months to process the application will allow the Board a chance to reissue the permit before it expires.

Comment 3: The cities request changes to Table 5 (Task 1) of the tentative order, describing their planned approach to reduce wet weather blending.

Response to Comment 3
We agree and changed Table 5 of the tentative order consistent with most, but not all, of the cities' suggestions as follows:

Table 5. Tasks to Reduce Blending

Task	Compliance Date
1. Implement a Wet Weather Improvement Program. The Discharger shall develop and implement a Wet Weather Improvement Program to reduce blending. This program shall ~~continue with~~ implement~~ation of P~~plant improvements documented in the "South San Francisco/San Bruno Water Quality Control Plant Facility Plan Update (May 2010)." The improvements are expected to include the following activities that ~~and~~ will result in an increase in secondary treatment capacity to 40 MGD. By the compliance date, the Discharger shall submit a report summarizing how and when these activities were completed or a report certifying a secondary treatment capacity of 40 MGD by other means:~~.~~ ~~**Phase 1**~~ • Improve sludge settling ability (selectors in AB5-7). • Improve electrical to include replacing generator and switchgear, replacing elevated bus duct, and installing new generator building. • Rehabilitate and repair the ~~following:~~ bar screen 4 bypass, motorized operators at flow split 1, and blower building 1 for seismic stability. ~~**Phase 2**~~ ~~Install solar photovoltaics (150 KW).~~ ~~**Phase 3**~~ • Complete Flood Protection Study. • Construct new secondary clarifier. ~~Improve electrical systems and replace elevated bus duct.~~ • Raise channel walls at wet weather mixed liquor lift station. • Rehabilitate and upgrade the ~~following:~~ screening room surface, stormwater pump station, and SCADA server. ~~**Phase 4**~~ • Rehabilitate and, or replace anaerobic digester.	September 1, 2018
2. Report Progress on Implementing Wet Weather Improvement Plan ⋮	Annually …

Comment 4: The cities request revisions to the acute toxicity testing requirements in Monitoring and Reporting Program section V.A.5 to allow them to abort an acute toxicity test (and restart the test as soon as practical) if early results clearly indicate that a permit violation will occur.

Response to Comment 4

We agree and changed Monitoring and Reporting Program section V.A.5 as follows:

> The sample may be taken from final secondary effluent prior to disinfection. Bioassay water monitoring shall include, on a daily basis, pH, dissolved oxygen, ammonia (if toxicity is observed), temperature, hardness, and alkalinity. These results shall be reported. If final or intermediate results of an acute bioassay test indicate a violation or threatened violation (e.g., the percentage of surviving test organisms is less than 70 percent), the Discharger shall initiate a new test as soon as practical and shall investigate the cause of the mortalities and report its findings in the next self-monitoring report. The Discharger shall repeat the test ~~a violation of an acute toxicity limit occurs, the bioassay test shall be repeated with new fish as soon as practical and shall be repeated~~ until a test fish survival rate of

90 percent or greater is observed. If the control fish survival rate is less than 90 percent, the bioassay test shall be restarted with new fish and shall continue as soon as practical until an acceptable test is completed (i.e., control fish survival rate is 90 percent or greater).

Comment 5: The cities submitted a series of non-substantive and editorial comments.

Response to Comment 5. We made several typographical corrections (not shown here) and the changes as shown below:

We changed Fact Sheet Table F-1 as follows:

Table F-1. Facility Information

⋮	⋮
Reclamation Requirements	Not Applicable
Mercury and PCBs Requirements	NPDES Permit No. ~~CA0038130~~ CA0038849
Permitted Flow	13 million gallons per day (MGD) average dry weather flow
⋮	⋮

We changed Fact Sheet Table F-2 as follows:

Table F-2. Historic Effluent Limitations and Monitoring Data

Parameter	**Units**	**Effluent Limitations**					**Monitoring Data (1/19/09–11/30/13)**
		Monthly Average	**Weekly Average**	**Daily Maximum**	**Instant-aneous Maximum**	**Instant-aneous Minimum**	**Highest Daily Discharge**
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
Tributyltin	µg/L	0.045	---	0.095	---	---	<0.06
Dioxin-TEQ	µg/L	$1.4x10^{-8}$ [7~~8~~]	---	$2.8x10^{-8}$ [7]	---	---	0
Ammonia as N	mg/L as N	110	---	230	---	---	64

⋮

Footnotes:

[1] Sample~~s~~ were collected at Discharge Point 002~~s~~ and measured indirectly~~, measureable~~ as residual sodium bisulphite indicating absence of chlorine.

[2] Monthly geometric mean

[3] The limitation ~~was that~~ specified the geometric mean value for the last five samples analyzed within a 30-day period was not to exceed 200 MPN/100 mL. The 90^{th} percentile of the last ten samples collected within a 30-day period ~~were~~ was not to exceed 400 MPN/100 mL.

⋮

We changed Fact Sheet section II.D as follows:

Between 2014 and 2018, the Discharger plans to complete the following projects at the ~~p~~Plant:

~~**1.** Replace and install a new standby generator and bus duct,~~
~~**2.** Increase secondary capacity from 30 MGD to 40 MGD, and~~

~~**3.** Provide additional onsite effluent storage capacity of 700,000 gallons.~~

1. Improve electrical to include replacing generator and switchgear, replacing elevated bus duct, and installing a new generator building;

2. Rehabilitate and repair the bar screen bypass, motorized operators at flow split, and the blower building;

3. Construct a new secondary clarifier and increase secondary capacity from 30 MGD to 40 MGD; and

4. Repurpose the existing facilities to provide an additional onsite effluent storage capacity of 700,000 gallons.

We changed Fact Sheet section Table F-6 as follows:

Table F-6. Reasonable Potential Analysis

CTR #	Priority Pollutants	Governing criterion or objective (µg/L)	MEC or Minimum DL [1][2] (µg/L)	B or Minimum DL [1][2] (µg/L)	Results [3]
⋮	⋮	⋮	⋮	⋮	⋮
16	2,3,7,8-TCDD (303(d) listed)	$1.40x10^{-8}$	$< 3.5 x10^{-7}$	$8.2 x 10^{-9}$	No
	Dioxin-TEQ (303(d) listed)	**$1.40x10^{-8}$**	**~~$1.5 x 10^{-9}$~~ $7.1x10^{-7}$**	**$5.3 x 10^{-8}$**	**Yes**
17	Acrolein	780	<0.62	< 0.5	No
⋮	⋮	⋮	⋮	⋮	⋮

We changed Fact Sheet section IV.C.4.b.ii(c) as follows:

WQBELs. Cyanide WQBELs, calculated according to SIP procedures with an effluent data coefficient of variation of 2.5 and a dilution credit of D = 9, are an AMEL of ~~57~~ 24 µg/L and an MDEL of ~~130~~ 48 µg/L. The AMEL and MDEL are less stringent than those in the previous order (20 and 43 µg/L); therefore, this Order retains the previous limits to avoid backsliding.

We changed Fact Sheet section IV.C.4.b.v(b) as follows:

Reasonable Potential Analysis. This Order relies on the SIP methodology as guidance to perform the reasonable potential analysis and establishes total ammonia WQBELs because the maximum effluent concentration (~~60~~ 64 mg/L as nitrogen) exceeds the governing water quality criterion (1.5 mg/L as nitrogen), demonstrating reasonable potential by Trigger 1.

We changed Fact Sheet Table F-7 as follows:

Table F-7. WQBEL Calculations

PRIORITY POLLUTANTS	Copper	Cyanide	Total Ammonia (acute)	Total Ammonia (chronic)	Dioxin-TEQ
Units	**ug/L**	**ug/L**	**mg/L N**	**mg/L N**	**ug/L**
⋮	⋮	⋮	⋮	⋮	⋮
HH criteria	----	220000	----	~~----~~	1.4E-08
Background (Maximum Conc for Aquatic Life calc)	2.5	0.0	0.22	~~0.22~~ 0.11	-----

Background (Average Conc for Human Health calc)	----	0.4	----	----	5.3E-08
⋮	⋮	⋮	⋮	⋮	⋮
Final limit - MDEL	69	43	230	190	2.8E-08
Max Effluent Concentration (MEC)	15	3.9	~~60~~ 64	~~60~~ 64	7.1^{-07}

We changed Fact Sheet section IV.C.6.b as follows:

> **Reasonable Potential Analysis.** The Discharger conducted annual chronic toxicity tests during the previous order term using the ~~Atlantic~~ mysid shrimp (*Mysidopsis bahia*). The previous order contained ~~a~~ chronic toxicity triggers (3-sample median ~~single-sample maximum~~ of 10 TUc and single-sample maximum of 20 TUc) for accelerated chronic toxicity testing. …

We changed Fact Sheet section VII.A.5 as follows:

> **Pretreatment and Biosolids Monitoring.** The pretreatment and biosolids monitoring requirements for influent, effluent, and biosolids are necessary to evaluate compliance with the Discharger's U.S. EPA-approved pretreatment program. Biosolids monitoring is also required pursuant to 40 C.F.R. part 503 if land application of biosolids is conducted.

STAFF-INITIATED CHANGES

In addition to making minor editorial and formatting changes, we added the following modification to Task 3 in Tables 6 and 7 as follows:

Table 6. Copper Action Plan

Task	Compliance Date
1. Review Potential Copper Sources …	
2. Implement Copper Control Program …	*Completed February 2010 (see 2009 Annual Pollution Prevention Report)*
3. Implement Additional Measures If the Regional Water Board notifies the Discharger that the three-year rolling mean copper concentration in Lower San Francisco Bay exceeds 2.2 µg/L, then within 90 days of the notification, the Discharger shall evaluate the effluent copper concentration trend and, if it is increasing, develop and begin implementation of additional measures to control copper discharges. The Discharger shall report on the progress and effectiveness of actions taken, and provide a schedule for actions to be taken in the next 12 months.	With next Annual Pollution Prevention Report due February 28~~,~~ (at least 90 days following notification)~~,~~ ~~2015~~.
4. Undertake Studies to Reduce Copper Pollutant Impact Uncertainties …	

Table 7. Cyanide Action Plan

Task	Compliance Date
1. Review Potential Cyanide Sources …	…
2. Implement Cyanide Control Program …	…
3. Implement Additional Cyanide Control Measures If the Regional Water Board notifies the Discharger that ambient monitoring shows cyanide concentrations are 1.0 µg/L or higher in the main body of San Francisco Bay, then within 90 days of the notification, the Discharger shall commence actions to identify and abate cyanide sources responsible for the elevated ambient concentrations, and shall report on the progress and effectiveness of actions taken, and provide a schedule for actions to be taken in the next 12 months.	With next Annual Pollution Prevention Report due February 28~~,~~ (at least 90 days following notification)~~,~~ ~~2015~~.
4. Report Status of Cyanide Control Program ….	…