Appendix B
Comment Letters

OFFICE OF THE SUPERINTENDENT OF
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February 27, 2014

Mr. Derek Whitworth
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612
By email: Derek.Whitworth@waterboards.ca.gov

Subject: Comments on Tentative Order Issued for the Cities of South San Francisco and San Bruno Water Quality Control Plan and NBSU (Reissuance of NPDES Permit No. CA0038130)

Dear Mr. Whitworth:

The City of South San Francisco-San Bruno WQCP has reviewed the Tentative Order issued by the San Francisco Bay Regional Water Quality Control Board on January 27, 2014. The attached comments are submitted prior to the February 28, 2014 deadline to be considered for inclusion in the final adopted NPDES permit. The substantive comments are related to projects that will be undertaken to reduce wet weather blending and acute toxicity test procedures.

The Cities have appreciated your assistance and the time and considerations that were granted during development of this Tentative Order. Please contact me at (650) 829-3844 (or by email brian.schumacker@ssf.net) if you have any questions on the attached comments.

Sincerely,

Brian Schumacker
Superintendent of Water Quality

Attachment: Comments on Tentative Order for the South San Francisco and San Bruno Water Quality Control Plant and North Bayside Systems Unit, Reissuance of NPDES Permit No. CA0038130

cc: Brian McMinn, Director of Public Works City of South San Francisco
Klara Fabry, Public Services Director City of San Bruno
Bill Johnson, San Francisco Bay Regional Water Quality Control Board
Lila Tang, San Francisco Bay Regional Water Quality Control Board
Denise Conners, Larry Walker Associates

ATTACHMENT

Comments on Tentative Order for the
South San Francisco and San Bruno Water Quality Control Plant
and the North Bayside Systems Unit

Reissuance of NPDES Permit No. CA0038130

The Cities of South San Francisco and San Bruno (Cities) appreciate the opportunity to submit the following comments on the Tentative Order (T.O.), released for review and comment on January 27, 2014. For requested revisions to the text of the T.O., underline is shown for suggested additions, and ~~strike-out~~ is shown for suggested deletions.

1. Discharge Location (Permit, page 1)

Additional information should be included in Table 2 to explain the type of effluent produced by the South San Francisco/San Bruno Water Quality Control Plant and discharged to the Lower San Francisco Bay.

Table 2. Discharge Locations

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

2. Administrative Information (Permit, page 1)

The application for reissuance (Report of Waste Discharge) is due 180 days (or approximately 6 months) prior to permit expiration. The following change is needed to indicate the correct deadline for submittal of the Report of Waste Discharge.

Table 3. Administrative Information

The Discharger shall file a Report of Waste Discharge as an application for reissuance of WDRs in accordance with California Code of Regulations, title 23, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than:	~~September 1, 2018~~ December 1, 2018

3. Provision VI. C.5. (Permit, page 13)

The Cities request the following changes to Table 5 (Task 1) to describe the planned approach and projects expected to be undertaken to reduce wet weather blending.

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~~ 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 which ~~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. ~~**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.~~ Replace Digester 1. Raise walls of mixed liquor channel. Rehabilitate and upgrade the following: screenings room surface, stormwater pump station, and SCADA server. ~~**Phase 4**~~ Replace Digester 2 and rehabilitate Digester 3	September 1, 2018

4. Monitoring and Reporting Program, V.A.5. (page E-5)

The Cities request revisions to the acute toxicity test procedures. Changes are needed that will allow the Cities to abort an acute toxicity test (and restart the test as soon as practical) if early results indicate a permit violation will occur. The test procedures in the T.O. specify retesting can only be initiated after the full 96-hour test is completed, the median/90th percentile values are calculated, and a violation is confirmed. The following revisions are suggested to allow this testing approach and for consistency with the recently adopted Sonoma Valley County Sanitation District NPDES permit.

5. 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), ~~of an acute toxicity limit occurs,~~ the Discharger shall initiate ~~bioassay test shall be repeated with new fish~~ 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 ~~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).

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5. Non-substantive, editorial comments.

a. Table 4, Footnote [2] (page 5)

[2] In addition to monitoring for chlorine, the Discharger may elect to use a continuous on-line monitoring system(s) for measuring flows, sodium hypochlorite, and sodium bisulfite (including a safety factor) and concentration to prove that chlorine residual exceedances are false positives. If convincing evidence is ~~I~~ provided, Regional Water Board staff will conclude that these chlorine residual exceedances are false positives and are not violations of the Order's Total Chlorine Residual limit.

b. Monitoring and Reporting Program, Provision V.B.2.vii. (page E-7)

TUc values (100/NOEL, where NOEL = IC_{25}, EC_{25}, or NOEC)

c. Table F-1 (page F-2)

Mercury and PCBs Requirements	NPDES Permit No. ~~CA0038130~~ CA0038849

d. Fact Sheet Findings I.A. (page F-3)

...and the deepwater outfall with diffuser. The combined treated, dechlorinated wastewater is discharged to Lower San Francisco Bay through a single pipe to the deepwater outfall.

e. Fact Sheet Findings II.A.3. (page F-4)

The flow schematic in Attachment C shows these steps. The Plant has an average dry weather design capacity of 13 million gallons per day (MGD). During the previous Order term, its average dry weather flow was 9.2 MGD. During wet weather, when influent flows exceed the Plant's secondary treatment capacity of 30 MGD~~)~~, excess primary ...

f. Fact Sheet Findings II.B.3. (page F-5)

Stormwater Outfalls. Most stormwater captured within the Plant's site is directed to the Plant headworks except for stormwater from the Plant entrance and parking lots, where storm drains flow directly to Colma Creek. This stormwater is covered under the Statewide Industrial Storm Water Permit (NPDES General Permit No. CAS000001).

g. Table F-2 (page F-5)

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
Dioxin-TEQ	µg/L	$1.4x10^{-8[8/7]}$	---	$2.8x10^{-8[7]}$	---	---	<0.06

[1] Samples are collected at Discharge Point 002s and measured indirectly, measurable as residual sodium bisulfite indicating absence of chlorine.

[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/100mL. The 90th percentile of the last ten samples collected within a 30-day period were was not to exceed 400 MPN/100mL.

h. Fact Sheet Findings II.D. (page F-6)

Between 2014 and 2018, the Discharger plans to complete the following projects at the pPlant:

1. Improve electrical to include replacing generator and switchgear, replacing elevated bus duct, and installing new generator building, Replace and install a new standby generator and bus duct,
2. Rehabilitate and repair bar screen bypass, motorized operators at flow split, and blower building,
3. Construct new secondary clarifier and increase secondary capacity from 30 MGD to 40 MGD, and
4. Repurpose existing facilities to provide additional onsite effluent storage capacity of 700,000 gallons.

i. Applicable Plans, Policies, and Regulations III.D. (page F-8)

Adjust margin...

D. Impaired Waters on CWA 303(d) List. In October 2011, U.S. EPA approved a revised list of impaired waters prepared pursuant to CWA section 303(d), which requires identification of specific water bodies where it is expected that water quality standards will not be met after implementation of technology-based effluent limitations on point sources. Where it has not done so already, the Regional Water Board plans to adopt Total Maximum Daily Loads (TMDLs) for pollutants on the 303(d) list. TMDLs establish wasteload allocations for point sources and load allocations for non-point sources, and are established to achieve the water quality standards for the impaired waters.

j. Rationale for Effluent Limitations and Discharge Specifications IV.A.3. (Page F-9)

3. Discharge Prohibition III.C (No bypass or overflow, except as provided for in Attachment D): This prohibition is based on 40 C.F.R. section 122.41(m) (see Federal Provision, Attachment D section I.G). Bypass ~~t~~ is prohibited when the inflow is at or below 30 MGD (the reliable process capacity of the secondary treatment system)...

k. Rationale for Effluent Limitations and Discharge Specifications IV.C.3.d. (Page F-16)

CTR #	Priority Pollutants	Governing Criterion or Objective (µg/L)	MEC or Minimim DL (µg/L)	B or Minimum DL (µg/L)	Results
	Dioxin-TEQ (303(d) listed)	$1.40x10^{-8}$	~~$1.5x10^{-9}$~~ $7.1x10^{-7}$	$5.3x10^{-8}$	Yes

l. Rationale for Effluent Limitations and Discharge Specifications IV.C.4.b.ii.(c) (page F-21)

(c) 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.

m. Rationale for Effluent Limitations and Discharge Specifications IV.C.4.b.v.(c) (page F-23)

(b) 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.

n. Rationale for Effluent Limitations and Discharge Specifications IV.C.4.c. (page F-25)

Table F-7. WQBEL Calculations

PRIORITY POLLUTANTS	Total Ammonia (acute)	Total Ammonia (chronic)
Background (Maximum or Median Conc for Aquatic Life Calc)	0.22	~~0.22~~ 0.11
Max Effluent Concentration (MEC)	~~60~~ 64	~~60~~ 64

o. Rationale for Effluent Limitations and Discharge Specifications IV.C.6.b. (page F-27)

b. 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 of ~~single-sample maximum~~ of 10 TUc and single sample maximum of 20 TUc) for accelerated chronic toxicity testing. The maximum single-sample chronic toxicity result during the previous order term was 4 TUc in March 2012. The relatively low toxicity indicates low reasonable potential for chronic toxicity in the receiving water so this Order contains only a narrative chronic toxicity limit. A numeric limit is unwarranted.

p. Rationale for Provisions VI.C.5.c. (page F-30)

> **c. Standard Operating Procedures Requirement for Resource Recovery.** If the Discharger receives hauled-in anaerobically digestible material for injection into an anaerobic digester, ~~then~~ the. Standard Operating Procedures which are required for dischargers that accept hauled waste fats, oil, and grease for injection into anaerobic digesters shall apply. The development and implementation~~s~~ of Standard Operating Procedures for management of these materials is intended to allow the California Department of Resources Recycling and Recovery to exempt operations from separate and redundant permitting programs...

q. Rationale for Monitoring and Reporting Program (MRP) VII.A.5. (page F-31)

> **5. 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 <u>if land application of biosolids is conducted</u>.