

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

**RESPONSE TO WRITTEN COMMENTS**

on the Tentative Order for  
South San Francisco – San Bruno Water Quality Control Plant and Sanitary Sewer  
Systems and North Bayside System Unit facilities

The Regional Water Board received written comments from the City of South San Francisco on a tentative order distributed for public comment. The comments are summarized below in *italics* (paraphrased for brevity) and are followed by a staff response. For the full content and context of the comments, please refer to the comment letter. To request a copy of the comment letter, see the contact information in Fact Sheet section 7.7 of the Revised Tentative Order.

All revisions to the tentative order are shown with underline text for additions and ~~strikethrough~~ text for deletions.

**Comment 1:** *The City requests that we adjust the required precision of the BOD<sub>5</sub>/TOC correlation standard, clarify the use of BOD<sub>5</sub>/TOC equation, and that we not specify the dates for the BOD<sub>5</sub>/TOC correlation study.*

**Response:** We agree with the City's suggestion to specify the duration required for the BOD<sub>5</sub>/TOC correlation study sampling period rather than requiring the study to be conducted within specific dates.

We disagree with the City's request to revise the precision of the correlation coefficient and the use of BOD<sub>5</sub>/TOC equation. The Regional Water Board considers the 0.90 correlation coefficient to be appropriately precise to justify the use of TOC measurements in lieu of BOD<sub>5</sub>. Permits issued by other Regional Water Boards have demonstrated a higher correlation coefficient than the currently specified 0.90, indicating that there must be a close correlation between the effluent TOC and the effluent BOD<sub>5</sub> concentrations. The BOD<sub>5</sub>/TOC equation must provide a precise estimate of equivalent BOD<sub>5</sub> concentrations based on individual TOC measurements. Allowing the precision to be evaluated for average measurements over weekly or monthly intervals would allow the individual measurements to be inadequately precise compared to the requirements in the original Tentative Order.

We revised Provision 5.3.4.4 of the tentative order as follows:

**Site-Specific BOD<sub>5</sub> and TOC Correlation.** The Discharger may undertake a study of the correlation between influent and effluent Biochemical Oxygen Demand (BOD<sub>5</sub>) and Total Organic Carbon (TOC), and submit documentation of its findings to the Executive Officer for concurrence. The study shall evaluate at least 5 separate sampling events per month, each consisting of one paired influent and effluent analyzed for BOD<sub>5</sub> and TOC.

Samples shall be collected during at least a one year period that encompasses both dry and wet weather. The documentation shall provide regression parameters, a correlation coefficient, raw data, a quality control summary, percent removal calculated using both actual BOD data and estimated BOD concentrations, and a demonstration that appropriate statistical approaches were used. The regression parameters could be represented by A and B in the following equation:

$$[\text{BOD}_5] = (A \times [\text{TOC}]) + B$$

The regression parameters shall be sufficiently precise to estimate BOD<sub>5</sub> concentrations within at least 1 mg/L, and the correlation coefficient shall be at least 0.90. The Discharger may use TOC concentrations to estimate BOD<sub>5</sub> concentrations for compliance purposes beginning on the first day of the first month following Executive Officer concurrence in writing that the study satisfies the requirements of this provision.

We revised Attachment F 5.3.5.5 of the tentative order as follows:

This provision is based on 40 C.F.R. section 133.104(b), which allows dischargers to substitute TOC results for BOD<sub>5</sub> results if and when dischargers demonstrate a significant long-term correlation between TOC and BOD<sub>5</sub>. The Discharger submitted a sampling plan, dated December 2025, to evaluate the correlation between TOC and BOD<sub>5</sub> in its effluent. Influent and effluent sampling will be ~~completed between January 2026 through December 2026~~ conducted over a minimum of one year and will cover both wet and dry season conditions. A minimum of 5 paired samples monthly will be collected and analyzed. If and when the Discharger demonstrates a sufficient correlation between TOC and BOD<sub>5</sub>, this provision provides for the Discharger to translate TOC concentrations into BOD<sub>5</sub> concentrations for compliance purposes. The Discharger must provide regression parameters, a correlation coefficient, raw data, a quality control summary, and a demonstration that appropriate statistical approaches were used. The correlation coefficient must be at least 0.90 to ensure that the TOC measurements serve as a statistically reliable surrogate for BOD<sub>5</sub> measurements. The regression parameters could be represented by A and B in the following equation:

$$[\text{BOD}_5] = (A \times [\text{TOC}]) + B$$

The regression parameters must be sufficiently precise to estimate BOD<sub>5</sub> concentrations within at least 1 mg/L. The Discharger may use TOC concentrations to estimate BOD<sub>5</sub> concentrations for compliance purposes beginning on the first day of the first month following Executive Officer concurrence in writing that the study satisfies the requirements of this provision.

**Comment 2:** *The City requests that we remove reporting requirements that are no longer applicable under the Toxicity Provisions.*

**Response:** We agree and revised Monitoring and Reporting Program 5.2 as follows:

5.2. Reporting

The Discharger shall provide toxicity test results with self-monitoring reports and shall include the following, at a minimum, for each test:

5.2.1. Sample date

5.2.2. Test initiation date

5.2.3. Test species

~~5.2.4. End point values for each dilution (e.g., number of young, growth rate, percent survival)~~

~~5.2.5. No Observable Effect Level (NOEL) values in percent effluent. The NOEL shall equal the IC25 or EC25. If the IC25 or EC25 cannot be statistically determined, the NOEL shall equal the No Observable Effect Concentration (NOEC) derived using hypothesis testing. The NOEC is the maximum percent effluent concentration that causes no observable effect on test organisms based on a critical life stage toxicity test.~~

~~5.2.6. IC15, IC25, IC40, and IC50 values (or EC15, EC25, EC40, and EC50) as percent effluent~~

~~5.2.7. TU values (100/NOEL and upper and lower confidence intervals)~~

5.2.48. End point values for the control and IWC sample (e.g., number of young, growth rate, percent survival). For routine monitoring and MMEL compliance tests, the Discharger shall report the results as either “pass” or “fail,” and the percent effect at the IWC for each endpoint. For surveillance monitoring (see MRP § 5.4), the Discharger shall report the results as either “pass” or “fail” and the percent effect at 10 percent effluent for each endpoint.

5.2.59. End point values for each replicate of the control and IWC sample (e.g., number of young, growth rate, percent survival).

5.2.640. Available water quality measurements for each test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, ammonia).

**Comment 3:** *The City requested that we allow the influent and effluent data collected during routine monitoring be used to satisfy pretreatment program requirements and change biosolids monitoring for Volatile Organic Compounds and Base/Neutrals and Acid Extractable Organic Compounds (BNAs).*

**Response:** We agree with the City's suggestion. Regarding biosolids monitoring, the City has sampled biosolids annually for over two years, and under 40 C.F.R. Part 503, the permitting authority may reduce monitoring frequency accordingly. For pretreatment requirements, routine influent and effluent monitoring data may be used as requested. According to the City's 2025 Annual Pretreatment Report, the facility currently permits 16 active Significant Industrial Users with an average daily flow of 429,055 gallons per day.

We revised Table E-6 to the following:

**Table E-1. Pretreatment and Biosolids Monitoring**

Parameters	Influent (INF-001) Sampling Frequency <sup>[7]</sup>	Effluent (EFF-001) Sampling Frequency <sup>[7]</sup>	Biosolids (BIO-001) Sampling Frequency	Influent and Effluent Sample Type	Biosolids Sample Type
Volatile Organic Compounds	1/Year	Once	<del>1/Year</del> Once	Grab	Grab
Base/Neutrals and Acid Extractable Organic Compounds	1/Year	Once	<del>1/Year</del> Once	Grab	Grab

<sup>[7]</sup> Influent and effluent monitoring conducted in accordance with MRP Table E-2 and E-3 may be used to satisfy these pretreatment monitoring requirements.

**Comment 4:** *The City requests that we add clarifying language describing how the diverted effluent will be used by Genentech.*

**Response:** We agree and revised the following:

**Temperature.** The discharge may be an elevated temperature waste if its temperature is higher than the natural temperature of Lower San Francisco Bay. To date, however, no evidence suggests that the discharge has harmed beneficial uses or that the maximum temperature has exceeded the natural temperature of Lower San Francisco Bay water by more than 20°F. As explained in Fact Sheet section 4.3.4.6.462, the treated wastewater discharged to Lower San Francisco Bay receives a minimum initial dilution of 37:1.

The proposed Heat Recovery Project will divert treated wastewater from the NBSU pipeline for heating of Genentech Buildings before discharge through Discharge Point 002 to Lower San Francisco Bay. The Feasibility Study estimates that recovering heat from the treated wastewater could reduce ~~its~~ the effluent temperature by as much as 3°F, bringing the discharge temperatures closer to the ambient temperature of Lower San Francisco Bay. Therefore, the discharge will continue to support beneficial uses, the maximum temperature will continue to be less than 20°F below the natural temperature of the receiving water, and there is no reasonable potential to exceed the Thermal Plan water quality objectives.