

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

RESPONSE TO WRITTEN COMMENTS

on the Tentative Order for
the City of San Jose, City of Santa Clara
San Jose/Santa Clara Water Pollution Control Plant and wastewater collection systems

The Regional Water Board received written comments on a tentative order distributed on November 1, 2019, for public comment from the City of San Jose.

Regional Water Board staff has summarized the comments, shown below in *italics* (paraphrased for brevity), and followed each comment with staff's response. For the full content and context of the comment, please refer to the comment letter. To request a copy of the comment letter, see the contact information provided in Fact Sheet section VIII.G of the revised tentative order.

Revisions are shown with underline text for additions and strikethrough ~~text~~ for deletions. This document also contains staff-initiated revisions.

City of San Jose

City Comment 1: *The City requests that we change the monitoring frequency for acute toxicity from monthly to once per quarter. The City points out that there have been no acute toxicity violations in 25 years of monitoring and that the previous order required monitoring once per quarter.*

Response: We agree. For quarterly monitoring, however, Basin Plan Table 4-3 requires that we base acute toxicity effluent limits on fewer samples. Therefore, we revised section IV.D of the tentative order as follows:

Whole Effluent Acute Toxicity. The discharge at Discharge Point No. 001 shall meet the following acute toxicity effluent limitations, with compliance measured at Monitoring Location EFF-001, as described in the MRP:

1. ~~11-sample~~ A three-sample median of not less than 90 percent survival; and
2. ~~11-sample 90th percentile~~ A single-sample maximum of not less than 70 percent survival.

These acute toxicity limitations are defined as follows:

- ~~11-sample~~ Three-sample median. A bioassay test showing survival of less than 90 percent represents a violation of this effluent limit if ~~five~~ one or more of the past ~~ten or fewer~~ two bioassay tests ~~also~~ show less than 90 percent survival.

- ~~11-sample 90th percentile~~ **Single-sample maximum**. A bioassay test showing survival of less than 70 percent represents a violation of this effluent limit ~~if one or more of the past ten or fewer bioassay tests also show less than 70 percent survival.~~

We revised Monitoring and Reporting Program (Attachment E) Table E-3 as follows:

Table 1. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency
⋮	⋮	⋮	⋮
Enterococcus ^[7]	CFU/100 mL ^[11]	Grab	5/Week ^[12]
Acute Toxicity ^[8]	% Survival	Continuous or C-24	1/Month 1/Quarter
Chronic Toxicity ^[9]	TU _c	C-24	1/Month
Priority Pollutants ^[10]	µg/L	Grab	2/Year

We revised Fact Sheet (Attachment F) Table F-9 as follows:

Table 2. Monitoring Requirements Summary

Parameter ^[1]	Influent INF-001	Effluent EFF-001	Biosolids BIO-001	Receiving Water
⋮	⋮	⋮	⋮	⋮
Total Chlorine Residual	---	1/Hour	---	---
Acute Toxicity	---	1/Month 1/Quarter	---	Support RMP
Chronic Toxicity	---	1/Month	---	Support RMP
⋮	⋮	⋮	⋮	⋮

City Comment 2: *The City requests that we add language to Fact Sheet section IV.A.2 to further support the exception to Basin Plan Discharge Prohibition 1 by stating that the City provides 15 million gallons per day of recycled water for non-potable uses throughout its service area and that its discharge to Artesian Slough may enhance beneficial uses based on studies that show diverse and abundant fish populations.*

Response: We did not add these findings to Fact Sheet section IV.A.2 because these facts are insufficient in themselves to justify the exception. The revised tentative order continues to grant the exception because moving the City’s outfall to deep water (i.e., north of the Dumbarton Bridge) would be an inordinate burden and the City provides an equivalent level of environmental protection by providing advanced secondary treatment. However, we did modify other parts of the Fact Sheet to include the City’s suggested revisions and to extend the exception to Basin Plan Discharge Prohibition 2.

We revised Fact Sheet section II.B as follows:

The Facility discharges to Artesian Slough via a discharge channel, where it mixes with Coyote Creek and then San Francisco Bay, all of which are waters of the United States. The discharge appears to enhance beneficial uses of the receiving waters as documented in the “Environmental Monitoring” sections of the San Jose-Santa Clara Regional Wastewater Facility Annual Self-Monitoring

Reports from 2014-2018. The momentum of the water flowing through Artesian Slough and Coyote Creek, and the high level of dissolved oxygen in the water, enhances the estuarine habitat, preservation of rare and endangered species, and wildlife habitat beneficial uses. The freshwater outfall channel also provides habitat for migrating waterfowl.

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

Exception to Shallow Water and Dead-End Slough Discharge Prohibitions

Basin Plan Table 4-1, Discharge Prohibitions 1 and 2, prohibits discharges not receiving a minimum of 10:1 initial dilution, ~~or~~ discharges into shallow waters or dead-end sloughs, and discharges south of the Dumbarton Bridge. Basin Plan section 4.2 provides for exceptions under certain circumstances:

- An inordinate burden would be placed on the Discharger relative to the beneficial uses protected, and an equivalent level of environmental protection can be achieved by alternate means;
- A discharge is approved as part of a reclamation project;
- Net environmental benefits will be derived as a result of the discharge; or
- A discharge is approved as part of a groundwater cleanup project.

The Basin Plan further states:

~~Significant factors to be considered by the Regional Water Board in reviewing requests for exceptions will be the reliability of the discharger's system in preventing inadequately treated wastewater from being discharged to the receiving water and the environmental consequence of such discharges. In reviewing requests for exceptions, the Water Board will consider the reliability of the discharger's system in preventing inadequately treated wastewater from being discharged to the receiving water and the environmental consequences of such discharges.~~

Surrounded by an extensive network of mudflats, sloughs, marshes, and salt ponds, South San Francisco Bay is generally confined and shallow, except for a deep central channel, and does not receive a minimum initial dilution of 10:1. When the Regional Water Board reissued this permit in 1988, it granted an exception to the discharge prohibitions based on the discharge providing a net environmental benefit. In 1990, the State Water Board overruled the Regional Water Board by concluding that the Discharger had failed to demonstrate a net environmental benefit. Nonetheless, it acknowledged that relocating the discharge north of the Dumbarton Bridge was not economically or environmentally sound. It concluded that discharges could meet an exception to the prohibitions because the Discharger could ensure an “equivalent level of protection” if the discharge received advanced secondary treatment and nitrification. Attachment I provides more details regarding this history.

The Regional Water Board continues to grant an exception to the discharge prohibitions based on the following:

- a. Moving the Discharger's outfall to deep water (i.e., north of the Dumbarton Bridge) would be an inordinate burden because such relocation would require pipeline construction through protected wetlands, which would be costly and disturb wetland habitats.
- b. The requirements of this Order (i.e., its prohibitions, limitations, and provisions) implement applicable water quality objectives and protect all relevant beneficial uses.
- c. The Discharger continues to provide an equivalent level of environmental protection by providing advanced secondary treatment through a higher level of biochemical oxygen demand (BOD) and total suspended solids (TSS) removal and nitrification, and pretreatment and pollution prevention programs.

Staff-Initiated Changes

In addition to making minor editorial and formatting changes, we revised Provision IV.C as follows to more accurately reflect the *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Part 3, Bacteria Provisions and a Water Quality Standards Variance Policy*:

Enterococcus Bacteria. The discharge at Discharge Point No. 001 shall meet the following enterococcus bacteria effluent limitations, with compliance measured at Monitoring Location EFF-001, as described in the MRP:

1. The six-week rolling geometric mean of enterococcus bacteria, calculated weekly, shall not exceed 30 colony forming units per 100 milliliters (CFU/100 mL); and
2. ~~The 90th percentile~~ No more than 10 percent of all enterococcus bacteria samples collected in a calendar month shall ~~not~~ exceed 110 CFU/100 mL.

Compliance with these enterococcus limits shall be evaluated as follows:

- **Six-week rolling geometric mean.** Compliance with this limit shall be determined weekly by calculating the geometric mean of all enterococcus sample results from the past six weeks.
- **10 percent of samples.** Compliance with this limit shall be determined based on measured sample results. The Discharger shall not report interpolated results. If the Discharger has 9 or fewer sample results in a calendar month, compliance shall be based on the highest result. If the Discharger has 10 to 19 sample results, compliance shall be based on the second highest result, and so on.

We revised the beginning of Monitoring and Reporting Program section VIII to include an introductory paragraph as follows:

The Discharger shall comply with the following recycled water monitoring requirements. The Executive Officer may modify these requirements to reflect any changes made to the requirements of State Water Board Order No. WQ 2019-0037-EXEC (Amending Monitoring and Reporting Programs for Waste Discharge Requirements, National Pollutant Discharge Elimination System Permits, Water Reclamation Requirements, Master Recycling Permits, and General Waste Discharge Requirements).