

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

RESPONSE TO WRITTEN COMMENTS

On the Tentative Order for
Novato Sanitary District Wastewater Treatment Plant and wastewater collection system

The Regional Water Board received written comments from the Novato Sanitary District on a tentative order distributed for public comment. The comments are summarized below in *italics* (paraphrased for brevity) and 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 provided in Fact Sheet section VIII.G of the revised tentative order.

Revisions are shown with ~~strikethrough~~ for deletions and underline for additions.

Novato Sanitary District

***Comment 1:** The District requests we clarify language in the Monitoring and Reporting Program to include the phrase “recycled water” for calculating effluent flow. The District subtracts both reclamation flow (secondary-treated effluent for pasture irrigation) and recycled water flow (tertiary-treated effluent for customer distribution) from its influent flow to determine effluent flow to San Pablo Bay.*

Response

We agree and revised the Monitoring and Reporting Program Table E-3, footnote 1, of the tentative order as follows:

Flow shall be calculated based on influent and reclamation flow/recycled water monitoring. The following flow information shall be reported in monthly self-monitoring reports: ...

***Comment 2:** The District requests we not describe its treatment as “advanced secondary treatment,” but say it achieves an advanced level of treatment. The District suggests we reserve the term “advanced secondary treatment” to be consistent with the Basin Plan definition, which includes, at a minimum, filtration. The District’s treatment plant does not provide filtration. However, it was designed to provide treatment better than the federal Secondary Treatment Standards by including nitrification and partial denitrification, thereby being able to meet more stringent effluent limitations for biochemical oxygen demand and total suspended solids. The District also notes that Fact Sheet section VI.C.4.b (Sludge and Biosolids Management) is missing the word “secondary” from the list of treatment options.*

Response

We agree and revised Fact Sheet section I.A follows:

The Novato Sanitary District (Discharger) owns and operates the Novato Sanitary District Wastewater Treatment Plant and its collection system (collectively, the

Facility). The plant provides ~~advanced~~ secondary treatment of the wastewater collected from its service area and discharges it to San Pablo Bay.

We revised Fact Sheet section II.A follows:

1. Location and Service Area. The plant is located at 500 Davidson Street in Novato, Marin County. It provides ~~advanced~~ secondary treatment of wastewater from domestic and non-domestic wastewater from the City of Novato and adjacent unincorporated Marin County. The Facility serves a population of approximately 60,000.

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3. Wastewater Treatment. The plant can provide ~~advanced~~ secondary treatment for an average daily dry weather design flow of 7.0 million gallons per day (MGD) and a sustained three-hour peak wet weather flow of 47 MGD. Between September 2015 and July 2019, the plant treated a daily average flow of 5.0 MGD, with the maximum daily flow peaking at 30.3 MGD.

The treatment process consists of influent screening and grit removal, primary clarification, activated sludge secondary treatment with nitrification and partial denitrification, secondary clarification, and ultraviolet (UV) disinfection.

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

The Discharger achieves a level of environmental protection equivalent to adherence to the discharge prohibition by providing ~~advanced~~ secondary treatment with nitrification and partial denitrification, ~~which includes achieving a higher level of BOD₅ and TSS removal, nitrification, and denitrification~~ and meeting the advanced level of treatment required by this Order. This Order requires the Discharger to remove more BOD₅ and TSS than the Secondary Treatment Standards (40 C.F.R. § 133) require and ensures nitrification by requiring ammonia effluent limitations.

We revised Fact Sheet section IV.B.1, second paragraph, as follows:

The plant provides ~~advanced~~ secondary treatment with nitrification and partial denitrification and complies with advanced secondary treatment limitations on conventional pollutants that are more stringent than the federal Secondary Treatment Standards. These more stringent limits are necessary to qualify for an exception to Basin Plan Discharge Prohibition 1 (see Fact Sheet section IV.A.2).

We revised Fact Sheet section IV.C.4.b as follows:

Mixing Zones and Dilution Credits. SIP section 1.4.2 allows mixing zones and dilution credits under certain circumstances. ...

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The fecal coliform mixing zones meet the requirements of SIP section 1.4.2.2.A and the Technical Support Document because they do not do any of the following:

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vii. Produce objectionable color, odor, taste, or turbidity. The mixing zones will not produce objectionable color, odor, taste, or turbidity because the effluent receives ~~advanced~~ secondary treatment and is disinfected prior to discharge. ~~Advanced~~ Secondary treatment addresses objectionable odor, taste, and turbidity through the biological degradation of organic compounds and clarification. In addition, provision V.A of this Order specifically prohibits alteration of color or turbidity beyond natural background levels.

viii. Cause objectionable bottom deposits. The SIP defines objectionable bottom deposits as an accumulation of materials or substances on or near the bottom of a water body that creates conditions adversely affecting aquatic life, human health, beneficial uses, or aesthetics. ... The mixing zones will not cause objectionable bottom deposits because the effluent receives ~~advanced~~ secondary treatment, which biologically degrades and removes suspended particles that could contribute to receiving water bottom deposits. ...

ix. Cause nuisance. The mixing zones will not cause a nuisance because the effluent receives ~~advanced~~ secondary treatment and is disinfected prior to discharge. Water Code section 13050(m) defines “nuisance” to mean anything that meets all three of the following criteria:

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We revised Fact Sheet section VI.C.4.b as follows:

Sludge and Biosolids Management. This provision requires the Discharger to prevent discharges to groundwaters and surface waters because the Discharger operates sludge lagoons and a dedicated land disposal site for sludge thickening and disposal. “Sludge” refers to the solid, semisolid, and liquid residue removed during primary, secondary, and advanced wastewater treatment processes. “Biosolids” refers to sludge that has been treated and may be beneficially reused. This provision is based on Basin Plan section 4.17 and the Water Code. ...

Comment 3: *The District requests minor modifications to Fact Sheet language summarizing its sanitary sewer overflows (SSOs) and collection system performance. Specifically, the District requests replacing the number “10” with the word “most” when referring to the amount of SSOs caused by roots during the previous permit term because there are typically multiple factors that contribute to an SSO. The District also requests that the language be phrased in past tense, and that the SSO summary clearly states the period it covers so as not to imply that the District is required to meet the collection system inspection, cleaning, and maintenance rates described in the Fact Sheet. These rates are governed by the its Sewer System Management Plan.*

The District also notes that, by only showing the SSO rate per 100 miles in Table F-3, such SSO rates can skew the perception of collection system performance because they do not account for total SSO volumes discharged or recovered.

Response

We agree that SSO rates do not account for volumes discharged. SSO rates are one indicator of collection system performance (i.e., how often raw sewage is discharged from the system), and not a measure of response and recovery efforts.

We revised Fact Sheet section II.E.2, second paragraph (under Table F-3) as follows:

The Discharger had 17 Category 1 SSOs since 2014. The average age of the Discharger's collection system is approximately 45 years, which matches the average age of collection systems in the San Francisco Bay Region. The Discharger inspecteds an average of 19 miles per year of its collection system using closed-circuit TV and cleaneds an average of 149 miles of hotspot areas per year during the 2014-2018 period. Tree root intrusion is the leading cause of SSOs in the Region and the State and contributed to ~~40~~ most of the Discharger's Category 1 SSOs summarized above. During the previous order term, the Discharger added its root hotspot pipelines to its root treatment program and increased the cleaning frequency from every 36 months to every 3 to 6 months. The Discharger contracteds with a chemical root abatement contractor and treateds an average of 10 miles per year.