

Appendix B
Comment Letters



July 28, 2014

via email: To: mliao@waterboards.ca.gov
cc: bwolfe@waterboards.ca.gov

Marcia Liao
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 92612

Subject: Tentative Order for Sunnyvale Water Pollution Control Plant NPDES Permit

Dear Ms Liao:

The City of Sunnyvale appreciates the opportunity to comment on the Tentative Order (TO) for reissuance of the NPDES Permit for its Water Pollution Control Plant (Plant). The Plant serves a community of more than 147,000 and a diverse business community that includes many of the biggest names in Silicon Valley. The Plant continues to provide high quality treatment for discharge into the sensitive Lower South Bay. Sunnyvale is amid a Master Planning process that will replace many of the treatment processes over the next 10-15 years. This planning effort is happening concurrent with active design of the new primary treatment facilities and with a high potential partnership with the Santa Clara Valley Water District to expand the use of Sunnyvale's treated wastewater for recycled water.

The City of Sunnyvale appreciates the detailed work and care taken in preparing this permit and also provides the following comments for consideration as the final permit document is developed:

Receiving Water Monitoring

The Tentative Order includes new requirements for receiving water monitoring. The Fact Sheet states that the monitoring is designed to provide data necessary for reasonable potential analyses and WQBEL development, such as reasonable potential analyses for ammonia and hardness data to determine water quality objectives. The City believes such monitoring will not generate significant new or useful information, and offers the following reasons for its request that the new monitoring requirements be removed from the final order.

- 1) For over 20 years, the City of Sunnyvale (and other dischargers) has supported the Regional Monitoring Program (RMP) as an alternative to permit requirements for individual receiving water monitoring. The RMP has conducted Bay-wide monitoring for wide range of pollutants, including ammonia, and has contributed the bulk of the data used by the Water Board to characterize water quality in the Bay, develop TMDLs, and track their

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implementation. Over 20 years of monitoring by the RMP has demonstrated that toxicity from unionized ammonia is not a problem in the Bay, and that Basin Plan water quality objectives for unionized ammonia applicable to the lower South Bay are readily met.

- 2) The City's 1998 and 2009 NPDES permits required extensive receiving water characterization studies for ammonia. These studies, completed in 2001 and 2012, were conducted at considerable expense, and involved monitoring at numerous locations over extended periods of time. Both studies demonstrated that the receiving water was in full compliance with Basin Plan water quality objectives for unionized ammonia. The observed maximum and annual median receiving water concentrations were typically about an order of magnitude below the applicable objectives. Since those studies, there has been no change in the treatment effluent quality, other than the normal variability that was captured by the existing studies.
- 3) A Reasonable Potential Analysis for unionized ammonia was conducted for the current (2014) permit reissuance, based on plant effluent data. That analysis, which utilized a very robust set of effluent data (>200 samples), again found no RP for unionized ammonia.
- 4) Sampling at a single location in the receiving water would not provide useful information as to the extent of a potential mixing zone for ammonia. The much more robust data set from the 2012 *Receiving Water Ammonia Characterization Study* along with results from a modelling effort currently in progress will inform any future decision regarding an effluent mixing zone that could be applied to unionized ammonia or other pollutants.
- 5) For purposes of establishing an ambient background concentration, a far field location, such as the RMP South Bay Station BA30 used in calculating the effluent limitations for cyanide, is more appropriate than a near-field location that is likely to be within the effluent mixing zone.
- 6) Moffett Channel is not readily accessible for sampling from its banks. The two receiving water studies referred to above both required sampling by boat. The launch point is located approximately 2.5 miles downstream from the discharge outfall. Safety and training concerns would likely dictate use of a contractor. Based on costs for the 2012 study, the City anticipates the quarterly sampling event will cost about \$20,000 annually. The TO's new receiving water monitoring requirements come in addition to other recent monitoring requirements for dischargers, such as the low level PCB monitoring specified in Order R2-2012-0096 and nutrient monitoring specified in the March 2, 2012 "13267" letter and subsequent Nutrient Permit (Order R2-2014-0014).

The City believes that any new monitoring requirements should be viewed in the context of the overall monitoring burden on Dischargers, and the limited public resources available, and that any new requirements should focus on monitoring that provides the most useful information on constituents of current and/or emerging concern. This view is consistent with the intent of State Water Board Resolution No. 2013 "*Directing Actions in Response to Efforts by Stakeholders on Reducing Costs of Compliance While Maintaining Water Quality Protection*" (adopted September 24, 2013). That Resolution supported proposals by the NPDES wastewater stakeholder group that "When renewing or revising NPDES permits, consider removing overlapping monitoring requirements, reducing monitoring frequency for

parameters consistently in compliance, encouraging surrogate monitoring, and eliminating unnecessary reports.”

- 7) With respect to the need for receiving water data for hardness, the existing data from Moffett Channel supports the use of the maximum allowable hardness (400 mg/L) when calculating water quality objectives for the small number of pollutants for which fresh water objectives could potentially be more stringent (than salt water objectives) and thus govern the RPA results. As documented in the Fact Sheet, data used for the current permit re-issuance indicate a median hardness value of 815 mg/L in Moffett Channel. Given that Moffett Channel is tidally influenced, and the expectation of no significant change in the volume of freshwater discharge from the treatment plant, it is extremely unlikely that median hardness values below 400 mg/L will be observed in any new monitoring data.

Based on the above factors, the City respectfully requests that the proposed new receiving water monitoring requirements be removed.

Chlorine Residual \Reporting

Footnote 2 of Table 4 (Effluent Limitations) contains a change in reporting requirements for chlorine residual. The footnote states that if continuous monitoring is employed, the Discharger is required to report the maximum of all chlorine residual values observed during the day (*emphasis added*). The footnote then notes that only values that occur “on-the-hour” will be considered in assessing mandatory minimum penalties.

In contrast to the above, the City’s current permit requires that the maximum of the on-the-hour chlorine residual readings be reported, and that the remaining continuous monitoring data be retained and be available for discretionary enforcement use by the Water Board. The current use of on-the-hour readings for reporting purposes reflects a strategy developed between the Water Board and the Bay Area Clean Water Agencies (BACWA). That strategy, which accompanied the Water Board’s October 19, 2004 letter to the BACWA Permit Committee Chair, clearly states that only on-the-hour readings will be reported in the monthly SMRs. A copy of that letter is attached to these comments. NPDES Permits issued as recently as May 2014 (e.g., Order R2-2014-0023 for the City of Benicia) continued to apply this strategy to chlorine residual reporting.

The City requests that the new permit retain the previous permit’s requirement for reporting of chlorine residual concentrations based on the “on-the-hour” readings. The following wording adapted from Order R2-2014-0023 could serve as footnote 2 for Table 4:

Effluent residual chlorine concentrations shall be monitored continuously or, at a minimum, every hour. The Discharger shall report for each day the maximum residual chlorine concentration observed following dechlorination. However, if monitoring continuously, the Discharger shall report for each day the maximum residual chlorine concentration based on discrete readings from the continuous monitoring taken every hour on the hour. The Discharger shall retain continuous monitoring readings for at least three years. The Regional Water Board reserves the right to use all other continuous monitoring data for discretionary enforcement.

Ms. Marcia Liao
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Additionally, the definition of sample type "Continuous/H" in the Table E-4 should be revised as follows:

Continuous/H = measured continuously, or at a minimum hourly

We appreciate your consideration of the above and the related comments being submitted by the Bay Area Clean Water Agencies, which are incorporated herein by reference. Please contact Melody Tovar, Regulatory Programs Division Manager, at (408) 730-7808 or mtovar@sunnyvale.ca.gov if you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "John Stufflebean". The signature is written in a cursive, somewhat stylized font.

John Stufflebean
Director
Environmental Services Department

Attachment: Water Board letter to BACWA dated October 19, 2004



California Regional Water Quality Control Board
San Francisco Bay Region



Terry Tamminen
Secretary for
Environmental
Protection

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Arnold Schwarzenegger
Governor

OCT 19 2004

File Code: 1215.00 (RS)

Mr. Larry Bahr
Chair, BACWA Permits Committee
c/o Fairfield-Suisun Sewer District
1010 Chadbourne Road
Fairfield, CA 94534

Subject: Chlorine Compliance Strategy for Dischargers Using Continuous Monitoring Devices

Dear Mr. Bahr:

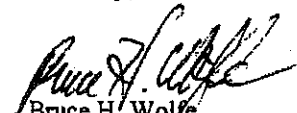
This letter authorizes implementation of the attached memorandum entitled: Chlorine Residual Reporting: Administrative Compliance Strategy for Continuous Monitoring of Dechlorinated Effluents. This strategy was prepared by Bay Area Clean Water Agencies (BACWA) and shall apply to all dischargers in Region 2 that use continuous chlorine monitoring devices and fulfill the stipulated conditions.

Background. By memorandum dated August 22, 2002, Loretta Barsamian (former Executive Officer of the Water Board) described chlorine residual compliance challenges, and a proposed solution. To encourage dischargers to monitor for chlorine residual continuously without increasing their risk for violations, this memorandum proposed to allow dischargers to report discrete readings from continuous monitoring devices every hour on the hour.

Chlorine Compliance Strategy: Recently, BACWA summarized the content of the Water Board's August 22, 2002, memorandum and submitted the attached strategy. As BACWA's submittal is consistent with the Water Board's August 22, 2002, memorandum, this letter authorizes implementation of the compliance strategy as proposed.

We appreciate BACWA's efforts to work with us on this issue. If you have any questions concerning the above, please contact Robert Schlipf at (510) 622-2478.

Sincerely,


Bruce H. Wolfe
Executive Officer

Enclosure: Chlorine Residual Reporting: Administrative Compliance Strategy for Continuous Monitoring of Dechlorinated Effluents

Preserving, enhancing, and restoring the San Francisco Bay Area's waters for over 50 years

Chlorine Residual Reporting Administrative Compliance Strategy for Continuous Monitoring of Dechlorinated Effluents

Introduction

Determining chlorine residual violations for dischargers that continuously monitor dechlorinated final effluents has presented numerous difficulties related to the technological limits of the monitoring instrumentation. With the enactment of the Clean Water Enforcement and Pollution Prevention Act (SB709), the Regional Board's enforcement discretion has been essentially eliminated and this has resulted in a number of Mandatory Minimum Penalties (MMP's) for violations that were related to technological limitations rather than threats to water quality. This issue was addressed in Loretta Barsamian's (former Executive Officer to the Regional Board) August 22, 2002, memorandum to Celeste Cantu, Executive Director of the State Water Resources Control Board (attached). This policy is consistent with the content of that memorandum and, as noted in that memorandum, this is only an initial step in accomplishing the long-term goal of implementing limits with exceedance thresholds for enforcement and compliance determination.

Strategy

Upon notification by permittees with continuous monitoring of dechlorinated final effluent, the Executive Officer of the Regional Board will allow compliance with the continuous monitoring provision of the permit by recording discrete readings from the continuous monitoring equipment every hour on the hour. Chlorine residual readings outside of the reporting time indicated above, including exceedances of the numerical permit limit, will not be reported by the permittee. This compliance reporting method will be granted automatically when the discharger fulfills all of the following conditions:

- 1) The permittee must continuously monitor dechlorinated final effluent chlorine residual using equipment designed for this function and retain the continuous monitoring records for three years.
- 2) The permittee shall acknowledge in writing that Regional Board reserves the right to use all other continuous monitoring data for discretionary enforcement.
- 3) The permittee must provide in writing the brand name(s), model number(s), and serial number(s) of the equipment used to continuously monitor dechlorinated final effluent chlorine residual. If the identified equipment is replaced, the permittee shall provide the Regional Board in writing, within 72 hours of the successful startup of the new equipment, the new equipment's brand name, model number, and serial number.
- 4) The written notification identified in items 1 through 3 shall be in the form of a letter addressed to the Regional Board's Executive Officer, shall be signed

by the permittee's authorized agent, and shall include the following certification statement:

"I certify under penalty of law that the information provided in this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Coverage under this policy shall retroactively apply to the date of Ms. Barsamian's August 22, 2002, memorandum provided enforcement proceedings have not been initiated for these reported chlorine residual violations. Alternative equipment conditions may be compliant with this strategy if approved in writing by the Executive Officer.

Dechlorinated effluent data recorded in the Self Monitoring Report (SMR) shall consist of reporting the single highest reading of the 24 discrete hourly readings taken from the continuous monitoring equipment each day.



July 28, 2014

Marcia Liao
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

VIA EMAIL: mliao@waterboards.ca.gov

Subject: BACWA Comments on Tentative Order for Sunnyvale Water Pollution Control Plant and Collection System: NPDES Permit No. CA0037621, Regional Water Quality Control Board Order No. R2-2014-00XX

Dear Ms. Liao:

The Bay Area Clean Water Agencies (BACWA) appreciates the opportunity to comment on the Tentative Order issued to the Sunnyvale Water Pollution Control Plant and Collection System (Sunnyvale WPCP). BACWA is a joint powers agency whose members own and operate publicly-owned treatment works (POTWs) and sanitary sewer systems that collectively provide sanitary services to over 6.5 million people in the nine-county San Francisco Bay Area. BACWA members are public agencies, governed by elected officials and managed by professionals who protect the environment and public health.

On behalf of its member agencies, BACWA requests that the San Francisco Bay Regional Water Quality Control Board (Water Board) consider the following comments on the Tentative Order's receiving water monitoring and chlorine residual reporting requirements.

1. Receiving Water Monitoring should continue to be the purview of the Regional Monitoring Program

This Tentative Order requires quarterly grab sample monitoring at Monitoring Location RSW-001 for salinity, hardness, temperature, pH, and total ammonia nitrogen (pg. E-9, Table E-4, Receiving Water Monitoring). Sunnyvale WPCP's previous permit required that "[t]he Discharger shall continue to participate in the Regional Monitoring Program (RMP), which involves collection of data on pollutants and toxicity in water, sediment and biota of the Estuary. The Discharger's participation and support of the RMP is used in consideration of the level of receiving water monitoring required by this Order." It did not require any additional receiving water monitoring by the Discharger.

The RMP was formally established in 1993, at which time it replaced the piecemeal receiving water monitoring being conducted by individual dischargers. Since its inception, the RMP has proven to be a successful strategy to efficiently generate receiving water data that is responsive to the water quality monitoring needs for the region through one centralized organization

responsible for all the data collection and analysis. However, the Sunnyvale WPCP's Tentative Order is moving some of the receiving water monitoring expectation back to individual dischargers. In light of the successful model where dischargers fund the RMP to manage water quality monitoring in the San Francisco Bay, it seems prudent to continue with that model rather than selectively requiring individual POTWs to begin their own receiving water monitoring efforts. BACWA is concerned that this type of hybrid model may lead to increased individual POTW receiving water monitoring while there are continued requirements to fund the RMP.

This additional monitoring is burdensome to the Sunnyvale WPCP which does not have access to the infrastructure necessary for collecting the samples. **BACWA requests that the receiving water requirements be removed from this Tentative Order, and that additional receiving water monitoring requirements not be added to our other members' permits. If additional receiving water monitoring is required, the Regional Water Board should work with the RMP to ensure that it is conducted.**

2. Reporting of all continuous chlorine monitoring data is excessive

In Sunnyvale WPCP's prior permit, as in other permits issued to our member agencies, the data from continuous chlorine monitoring was required to be reported at the top of every hour, and the maximum daily value was to be identified from this data set. However, this Tentative Order (page 5, footnote 2 of Table 4) requires that, "*[e]ffluent residual chlorine concentrations shall be monitored continuously or, at a minimum, every hour. The Discharger shall report for each day the maximum residual chlorine concentration observed following dechlorination using all values measured during that day. However, if monitoring continuously, for the purpose of mandatory minimum penalties required by Water Code section 13385(i), compliance shall be based only on discrete readings from the continuous monitoring every hour on the hour*" (emphasis added).

This small change in language means that Sunnyvale WPCP must report and select a maximum daily value from the entire dataset, although mandatory minimum penalties will only be assessed based on the data gathered at the top of each hour.

This new reporting approach contradicts the BACWA Chlorine Compliance Strategy that was originally approved by Regional Water Board letter, dated 19 October 2004, and that only requires reporting data collected at the top of every hour. The top of the hour compliance strategy has successfully encouraged dischargers to use continuous monitoring equipment in lieu of conducting hourly grab sampling, thus ensuring that momentary exceedances of the residual chlorine water quality objective are detected and remediated. In addition, under the new language there is the risk that momentary exceedances in the full dataset may appear to be violations for which the Water Board is not pursuing enforcement. Finally, we believe that the new language requiring the reporting of maxima from two different data sets into CIWQS unnecessarily complicates the data management with no additional benefit.

BACWA requests that the language in this tentative order pertaining to continuous chlorine meter reporting revert to the analogous language included in the previous permit, or the language submitted by the City of Sunnyvale in their comment letter.

Sunnyvale WPCP TO Comments

July 28 2014

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BACWA appreciates the opportunity to comment on this Tentative Order and thanks you for considering our concerns.

Respectfully Submitted,

David R. Williams

David R. Williams
Executive Director
Bay Area Clean Water Agencies

cc: BACWA Board
Melody Tovar, City of Sunnyvale