



SOUTH BAYSIDE SYSTEM AUTHORITY

JOINT POWERS AUTHORITY ————— *A Public Entity*

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West Bay Sanitary District

May 23, 2012
13-80.5

Mr. John Madigan
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Subject: South Bayside System Authority Comments on SFBRWQCB Tentative Order (NPDES Permit No. 0038369)

Dear Mr. Madigan:

Enclosed you will find the South Bayside System Authority's comments regarding the Regional Water Quality Control Board's Tentative Order received on April 27, 2012 for our NPDES permit reissuance. The transmittal letter for the Tentative Order (TO) requested that comments be submitted to your office by May 28, 2012.

SBSA appreciates the hard work of Water Board staff on this permit. SBSA's comments consist of two main comments and a few minor editorial changes, together with requested corresponding changes to the TO. The main comments relate to the dibenzo(a,h)anthracene effluent limits and the approval for use of the clinoptilolite form of zeolite treatment to remove ammonia from the effluent test solutions prior to chronic toxicity testing. We believe that, with the requested changes addressed, the final permit will satisfy the common goal that both our agencies share, namely protection of water quality in San Francisco Bay.

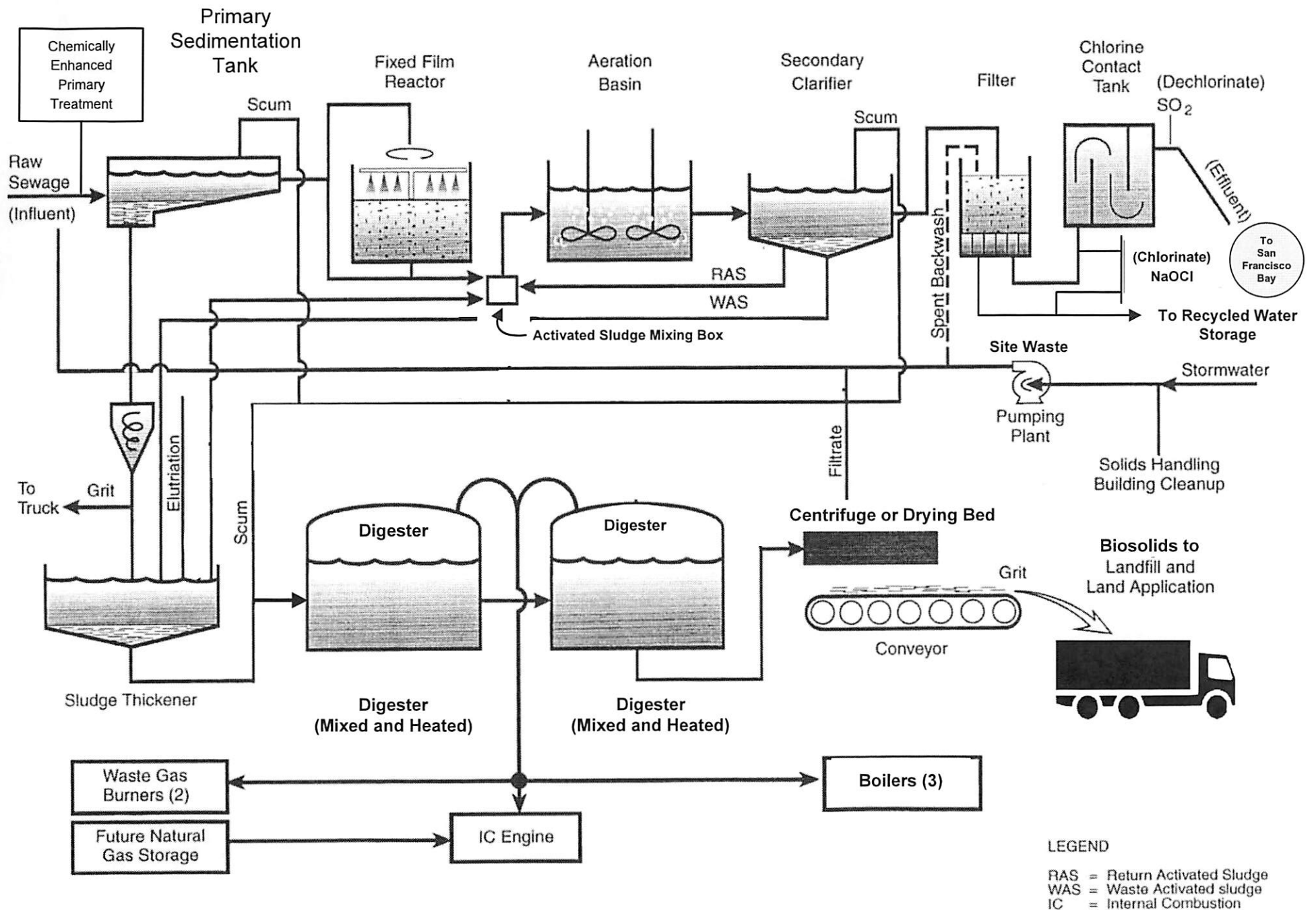
Please contact me if you have any questions on the enclosed comments, or would like to discuss them in more detail.

Sincerely,

Daniel Child
Manager

Attachment A – Comments on Tentative Order
Attachment B – Updated Process Flow Diagram

cc: Bruce Wolfe, RWQCB
Lila Tang, RWQCB
David Schricker, Law Offices of David E. Schricker
Kristine Corneillie, Larry Walker Associates



Plant Process Schematic

LEGEND
 RAS = Return Activated Sludge
 WAS = Waste Activated sludge
 IC = Internal Combustion

ATTACHMENT A

May 23, 2012

South Bayside System Authority

Comments Regarding Tentative Order Dated April 27, 2012 For Reissuance of NPDES Permit No. CA0038369

The South Bayside System Authority (SBSA) appreciates the opportunity to submit the following comments on the Tentative Order (TO), released for review and comment on April 27, 2012.

The comments are organized as follows:

- Comments 1 and 2 are SBSA's significant comments on the main body of the TO
- Comment 3 contains editorial revisions on the main body of the TO
- Comments 4 through 6 are SBSA's comments on the Monitoring and Reporting Program
- Comment 7 contains SBSA's comments on the Fact Sheet

For requested revisions to the text of the TO, underline is shown for suggested additions, and ~~strike-out~~ is shown for suggested deletions.

Comments Regarding Tentative Order - Main Body

1. **SBSA believes there are some issues to be clarified regarding the method detection limits and compliance determination surrounding the Total Chlorine Residual monitoring and effluent limitations. However, it is believed that these issues would be best dealt with on a regional basis. Additionally, it is requested that the second paragraph of Footnote [4] on page 9 of the Tentative Order be modified as follows because 'free' chlorine does not exist in wastewater effluent in the presence of ammonia:**

[4] Total Residual Chlorine. Effluent chlorine residual 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 measured values during that day. However, if monitoring continuously, for the purpose of mandatory minimum penalties required by CWC 13385(i), compliance shall be based only on discrete readings from the continuous monitoring 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.

The Discharger may elect in addition to use a continuous on-line monitoring system for measuring or determining that residual dechlorinating agent is present. This monitoring system may be used to prove to the Executive Officer that anomalous chlorine residual exceedances measured by on-line chlorine analyzers are false positives and are not violations of the Order's Total Residual Chlorine limit because it is chemically improbable to have free chlorine present in the presence of sodium bisulfite.

2. SBSA requests the effluent limitation for dibenzo(a,h)anthracene be replaced in the Tentative Order by a Special Study designed to explore whether dibenzo(a,h)anthracene is a pollutant of concern in the SBSA effluent. The Special Study could be added after Provision VI.C.5.b.Cyanide Action Plan and would include the following text:

The Discharger shall conduct further testing to determine whether the detection of dibenzo(a,h)anthracene in the effluent is the result of a one-time detection or if dibenzo(a,h)anthracene is a constituent that requires source control. If further testing indicates dibenzo(a,h)anthracene is a consistent constituent of concern, SBSA requests time to conduct source investigations and evaluate potential source controls that would achieve compliance with final limits. Consequently, if dibenzo(a,h)anthracene measurements conducted under this special study are determined to be appropriate, Regional Water Board staff may re-evaluate the reasonable potential for dibenzo(a,h)anthracene.

Table 11. Dibenzo(a,h)anthracene Special Study

Tasks	Compliance Date
a. Develop a study plan, acceptable to the Executive Officer, to investigate dibenzo(a,h)anthracene concentrations in effluent.	By December 31, 2012.
b. Following approval by the Executive Officer, commence work in accordance with the study plan and time schedule submitted pursuant to Task a.	Within 30 days after approval of study plan by the Executive Officer.
c. Submit a final report, acceptable to the Executive Officer, documenting the findings of the study described above.	Within 60 days of completion of data collection.

Additional Comments for Tentative Order – Main Body

3. SBSA requests the following changes for consideration:

- a. Effluent Limitations and Discharge Specification:

A. Effluent Limitations for Conventional and Non-Conventional Pollutants

3. Fecal Coliform Bacteria. Discharges at Discharge Point 001, with compliance measured at Monitoring Location EFF-001-D as described in the MRP (Attachment E), shall meet the following limitations of bacteriological quality:

- b. SBSA requests the attached updated Process Flow Diagram be incorporated into the final Order at Attachment C, for consistency with current processes.

Comments for Monitoring and Reporting Program

4. For consistency with other recently adopted Region 2 permits, because SBSA participates in the RMP and because there is no limitation for un-ionized ammonia, SBSA requests that footnote [9] to Table E-3. Effluent Monitoring be removed.

~~[9] Total Ammonia. Monitoring for total ammonia shall occur concurrently with effluent and receiving water monitoring for temperature and pH for determination of the un-ionized ammonia fraction.~~

5. SBSA requests that permission be granted in Section V.B.2. Chronic Toxicity Monitoring Requirements (page E-6) for the use of the clinoptilolite form of zeolite treatment to remove ammonia from the effluent test solutions prior to chronic toxicity testing. SBSA has worked with Pacific EcoRisk (PER) laboratory to perform studies using clinoptilolite on effluent for toxicity testing. The analyses performed at PER indicate that the SBSA effluent concentrations are already well below metals concentrations of toxic concern to *Americamysis bahia* (mysid shrimp), and furthermore, that the clinoptilolite treatment had minimal effect on these metals concentrations. The results of this study were sent to John Madigan on August 15, 2011 as part of the Chronic Toxicity Screening Study Report (letter from Scott Ogle [PER] to Bob Wandro [SBSA] dated July 27, 2011). Inclusion of this language will streamline the process since approval “to remove the influence of those substances” will have already been granted based on the results of the studies performed by SBSA and PER.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

B. Whole Effluent Chronic Toxicity

1. Chronic Toxicity Monitoring Requirement

d. **Methodology.** Sample collection, handling, and preservation shall be in accordance with USEPA protocols. In addition, bioassays shall be conducted in compliance with the most recently promulgated test methods, as shown in Appendix E-1. These are *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, currently fourth Edition (EPA-821-R-02-013), with exceptions granted the Discharger in writing by the Executive Officer and the Environmental Laboratory Accreditation Program (ELAP). If toxicity is suspected to be caused by ammonia SBSA may use pH adjustment and/or ammonia removal using the clinoptilolite form of zeolite which has been demonstrated not to remove metals. If the Discharger demonstrates that specific identifiable substances in the discharge are rapidly rendered harmless upon discharge to the receiving water, compliance with the chronic toxicity limit may be determined after the test samples are adjusted to remove the influence of those substances. Written approval from the Executive Officer must be obtained to authorize such an adjustment.

6. The units for Enterococcus Bacteria in Table E-3. Effluent Monitoring should be “MPN/100 mL” instead of “Colonies/100 mL.”

Comments for Fact Sheet

7. Any changes to the TO based on comments from SBSA or others should be reflected in the Fact Sheet, to avoid conflicts or ambiguities. Additionally, the specific comments are submitted regarding the Fact Sheet.

a. All references to dibenzo(a,h)anthracene effluent limitations should be deleted or edited, as discussed under Item 2, above. These would include:

i. Table F-8. Reasonable Potential Analysis Summary (page F-17)
{remove reasonable potential}

ii. Item 4.c.(4).Dibenzo(a,h)anthracene (page F-23):

(4) Dibenzo(a,h)anthracene

(a) Water Quality Objective. The CTR contains a human health water quality objective for dibenzo(a,h)anthracene of 0.049 µg/L.

(b) RPA Results. This Order establishes effluent limitations for dibenzo(a,h)anthracene because the MEC (0.40 µg/L) exceeds the water quality objective (0.049 µg/L), demonstrating reasonable potential by Trigger 1.

(c) Dibenzo(a,h)anthracene Monitoring. The Discharger has only one detected value of 0.40 µg/L, therefore, the Regional Water Board has determined that there is insufficient information to determine the feasibility of compliance. Therefore, a provision is included in this Order requiring the Discharger to perform a special study to characterize dibenzo(a,h)anthracene in the plant's effluent. Based on the result of this study, the permit may be reopened, to include effluent limits for dibenzo(a,h)anthracene.

~~(e) WQBELs. WQBELs for dibenzo(a,h)anthracene, calculated according to SIP procedures with a default CV of 0.6 and a dilution credit of D = 9, are an AMEL of 0.48 µg/L and an MDEL of 0.97 µg/L.~~

~~(d) Anti-backsliding. Anti-backsliding requirements are satisfied because the previous Order did not include dibenzo(a,h)anthracene WQBELs.~~

iii. Table F-9. WQBEL Calculations (page F-25) {remove from Table}

iv. Page F-29, B. Effluent Monitoring:

- Routine effluent monitoring for dibenzo(a,h)anthracene is established to assess effluent concentrations and for total ammonia ~~is established~~ to determine compliance with new effluent limitations.

Similarly, the dibenzo(a,h)anthracene Special Study should be added to the Fact Sheet on page F-32, under Section 5:

c. Dibenzo(a,h)anthracene Special Study. This provision is included to require the collection of more data to assess whether dibenzo(a,h)anthracene has reasonable potential to cause or contribute to an exceedance of the water quality objective.