



July 12, 2006

VIA EMAIL AND HAND DELIVERED MAIL

Ms. Lila Tang, NPDES Permits Division Chief
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

RE: Comments on the Tentative Order R2-2006-XXXX, NPDES No. CA0037613
Reissuing the NPDES Permit for the Dublin San Ramon Services District

Dear Ms. Tang,

The Dublin San Ramon Services District (DSRSD) appreciates the opportunity to comment on the Tentative Order reissuing the NPDES Permit. Many of the issues have been previously discussed and resolved with you and your staff. DSRSD's treated effluent is conveyed via the Livermore Amador Valley Water Management Agency (LAVWMA) and combined with the effluent from the East Bay Dischargers Authority (EBDA) before discharge into San Francisco Bay. Consequently, DSRSD's permit is linked with that of EBDA. DSRSD agrees with all of the edits and comments raised by EBDA on their Tentative Order, and hereby incorporates all EBDA comments by reference. Any applicable modifications to the final EBDA permit should also be incorporated into the final DSRSD permit. We have organized the comments into two sections. The first section contains comments with unique language to DSRSD. The second section includes EBDA comments that are also applicable to DSRSD but are included herein for completeness.

COMMENTS UNIQUE TO DSRSD

**1. THE PERMITTED FLOW IS FOR AVERAGE DRY WEATHER DESIGN FLOW,
NOT WET WEATHER FLOW**

DSRSD believes it is inappropriate to indicate a "permitted" wet weather flow for the DSRSD discharge. This misuse of standard terminology in the wastewater industry results in effectively creating a disincentive for maximizing flow during rainfall events through publicly-owned treatment works (POTWs), and is more stringent than federal law. To date, the term "permitted flow" has been used for Average Dry Weather Design Flow (ADWF), the capacity the treatment plant is designed for during dry weather. The actual flow, which is used for compliance purposes, is measured during three consecutive dry weather months. There is no language in the

Prohibitions Section of the Tentative Order to support an approach that would limit wet weather flows. In addition, language should be consistent with the EBDA permit regarding the nature of studies to be completed for facility improvements. The language should be revised as follows:

(page 2, Footnote (3) to Table 1)

(3) Wet Weather Flow (WWF). DSRSD has instantaneous pumping capacity to convey treated wastewater to the LAVWMA storage and pumping facilities. The maximum LAVWMA flow to the EBDA system, under an EBDA/LAVWMA agreement is 41.2 mgd, including Zone 7 groundwater reverse osmosis reject flow, if capacity is available. During peak EBDA WWF, only 19.72 mgd capacity is available to LAVWMA in the EBDA system. If EBDA system capacity is not available due to peak WWF, LAVWMA is authorized to discharge up to 21.5 mgd of its peak WWF to San Lorenzo Creek by a separate Regional Water Board order (Order No. R2-2006-0026). Under the industrial pretreatment permit to be issued by DSRSD, Zone 7 groundwater reverse osmosis reject water is interruptible flow. The Order requires that DSRSD specify in the pretreatment permit that at times of peak WWF, discharge of Zone 7 groundwater reverse osmosis reject water to DSRSD will be suspended so as to not cause or contribute to any exceedance of EBDA's peak WWF limitation, or to any discharge under Order No. R2-2006-0026.

(page F-3, Table F-1)

Facility Permitted Flow	17 mgd, plus 3.2 mgd for Zone 7 reject water, for a total of 20.2 mgd
Facility Design Flow	17 mgd (average dry weather design capacity), plus 3.2 mgd Zone 7 brine. Proposed 20.7 mgd (future average dry weather design capacity), plus 3.2 mgd Zone 7 brine; increase to 20.7 mgd over next 25 years subject to completion of studies demonstrating reliability and capacity of improvements.
Watershed	San Francisco Bay
Receiving Water	Lower San Francisco Bay
Receiving Water Type	Enclosed Bay, Marine

2. THE BIOSOLIDS DISPOSAL AREA WILL BE COVERED UNDER SEPARATE WASTE DISCHARGE REQUIREMENTS.

DSRSD's biosolids disposal practice for more than 20 years has been used to periodically remove treated and stabilized sludge from the bottom of on-site Facultative Sludge Lagoons and to incorporate the biosolids into the soil of adjacent DSRSD owned property, referred to as the Dedicated Land Disposal (DLD) area. DSRSD acknowledges that this renewed permit does not cover the existing practice of biosolids disposal, and therefore commits to preparing and submitting a Report of Waste Discharge that will conform to California regulations by no later than December 31, 2006. The language on page 23, section VI.C.6.b.8) should be revised as shown below because the DLD will be covered under separate waste discharge requirements:

8) Permanent on-site sludge storage or disposal activities are not authorized by this permit.

EBDA COMMENTS APPLICABLE TO DSRSD

3. IT IS UNREASONABLE TO REQUEST PERMITTEES TO CONDUCT A REASONABLE POTENTIAL ANALYSIS EVERY YEAR

The effluent characterization language in Provision C.2.a. indicates that the permittee must conduct a reasonable potential analysis every year. This is unreasonable because conducting a reasonable potential analysis requires specialized expertise and detailed knowledge, of the ever-changing regulatory climate, including continually changing interpretations of various regulations within Region 2 and throughout the state. It is difficult enough to prepare a reasonable potential analysis at each permit renewal. Moreover, municipal wastewater treatment plants have fairly predictable performance; the constituents which are found to have reasonable potential are fairly consistent among plants, as well as from permit renewal to permit renewal. This overly burdensome requirement should be removed from the permit as follows:

(page 18)

VI. PROVISIONS

C. Special Provisions

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Effluent Characterization for Selected Constituents

The Discharger shall continue to monitor and evaluate the discharge from Outfall 001 (measured at M-001) for the constituents listed in Enclosure A of the Regional Water Board's August 6, 2001 Letter, according to the sampling frequency specified in the attached MRP (**Attachment E**). Compliance with this requirement shall be achieved in accordance with the specifications stated in the Regional Water Board's August 6, 2001 Letter under Effluent Monitoring for Major Discharger.

The Discharger shall evaluate on an annual basis if concentrations of any constituent increase over past performance. The Discharger shall investigate the cause of the increase, which may include but is not limited to an increase in the effluent monitoring frequency, monitoring of internal process streams, and monitoring of influent sources. This may be satisfied through identification of these constituents as "Pollutants of Concern" in the Discharger's Pollutant Minimization Program described in **Provision C.3.b**, below. A summary of the annual evaluation of data, and source investigation activities shall also be reported in the annual self-monitoring report.

A final report that presents all the data shall be submitted to the Regional Water Board no later than 180 days prior to the Order expiration date. This final report shall be submitted with the application for permit reissuance.

4. SIGNIFICANT CHANGES TO THE POLLUTION PREVENTION LANGUAGE FROM PREVIOUS PERMITS NEED TO BETTER REFLECT ACTUAL CONDITIONS, AND BE REVISED BACK TO PREVIOUSLY AGREED-UPON LANGUAGE

Several text changes for the pollution prevention program were made for the first time in the EBDA permits, including the DSRSD permit, contrary to previous agreements with permittees. Also, special copper pollution prevention activities are not warranted for selected facilities.

Additionally, the submittal date options for annual Pollutant Minimization Program reports need to be the same as the existing permit to accommodate workload issues for the EBDA member agencies. As an example, if the option of August 30th is eliminated, then three significant reports will be required in February within a one month period (Semiannual Pretreatment, Annual Pretreatment, and Pollutant Minimization Program) and only one in August. The current permit allows for two reports due in each semiannual period (Semiannual Pretreatment and Annual Pretreatment due in January and February, respectively; Semiannual Pretreatment and Pollutant Minimization Program due in July and August, respectively) which allows for better agency efficiency. Changing this balance would not be a good use of public agency resources.

Therefore, language should be revised as follows:

(starting page 20 of the tentative order)

VI. PROVISIONS

C. Special Provisions

2. Best Management Practices and Pollutant Minimization Program

- a.** The Discharger shall continue to implement and improve, in a manner acceptable to the Executive Officer, its existing Pollutant Minimization Program to reduce pollutant loadings of copper, mercury, and cyanide to the treatment plant and therefore to the receiving waters. In addition, the Discharger shall implement any applicable additional pollutant minimization measures described in Basin Plan implementation requirements associated with the copper SSO and cyanide SSO if and when each of those SSOs become effective and the alternate limits take effect.
- b.** The Discharger shall submit an annual report, acceptable to the Executive Officer, no later than August 31st of each calendar year. For those agencies choosing to submit earlier in the year, the report shall cover the preceding 12 months two months prior to the submittal date. As an example, a report submitted on June 30, shall cover the preceding 12 month ending in April. Each annual report shall include at least the following information:
 - i. A brief description of its treatment plant, treatment plant processes and service area.*

c. Pollutant Minimization Program for Pollutants with Effluent Limitations

The Discharger shall develop and conduct a Pollutant Minimization Program (PMP) as further described below when there is evidence (e.g., sample results from analytical methods more sensitive than those methods required by this Order, presence of whole effluent toxicity, results of benthic or aquatic organism tissue sampling) that a priority pollutant is present in the effluent above an effluent limitation and either:

- i. A sample result is reported as DNQ and the effluent limitation is less than the RL; or
- ii. A sample result is reported as ND and the effluent limitation is less than the MDL, using definitions described in the SIP.

d. If triggered by the reasons in c. above and notified by the Executive Officer, the Discharger's PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Water Board:

- i. An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling, or alternative measures approved by the Executive Officer when it is demonstrated that source monitoring is unlikely to produce useful analytical data;
- ii. Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system, or alternative measures approved by the Executive Officer, when it is demonstrated that influent monitoring is unlikely to produce useful analytical data;
- iii. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutant(s) in the effluent at or below the effluent limitation;
- iv. Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and
- v. The annual report required by 3.b. above, shall specifically address the following items:
 - 1. All PMP monitoring results for the previous year;
 - 2. A list of potential sources of the reportable priority pollutant(s);
 - 3. A summary of all actions undertaken pursuant to the control strategy; and

4. A description of actions to be taken in the following year.

5. DSRSD SHOULD NOT BE HELD ACCOUNTABLE FOR REGIONAL WATER BOARD INACTION

DSRSD believes it is inappropriate to require, in advance, pollutant reductions by permittees starting July 1, 2009, in the event the cyanide site-specific objective and the mercury TMDL are not adopted by the Regional Water Quality Control Board. The municipal governments around the Bay Area have contributed millions of dollars to conduct these studies, the technical work is complete, and peer review is complete. The activity that remains is the Basin Plan Amendment adoption and approval process, over which the permitted agencies have no control. This requirement is potentially punitive to permitted agencies if the Regional Water Board cannot accomplish the tasks it has committed to. In addition, this provision assumes that wholly new technologies capable of reducing trace contaminants from POTW effluent can be developed in a few months. Moreover, the need for these technologies is extremely doubtful, and in any event DSRSD should not be put in the position of having to develop technologies that would obviate the need for TMDLs. Timely and appropriate action by the Regional Water Quality Control Board to adopt TMDLs and the SSO, with the participation of DSRSD and other Bay Area POTWs, will eliminate this issue. Language should be revised as follows:

(page 22)

4. Requirement to Support SSO and TMDL, and Assure Compliance with Final Limits

This Order grants a compliance schedule for mercury, and alternative final limits for cyanide and copper that are based on pending SSOs. The Discharger shall participate in and support the development of the mercury TMDL, cyanide site-specific objective (SSO), and copper SSO.

(page F-53)

4. Requirement to Support SSO and TMDL, and Assure Compliance Schedules with Final Limits

Maximum allowable compliance schedules are granted to the Discharger for mercury and cyanide because of the uncertainty in the time it takes to complete the TMDL and SSO for these pollutants. Therefore, it is appropriate to require the Discharger participate and support the development of the TMDL and SSO. For copper, this commitment is also necessary because data from the *North of Dumbarton Bridge Copper and Nickel Site-Specific Objective (SSO) Derivation (Clean Estuary Partnership March 2005)* suggest that the CTR criterion (3.1 µg/l) used in calculating the WQBELs in this Order will likely to be lowered in the SSO (2.5 µg/l chronic, and 3.9 µg/l acute). Since more generous WERs from this same SSO effort has been used in calculating the copper limits in this Order, it is appropriate for the Discharger to support the copper SSO effort to ensure the timely completion of the SSO to ensure the most appropriate limit for protection of beneficial uses.

6. COMPLIANCE DETERMINATION

DSRSD believes that it is inappropriate to include any provisions related to compliance determination in a permit. Compliance determination criteria should be included in the State Water Board Enforcement Policy. Therefore, DSRSD requests that Section VII. Compliance Determination be deleted in its entirety.

If the Regional Water Board opts not to delete Section VI in its entirety, then DSRSD recommends the use of alternative language as noted below. The alternative language was used in Region 9 and was developed by that Region's legal counsel. Neither the State Water Board nor EPA objected to this alternative language. The language is contained in Order No. R9-2006-002.

(page 27)

VII. Compliance Determination

Compliance with the effluent limitations contained in Section IV of this Order will be determined as specified below:

A. General.

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

B. Multiple Sample Data.

When determining compliance with an AMEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

C. Average Monthly Effluent Limitation (AMEL)

The Dischargers shall determine the average monthly effluent value (AMEV) for a given parameter by calculating the arithmetic average of all daily effluent values (DEVs) for each parameter within each calendar month. The AMEV calculation for a given calendar month shall not include DEVs from any other calendar month. If only a single DEV is obtained for a parameter during a calendar month, that DEV shall be considered the AMEV for that parameter for that calendar month. The AMEV shall be attributed to each day of the calendar month for determination of compliance with the Average Monthly Effluent Limitation (AMEL) for a given parameter for that given calendar month. For any calendar month during which no DEV is obtained, the AMEV cannot be determined for that calendar month.

D. Average Weekly Effluent Limitation (AWEL)

The Dischargers shall determine the average weekly effluent value (AWEV) for a given parameter by calculating the arithmetic average of all daily effluent values (DEVs) for each parameter within each calendar week (Sunday through Saturday). The AWEV calculation for a given calendar week shall not include DEVs from any other calendar week. If only a single DEV is obtained for a parameter during a calendar week, that DEV shall be considered the AWEV for that parameter for that calendar week. The AWEV shall be attributed to each day of the calendar week for determination of compliance with the Average Weekly Effluent Limitation (AWEL) for a given parameter for that given calendar week. For any calendar week during which no DEV is obtained, the AWEV cannot be determined for that calendar week.

E. Maximum Daily Effluent Limitation (MDEL)

The Dischargers shall determine the daily effluent value (DEV) for a given parameter from the results of a flow-weighted 24-hour composite sample collected during a calendar day (12:00 am through 11:59 pm) or any continuous 24-hour period that ends on and reasonably represents a given calendar day for purposes of sampling. Upon approval by the Regional Water Board, the Dischargers may also determine the DEV for a given parameter from the arithmetic mean of results from one or more flow-weighted grab samples taken over the course of one calendar day or a 24-hour period that reasonably represents the calendar day. The DEV shall not include results from any sample outside of the 24-hour period that represents the calendar day. The DEV shall be attributed to the calendar day for determination of compliance with the Maximum Daily Effluent Limit (MDEL) for a given parameter for that given calendar day. For any calendar day during which a 24-hour flow-weighted composite sample, or flow-weighted grab samples in lieu of a 24-hour composite sample, are not obtained, a DEV cannot be determined for that calendar day.

F. Instantaneous Minimum Effluent Limitation

The Dischargers shall determine the instantaneous effluent value (IEV) for a given parameter from the results of any grab sample. The IEV for a given grab sample shall not include IEVs from any other grab sample. An IEV shall be attributed to each

separate grab sample result for determination of compliance with the Instantaneous Minimum Effluent Limitation for a given parameter.

G. Instantaneous Maximum Effluent Limitation

The Discharger shall determine the instantaneous effluent value (IEV) for a given parameter from the results of any grab sample. The IEV for a given grab sample shall not include IEVs from any other grab sample. An IEV shall be attributed to each separate grab sample result for determination of compliance with the Instantaneous Maximum Effluent Limitation for a given parameter.

7. WHOLE EFFLUENT CHRONIC TOXICITY SAMPLE BUFFERING

As noted in the T.O. ammonia toxicity was determined to be the cause of toxicity to *Ceriodaphnia dubia* in the mid 1990's. EBDA conducted a TIE to identify ammonia and determined that the addition of a buffer to prevent pH upward drift eliminated the toxicity. Chronic toxicity testing using *C. dubia* since that time has always been in compliance with permit limits. Regional Water Board staff approved the use of the buffer based on a review of the TIE.

EBDA submitted a Chronic Toxicity Screening Program Final Report in February 2005. The initial phase of the study used unbuffered samples and concluded, "EBDA effluent consistently elicited significantly toxic effects on both lethal and sublethal endpoints measured for the two most sensitive species used in this study." The study further concluded, "The consistent toxicity hierarchy observed between the fathead minnows and the mysids is likely due to the confounding influence of ammonia typically present in EBDA effluent at relatively elevated levels." Additional toxicity tests were run using buffered samples and the study concluded, "...results generated for the unbuffered and buffered treatments ... shows that the toxic effects were essentially eliminated for both species..."

Regional Water Board staff has indicated the convincing evidence that ammonia present in EBDA effluent be presented to document that receiving water standards will not be exceeded by discharge of the ultimate ADWF of 119.1 mgd. Continued receiving water monitoring or a dynamic model were offered as possible solutions. Since the 119.1 mgd flow will not be reached for many years, receiving water modeling does not seem to be a viable option. A dynamic model could be time consuming and expensive, but is being investigated.

Attachment No. 2 is a July 5, 2006 Memo, "Ammonia Analysis for East Bay Dischargers Authority Capacity Increase." The report analyzed receiving water unionized ammonia data from 1995-2006 and effluent ammonia data from 1999-2005. The analysis concludes that future receiving water ammoniac concentrations will range from 0.0104 to 0.0120 mg/L, which are well below the Basin Plan objective of 0.025 mg/L. Historic data showed only a single violation of receiving water unionized ammonia concentrations in March 1998, following an El Nino winter. Effluent ammonia averaged 15 mg/L during that month, which is below historical averages. The single event in 1998 was caused by factors other than the EBDA discharge. Therefore, EBDA requests that the language for Whole Effluent Chronic Toxicity be amended to something similar to the following:

(page E-10)

B. Whole Effluent Chronic Toxicity

1. Chronic Toxicity Monitoring Requirements

- d. *Dilution Series.* The Discharger shall conduct tests at 50%, 25%, 10%, 5%, and 2.5%. The "%" represents percent effluent as discharged. Samples may be buffered using the biological buffer MOPS (3-(N-Morpholino)propanesulfonic Acid) to control pH drift and ammonia toxicity caused by increasing pH during the test. This allowance is based on the Discharger's studies in the mid-1990's with *Ceriodaphnia dubia*. The Discharger conducted a full scale Phase III TIE that confirmed the toxicity was due to ammonia caused by pH drift during static renewal testing. Use of the buffer in that case eliminated the toxicity. This allowance is further based on the Discharger conducting a Chronic Toxicity Screening Study in 2005 as part of the permit renewal process. In Phase 1 of the study both of the most sensitive species showed significant toxicity due to the likely presence of ammonia and upward pH drift. The tests were repeated in Phase 2 using both buffered and unbuffered samples. In the buffered samples the toxic effects were eliminated. The Discharger has also submitted a technical memorandum documenting that the ultimate ADWF of 119.1 mgd will result in receiving water unionized ammonia concentrations increasing from current level of 0.0104 to 0.0120 mg/L, which is well below the receiving water objective of 0.025 mg/L. Therefore, the Discharger has demonstrated that the beneficial uses of the receiving waters are protected through demonstration of compliance with applicable ammonia objectives.

8. TSS IS SUFFICIENT FOR BLENDING SAMPLING AND BOD IS NOT NEEDED AS AN INDICATOR OF COMPLIANCE

It is well known that CBOD and TSS track together in POTW effluents. In addition the CBOD 5-day test is not a practical indicator of issues during blending because blending happens on the order of hours instead of the several days it takes to get results back from a BOD test. Therefore, DSRSD requests that CBOD be removed from the requirements for sampling during blending, and language revised as follows:

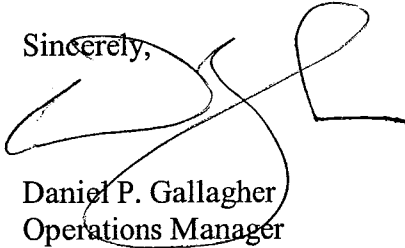
(page E-14)

- i. When bypassing occurs from any primary or secondary treatment unit(s), samples of the discharge shall be collected for the duration of the bypass event for TSS analyses in 24-hour composite or less increments, and continuous monitoring of flow, chlorine residual, and grabs for pH and coliform. Samples in accordance with proper sampling techniques for all other limited pollutant parameters shall also be collected and retained for analysis if necessary. If TSS values exceed the weekly average effluent limits, analysis of the retained samples shall be conducted for all these pollutant constituents that have effluent limits for the duration of the bypass, until the

TSS is in compliance with their weekly effluent limitations. Holding times for these retained samples must be complied with.

Thank-you for your consideration of these comments. Please feel free to contact Robert Whitley at (925) 945-6850 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'DPG', is written over the word 'Sincerely,' and extends into the name 'Daniel P. Gallagher'.

Daniel P. Gallagher
Operations Manager

cc: Bert Michalczyk, General Manager, DSRSD
David Requa, District Engineer, DSRSD
Levi Fuller, Operations Supervisor, DSRSD
Bing Misra, Environmental Services Supervisor, DSRSD
Charles Weir, General Manager, EBDA
Darren Greenwood, City of Livermore
Robert Whitley, WBA

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