CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

Response to Written Comments
Item No. 7

NPDES Permit Reissuance
for
East Bay Dischargers Authority (EBDA), City of Hayward, City of San Leandro, Oro Loma Sanitary District, Castro Valley Sanitary District, Union Sanitary District
Livermore-Amador Valley Water Management Agency

The Regional Water Board received timely written comments from the following:

- East Bay Dischargers Authority, dated November 14, 2011
- U.S. Environmental Protection Agency, dated November 23, 2011
- San Francisco Baykeeper, dated November 28, 2011

This Response to Comments begins with the comments (in *italics*) quoted where possible, or paraphrased for brevity. Regional Water Board staff responses follow each comment.

I. East Bay Dischargers Authority (EBDA)

EBDA Comment 1: *EBDA indicates that compliance with technology-based effluent limitations should be measured at the EBDA outfall, not at each individual plant. Throughout the entire permitting history of EBDA's facilities, beginning with the first NPDES permit issued in 1979 through the permits currently in effect, compliance with technology-based effluent limitations for secondary treatment has always been determined in the combined effluent from all contributing facilities. In this Tentative Order, Regional Water Board staff proposes to determine compliance with these effluent limitations in the effluent of each individual treatment plant. The Tentative Order includes language that mitigates the impact of this new compliance point to a degree, and EBDA is appreciative that Regional Water Board staff has attempted to accommodate concerns on this issue. Nevertheless, EBDA must respectfully assert that this point of compliance requirement is improper for the reasons discussed below and that the appropriate point of compliance is the combined discharge at the EBDA outfall, as in all prior permits.*

First, effluent limitations only apply to discharges to waters of the United States, and the individual treatment plants do not discharge to such waters. Section 301(e) of the Clean Water Act states that "effluent limitations established pursuant to this section…shall be applied to all point sources of discharge of pollutants in accordance with the provisions of this chapter." An effluent limitation is "any restriction established by a State or the Administrator on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters," (33 U.S.C. § 1362(11)), and a point source is "any discernible, confined and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit…from which pollutants are or may be discharged." (33 U.S.C. § 1362(14).) Discharge of

pollutants means "any addition of any pollutant to navigable waters from any point source." (33 U.S.C. § 1362(12).)

Based on these provisions, it is clear that all effluent limitations, including technology-based effluent limitations based on secondary treatment, only apply to actual discharges to navigable waters. Therefore, because EBDA member's treatment plants do not discharge directly to navigable waters, effluent limitations based on secondary treatment do not apply to the uncombined treated wastewater coming from the plants. Rather, they apply only to EBDA's discharge of combined effluent from all of the plants to navigable waters. The Clean Water Act only regulates discharges of pollutants to navigable waters. (33 U.S.C. 1311(a).)

Second, Clean Water Act section 301(b)(1)(B), which requires all publicly owned treatment works ("POTWs") to achieve "effluent limitations based upon secondary treatment as defined by the [EPA] Administrator . . . .," merely describes a level of effluent quality that must be achieved based on EPA's determination of the effectiveness of secondary treatment. Section 301(b)(1)(B) does not specifically require a POTW to implement secondary technology. The regulations EPA adopted to implement the secondary treatment requirements further illustrate that the regulatory focus is on effluent quality discharged to navigable waters. (40 C.F.R. § 133.102.)

Third, the point of compliance with technology-based limitations based on secondary treatment should be the outfall because EBDA's entire system constitutes a single POTW under EPA regulations. (33 U.S.C. § 1292(2)(A); 40 CFR §§ 122.1, 403.3.) The history of EBDA's formation illustrates that EBDA is a single POTW. After the Clean Water Act was enacted, EBDA members worked closely with EPA, the State Water Resources Control Board and the Regional Water Board to develop a solution for achieving compliance with effluent limitations based on secondary treatment. EBDA members conducted a Water Quality Management Program Study, which recommended that EBDA members consolidate effluent disposal at a separate outfall. To implement the recommendations in the study, EBDA was formed and EBDA members obtained federal construction grants to construct and/or upgrade their plants and constructed a conveyance system to deliver all treated effluent from the four member plants and the two plants operated by members of the Livermore Amador Valley Water Management Agency to the EBDA outfall. More than $140,000,000 was spent to construct EBDA's system to meet the requirements of the Clean Water Act. Not only was the Regional Water Board involved in the process of constructing EBDA's system to comply with the requirements of the Clean Water Act, but it has consistently acknowledged in all NPDES permits issued to EBDA since 1979 that EBDA is a single system. It is clear from EBDA's history and its prior NPDES permits that EBDA is a single POTW. Therefore, it is appropriate to measure compliance with effluent limitations based on secondary treatment in the combined effluent discharged from the system at the outfall.

Fourth, the Porter-Cologne Water Quality Control Act prohibits the Regional Water Board from specifying the manner of compliance with the Tentative Order. (Wat. Code, § 13360, subd. (a).) Requiring compliance with secondary treatment standards in the segregated effluent of each EBDA member agency's facility improperly specify the location and manner of compliance in violation of section 13360.

Finally, EPA regulations provide that monitoring in NPDES permits should be designed to provide data that is "representative of the monitored activity." (40 C.F.R. § 122.48.) The regulated and monitored activity at issue is the discharge of treated wastewater effluent into navigable waters.

Monitoring in the combined effluent is representative of that activity, and monitoring in the uncombined effluent is not.

Response: We have not made changes in response to this comment. The fundamental disagreement is over the definition of a "POTW" or "publicly owned treatment works." EBDA asserts that its entire system, consisting of four separate municipal treatment plants discharging through a common outfall, should be recognized as one single POTW. The argument is contrary to the definition of "POTWs," which is defined in the federal Clean Water Act regulations as:

> *a* treatment works . . . *owned* by *a* state or municipality. . . . This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality . . . which has jurisdiction over the Indirect Discharges to and the discharges from such a treatment works. 40 CFR § 403.3(q) *(emphasis added).*

The plain language of the definition does not lend itself to the idea that many distinct treatment works owned by numerous municipalities can be a single POTW. Here, there are four distinct treatment works owned by different municipalities[1], and each is a POTW under the above definition. Each of the four treatment works is owned (and operated) separately by different municipalities such that the entire system cannot be considered as a single POTW. While EBDA has certain oversight authorities on its members, these authorities do not extend to ownership (or operation) of any of its members' treatment works and plants. Nor by being a member of EBDA does the member share in the ownership of the other EBDA members' treatment plants.

Moreover, from other definitions in 40 Code of Federal Regulations (CFR) section 403.3, it is clear that the term "treatment," for the purpose of compliance with secondary standards, is intended to apply at each treatment plant and not after comingling with effluent from other treatment plants. As set forth above, a POTW includes devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. More specifically, 40 CFR section 403.3(r) states, "The term POTW Treatment Plant means that portion of the POTW which is designed to provide treatment (including recycling and reclamation) of municipal sewage and industrial waste."

Secondary standards are defined by the parameters biochemical oxygen demand (BOD) and total suspended solids (TSS). Wastewater from each of EBDA's member agencies flows only to its own separate treatment plant. Treatment for BOD and TSS occurs only at each treatment plant, not at the EBDA common outfall or the EBDA dechlorination facility. As these technology-based limits are considered the minimum level of effluent quality that should be attained by a POTW, the tentative order proposes to require compliance with these limits at each individual treatment plant to ensure these minimum standards are met.

Allowing compliance with technology-based limits at the common outfall also allows for dilution from well-run facilities to offset higher pollutant loads from not as well-run facilities. This is clearly

[1] The Union Sanitary District, Oro Loma Sanitary District, and Castro Valley Sanitary District fall within the definition of municipality, which is defined as "a city, town, borough, county, parish, district, association, or other public body created by or pursuant to State law and have jurisdiction over the disposal of sewage...." Clean Water Act § 1362(4).

not the intent of technology-based limits that were established to ensure the minimum level of treatment achievable by all facilities.

EBDA claims that Clean Water Act section 301(b)(1)(B) does not specifically mandate secondary treatment, but rather focuses on the quality of the effluent into navigable waters to bolster its argument that the compliance point should be at the end of the common outfall as opposed to at each treatment plant. The cited section requires all POTWs to meet "effluent limitations based on secondary treatment." EBDA's distinction is meaningless because the effluent limitations that must be met can only occur through the application of secondary or equivalent treatment at each POTW. To somehow suggest that POTWs do not have to implement secondary treatment at their plants is contrary to the Clean Water Act and how it has been implemented for more than 30 years.

As for EBDA's other points, effluent from each of the four individual treatment plants does eventually all discharge to navigable waters. As such, limits are appropriate and authorized for these discharges from the plants to navigable waters. As pointed out by EBDA, 40 CFR section 122.41(j)(1) requires that all samples for compliance be representative of the monitored activity. The monitored activity in this case is whether each individually-owned and operated treatment plant meets minimum treatment standards required under the Clean Water Act; it is not the act of discharging to San Francisco Bay. Therefore, it is appropriate that the sampling points (i.e., compliance points) be located at the end of each treatment plant as proposed in the tentative order. Doing so does not somehow change whether the discharges are to navigable waters as EBDA asserts. Doing so also is not in conflict with Water Code section 13360. Section 13360 is a prohibition on specifying the manner of compliance including the location of where treatment facilities are located. It is not a prohibition on specifying the location of where sampling must be conducted to determine compliance as asserted by EBDA. Even if that is the intent and effect of section 13360, the Clean Water Act would preempt any conflicting requirements of section 13360. Moreover, Water Code section 13372 requires that the Water Code to be construed to ensure consistency with the Clean Water Act.

EBDA Comment 2: *This comment concerns pretreatment and biosolids monitoring requirements in the Tentative Order. EBDA believes its limited public resources should be focused on monitoring that provides useful information on constituents of current and/or emerging concern. Most monitoring efforts focus on the 126 Priority Pollutants constituents that were identified by US EPA approximately 30 years ago. Much has been done since then to reduce or ban their use and prevalence. As evidenced by the lack of Reasonable Potential (RP) for all other constituents except for copper and cyanide, pretreatment and pollution programs have been effective in reducing these constituents to below levels of water quality concern. Therefore, intensive monitoring of Priority Pollutants has little management value.*

EBDA believes that the proposed monthly metals and semi-annual priority pollutant monitoring frequencies in Table E-5 for EBDA and the individual EBDA member WWTPs is unnecessary. This effort would add additional polycyclic aromatic hydrocarbon (PAH) and pesticide monitoring beyond current permit requirements. Instead, EBDA believes that reduced monitoring frequencies are appropriate for three reasons:

- *First, the EBDA member and contributing LAVWMA agencies have mature and successful Pretreatment Programs that have been operating since the mid-1980s. It is unclear how, if at all, the proposed monitoring data provides information useful for making*

management/enforcement decisions within the respective Pretreatment Programs. Such actions are typically based on individual Significant Industrial User (SIU) inspections and monitoring.

- *In addition, based on Attachment H guidance for reduction of monitoring frequencies based on the number of SIUs regulated by a Discharger's Pretreatment Program all but one of the EBDA and LAVWMA agencies have less than 50 SIUs in their service areas and are thus potentially eligible per for a minimum monitoring frequency of once per year. EBDA's permit application includes equivalent influent, effluent, and biosolids information to that requested in Attachment H that justify monitoring frequency reductions as part of its Annual Pretreatment Program Reports and the March 16, 2011 and February 17, 2005 Reports of Waste Discharge (If additional information is needed regarding interpretation of the influent and/or biosolids data, EBDA requests guidance on how to present historic influent and biosolids data to demonstrate that the concentrations are "very low" as specified in Appendix H-4).*

- *Finally, the Reasonable Potential Analysis (RPA) is conducted on the EBDA combined effluent discharge, not on the individual WWTP effluents. Therefore there is no need for these data on a twice per year and certainly not a monthly basis, for RPA purposes. The EBDA RPA results (Fact Sheet Table F-10) shows that with two exceptions, all the monitored priority pollutant organics were either non-detected (below the method detection limit (MDL)) or were estimated "J-flag" values (detected-not-quantified or DNQ). The two exceptions were dioxin-TEQ (for which there is no CTR objective) and 1,4-Dichlorobenze which was detected at a concentration over 10,000-fold below the corresponding CTR water quality objective.*

EBDA requests that the Influent-M-INF-x and Effluent M-002-x monitoring frequencies for the EBDA member WWTPs in Table E-5 be reduced to once per year for all priority pollutants, including metals and cyanide (excluding the ~$1,000 per analysis for dioxin-TEQ). This frequency will provide sufficient information to track long-term trends in influent loadings and removals across each WWTP and to compare to the combined EBDA M-001 effluent quality.

Alternatively, EBDA would accept semi-annual monitoring frequency at the combined effluent (M-001) for all priority pollutants and dioxin TEQ, and monthly for copper and cyanide (i.e. those constituents for which there are effluent limits). As noted above, EBDA does not believe that monthly or quarterly monitoring for other metals provides information useful for pollution management actions.

EBDA believes that the above recommendations are technically sound, protective of water quality, make appropriate use of public funds, and can and should be included in the Tentative Order. EBDA believes that the effluent quality data supports the requested monitoring frequency reduction to once per year monitoring.

Response: We have not made changes in response to this comment. The alternative proposed by EBDA (semi-annual monitoring for priority pollutants and dioxin-TEQ, and monthly monitoring for metals at the Common Outfall) is already a requirement proposed in the tentative order. While the EBDA members have mature pretreatment programs, we do not believe they have provided sufficient information for us to reduce monitoring requirements to once per year at each individual

treatment plant. This is because there is always the possibility that individual treatment plants may receive a slug of pollutants from an unknown source even if significant industrial users are well regulated. In our view, the monitoring frequency proposed in the tentative order for influent, effluent, and biosolids at individual treatment plants is the minimum necessary to ensure the effectiveness of pollution prevention and pretreatment programs and as a means for detecting illicit discharges into the system. That said, the Pretreatment Program Provisions, included in Attachment H, do provide EBDA and its members with the opportunity to request a reduction in influent, effluent, and biosolids monitoring if it documents nondetect levels in its effluent and very low (i.e., near nondetect) levels for influent and biosolids monitoring for a minimum of eight previous years' worth of data. However, neither EBDA nor its members have provided an analysis to show that influent and biosolids contain low levels, nor do the reports of waste discharge from 2011 and 2005 appear to include all data from the previous eight years. Therefore, we do not believe that a reduction in the monitoring frequency is appropriate at this time.

II. U.S. Environmental Protection Agency (USEPA)

USEPA Comment 1: *USEPA supports the revised requirement that each publicly owned treatment work (POTW) separately meet the technology-based effluent limits for secondary treatment at 40 CFR 133 prior to comingling for discharge through the Common Outfall.*

According to the Clean Water Act section 301(b)(1)(B), POTWs must meet technology-based effluent limits for secondary treatment. Technology-based effluent limits are to be met with treatment technology, not through non-treatment mechanisms, such as dilution which occurs as these effluents are comingled for discharge through the Common Outfall (40 CFR 125.3(f)). Moreover, the past practice of determining compliance with secondary treatment standards in the comingled effluent is inappropriate, as the Common Outfall fails to meet the definition of a POTW because it does not convey waste to a treatment plant. (A POTW is defined as "…any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes, and other conveyances only if they convey wastewater to a POTW Treatment Plant…" (40 CFR Parts 122.2 and 403.3.))

Consequently, USEPA supports the proposed permit requirement that facility effluents be monitored and compliance with secondary treatment standards be determined immediately following treatment at each treatment plant.

Response: We appreciate USEPA's support that compliance with secondary treatment standards be determined immediately following treatment at each POTW (see also Response 1 to EBDA).

III. San Francisco Baykeeper (Baykeeper)

Baykeeper Comment 1: *Baykeeper indicates that the Draft Permits must require Dischargers to produce a detailed sewer system management plan to administer their wastewater treatment plants and collection systems. Baykeeper indicates that the Draft Permits are incomplete because they do not require the Dischargers to prepare a Sewer System Management Plan ("SSMP"). According to*

Water Board Order No. 2006-0003-DWQ, all owners of sanitary sewer systems must develop and implement a system-specific SSMP that includes provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems. Order No. 2006-0003-DWQ, 2. Specifically, each SSMP must include several elements, including, but not limited to, plans for condition assessment, operation and maintenance, design and performance, overflow emergency response, communications, FOG control, system evaluation and capacity assurance, monitoring and measuring modifications, and SSMP program audits. See Order No. 2006-0003-DWQ, 10 to 15. If the Dischargers have already prepared SSMPs to comply with the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems ("Statewide WDRs"), the Draft Permits or their corresponding Fact Sheets should, at the very least, discuss the elements of each SSMP.

Response: We have not made changes in response to this comment. The dischargers are all currently subject to Order No. 2006-0003-DWQ (*Statewide General Waste Discharge Requirements for Sanitary Sewer Systems).* As Order No. 2006-0003-DWQ already requires that dischargers develop and implement a system-specific Sewer System Management Plan, and each discharger has already done so, it is unnecessary to include this duplicative requirement in the tentative order. The suggestion to summarize the plans in the permit is without basis or purpose and would only add to the already significant local agency and Regional Water Board staff time needed to reissue a permit.

Baykeeper Comment 2: *Baykeeper indicates that the Draft Permit must prohibit all spills from the sewer collection system. Discharge Prohibition E is insufficient because it fails to prohibit sanitary sewer overflows that result in discharges of untreated or partially treated wastewater to California waters, not just waters of the United States. EBDA Permit, 12; Livermore Permit, 10; DSRSD Permit, 10. The Clean Water Act ("CWA") is not the only law that prohibits sewage discharges – the California Water Code forbids all discharges to state waters that violate California water quality standards, precluding the Regional Board from authorizing discharges that violate such standards. Water Code § 13304(a), 13263, 13377. In addition, the Statewide WDRs prohibit overflows that create a public nuisance. Order No. 2006-0003-DWQ, 7. Therefore, the Regional Board should revise Discharge Prohibition E in the Draft Permits to read, "Any sanitary sewer overflow that results in a discharge of untreated or partially treated wastewater to waters of the United States and California is prohibited." The Regional Board has authority to prohibit such discharges under section 13243 of the California Water Code. This revision is necessary to ensure that beneficial uses are not impaired by harmful spills of raw sewage.*

Response: We have not made changes in response to this comment. The tentative order would prohibit illicit discharges to waters of the United States, which is where the focus should appropriately remain at this time. To revise the prohibitions to include State waters as Baykeeper requests would in essence add groundwater to the mix and thus diffuse the focus of efforts to eliminate discharges to surface waters where the threat to water quality remains the greatest. The prohibition in the tentative order, coupled with the requirements of Order No. 2006-0003-DWQ, are sufficient to ensure that these dischargers properly operate and maintain their respective collection systems so untreated wastewaters are not discharged and that any discharges are minimized.

Furthermore, while the prohibition would not specifically include discharges to waters of the State, this does not mean that the tentative order would permit such discharges. Such discharges would be in violation of Water Code section 13260, which requires that any person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the

State file a report of waste discharge. Such discharges would be directly enforceable under Water Code sections 13304 and 13350.

Baykeeper Comment 3: *Baykeeper indicates that the Draft Permit for EBDA must include an additional discharge point for Wet Weather Diversions and require the Discharger to sample these diversions for pollutants. The Draft Permit for EBDA allows the San Leandro and Oro Loma Treatment Plants to discharge a portion of their secondary treated effluent from overflow weirs instead of the common outfall. EBDA Permit, F-8. This potential overflow discharge must be listed as a discharge point in the permit. The EBDA Draft Permit should also require the Discharger to sample this effluent for CBOD, TSS, pH, oil and grease, residual chlorine, and all priority pollutants in the event of a discharge to ensure compliance with water quality standards.*

Response: We have not made changes in response to this comment. Contrary to the Baykeeper's assumption, the tentative order does not propose to permit routine discharges from the San Leandro or Oro Loma treatment plant overflow weirs; so it would be inappropriate to add discharge points for them. The purpose of the language in the Fact Sheet is simply to recognize that discharges via these overflow weirs could occur in an extreme weather event (i.e., 10-year storm or greater). As stated in the Fact Sheet (page F-8), these discharges would be subject to the requirements in Federal Standard Provisions section I.G. This means that if such discharges occur, the Regional Water Board may take an enforcement action for bypass, unless the discharger documents that (a) the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage, (b) there were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime; and (c) it has submitted notice to the Regional Water Board.

In the event the discharger routes treated wastewater via the overflow weirs to San Francisco Bay, the tentative order already proposes to require monitoring for all pollutants with effluent limits except for chronic toxicity. This is because such a discharge is subject to bypass requirements under Regional Standard Provisions section III.A.3.b (5).

Baykeeper Comment 4: *Baykeeper indicates that the Draft Permits must conduct a complete reasonable potential analysis that fully addresses pharmaceuticals, chemicals from personal care products, and sediment toxicity. The Draft Permits are inadequate because their reasonable potential analyses ("RPA") are incomplete – the RPAs do not address all of the pollutants discharged from the Dischargers' facilities that could potentially impair the water quality of the San Francisco Bay. The CWA requires NPDES permits to include effluent limitations for all pollutants that may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of narrative or numeric water quality standards. 40 CFR 122.44(d)(1)(i). However, the Draft Permits ignore several pollutants that are most likely present in the Dischargers' wastewater, including antibiotics, contraceptives, various medicines, nanoparticles from sunscreen, and chemical fragrances. The active ingredients of these products are typically not removed by wastewater treatment processes because standard treatment plants are not designed to remove a wide variety of compounds. Even though the impacts of these substances are not widely known, many cause severe ecological and human harm. For example, studies show that triclosan, the active ingredient in many antibacterial products that has been detected in the San Francisco Bay, is acutely and chronically toxic to aquatic organisms and bioaccumulates at an extremely high rate. Since the Draft Permits do not consider the presence of any of these substances in wastewater, the Permits must be revised. At the very least, the Draft Permits should require the Dischargers to*

independently monitor and test for chemicals from pharmaceuticals and personal care products in their wastewater to ensure that there are no exceedances of narrative water quality standards. Also, according to the third trigger for a RPA, the Dischargers must conduct a RPA if monitoring results show a potential for adversely impacting beneficial uses. See EBDA Permit, F-22; Livermore Permit, F-16; DSRSD Permit, F-18.

The RPAs also fail to analyze the potential for impairing sediments in San Francisco Bay. According to the Sediment Quality Objectives ("SQO") for enclosed bays and estuaries, sediments may not have pollutants in quantities that are harmful to benthic communities, wildlife, resident finfish, or human health. SQO Policy, 3. Despite this mandate, the Draft Permits dismisses the SQOs because "there is no evidence directly linking compromised sediment conditions to the discharges subject to this Order." EBDA Permit, F-26; Livermore Permit, F-21; DSRSD Permit, F-22. Instead, the Draft Permits should explicitly require the Dischargers to monitor sediment pollutants in order to gather the evidence necessary for a RPA during the next permit cycle. This provision would ensure that the Dischargers are following the CWA's process for determining when effluent limitations are needed to comply with water quality standards. 40 CFR 122.44(d)(1).

Response: We have not made changes in response to this comment. We are not aware of promulgated water quality standards that would allow us to perform a reasonable potential analysis for the compounds Baykeeper suggested. While we share some of Baykeeper's concern that some of the compounds have been detected in the Bay, there is insufficient information to specifically determine if the levels detected are causing actual problems, or how to translate a potential problem into a numeric limit.

Until sufficient information is available, the tentative order, as does nearly all other permits in this region, would require compliance with the Basin Plan's toxicity objective, through acute and chronic toxicity testing, and compliance with limitations if appropriate. Toxicity tests would measure unregulated pollutants, such as personal care products and pharmaceuticals, or pollutants with synergistic effects in the discharges. Both of these tests are conducted on the most sensitive species available and serve as indicators for protecting all other aquatic life in San Francisco Bay. Including mortality, the chronic toxicity tests especially measure for sublethal impacts, such as changes in reproduction or growth from these unregulated compounds.

That said, we are working with the San Francisco Estuary Institute (SFEI) to better understand personal care products and pharmaceuticals and identify any that we should target for further monitoring. For example, SFEI measured triclosan at detectable concentrations in San Francisco Bay but found them to be less than the known toxicity threshold for this pollutant. Moving forward, SFEI has a workgroup through the Regional Monitoring Program (RMP) that is addressing emerging contaminants and is expected to produce a report on next steps in spring 2012. The RMP has and is currently funded in large part by all Bay dischargers.

In regards to sediment monitoring, the tentative order would require these dischargers to participate in the RMP. Through this effort, additional sediment toxicity data are being collected that will allow us to revisit whether the discharge may be impacting sediment quality. The State Water Board's *Water Quality Control Plan for Enclosed Bays and Estuaries—Part 1, Sediment Quality* requires a multiple lines of evidence approach (toxicity, chemistry, and benthos) to determine impairment. For San Francisco Bay sites identified as impacted, SFEI is working on how to conduct a stressor analysis to determine the causal factors behind toxicity. This is a necessary step before we can

conduct a linkage analysis to identify sources of sediment toxicity. Given the complex nature of assessing sediment quality, we believe it's most effective to require all San Francisco Bay dischargers to support the RMP as opposed to requiring individual dischargers to attempt this complex and costly work by themselves.

Baykeeper Comment 5: *The Regional Board must assess the environmental impacts of all major facility upgrades under the California Environmental Quality Act. The Draft Permits unlawfully exempts all existing and future facility upgrades from review under the California Environmental Quality Act ("CEQA"). According to the Draft Permits, the Dischargers are planning several major upgrades to their facilities, including multimillion dollar upgrades to the City of Hayward Water Pollution Control Facility, Oro Loma and Castro Valley Sanitary District Treatment Plant, San Leandro Water Pollution Control Plant, Livermore Treatment Facility, and DSRSD Facility. EBDA Permit, F-6 to F-7; Livermore Permit, 9; DSRSD Permit, 10. These considerable projects could result in environmental impacts that are not reviewed by the Regional Board during the NPDES permit renewal process, such as the impacts associated with increased air emissions, traffic, land use, and greenhouse gas emissions. Since these potential environmental impacts are not addressed by the NPDES permit review process, the Draft Permits are not the functional equivalent of environmental impact reports prepared pursuant to CEQA. The Regional Board should assess all of the environmental impacts associated with these projects, not just water-related impacts.*

Response: We have not made changes in response to this request. Under Water Code section 13389, Regional Water Boards are not required to comply with CEQA prior to adoption of NPDES permits, except for new sources, which these proposed facility upgrades are not.

However, this does not mean that dischargers are exempt from CEQA for the potential environmental impacts pointed out by Baykeeper, such as air emissions, traffic, land use, and greenhouse gases. Before Union Sanitary District, the City of Livermore, or Dublin San Ramon Services District can increase their respective capacities, each of the tentative orders requires these dischargers to comply with CEQA (see Provision C.2.d in all three tentative orders). In the case of other construction activities not related to flow increases, the dischargers are responsible for compliance with CEQA and must complete a negative declaration, mitigated negative declaration, or Environmental Impact Report as deemed appropriate by the local lead agency. NPDES permit coverage in general for the discharges does not exempt the dischargers from their responsibility to comply with CEQA.

IV. Revisions Initiated by Regional Water Board Staff

In addition to minor editorial and formatting, Regional Water Board staff has made the revisions below to: (1) improve and add clarity to the requirement that the discharge must achieve a minimum initial dilution of 79:1, (2) remove duplicative requirements for chronic toxicity (i.e., monitoring requirements are already included in the monitoring and reporting program), (3) clarify Fog Management Program requirements, and (4) modify Attachment G to replace a discontinued regional electronic reporting system with a current statewide system.

Discharge Prohibition III.B (page 11)

Discharge of treated wastewater that does not receive an initial dilution of at least 79:1 (nominal) is prohibited. Compliance shall be achieved by proper operation and maintenance of the discharge outfall to ensure that it (or its replacement, in whole or in part) is in good working order, and is consistent with, or can achieve better mixing than that described in the Fact Sheet (Attachment F). The Discharger shall address measures taken to ensure this in its application for permit reissuance.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS
D. Whole Effluent Chronic Toxicity – Discharge Point No. 001 (page 14)

~~2. The Discharger shall comply with the following tiered requirements based on results from representative samples of the effluent at M-001 as described in the MRP (Attachment E). Compliance with the Basin Plan narrative chronic toxicity objective shall be demonstrated according to the following tiered requirements based on results from representative samples of the treated final effluent meeting test acceptability criteria and complying with MRP section V.B. (Attachment E):~~

~~a. Conduct routine monitoring.~~

~~b. Accelerate monitoring after exceeding a three sample median of 10 TUc or a single sample maximum of 20 TUc or greater. Accelerated monitoring shall consist of monthly monitoring.~~

~~i. A TUc equals 100/NOEL. The No Observable Effect Level (NOEL) shall equal to the IC_{25} or EC_{25} (see Attachment E, Appendix E-1). If the IC_{25} or EC_{25} cannot be statistically determined, the NOEL shall equal the No Observable Effect Concentration (NOEC) derived using hypothesis testing. The NOEC is the maximum percent effluent concentration that causes no observable effect on test organisms, based on a critical life stage toxicity test. The NOEL shall be based on a critical life stage test using the most sensitive test species as specified in MRP section V.B (Attachment E). If two compliance test species are specified, compliance shall be based on the maximum TUc value of the discharge samples based on a comparison of TUc values obtained through concurrent testing of the two species.~~

~~c. Return to routine monitoring if accelerated monitoring does not exceed the "trigger" in b., above.~~

~~d. If accelerated monitoring confirms consistent toxicity above the "trigger" in b., above, initiate toxicity identification evaluation/toxicity reduction evaluation (TIE/TRE) in accordance with a workplan submitted in accordance with MRP section V.B (Attachment E) that incorporates any and all comments from the Executive Officer.~~

~~e. Return to routine monitoring after appropriate elements of the TRE workplan are implemented and either the toxicity drops below "trigger" levels in b., above, or, based on the TRE results, the Executive Officer authorizes a return to routine monitoring.~~

Provision VI.C.4d - Fog Management Program (page 24)

If the Discharger receives ~~hauled in organic wastes, including,~~ fats, oils, grease, or ~~and~~ food processing wastes for injection into an anaerobic digester, ~~into its treatment works,~~ the Discharger shall develop and implement standard operating procedures (SOPs) for this activity. The SOPs ~~standard operating procedures~~ shall address spill prevention;~~,~~ spill response;~~, prevention of the~~ introduction of materials that could cause interference, pass through, or upset of the ~~with~~ treatment processes; ~~or cause a process upset,~~ vector control;~~,~~ and operation and maintenance ~~procedures. The Discharger must operate the system in compliance with all permit effluent limitations, conditions, prohibitions, and requirements.~~ The Discharger shall provide training to its staff on the SOPs ~~standard operating procedures~~ and shall maintain records onsite for a minimum of three years ~~documenting~~ for each load received, describing the hauler, waste type, and amount. ~~the type and amount of waste in the load and the hauler for a minimum of 3 years.~~

Monitoring and Reporting Program (page E-7)

Insert new B.1e

Definition of TU_c. Chronic toxicity is measured in terms of TU_c. TU_c = 100/NOEL. The No Observable Effect Level (NOEL) shall equal to the IC_{25} or EC_{25} (see Attachment E, Appendix E-1). If the IC_{25} or EC_{25} cannot be statistically determined, the NOEL shall equal to the No Observable Effect Concentration (NOEC) derived using hypothesis testing. The NOEC is the maximum percent effluent concentration that causes no observable effect on test organisms based on a critical life stage toxicity test.

Fact Sheet (page F-5)

EBDA Common Outfall. EBDA is comprised of five member agencies: City of Hayward, Oro Loma Sanitary District, Castro Valley Sanitary District, City of San Leandro, and Union Sanitary District. EBDA conveys treated wastewater from its member agencies together with treated wastewater from LAVWMA, which is comprised of wastewater from the City of Livermore, DSRSD, to a dechlorination station near the San Leandro Marina (Marina Dechlorination Facility). The treated wastewater is dechlorinated by sodium bisulfite before being discharged from the EBDA Common Outfall to Lower San Francisco Bay, a water of the United States within the San Francisco Bay Watershed. The outfall's diffuser is located 37,000 feet from shore, 23.5 feet below the water surface, and includes 251 special bell mouth riser ports with a 6-inch diameter that split into two 3-inch perpendicular discharge points that open every eight feet along the last 2,000 feet of outfall pipe. ~~and~~The diffuser is designed to provide a minimum initial dilution of greater than 10:1. At current flows, a minimum initial dilution of 95:1 is achieved.

Fact Sheet (page F-16)

Discharge Prohibition III.B (~~Discharge of treated wastewater that does not receive a m~~Minimum initial dilution of 79:1 ~~is prohibited~~): This Order allows a ~~conservative estimate of the actual initial~~ dilution credit of 79:1 to calculate WQBELs for ammonia, based on information of dilution achieved by the Discharger's current outfall. Thus, this prohibition is necessary to ensure that the assumptions used to derive the dilution credit remain substantially the same so that the limitations are protective of water quality. ~~This is discussed further in section IV.C.4.b of this Order. These~~

~~WQBELs would not be protective of water quality if the discharge did not actually achieve at least a 79:1 minimum initial dilution, thus this prohibition is necessary and warranted.~~

Modifications to Attachment G

At VIII.A of the MRP, revise as follows:

A. General Monitoring and Reporting Requirements

The Discharger shall comply with all Federal Standard Provisions (Attachment D) and Regional Standard Provisions (Attachment G) related to monitoring, reporting, and recordkeeping, with modifications shown in VIII.D below.

…

After VIII.C of the MRP, add subsection VIII.D as follows:

D. Modifications to Attachment G

1. V.C.1.f. and V.C.1.g. are revised as follows, and V.C.1.h. (Reporting data in electronic format) is deleted.

f. Annual self monitoring report requirements

By the date specified in the MRP, the Discharger shall submit an annual report to the Regional Water Board covering the previous calendar year. The report shall contain the following:

1) Annual compliance summary table of treatment plant performance, including documentation of any blending events (This summary table is not required if the Discharger has submitted the year's monitoring results to CIWQS in electronic reporting format by EDF/CDF upload or manual entry);

2) [subsection V.C.1.f.2) is unchanged from Attachment G];

3) Both tabular and graphical summaries of the monitoring data for the previous year if parameters are monitored at a frequency of monthly or greater (This item is not required if the Discharger has submitted the year's monitoring results to CIWQS in electronic reporting format by EDF/CDF upload or manual entry);

[subsections V.C.1.f.4) through to and including V.C.1.f.7) unchanged from Attachment G]

g. Report submittal

The Discharger shall submit SMRs addressed as follows, unless the Discharger submits SMRs electronically to CIWQS:

California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400

Oakland, CA 94612
Attn: NPDES Wastewater Division

h. Reporting data in electronic format – Deleted

2. V.E.2.a. and V.E.2.c. are revised as follows, and subsections V.E.2.b. (24-hour Certification) and V.E.2.d. (Communication Protocol) are deleted:

2. Unauthorized Discharges from Municipal Wastewater Treatment Plants[2]

The following requirements apply to municipal wastewater treatment plants that experience an unauthorized discharge at their treatment facilities and ~~are consistent with and~~ supercede requirements imposed on the Discharger by the Executive Officer by letter of May 1, 2008~~, issued pursuant to California Water Code Section 13383~~.

a. Two (2)-Hour Notification

For any unauthorized discharges that ~~result in a discharge to~~ enter a drainage channel or a surface water, the Discharger shall, as soon as possible, but not later than two (2) hours after becoming aware of the discharge, notify the ~~State Office of~~ California Emergency ~~Services~~Management Agency (CalEMA currently 800-852-7550), the local health officers or directors of environmental health with jurisdiction over the affected water bodies, and the Regional Water Board. ~~The~~Timely notification by the Discharger to CalEMA also satisfies notification to the Regional Water Board~~'s online reporting system at www.wbers.net, and~~. Notification shall include the following:

[subsections V.E.2.a.1) through to and including V.E.2.a.6) is unchanged from Attachment G]

b. 24-hour Certification – Deleted

c. 5-day Written Report
Within five business days, the Discharger shall submit a written report~~, via the Regional Water Board's online reporting system at www.wbers.net,~~ that includes, in addition to the information required above, the following:

[Subsections V.E.2.c.1) through V.E.2.c.7) unchanged from Attachment G]

d. Communication Protocol - Deleted

[2] Cal. Code of Regs., tit 23, § 2250(b), defines an unauthorized discharge to be a discharge, not regulated by waste discharge requirements, of treated, partially treated, or untreated wastewater resulting from the intentional or unintentional diversion of wastewater from a collection, treatment or disposal system.