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February 18, 2011

Sam Unger, Executive Officer  
California Regional Water Quality Control Board  
Los Angeles Region  
320 West 4<sup>th</sup> Street  
Los Angeles, CA 90013

ATTN: LB Nye, Senior Environmental Scientist, TMDL Unit

Dear Mr. Unger:

## **TECHNICAL COMMENTS ON THE DRAFT DOMINGUEZ CHANNEL AND GREATER LOS ANGELES AND LONG BEACH HARBOR WATERS TOXICS TMDL**

The City of Los Angeles, Bureau of Sanitation (Bureau) appreciates the opportunity to provide technical comments on the Los Angeles Regional Water Quality Control Board's (Regional Board) Draft Staff Report and Proposed Basin Plan Amendment (BPA) to incorporate a Total Maximum Daily Load (TMDL) for Toxics in the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters. The Bureau appreciates and thanks Regional Board and United States Environmental Protection Agency (EPA) staff for its efforts in developing the Draft TMDLs and especially would like to thank Regional Board and EPA staff for the very productive and beneficial discussions to date. The Bureau is providing the following comment letter to highlight a few key technical issues. Additional detailed technical comments are also provided in the associated attachments.

### **SUMMARY OF KEY TECHNICAL ISSUES**

- Wet weather freshwater metals targets, allocations, and the margin of safety for the Dominguez Channel result in TMDL requirements significantly more restrictive than necessary to meet the California Toxics Rule and protect beneficial uses.
- The Terminal Island Water Reclamation Plant Waste Load Allocations require additional clarification to support implementation within the Plant's NPDES permit.
- Additional clarification is needed related to the final mass-based sediment allocations.
- Interim allocations are established in a manner that may result in non-compliance on the effective date of the TMDL prior to any responsible party having the ability to implement BMPs.
- The approach to identifying responsible parties to the Dominguez Channel Estuary mass-based sediment allocations is not consistent within the TMDL and with the approach utilized within the region.



- The effect of Superfund sites within the TMDL watersheds on the ability of responsible parties to attain the TMDL is not reflected in the Implementation Schedule and could result in those parties being held responsible for cleaning up pollution caused by Superfund sites.
- Requiring attainment of both the waste load and load allocations on the same schedule will result in repeating costly implementation actions.

This letter incorporates by reference Attachment 1, which provides additional Bureau technical comments, proposed revisions, and further details on the above and other issues.

The Bureau has the following specific technical comments related to the summary of key issues above:

**1. WET WEATHER FRESHWATER METALS TARGETS, ALLOCATIONS, AND MARGIN OF SAFETY FOR THE DOMINGUEZ CHANNEL SHOULD BE REVISED TO BE CONSISTENT WITH THE INTENT OF THE CALIFORNIA TOXICS RULE AND USEPA'S TRANSLATOR GUIDANCE**

Targets and Allocations

The California Toxics Rule (CTR) establishes hardness adjusted dissolved criteria for copper, lead, and zinc. By selecting a singular hardness and using the total fraction to establish a TMDL target, the waterbody could meet the dissolved CTR criteria (i.e., the protective condition) but not meet the TMDL targets and corresponding allocations. As the goal of the TMDL is to meet the criteria protective of the corresponding beneficial use (i.e., the CTR criteria), the TMDL target should be set as the dissolved hardness dependent equation rather than a singular total target. The need to set allocations based on total metals is understood; however, it would be more appropriate to convert the dissolved targets into total allocations within either the linkage analysis or allocations sections of the TMDL.

Margin of Safety

The Dominguez Channel freshwater allocations include a 10% explicit margin of safety (MOS) to account for uncertainty in the wet-weather TMDLs (e.g., flow conditions and the use of a site-specific translator). The use of a flow duration curve approach to establish the loading capacity based on CTR TMDL targets removes uncertainty related to setting allocations to attain the protective condition since the numeric target has to be met instream to meet the loading capacity and allocations. Establishing an explicit MOS therefore results in requiring responsible parties to discharge well below the CTR criteria. As the CTR criteria were established at levels that are protective of beneficial uses, the additional MOS implies that the CTR criteria were not established appropriately.

In terms of the use of site-specific conversion factors resulting in uncertainty, the TMDL follows the USEPA's 1996 Metals Translator Guidance and California's State Implementation Plan (SIP) procedures for calculating translators. Further, the TMDL uses 29 data points for calculation of the conversion factors exceeding the minimum requirements (see page 15 of the 1996 Metals Translator Guidance). Additionally, per the SIP, the TMDL uses the 90th percentile value to calculate site-specific conversion factors to result in a conservative estimate. The 1996 Translator Guidance (page 15) suggests that an extreme percentile (e.g., 90<sup>th</sup> percentile) of the dissolved metals fraction ( $f_D$ ) may be used as an **alternative** method of including a MOS in TMDLs or WLAs.

Therefore, the current application of an explicit 10% MOS is inconsistent with the intent of the California Toxics Rule and USEPA's Translator Guidance by: 1) double applying an MOS by using the 90<sup>th</sup> percentile  $f_D$  in addition to an explicit 10% MOS and 2) establishing a MOS on the CTR criteria which were established at levels that are protective of beneficial uses. Additionally, there is precedent for not including an explicit MOS for metals in the Los Angeles region. The Los Angeles River Metals TMDL

utilized a load duration curve approach to set allocations (including the use of site-specific translators) and specifically stated that an explicit MOS was not needed.

***Requested Actions:*** Please make the following changes to ensure the TMDL is consistent with the CTR and applicable USEPA guidance: 1) revise the Dominguez Channel freshwater metals targets and allocations to be set equal to the CTR dissolved metals hardness based equations and 2) remove the 10% MOS. Alternatively, add language to the allocations section stating that "Compliance with the freshwater metals allocations may be demonstrated via the following means: a) final allocations are met, b) CTR dissolved criteria are met instream, or c) CTR dissolved criteria are met at the point of discharge."

## **2. ADDITIONAL CLARIFICATION IS NEEDED FOR TERMINAL ISLAND WATER RECLAMATION PLANT (TIWRP) TREATMENT PROCESSES, FLOWS AND ALLOCATIONS**

A number of concerns related to the way in which TIWRP is addressed in the TMDL have been identified.

1. The TMDL Staff Report states: "The Terminal Island Treatment Plant discharges secondary-treated effluent to the Outer Harbor and this POTW is under a time schedule order to eliminate their discharge into surface waters." However, the TIWRP is a tertiary treatment plant that is not under a time schedule order to eliminate their discharge. This language should be corrected.
2. The final sediment allocations for the TIWRP are based on one year of flow data (15.9 MGD) rather than the design capacity for the plant (30 MGD). TMDLs developed in Region 4 have consistently utilized design flow rates to calculate allocations for WRPs (i.e., the LA River Metals TMDL). The design flow rate should be used to calculate final allocations for TIWRP.
3. The sediment allocations were calculated in a manner that is inconsistent with the other discharges to the Harbor. As a result, the waste load allocations are not representative of the effluent limits that should be applied to the WRP to achieve the necessary concentrations in the sediment. Following is a more detailed discussion of this issue.

The sediment allocations for the TIWRP are calculated using effluent concentrations set equal to the CTR criteria times a flowrate that assumes all pollutants in the WRP effluent will be deposited in the sediments. However, not all of the pollutants in the WRP effluent will be deposited as bed sediments. As such, the BPA should clearly indicate that the WLAs (including WLAs for TIWRP) are for what settles on the bed sediment and does not directly correspond to an allowable effluent concentration. However, the Bureau acknowledges that it is important that WLAs for the TIWRP are clearly translatable into effluent limits to support permit writers during the reissuance of the TIWRP's NPDES permit. The following proposes a methodology for deriving appropriate effluent limits for the TIWRP to ensure that the TMDL sediment targets are not exceeded.

The WRP provides tertiary filtration so that suspended solids in the effluent are low in concentration and are not readily settleable. Additionally, the WRP discharge has an established mixing zone where effluent discharged from the diffuser turbulently mixes with the ambient water, a high energy process driven by the dissipation of the momentum and buoyancy energy of the discharge. Because the WRP effluent is lower density than the surrounding harbor waters, the mixing zone extends upward from the diffuser toward the surface. The end of pipe discharge conditions do not directly correspond to the loading from TIWRP effluent to bed sediments as the high momentum buoyant plume is energetically mixing the high quality effluent, precluding settling of effluent materials within the near-field.

However, allowable effluent concentrations can be linked to the edge of mixing zone conditions in the harbor using the CTR conversion factors, dilution, and ambient water quality for the development of effluent limits to ensure that the assigned sediment loading allocations (i.e., the amount of sediment and

pollutant that could potentially settle in bed sediment) are not exceeded. Consideration at the edge of mixing zone conditions is a conservative way to meet the intent of the allocation approach. The suspended sediment at the edge of the mixing zones may settle as the lower energy tidal currents move the water through the outer harbor and ultimately out into the open ocean. The first step is to characterize the suspended sediment in the ambient harbor waters. The average measured total suspended sediment (TSS) concentration in the harbor near the TIWRP discharge was 4.7 mg/L based on data collected by the Port of Los Angeles (POLA) between 2008 - 2011. An average TSS over an annual or longer time period is appropriate because the timeframe of settling explicitly averages conditions over time periods in the harbors exceeding three years. The CTR conversion factor (CV) is used with the average harbor TSS to determine the critical ambient constituent (total metals or toxics) conditions so that the TSS at the edge of the TIWRP mixing zone are at the TMDL sediment targets (SQVs) by first calculating the target particulate constituent concentration (TSS\*SQV) and second by calculating the critical water column total constituent concentration  $((1/(1 - CV)) \cdot \text{particulate constituent concentration})$ . The critical water column total constituent concentration is the allowable concentration in harbor water that would not result in exceedances of the TMDL targets in the suspended sediment. Finally, the critical water column total concentration, measured ambient concentration, and dilution credit are used in the standard dilution equation detailed in the State Implementation Plan (SIP) to determine the allowable effluent concentration so that the TMDL sediment targets are not exceeded.

For example, the allowable effluent copper may be determined utilizing the following:

D = dilution = 61 (from current NPDES permit)

TSS = TSS at the edge of the mixing zone = 4.7 mg/L (average from available POLA data)

SQV = 34 mg/kg (TMDL sediment target)

B = ambient average copper concentration = 0.80  $\mu\text{g/L}$  (average from available TIWRP and POLA data)

CV = 0.83 (saltwater conversion factor from CTR)

The allowable water column total copper concentration is calculated as follows:

$$C_{\text{total}} = \text{TSS} \cdot \text{SQV} \left( \frac{1}{1 - \text{CV}} \right)$$

$$C_{\text{total}} = 4.7 \frac{\text{mg}}{\text{L}} \cdot 34 \frac{\text{mg}}{\text{kg}} \cdot \frac{1000 \mu\text{g}}{\text{kg}} \cdot \frac{\text{kg}}{1000000 \text{mg}} \cdot \left( \frac{1}{1 - 0.83} \right)$$

$$C_{\text{total}} = 0.94 \frac{\mu\text{g}}{\text{L}}$$

Through the standard SIP dilution equation, the effluent concentration allowance (ECA) is calculated:

$$ECA_{\text{copper}} = C_{\text{total}} + D \cdot (C_{\text{total}} - B)$$

$$ECA_{\text{copper}} = 0.94 \frac{\mu\text{g}}{\text{L}} + 61 \cdot (0.94 \frac{\mu\text{g}}{\text{L}} - 0.80 \frac{\mu\text{g}}{\text{L}})$$

$$ECA_{\text{copper}} = 9.5 \frac{\mu\text{g}}{\text{L}}$$

Because the  $ECA_{\text{copper}}$  (9.5  $\mu\text{g/L}$ ) is developed to meet the long term average (LTA) of the TMDL allocation the  $ECA_{\text{copper}}$  would equal the  $LTA_{\text{copperTMDL}}$  for effluent limitation calculations. The  $LTA_{\text{copperTMDL}}$  would then be compared to the  $LTA_{\text{acute}}$  and  $LTA_{\text{chronic}}$  developed from aquatic life criteria and the most stringent LTA selected for the final limitations calculation. The standard equations in the SIP would then be used to calculate maximum daily and average monthly effluent limitations.

Similarly, the concentrations of the other constituents may be determined:  $ECA_{\text{lead}} = 242 \mu\text{g/L}$ , and  $ECA_{\text{zinc}} = 590 \mu\text{g/L}$ . The methodology will ensure the suspended sediment at the edge of the mixing zone will be under the SQV for the respective constituents on an annual average. The methodology is

conservative because the standard CTR conversion factors are applied. Furthermore, the methodology is conservative because of the assumption that once outside the mixing zone any pollutants associated with TIWRP effluent settling to bed sediments are at SQV without consideration of the amount that is transported out of the harbor. At this time the Bureau is unable to quantify the magnitude of transport of these TIWRP related sediments out of the harbor. The Bureau would request an optional special study be added to the TMDL for the purpose of refining the TSS concentrations in the outer harbor and resolving the magnitude of the suspended sediments that are deposited in the harbor and the amount transported to the open ocean.

***Requested Actions: Revise inaccurate information related to the TIWRP's treatment facilities and remove reference to a time schedule order that is not in place. Add the following clarifying language prior to the mass-based allocation tables "The mass-based sediment allocations indicate the allowable settleable load to bed sediments from each source. These allocations do not represent discharge limits." Additionally, incorporate the aforementioned approach to determining TIWRP effluent limits into the allocations section of the BPA so that NPDES permit writers can clearly and appropriately incorporate the intended Waste Load Allocations into the TIWRP permit.***

### **3. ADDITIONAL CLARIFICATION IS NEEDED RELATED TO THE FINAL MASS-BASED SEDIMENT ALLOCATIONS**

There are three components of the final mass-based sediment allocations that require clarification to support implementation of the TMDL:

1. Identifying the appropriate assessment point for the mass-based allocations
2. Defining an averaging period consistent with the assumptions inherent in the allocation approach
3. Including means of compliance consistent with the intent of the TMDL

#### Assessment Point for Mass-Based Allocations

The final mass-based sediment TMDLs for metals, PAHs, total DDT and total PCBs represent the mass of an individual pollutant that could be deposited in bed sediment and meet the calculated loading capacity. However, there is no language in the BPA or TMDL Staff Report that clearly indicates the mass-based allocations are assigned to what is deposited. Rather, the BPA on page 16 states "Compliance with mass-based WLAs shall be measured at designated discharge points." The BPA should clearly indicate that the WLAs (including WLAs for TIWRP) apply to what settles on the bed sediment and does not directly correspond to an allowable effluent concentration. Basing compliance with mass-based WLAs at designated discharge points is not only contradictory to the allocations, which are based on an acceptable bed sediment condition rather than a discharge condition, but also causes dischargers to reduce loadings well below a level that would cause or contribute to an impairment.

#### Averaging Period

Establishing the mass-based WLAs as annual limits does not account for the number of years it would take for sediments assigned allocations to affect the active sediment layer the TMDL is intended to address (i.e., the top 5 centimeters [cm] of sediment). Based on the information provided in the TMDL it would take between three (3) and 900 years for sediments to accumulate to a depth equivalent to the active layer (5 cm) (see the table below). The slow rate of deposition requires the use of a more appropriate averaging period.

Waterbody Name	Area (acres)	Total Deposition (kg/yr)	Depth of Deposition (centimeters)	Years to Accumulate 5 centimeters
Dominguez Channel Estuary	140	2,470,201	0.283	17.7
Consolidated Slip	36	355,560	0.157	31.8
Inner Harbor -POLA	1,539	1,580,809	0.015	322
Inner Harbor -POLB	1,464	674,604	0.007	719
Outer Harbor -POLA	1,454	572,349	0.006	782
Outer Harbor -POLB	2,588	1,828,407	0.011	436
Fish Harbor	91	30,593	0.006	850
Cabrillo Marina	77	38,859	0.009	557
San Pedro Bay	8,173	19,056,271	0.037	136
Los Angeles River Estuary	207	21,610,283	1.540	3.24
Cabrillo Beach	82	27,089	0.005	913

Means of Demonstrating Compliance

For demonstrating compliance with direct effects allocations, the BPA states (page 16):

*Compliance with these sediment TMDLs for Cu, Pb, Zn, and total PAHs may be demonstrated via two different means:*

- a. Final sediment allocations, as presented above, are met.*
- b. The qualitative sediment condition of **Unimpacted or Likely Unimpacted** via the interpretation and integration of multiple lines of evidence as defined in the SQO Part 1, is met.*

For demonstrating compliance with indirect effects (i.e., bioaccumulative) allocations, the BPA states (page 19):

*Compliance with these bioaccumulative TMDLs may be demonstrated via two different means:*

- a. Fish tissue targets are met.*
- b. Final sediment allocations, as presented above, are met.*

However, the goal of the TMDL is to meet the TMDL targets. As such, an additional means of compliance should be allowed based on discharges meeting the TMDL targets (which are not the same as the allocations).

Additionally, attainment of the fish tissue targets should be linked to meeting fish tissue targets in species resident to the TMDL waterbody. The nearby Palos Verdes Shelf Superfund Site is an area contaminated by DDT and PCBs. USEPA's September 2009 Interim Record of Decision for the Palos Verdes Shelf Superfund Site is based on allowable levels of DDT and PCBs in sediment and tissue that are orders of magnitude higher than what is proposed in the Harbors TMDLs. Pollutant levels in transient fish that are sampled within the TMDL waterbodies may have little to no relationship to the level of pollutants in sediments in the TMDL waterbodies themselves. The findings in the Staff Report for Cabrillo Marina (Pg. 40) and Cabrillo Beach (Pg. 41) are an example of the importance of considering resident species and/or the foraging range of such species. The staff report states "sediment results did not show elevated levels of metals or other organic compounds" yet there is a fish consumption advisory in place for DDT and PCBs in certain fish species. Therefore, focusing compliance on resident species is important given that non-resident species can bioaccumulate pollutants in waterbodies not addressed by the TMDL. While elevated fish tissue levels would still likely need to be addressed by the State, implementation measures are only effective if they are directed at the source of exposure.

***Requested Action:*** *Incorporation of the following requested clarifications would help guide responsible parties as they design and implement BMPs to meet the protective conditions and ensure compliance with the TMDL:*

- *Add the following clarifying language prior to the mass-based allocation tables “The mass-based sediment allocations indicate the allowable settleable load to bed sediments from each source. These allocations do not represent discharge limits.”*
- *In the alternative means to demonstrate compliance following both the direct and indirect effects allocations tables two additional means for demonstrating compliance should be included:*
  - *TMDL sediment targets are met in the TMDL waterbody*
  - *Discharge concentrations meet the TMDL sediment targets on a five year averaging period in all waterbodies except for the Los Angeles River Estuary where the averaging period would be set at three years. The suggested averaging period is consistent with the approach used to develop the averaging period in the Machado Lake Toxics TMDL.*
- *In the alternative means to demonstrate compliance for indirect effects, add the following underlined language “Fish tissue targets are met in species resident to the TMDL waterbodies.”*
- *For the TIWRP WLAs, incorporate the approach in Comment #4 to develop appropriate effluent limits for inclusion in the NDPES permit.*

#### **4. INTERIM ALLOCATIONS FOR METALS IN THE DOMINGUEZ CHANNEL SHOULD BE REVISED TO BE CONSISTENT WITH CURRENT CONDITIONS**

The TMDL establishes interim concentration-based allocations for freshwater metals in the Dominguez Channel that are effective on the effective date of the TMDL. Per discussions with Regional Board staff, the intent of the interim allocations is to ensure that conditions do not get worse prior to attaining final allocations. The Bureau is committed to improving water quality and meeting the end goals of the TMDL. However, the calculation approach results in interim allocations that potentially will subject responsible parties to permit violations even if existing conditions are maintained. As discussed below, the Bureau is recommending potential solutions that address the concern of permit violations while maintaining the Regional Board’s goal of maintaining or improving the existing water quality.

##### Interim Allocation Application

Interim allocations are established to ensure that water quality does not get worse during the implementation period. In setting the interim allocations, the BPA states that permitted dischargers shall ensure that concentrations do not exceed levels that can be attained by performance of the facility’s treatment technologies. Although this approach is consistent with NPDES permitting methodology for wastewater treatment plants (WTPs), it is not consistent with stormwater permitting methodology. WTPs have treatment technologies that are in place and are operated to maintain a certain level of performance. Because WTPs are actual facilities, a 95<sup>th</sup> percentile value can be used to ensure facilities continue to operate in a manner consistent with previous performance (i.e., if a WTP violated an interim allocation, plant operations could be modified to return to previous levels of performance). However, MS4 dischargers do not have treatment technologies in place within the watershed upon which to base “current” performance. As such, from a practical perspective, if responsible parties exceed the interim limits on the effective date of the TMDL, they will not be able to do anything more than continue to develop their implementation plans per the schedule since the responsible parties do not yet have treatment in place.

### Interim Allocation Calculation

The interim allocations are established using the 95<sup>th</sup> percentile values of existing data. The use of the 95<sup>th</sup> percentile value essentially guarantees the exceedance of an interim allocation as there is a 5% probability that samples will exceed the interim allocations. Thus, if the goal of interim allocations is to “keep things from getting worse,” use of a 95<sup>th</sup> percentile will periodically subject responsible parties to permit violations even if existing conditions are maintained. Additionally, the interim allocations exclude data from the calculations without providing justification, thereby lowering the interim allocations. Per discussions with Regional Board staff, the data were excluded in order to ensure the interim limits were meaningful. However, in reviewing the two data points that were excluded (December 2006 and April 2007), the total suspended solids (TSS) data on those days do not suggest unusually high TSS may have caused the high metals results. These data therefore are representative of existing conditions in the watershed. As those data points were excluded from the calculation of the interim allocations, if a future sample was at the same concentration, the discharger would be out of compliance with the interim allocation.

### Suggested Solutions

TMDL development guidance documents, including USEPA’s 2000 *Guidance for Developing TMDLs in California*, do not require the inclusion of interim allocations. As such, if the Regional Board chooses to establish interim allocations, the Regional Board has considerable discretion on the approach and timing for the establishment of such interim allocations. The following provide suggested solutions to address the issues identified above that we feel would address the goals of the Regional Board and are consistent with current conditions:

1. Set the interim limits equal to the maximum observed values of all data (including the currently censored data), or
2. Calculate the interim limits using the currently censored data, or
3. Exclude all future data considered outliers determined in a manner consistent with the currently censored data when determining compliance with the interim allocations, or
4. Compare annual median values of samples to the interim limits to determine compliance rather than comparing a single sample to the interim limits.

***Requested Action: Incorporate one of the aforementioned suggestions into the TMDL and include language indicating that the means to demonstrate attainment of interim allocations is consistent with the means to demonstrate attainment of final allocations.***

### **5. ESTABLISHMENT OF INTERIM ALLOCATIONS FOR SEDIMENT SHOULD BE DELAYED AND, IF NECESSARY, EITHER ESTABLISHED AFTER STRESSOR IDENTIFICATION IS COMPLETED AND/OR IMPLEMENTATION PLANS HAVE BEEN COMPLETED**

The TMDL establishes interim concentration-based allocations for metals and organics in sediment that are effective on the effective date of the TMDL. Per discussions with Regional Board staff, the intent of the interim allocations is to ensure that conditions do not get worse until final allocations are required to be achieved. As discussed in the previous comment, although the calculation approach is consistent with NPDES permitting methodology for wastewater treatment plants (WTPs), it is not feasible or appropriate for regulating bed sediments. For these reasons, we feel that the inclusion of interim sediment allocations is not appropriate at this time.

Additionally, the Bureau feels that interim sediment allocations are being established for constituents that have not yet been demonstrated to be causing beneficial use impairments and it is prudent to wait until



further data are collected before establishing interim allocations. A number of studies have demonstrated that ERLs do not appropriately link sediment concentrations to effects on the benthic community and are orders of magnitude below toxicity thresholds for benthic organisms. While the interim sediment allocations are based on the 95<sup>th</sup> percentile of existing data, the impairments themselves, leading to the establishment of interim and final allocations for particular chemicals, have been established using the ERLs. Establishing interim allocations for impairments identified using the ERLs and not the State's adopted and USEPA approved sediment quality objectives may subject responsible parties to permit violations where no actual impairment exists and where causality has not been demonstrated.

Existing data from the Outer Harbor supports the need for evaluating data using the applicable sediment quality objectives (the SQOs) and conducting stressor identification as individual chemicals are not exceeding the sediment guidelines. Page 40 of the Staff Report states: "*Sediment toxicity has been observed in 7 of 26 samples, including 3 of 7 moderately toxic samples in Bight 03. No individual contaminants were above sediment guidelines in more recent studies.*"

#### Suggested Solutions

As discussed above, since TMDL guidance documents do not require the inclusion of interim allocations, if the Regional Board chooses to establish interim allocations, the Regional Board has considerable discretion on the approach and timing for the establishment of such interim allocations. The inclusion of interim sediment allocations at this time subjects responsible parties to permit violations for chemicals in sediment that may not be the cause of impairments. Based upon the recent memorandum from USEPA regarding the incorporation of WLAs into NPDES permits, it is reasonable to expect that the interim allocations could be included in responsible parties' permits as numeric effluent limits. However, Section VII.B of the State's sediment quality objectives require [emphasis added]:

*Effluent limits established to protect or restore sediment quality shall be developed **only after**:*

- a. A clear relationship has been established linking the discharge to the degradation,*
- b. The pollutants causing or contributing to the degradation have been identified, and*
- c. Appropriate loading studies have been completed to estimate the reductions in pollutant loading that will restore sediment quality.*

*These actions are described further in Sections VII.F and VII.G.*

Therefore, it is appropriate and consistent with the Phase I SQOs to delay the establishment of interim allocations until the requirements of Section VII.B of the Phase I SQOs are met. As the TMDL already includes a specific reopener to consider the results of the stressor identification and other applicable special studies, interim allocations could be established at that time.

If the Regional Board chooses to establish interim allocations at this time, the issue of potential permit violations of the interim allocations could be mitigated with the inclusion of language for permit writers that clearly identifies the intent of the interim allocations. The suggested language is as follows:

"These interim allocations are established to ensure that conditions in receiving waters are not further degraded during the time period responsible parties are implementing actions to achieve the final allocations. Compliance with the interim allocations may be achieved via the following different means:

1. Demonstrate that the sediment quality condition of **Unimpacted** or **Likely Unimpacted** via the interpretation and integration of multiple lines of evidence as defined in the SQO Part 1, is met;  
or

2. Meet the interim allocations in bed sediment on a five year averaging period in all waterbodies, except for the Los Angeles River Estuary where the averaging period is three years; or
3. Discharge concentrations meet the interim allocations on a five year averaging period, except for the Los Angeles River Estuary where the averaging period is three years.

***Requested Action: Remove interim sediment allocations and, if appropriate, establish interim allocations at the year six reopener either based on the results of stressor identification studies and/or the timelines presented in the responsible parties implementation plans. If the Regional Board chooses to establish interim allocations at this time, incorporate the aforementioned suggestions into the TMDL and include language indicating that the means to demonstrate attainment of interim allocations is consistent with the means to demonstrate attainment of final allocations.***

#### **6. TOXICITY INTERIM AND FINAL ALLOCATIONS SHOULD BE REMOVED FROM THE BPA OR IMPLEMENTED AS TRIGGERS TO IDENTIFY THE TOXICANT**

Toxicity is an effect, not a pollutant. Therefore, inclusion of a toxicity target as a numeric value representative of the goal condition to ensure the waterbody is supporting beneficial uses is appropriate. However, it is not appropriate to then translate that value directly into an allocation as toxicity is an "effect" that does not represent an individual "pollutant" that can be controlled. For example, copper can cause toxicity and to address the effect (toxicity), copper (the pollutant) must be controlled. An appropriate approach to address toxicity can be found by looking at the approach utilized by the Regional Board and USEPA for TMDLs addressing algae. TMDLs to address algae impairments often set an algae target to be achieved, but the TMDL assigns allocations based on the pollutant (i.e., total nitrogen and total phosphorus) that may need to be controlled to address the "effect" (e.g., algae). This cause and effect relationship is reflected in the Basin Plan. The narrative toxicity objective first defines what constitutes toxicity and then defines how it is to be controlled - by regulating the specific toxicants causing the toxic effect: "Effluent limits for specific toxicants can be established by the Regional Board to control toxicity identified under Toxicity Identification Evaluations (TIEs)."

Given that a TUC target 1) cannot be divided amongst responsible parties as allocations, 2) numeric allocations are set for individual pollutants believed to be causing toxicity within the TMDL watersheds, and 3) future monitoring will require the identification of the causes of toxicity, the TUC interim and final allocations should be removed from the BPA. Alternatively, the interim and final TUC allocations could clearly state that the allocations are established as triggers consistent with NPDES permitting practice within the region and State at the time of permit issuance, reissuance, or revision. It is important that these changes occur within the allocations section of the TMDL because NPDES permit writers must write permits consistent with the assumptions presented in the allocations section.

***Requested Action: Remove the interim and final toxicity allocations, or alternatively, explicitly state within the allocations section of the BPA that the allocations are to be incorporated into permits consistent with NPDES permitting practices within the region and State at the time of permit issuance, reissuance, or revision and at the time of TMDL adoption the practice is to implement these allocations as a trigger.***

#### **7. RESPONSIBLE PARTIES TO THE DOMINGUEZ CHANNEL ESTUARY BED SEDIMENTS**

On pages 13 and 16 the BPA states: "The bed sediment LA is assigned to the City of Los Angeles (including the Port of Los Angeles), the City of Long Beach (including the Port of Long Beach) and the State Lands Commission." However, on page 27, the BPA states: "The Los Angeles County Flood Control District (District) owns and operates Dominguez Channel; therefore, the District and the cities that discharge to Dominguez Channel shall each be responsible for conducting implementation actions to

address contaminated sediments in Dominguez Channel.” On page 28 of the BPA, sediment reductions within the Ports are assigned to the cities of LA and Long Beach and it is assumed they are assigned the responsibilities as the owner operators. In the recently adopted Machado Lake Toxics TMDL, the City of LA was assigned the bed sediment allocations as the owner operator of the lake. For consistency with this TMDL and previously adopted TMDLs, the bed sediment allocations and associated implementation actions in the Dominguez Channel should be assigned only to the Los Angeles County Flood Control District. Furthermore, the Flood Control District collects fees to maintain the channel from the surrounding cities and has responsibilities for all activities that occur within the channel.

***Requested Action: For consistency with previously adopted TMDLs and consistency within this TMDL, please revise the allocations and implementation sections to assign the bed sediment load allocations and corresponding implementation actions for the Dominguez Channel and Estuary to the Los Angeles County Flood Control District.***

#### **8. THE MONTROSE SUPERFUND SITE NEEDS TO BE APPROPRIATELY CONSIDERED PERTAINING TO RESPONSIBILITY FOR REMEDIATION AND TIMEFRAM FOR IMPLEMENTATION ACTIVITIES**

There are two Superfund sites located within Dominguez Channel Watershed: the Montrose Superfund Site and the Del Amo Superfund Site. A final remedial decision with respect to certain of the Montrose Superfund Site Operable Units (OUs) that remain contaminated with DDT has not been established. The TMDL responsible parties are required to consult with US EPA’s Superfund Division in advance of taking actions to remediate bed sediment in the Dominguez Channel and Estuary. However, it is unreasonable to require responsible parties to implement actions to remediate contaminated sediments that are the responsibility of a Superfund site. Further, remedial activities could not occur prior to USEPA making a final remedial decision. The Dominguez Channel Watershed load allocation responsible parties have no control over the USEPA’s timeframe for making a final remedial decision for the Montrose Superfund Site. As such, the timeframe for the load allocation responsible parties within Dominguez Channel Watershed to meet the TMDL should be directly tied to USEPA’s decision making process.

***Requested Action: Revise the BPA to acknowledge 1) that cleanup of contaminated sediments associated with the Montrose Superfund Site are not required of the load allocation responsible parties and 2) to the extent that the cleanup is necessary to meet the MS4 responsibilities, such actions are not expected prior to the adoption and implementation of a final remedial decision for the Montrose Superfund Site.***

#### **9. REQUIRING ATTAINMENT OF WASTE LOAD ALLOCATIONS AND LOAD ALLOCATIONS ON THE SAME SCHEDULE WILL RESULT IN DUPLICATIVE REMEDIATION ACTIVITIES**

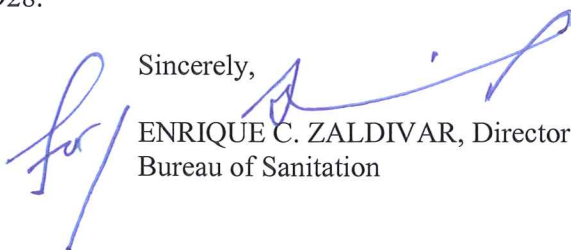
As presented in the BPA, current discharges from watershed sources result in impairments to bed sediments. However, the TMDL schedule essentially requires responsible parties to concurrently implement watershed BMPs and conduct bed sediment cleanup activities. The implications of this requirement are that remediated bed sediments will be subject to recontamination. Recontamination will necessitate additional cleanup activities, which in effect, will require responsible parties to pay for clean up twice. This can be avoided by requiring cleanup of impaired areas that **are not** affected by watershed sources during the current implementation schedule (20 years) and require clean up of areas that **are** affected by watershed sources over the following 10 years.

***Requested Action: Revise the Implementation Plan section and schedule of the BPA and Staff Report to acknowledge the issue with requiring cleanup before sources are addressed through BMPs and***

***extend the implementation schedule for areas affected by watershed sources for 10 years following the completion of Phase III by WLA responsible parties.***

The Bureau is committed to improving and protecting the local environment as evidenced by the leadership role the City has taken in implementing previously adopted TMDLs, such as the LA River Trash TMDL, and in proactively implementing clean water projects, such as the Echo Park Lake Ecosystem Rehabilitation Project, via the voter approved Proposition O ballot measure. These investments in the future are done in partnership with your agency to achieve maximum return in local environmental programs and infrastructure.

Thank you for your consideration of these technical comments. If there any questions, please feel free to call Donna Toy-Chen at (213) 485-3928.

Sincerely,  
  
ENRIQUE C. ZALDIVAR, Director  
Bureau of Sanitation

ECZ:SK:DC  
WPDCR 8823

Attachments:

- Attachment 1 – Detailed Technical Comments Matrix on Draft Dominguez Channel and Greater LA and LB Harbor Waters Toxics Pollutants TMDLs
- Attachment 2 – Proposed Revisions to Section 3.2
- Attachment 3 – Maps related to comments provided in the Detailed Comment Matrix
- Attachment 4 – Sediment Quality Units (SQUs) based on the Phase I SQOs

cc: Deborah J. Smith, Regional Water Quality Control Board  
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