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October 28, 2011

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-2000

Dear Ms. Townsend:

COMMENT LETTER – DOMINGUEZ CHANNEL AND GREATER LOS ANGELES AND LONG BEACH HARBOR WATERS TOXIC POLLUTANTS TMDL

The City of Los Angeles, Bureau of Sanitation (Bureau) appreciates the opportunity to provide technical comments to the State Water Resources Control Board (State Board) for the proposed approval of the Los Angeles Regional Water Quality Control Board's (Regional Board) 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 during the course of TMDL development.

The Bureau is providing the following comment letter to highlight a few key technical issues. The Bureau submitted a comment letter on February 18, 2011 and provided oral testimony at the May 5, 2011 Regional Board hearing. As described within the applicable comments herein, the responses provided by the Regional Board did not adequately address several comments.

1. **COMPLIANCE OPTIONS FOR BIOACCUMULATIVE COMPOUNDS ARE INAPPROPRIATELY BASED UPON ATTAINING TISSUE VALUES FOR PROTECTION OF FINFISH AND WILDLIFE**

A modification to the compliance options for Mass-Based Allocations for Bioaccumulative Compounds (Wasteload and Load Allocations Section; pg. 21 of the Final BPA), specifically, compliance option d (see italicized text below), was made to the final version of the BPA.

Page 21 of the Final BPA states (emphasis added):

> Compliance with these bioaccumulative TMDLs may be demonstrated via any of four different means:
>
> a. Fish tissue targets are met in species resident to the TMDL waterbodies.
> b. Final sediment allocations, as presented above, are met.
> c. Sediment numeric targets to protect fish tissue are met in bed sediments over a three year averaging period.
> *d. Demonstrate that the sediment quality condition protective of fish tissue is achieved per the Statewide Enclosed Bays and Estuaries Plan, as amended to address contaminants in resident finfish and wildlife.*

In the February 18, 2011 comment letter to the Regional Board, the Bureau did request clarification regarding compliance language associated with WLAs for bioaccumulative compounds. The Bureau requested that the BPA recognize that revisions to the numeric targets are anticipated after Phase II sediment quality objectives (SQOs) to protect human health are established by the State Board. Such objectives will become the applicable water quality standards and should replace the guidelines utilized as the basis for the numeric targets. Per the response in A42 in the Response to Comments, the Regional Board viewed the existing language (compliance options a. and b.) as sufficient.

However, the compliance options related to fish tissue were revised in the Final BPA, but the modified language does not address the pending Phase II sediment quality objectives for the protection of human health; rather, the revised language implies that attainment of the wasteload allocations developed to protect *human health* would need to be demonstrated by the attainment of tissue values developed to protect *resident finfish and wildlife*.

The TMDL makes no finding of impairment for wildlife or resident finfish, the numeric targets are selected to protect human health, not wildlife or resident finfish, and the allocations are designed to reduce sediment levels to result in lower tissue values to protect human health, not wildlife or resident finfish.

For bioaccumulative compounds, the TMDL was specifically developed to protect human health, as noted in the Final BPA (emphasis added):

> "***Fish tissue targets were determined*** from Fish Contaminant Goals and Advisory Tissue Levels for Common Contaminants in California Sport Fish: Chlordane, DDTs, Dieldrin, Methylmercury, PCBs, Selenium, and Toxaphene, developed by OEHHA (2008) to assist agencies in developing fish tissue-based criteria for pollution mitigation or elimination and ***to protect humans from consumption of contaminated fish***. Associated sediment targets required to achieve the fish tissue targets were determined from several sources depending on the contaminant." – Fish Tissue and Associated Sediment Targets, pg. 5.

> "Fish tissue levels of certain bioaccumulative compounds are above desired ***numeric targets***. These TMDLs are designed to reduce contaminated sediment levels, which will result in lower corresponding pollutant levels in fish tissue." – Mass-Based Allocations for Bioaccumulative TMDLs, pg. 18.

To achieve the above, the Bureau respectfully requests consideration of the following modifications to compliance option d for consistency with the intent of the TMDL and modifications incorporated into the Final BPA (deletions shown in strikeout text; additions in bold, double underline text):

> Compliance with these bioaccumulative TMDLs may be demonstrated via any of four different means:
>
> a. Fish tissue targets are met in species resident to the TMDL waterbodies.
> b. Final sediment allocations, as presented above, are met.
> c. Sediment numeric targets to protect fish tissue are met in bed sediments over a three year averaging period.
> d. Demonstrate that the sediment quality condition protective of ~~fish tissue~~ **human health** is achieved per the ~~Statewide~~ **Water Quality Control Plan for** Enclosed Bays and Estuaries ~~Plan~~, as amended ~~to address contaminants in resident finfish and wildlife~~.

Requested Action: Revise Compliance Option d. on Page 21 of the Final BPA in order to:

- ***Provide for compliance to be based upon attaining the Phase II sediment quality objectives, after such objectives are adopted by the State Board; and***
- ***Remove the inconsistency in the revised language that implies attainment of tissue values for human health can be demonstrated by the attainment of tissue values for resident finfish and wildlife.***

2. Excluding Chromium from a Compliance Option Based Upon the Phase I SQOs is Inconsistent with State Board Policy

A modification to the compliance options for Mass-Based Allocations for Metals and PAH Compounds (Wasteload and Load Allocations Section; pg. 14 of the Final BPA), specifically, compliance option b (see underlined italicized text below), was made to the final version of the BPA. In the Regional Board's Response to Comments (RTC), Regional Board staff indicates in several responses that the BPA was revised to allow compliance with WLAs through demonstrating attainment of the Phase I SQOs. The revision adequately and correctly addressed concerns raised by the Bureau and other stakeholders. However, the Final BPA specifically excludes chromium. The compliance options for Final Concentration-Based Sediment WLAs for metals in Dominguez Channel Estuary, Consolidated Slip and Fish Harbor state:

> Compliance with these sediment TMDLs for Cu, Pb, Zn, Cd, Cr, Hg and total PAHs may be demonstrated via any one of three different means (emphasis added):

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, with the exception of Cr, which is not included in the SQO Part 1.*
c. Sediment numeric targets are met in bed sediments over a three-year averaging period.

The exclusion of chromium from compliance option b. is inconsistent with the *Water Quality Control Plan for Enclosed Bays and Estuaries - Part 1 (Phase I SQOs)*, adopted by the State Board in 2008 and approved by USEPA in 2009 and results in a modification to the Final BPA that is inconsistent with the RTC. The applicability of the Phase I SQOs is not limited to the chemicals listed in the chemistry line of evidence (LOE), which is clearly demonstrated in State Board's RTC for the adoption of the Phase I SQOs:

- "The chemical LOE does not reflect the chemicals that are being regulated under this draft Part 1; rather the chemical LOE provides a means to assess the overall risk of exposure to pollutants in sediments. If the MLOE indicates a potential risk of exposure and some evidence of biological effect, stressor identification is required to determine the cause. As more data becomes available, the list of chemicals is anticipated to increase." – RTC, Part 1 SQOs, Comment 1015
- "While staff agree that the current list of chemicals is limited, it is not intended to be a complete list. Rather, the chemicals simply serve as surrogates for potential exposure. Sediment toxicity is also used in the integration scheme to provide a means for an exposure measurement when there are no chemicals present at levels suggestive of an exposure risk." – RTC, Part 1 SQOs (Comment 83)
- "The toxicity and benthic community lines of evidence do reflect impacts from other chemicals and toxicants. Incorporation of the toxicity data as part of determining the chemical exposure potential during the assessment reduces the likelihood that sites impacted by constituents not on the SQO chemical list will be identified during the assessment. The list of chemicals in the plan does not imply that those are the only chemicals of concern; the list is based on chemicals of concern for which sufficient data was available to include in development of the chemical indices." – RTC, Part 1 SQO, Comment 208 and 1050

The chemistry LOE is only one part of the Phase I SQOs and does not limit the chemicals that are regulated under the SQOs to those listed in the chemistry LOE (e.g., if it's not on the list in the chemistry LOE, it is not appropriate to state that the Phase I SQOs exclude that chemical). In the case of chromium in particular, chromium was purposefully not included in the chemistry LOE of the Phase I SQOs as chromium, like nickel, is heavily influenced by regional geochemistry (i.e., natural background concentrations) (personal communication, Chris Beegan, State Board staff).

As this BPA is the first to incorporate the Phase I SQOs into a TMDL, it is important the precedent this TMDL sets is consistent with the Phase I SQOs. Therefore, in order to remove the

inconsistency with the Phase I SQOs, the Bureau respectfully requests that the compliance options on page 17 of the final BPA are modified as follows (deletions shown in strikeout text):

> Compliance with these sediment TMDLs for Cu, Pb, Zn, Cd, Cr, Hg and total PAHs may be demonstrated via any one of three different means (emphasis added):
>
> 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~~, with the exception of Cr, which is not included in the SQO Part 1~~.
> c. Sediment numeric targets are met in bed sediments over a three-year averaging period.

Requested Action: Modify the compliance options on page 17 of the final BPA, as noted above, in order to remove a statement that is inconsistent with the Phase I SQOs adopted by the State Board.

3. Additional Clarification is needed Related to the Final Mass-Based Sediment Allocations

There are two components of the final mass-based sediment allocations the Bureau requested clarification for in the Bureau's February 18, 2011 comment letter to the Regional Board:

A. Identifying the appropriate assessment point for the mass-based allocations
B. Including means of compliance consistent with the intent of the TMDL

The response to Comment 1.A (presented on page 69 of the RTC matrix) states that "The exact method of including the WLA into NPDES permits is not determined by this TMDL, but will be based on the administrative record for the permit at the time." The Bureau's request was to clarify the method for developing the WLAs so that NPDES permits could be written consistent with the assumptions of the WLAs. The response did not address the lack of clarity; rather it further supports the necessity to provide clarity.

The response to Comment 1.B (presented on page 69 of the RTC matrix) states that:

> "The goal of this TMDL is to protect and restore fish tissue, water and sediment quality. Regional Board staff agrees that the goal of the TMDL is to meet the TMDL targets. Therefore sediment numeric targets can be considered as third option of compliance with direct effects allocation for sediment."

The BPA was revised to provide additional means for demonstrating compliance based on this reasoning. However, the RTC did not respond to one approach specifically requested in the Bureau's Comment Letter.

As such, the Bureau respectfully requests consideration of the following comments, revised for consistency with the Final BPA.

A. 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, page 17 of the Final BPA 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 assumptions of the WLAs, which are based on an acceptable bed sediment condition rather than a discharge condition, but would also require dischargers to reduce loadings well below a level that would cause or contribute to an impairment in the sediment.

B. Means of Demonstrating Compliance

For demonstrating compliance with direct and indirect effects allocations, revisions to the Tentative BPA resulted in additional clarity in the Final BPA associated with attaining targets in bed sediments. However, additionally clarity is needed so that discharges (i.e., waters discharged from a responsible party) that meet the sediment targets also represent a means for demonstrating compliance. Simply put, if a discharge concentration does not exceed a TMDL target then a discharger should be in compliance.

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 both the direct and indirect effects mass-based allocation tables on pages 14 and 18, respectively: "The mass-based sediment allocations indicate the allowable settleable load to bed sediments from each source."***
- ***In the means to demonstrate compliance following both the direct and indirect effects mass-based allocations tables include the following on pages 17 and 21, respectively: "Discharge concentrations meet the TMDL sediment targets on a three year averaging period in all waterbodies."***

4. Clarification of Responsible Parties to the Dominguez Channel Estuary Bed Sediments

In the Bureau's February 18, 2011 comment letter to the Regional Board, the Bureau requested clarification on which parties were assigned the responsibility to meet bed sediment load allocations in the Dominguez Channel Estuary. The response to this comment (presented on page 81 of the

RTC matrix) indicated that the BPA had been revised on page 31 of the tentative BPA. However, no changes addressing the comment appear on page 31 of the tentative BPA and no changes are apparent in the Final BPA. As such, the Bureau respectfully requests consideration of the following comment.

In the Mass-based Allocations for Metals and PAHs compounds section of the Final BPA (page 14), bed sediment allocations are assigned as follows: "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." Thus all the bed sediment allocations for metals and PAHs in all waterbodies appear to have only been assigned to the cities of Los Angeles and Long Beach and the States Land Commission.

In the Mass-based allocations for Bioaccumulative Compounds section of the Final BPA (page 18), bed sediment allocations are assigned as follows: "The Greater Harbor Waters (excluding LA River Estuary and Consolidated Slip) 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." Thus all the bed sediment allocations for bioaccumulative compounds in the Greater Harbors Waters appear to have only been assigned to the cities of Los Angeles and Long Beach and the States Land Commission.

However, the bed sediment allocations for Dominguez Channel do not appear to have been assigned to any responsible party. The Implementation Plan section (page 29) of the Final 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." Also in the Implementation Plan section (page 30) of the Final BPA, sediment reductions within the Ports are assigned to the cities of Los Angeles and Long Beach and it is assumed they are assigned the responsibilities as the owner operators.

In the Machado Lake Toxics TMDL (Regional Board Resolution No. R10-008), 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 clarified as being assigned 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 clarify within the allocations and implementation sections that the bed sediment load allocations and corresponding implementation actions for the Dominguez Channel and Estuary are assigned to the Los Angeles County Flood Control District.

5. Clarification on the Interaction between Parties Responsible for Addressing Bed Sediments and the Potentially Responsible Parties to the Montrose Superfund Site is Needed

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. As such, in the Bureau's February 18. 2011 comment letter to the Regional Board, the Bureau requested that the BPA 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.

The response from the Regional Board (presented on page 82 of the RTC matrix) states that it would be reasonable for the TMDL responsible parties to participate in cleanup of sediments. The Bureau agrees that it is reasonable to require TMDL responsible parties to participate in cleanup of sediments. However, TMDL responsible parties should participate **with** the Superfund Potential Responsible Parties (PRPs).[1] As the TMDL is currently written, TMDL responsible parties may be required to clean up Dominguez Channel prior to a final remedial decision. Thus, the TMDL responsible parties would bear the burden of the PRPs' responsibilities under Superfund. It is unreasonable to require TMDL 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: Clarify in the BPA that to the extent that 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.

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.

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[1] PRPs include but are not limited to Shell Oil Company (2010 revenue = $368 Billion), Dow Chemical (2010 revenue = $54 Billion), Boeing (2010 revenue = $64 Billion), 3M (2010 revenue = $27 Billion), and Goodyear Tire (2010 revenue = $19 Billion)

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 or Charlie Yu at (213)485-3929.

Sincerely,

ENRIQUE C. ZALDIVAR, Director
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